Executive Order on CO_2 Allowances, etc.[1)]

Pursuant to section 21(1), para (i)-(iv), and (3) and section 26(4) of Act no. 1767 of 28 December 2023 on CO_2 Allowances, the following is laid down:

Part 1

Scope of application

1.-*(1)* This Executive Order implements the EU ETS Directive; cf. section 3, para (vii).
(2) The ETS Directive is printed as Annex 2 to this Executive Order.

2.-*(1)* The Executive Order applies to emissions of greenhouse gases; cf. section 3, para (v).
(2) The Executive Order applies to activities within:
(i) Aviation and maritime transport; cf. Chapter II of the ETS Directive and Annex I to the Directive.
(ii) Stationary installations; cf. Chapter III of the ETS Directive and Annex I to the Directive.
(iii) The buildings, road transport and additional sectors; cf. Chapter IVa of the ETS Directive and Annex III to the Directive.

Part 2

Definitions

3. For the purposes of this Executive Order, the following definitions apply:
(i) ALC Regulation: Commission Implementing Regulation 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.
(ii) AV Regulation: Commission Implementing Regulation on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council.
(iii) Fuel operator: Any natural or legal person who is covered by the provisions of the allowance scheme because the person meets the definition of "regulated entity" under Article 3(ae) of the ETS Directive.
(iv) Operator of an installation: Any natural or legal person who operates or controls a stationary installation, or to whom decisive economic power over the technical functioning of the installation has been delegated.
(v) Greenhouse gases: Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and other gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.
(vi) FAR Regulation: Commission Delegated Regulation 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.
(vii) ETS Directive: Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC, as amended.
(viii) Allowance scheme: The regulation in the Act on CO_2 Allowances, in rules issued pursuant to the Act on CO_2 Allowances or EU legal acts on matters covered by the Act on CO_2 Allowances.

(ix) Aircraft operator: An operator of an aircraft, a commercial air transport operator or any other person who is subject to EU rules on requirements for greenhouse gas emission allowance trading within the area of aviation.
(x) MR Regulation: Commission Implementing Regulation 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 No 601/2012/EU.
(xi) MRV Maritime Regulation: Regulation of the European Parliament and of the Council on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC.
(xii) Operator: An operator of an installation, an aircraft operator, shipping company, fuel operator or any other person, who is subject to EU rules on requirements for greenhouse gas emission allowance trading.
(xiii) Shipping company: A shipping company or shipowner or any other organisation or person, such as a manager or bareboat charterer, that is covered by the provisions of the allowance scheme because the person meets the definition of "shipping company" under Article 3(w) of the ETS Directive.
(xiv) Release (emission): The release of greenhouse gases as defined in Article 3(b) of the ETS Directive.
(xv) Emissions permit: Permit for an operator of an installation or fuel operator to emit greenhouse gases; cf. section 4(1) of the Act on CO_2 Allowances.

Part 3

Emissions permits to operators of installations and fuel operators

Application for an emissions permit

4.-*(1)* An operator of an installation's application for an emissions permit should be submitted to the Danish Energy Agency in sufficient time for the facts of the case, taking into account its complexity, to be fully clarified no later than 60 days before the date on which the emission is to commence.
(2) A fuel operator's application for an emissions permit must be submitted to the Energy Agency in sufficient time for the facts of the case, taking into account its complexity, to be fully clarified no later than four months before the date on which the emission is to commence.

5. An operator of an installation's application for an emissions permit for a stationary installation must include a description of the following:
(i) Clear identification of the installation, its owner and operator.
(ii) The installation and its activities, including the technology used, and the raw and auxiliary materials, the use of which is likely to lead to emissions.
(iii) The sources of emissions from the installation, insofar as the activities of the installation are to be monitored for specific species of greenhouse gases; cf. Annex I to the ETS Directive.
(iv) Planned measures for monitoring and reporting emissions; cf. section 19(1).
(v) A non-technical summary of the information in paras (i)-(iv).

6. A fuel operator's application for an emissions permit for release for consumption of fuels which are used for combustion in the buildings, road transport and additional sectors must include a description of the following:
(i) The fuel operator, who must be clearly identified.
(ii) The type of fuel released for consumption, and which is used for combustion in the sectors referred to in Annex III to the ETS Directive, as well as the means through which the fuels are released for consumption.

(iii) The end use or end uses of the fuels released for consumption; cf. para (ii).
(iv) The measures planned to monitor and report emissions in accordance with the implementing acts referred to in Articles 14 and 30f of the ETS Directive; cf. section 19(1).
(v) A non-technical summary of the information in paras (i)-(iv).

Emissions permits to operators of installations

7.-*(1)* The Energy Agency issues an emissions permit to an operator of an installation if it is satisfied that the applicant is capable of monitoring and reporting emissions from the installation; cf. Article 6(1) of the ETS Directive, and section 4(2) of the Act on CO_2 Allowances.
(2) An emissions permit may cover one or more installations on the same site operated by the same operator.
(3) If several natural or legal persons on the same site cooperatively operate several installations that are closely operationally or physically connected, the Energy Agency may decide that these installations are considered to constitute a single installation. In such cases, the persons are jointly and severally liable for the financial obligations, including the obligation to surrender allowances, arising from the allowance scheme.
(4) The Energy Agency may order the persons mentioned in subsection (3) to appoint among themselves one authorised representative who, on their behalf vis-á-vis the Energy Agency, is responsible for performing the duties of operator of the single installation.

8.-*(1)* An emissions permit issued to an operator of an installation must include the following:
(i) The operator's name and address.
(ii) A description of the activities in and the emissions from the installation.
(iii) A plan approved by the Energy Agency for monitoring emissions; cf. section 19(1).
(iv) Reporting requirements.
(v) An obligation to timely surrender allowances corresponding to the total verified emissions of the installation in each calendar year.
(2) The Energy Agency may, in a permit and in connection with amendments thereto, impose conditions requiring the operator to comply with specified requirements based on the company's special circumstances.

9. Where the Energy Agency decides that a sub-installation is permanently taken out of operation, this will not be taken into account when determining the total capacity of the installation.

Emissions permits to fuel operators

10.-*(1)* As from 1 January 2025, fuel operators must hold an emissions permit issued by the Energy Agency in order to carry out the activities referred to in Annex III to the ETS Directive.
(2) The Energy Agency issues an emissions permit to the fuel operator if it is satisfied that the applicant is capable of monitoring and reporting emissions corresponding to the quantities of fuels released for consumption pursuant to Annex III of the ETS Directive; cf. Article 30b(3) of the ETS Directive, and section 4(2) of the Act on CO_2 Allowances.

11.-*(1)* An emissions permit issued to a fuel operator must include the following:
(i) The fuel operator's name and address.
(ii) A description of how the fuel operator releases the fuels for consumption in the sectors covered by Chapter IVa of the ETS Directive.
(iii) A list of the fuels that the fuel operator releases for consumption in the sectors covered by Chapter IVa of the ETS Directive.
(iv) A plan approved by the Energy Agency for monitoring emissions; cf. section 19(1).

(v) Reporting requirements.
(vi) An obligation to timely surrender allowances corresponding to the fuel operator's total verified greenhouse gas emissions no later than 31 May in each calendar year.

(2) The Energy Agency may, in a permit and in connection with amendments thereto, impose conditions requiring the fuel operator to comply with specified requirements based on the company's special circumstances.

The operator of an installation's and the fuel operator's ongoing notification obligation

12.-*(1)* An operator of an installation must, without undue delay, notify the Energy Agency of matters of importance to the emissions permit and to the allocation of allowances, including any planned changes to the nature or functioning of the installation, or any extension or significant reduction of its activities or capacity, which may require amending or updating the permit or allocation.

(2) A fuel operator must, without undue delay, notify the Energy Agency of matters of importance to the emissions permit, including any planned changes of the nature of the operator's activities or of the fuels it releases for consumption, and which may require amending or updating the emissions permit.

(3) Where, on notification under subsection (1) or (2) or otherwise, the Energy Agency becomes aware of matters of importance to an emissions permit, the Agency may decide to amend or revoke the permit or to order the operator of an installation or fuel operator to apply for a new permit.

Transfer of an emissions permit

13.-*(1)* An operator of an installation or fuel operator may not transfer its emissions permit without the Energy Agency's permission.

(2) On transfer of an emissions permit to a new operator or fuel operator, the operator of an installation or fuel operator will, at the time from which the Energy Agency approves the transfer, enter into any obligation under the allowance scheme relating to the activity.

Temporary emissions permit

14. In special cases, the Energy Agency may decide that an operator of an installation or fuel operator who has applied for an emissions permit may temporarily emit greenhouse gases until the Energy Agency has decided on the application.

Part 4

Aircraft operators and shipping companies

15. In accordance with the provisions of the MR Regulation, an aircraft operator must submit a monitoring plan to the Energy Agency for approval.

16. In accordance with the provisions of the MRV Maritime Regulation, a shipping company must submit a monitoring plan to the Energy Agency for approval.

17. Decisions to detain Danish ships or expel foreign ships from Danish ports, cf. section 7(2) of the Act on CO_2 Allowances, are made by the Energy Agency in compliance with Article 16(11a) of the ETS Directive, Article 20(3) of the MRV Maritime Regulation or other relevant provisions of the allowance scheme.

18. Before the Energy Agency makes a decision as referred to in section 17, the matter is submitted to the Ministry for Climate, Energy and Utilities to assess whether it gives rise to an interministerial coordinated effort.

Part 5

Monitoring, verification and reporting

Monitoring plans

19.-*(1)* In accordance with a monitoring plan approved by the Energy Agency and pursuant to the provisions of the allowance scheme, an operator must continuously monitor emissions from assets and activities for which the operator is responsible.

(2) The operator notifies the Energy Agency without undue delay of any required proposals to amend or update the monitoring plan for the Agency's information or approval. However, the Energy Agency may, subject to specified conditions, allow an operator to provide notification no later than 31 December of the year in question.

Monitoring methodology plans

20. An operator of an installation, who is obliged under the FAR Regulation to comply with and update a monitoring methodology plan approved by the Energy Agency, must without undue delay notify the Energy Agency of required proposals to amend or update the monitoring methodology plan for the Agency's information or approval. The notification must be given in compliance with the requirements as to form, documentation and deadlines arising from the FAR Regulation.

Verification

21. Operators must ensure that reporting of emissions under section 22 and reporting of activity levels under section 25(1) is verified by an independent verifier in accordance with the allowance scheme, including the provisions of the AV Regulations or the MRV Maritime Regulation.

Annual reporting of emissions

22.-*(1)* In compliance with the provisions of the allowance scheme, operators must report annually to the Energy Agency verified emissions for the previous year from assets and activities for which the operator is responsible.

(2) For operators of installations and aircraft operators, the deadline for annual reporting under subsection (1) is 31 March. Aircraft operators must ensure that the reporting is registered in the EU Registry within the deadline.

(3) For shipping companies and fuel operators, the deadline for annual reporting under subsection (1) is 30 April.

Determination of emissions

23.-*(1)* The Energy Agency may determine the emissions caused by an asset or an activity covered by the allowance scheme if:

(i) the operator has not submitted an annual emission report by the applicable deadline;

(ii) the annual emission report is not in accordance with the rules of the allowance scheme; or

(iii) the emission report was not verified in accordance with the allowance scheme, including the provisions of the AV Regulation or the MRV Maritime Regulation.

(2) The Energy Agency's determination of emissions, cf. subsection (1), has the same legal effect as verified reporting under section 21.

24.-*(1)* The operator is liable to pay the Energy Agency's costs in connection with the determination of emissions, cf. section 23, including costs for the Energy Agency's initial work, and the Agency's costs for any expert assistance; cf. subsection (2).

(2) In the event that the Energy Agency finds reason to check or determine an operator's reporting, documentation or greenhouse gas emitting activities, the Agency may engage expert assistance, including a verifier to perform extraordinary verification tasks carried out under the provisions of the allowance scheme, including the provisions of the AV Regulation or the MRV Maritime Regulation.

Reporting and determination of activity level

25.-*(1)* An operator of an installation who is obliged under the ALC Regulation to report activity levels must submit a verified report on activity levels for the past year to the Energy Agency by 31 March each year. The report must be submitted in compliance with the requirements as to form, documentation and deadlines arising from the ALC Regulation.

(2) The Energy Agency may suspend the allocation of allowances to an installation if an operator fails to meet the deadline under subsection (1) until the Energy Agency has determined whether it is necessary to adjust the allocation to the installation in question, or until the European Commission has adopted a decision under Article 23(4) of the FAR Regulation.

(3) The Energy Agency may make an assessment of the reported activity levels and may determine an activity level by making a conservative estimate of the value of any parameter in accordance with the applicable rules under the ALC Regulation, provided that:

(i) the operator has not submitted a verified activity level report within the deadline, cf. subsection (1), and the allocation of allowances has not been suspended, cf. subsection (2);

(ii) the verified reported value is not in accordance with the ALC Regulation or the FAR Regulation; or

(iii) the operator's activity level report has not been verified in accordance with the AV Regulation.

(4) The provisions of section 24 apply by analogy to the Energy Agency's determination of activity levels under subsection (3) and the related costs.

Part 6

Surrender of allowances

26. In accordance with section 11(1) of the Act on CO_2 Allowances, the Energy Agency sets a penalty payable by operators who fail to comply with the annual deadline for surrendering allowances in the EU Registry pursuant to section 10(1) of the Act.

Part 7

Allocation of allowances

27. A request for free allocation of allowances is only considered if it was submitted to the Energy Agency in compliance with the related requirements as to form, documentation and deadlines set out in the FAR Regulation and the ALC Regulation.

28.-*(1)* Allocation of allowances in a given year is subject to the conditions that the operator holds the necessary permits for operation under the allowance scheme, and that the information of importance to the allocation of allowances provided by the operator is correct.

(2) For an operator of an installation who is obliged under the FAR Regulation to prepare and update a monitoring methodology plan approved by the Energy Agency, the allocation of allowances in a given year is also subject to the condition that the operator has met its monitoring, notification, reporting and

verification obligations and complied with the related requirements as to form, documentation and deadlines set out in the FAR Regulation and the ALC Regulation.

29. In accordance with section 9(2) of the Act on CO_2 Allowances, the Energy Agency determines the quantity of allowances that an operator must return because they are deemed to have been unduly received or because the conditions of the allowance scheme for receiving or retaining free allowances have otherwise not been fulfilled.

Part 8

Digital communication

30. Decisions and other documents can be sent digitally from the Energy Agency's electronic data online system to an operator.

31. Communication to the Energy Agency on matters covered by the allowance scheme, including communication in connection with applications for emissions permits, submission of information of matters of importance to the emissions permit, applications for free allowances, verification reports, presentation of updated monitoring plans or monitoring methodology plans, reporting of activity level, emission and other mandatory information, must be submitted digitally through the Energy Agency's electronic data online system to the extent possible. Communication must take place using the input forms, digital formats and signature options indicated or provided by the system for a given purpose.

32.-*(1)* The Energy Agency may decide that communication on matters covered by the allowance scheme must take place through Digital Post if the communication cannot be submitted through the Energy Agency's electronic data online system; cf. sections 30 and 31.

(2) Communication through Digital Post is subject to the legal effects of the Danish Act on Digital Post from public senders and rules issued pursuant to the Act.

Part 9

Fees and other payment obligations

Annual fee for operators

33.-*(1)* The Energy Agency charges an annual fee from operators to cover the costs related to the Agency's performance of its duties in the area of the allowance scheme; cf. section 21(1), para (iv) of the Act onCO_2 Allowances.

(2) The annual fee for operators of installations and aircraft operators is calculated per tonne of CO_2 emitted according to the operator's latest verified quantity of emissions during the past year. For aircraft operators, both flights covered by allowances and flights covered by CORSIA are included.

(3) Where the quantity of emissions during the year has been determined by the Energy Agency under section 23(1), the determination of the fee under subsection (2) is based on the quantity of emissions thus determined; cf. section 23(2).

(4) Irrespective of the calculation method used under subsections (2) and (3), the annual fee is not set lower than the minimum rate and not higher than the maximum rate applicable to the relevant category of operators.

(5) Fee rates per tonne of CO_2 emitted, cf. subsections (2) and (3), as well as minimum and maximum rates, cf. subsection (4), are set out in annex 1 to this Executive Order.

(6) The annual fee for shipping companies and fuel operators is set out in annex 1 to this Executive Order as a fixed amount per operator.

Collection of the annual fee

34.-*(1)* The Energy Agency may collect the annual fee under section 33 through the Danish Business Authority's joint fee collection system for operators.

(2) The collection of the fee, including the time when the fee is due for payment, the form of payment, reminder fees and debt collection, is subject to the Business Authority's rules on account fees applicable from time to time; cf. the Executive Order on the EU CO_2 Allowance Register and the Danish Kyoto Register.

(3) No VAT is payable on the annual fee.

(4) If the annual fee is not paid on time, the Energy Agency may charge interest and reminder fees in accordance with the provisions of the Danish Interest Act.

Hourly billing in the event of inadequate compliance

35.-*(1)* The Energy Agency may charge payment for the Agency's case management in connection with the determination of an operator's greenhouse gas emissions, cf. section 24, or the activity level of an installation, cf. section 25(4), as well as for other additional work in situations where an operator has not fulfilled its obligations under the allowance scheme or under decisions made in accordance with the allowance scheme; cf. section 21(1), para (iv), of the Act on CO_2 Allowances.

(2) Claims for payment under subsection (1) are calculated on the basis of hours spent by the Energy Agency to perform the task multiplied by the Agency's hourly rate applicable from time to time; cf. subsection (3).

(3) The hourly rate is determined on the basis of average salary costs plus general overheads at the Energy Agency in the previous financial year. The hourly rate is adjusted once a year.

(4) The provisions in section 34(3) and (4) apply by analogy to hourly billing under subsections (1)-(3).

Re-invoicing of other additional expenses in the event of inadequate compliance

36.-*(1)* In addition to hourly billing under section 35, the Energy Agency may charge payment for other documented additional expenses incurred by the Agency in connection with the case management or additional work, including travel expenses and costs for verifier assistance or other expert assistance. Such re-invoicing must include all VAT expenses incurred by the Agency.

(2) The provision in section 34(4) applies by analogy to re-invoicing pursuant to subsection (1).

Part 10

Appeal and penalty provisions

37.-*(1)* The Danish Energy Board of Appeal hears appeals against decisions made under this Executive Order, but see subsection (2).

(2) The following decisions cannot be appealed to the Energy Board of Appeal:

(i) Decisions covered by section 24(2) of the Act on CO_2Allowances.

(ii) Refusal in special cases to grant a temporary emissions permit to an operator of an installation or fuel operator; cf. section 14.

(3) Notwithstanding subsection (2), complaints about administrative law issues in connection with the Energy Agency's decisions may be brought before the Energy Board of Appeal.

(4) Complaints must be submitted in writing within four weeks of the notification of the decision.

38.-*(1)* Unless a more severe punishment is stipulated elsewhere in the law, the following offences are punishable by a fine:

(i) failure to appoint an authorised representative as referred to in section 7(4);

(ii) violation of terms in a permit granted to an operator of an installation under section 8(2) or to a fuel operator under section 11(2);

(iii) failure by an operator of an installation to fulfil an obligation under section 12(1) to notify the Energy Agency without undue delay of matters of importance to the emissions permit or to the allocation of allowances;

(iv) failure by a fuel operator to fulfil an obligation under section 12(2) to notify the Energy Agency without undue delay of matters of importance to the emissions permit;

(v) violation of an obligation under section 19(1) to monitor emissions from assets and activities in accordance with a monitoring plan approved by the Energy Agency;

(vi) violation of an obligation under section 19(2), first sentence, to notify the Energy Agency without undue delay of required proposals to amend or update a monitoring plan for the Agency's information or approval;

(vi) violation of an obligation under section 20 to notify the Energy Agency without undue delay of required proposals to amend or update a monitoring methodology plan for the Agency's information or approval;

(viii) violation of a reporting obligation under section 22 by failure to report verified emissions in a timely and satisfactory manner.

(ix) violation of a reporting obligation under section 25 by failure to report verified activity levels, including registration thereof, in a timely and satisfactory manner; or

(x) failure to comply with an order or prohibition issued pursuant to the provisions of this Executive Order.

(2) Companies, etc. (legal persons) may incur criminal liability under the rules of Part 5 of the Criminal Code.

Part 11

Blockings in the Danish Kyoto Registry

39. Existing blockings in the Danish Kyoto Registry are maintained so that CDM carbon credits of the types T-CER and L-CER may not be deposited in the accounts in the Registry.

Part 12

Entry into force and transitional provisions

40.-*(1)* The Executive Order will take effect on 1 January 2024.

(2) The following Executive Orders are repealed:

(i) Executive Order no. 2134 of 21 December 2020 on CO_2 Allowances, etc.

(ii) Executive Order no. 2255 of 2 December 2021 on fees and other payments for services under the Act on CO_2 Allowances.

The Ministry of Climate, Energy and Utilities, 28 December 2023

Lars Aagaard

/ Iben Møller Søndergård

Annex 1

Fee rates

Fee rates for operators of installations	
Fee per tonne of CO_2 emitted	DKK 1.79
Maximum rate	DKK 110,000
Minimum rate	DKK 10,000

Fee rates for aircraft operators	
Fee per tonne of CO_2 emitted	DKK 1.42
Maximum rate	DKK 85,000
Minimum rate	DKK 10,000

Fee rates for shipping companies	
Fee per year	DKK 33,226

Fee rates for fuel operators	
Fee per year	DKK 16,613

Annex 2

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

(Text with EEA relevance)

CHAPTER I
GENERAL PROVISIONS

Article 1
Subject matter

This Directive establishes a system for greenhouse gas emission allowance trading with the Union (hereinafter referred to as the 'EU ETS') in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner.

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 ([1]) and thereby to the objectives of the Paris Agreement ([2]).

This Directive also lays down provisions for assessing and implementing a stricter Union reduction commitment exceeding 20 %, to be applied upon the approval by the Union of an international agreement on climate change leading to greenhouse gas emission reductions exceeding those required in Article 9, as reflected in the 30 % commitment endorsed by the European Council of March 2007.

Article 2
Scope

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).

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[1] 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).

[2] OJ L 282, 19.10.2016, p. 4.

2. This Directive shall apply without prejudice to any requirements pursuant to Directive 2010/75/EU of the European Parliament and of the Council ([3]).

3. The application of this Directive to the airport of Gibraltar is understood to be without prejudice to the respective legal positions of the Kingdom of Spain and the United Kingdom with regard to the dispute over sovereignty over the territory in which the airport is situated.

Article 3
Definitions

For the purposes of this Directive the following definitions shall apply:

(a) 'allowance' means an allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this Directive and shall be transferable in accordance with the provisions of this Directive;

(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;

(c) 'greenhouse gases' means the gases listed in Annex II and other gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation;

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

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

(f) 'operator' means any person who operates or controls an installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated;

(g) 'person' means any natural or legal person;

(h) 'new entrant' means any installation carrying out one or more of the activities listed in Annex I, which has obtained a greenhouse gas emissions permit for the first time within the period starting from three months before the date for submission of the list under Article 11(1), and ending three months before the date for the submission of the subsequent list under that Article;

(i) 'the public' means one or more persons and, in accordance with national legislation or practice, associations, organisations or groups of persons;

(j) 'tonne of carbon dioxide equivalent' means one metric tonne of carbon dioxide (CO_2) or an amount of any other greenhouse gas listed in Annex II with an equivalent global-warming potential;

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[3] 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).

(k) 'Annex I Party' means a Party listed in Annex I to the United Nations Framework Convention on Climate Change (UNFCCC) that has ratified the Kyoto Protocol as specified in Article 1(7) of the Kyoto Protocol;

(l) 'project activity' means a project activity approved by one or more Annex I Parties in accordance with Article 6 or Article 12 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;

(m) 'emission reduction unit' or 'ERU' means a unit issued pursuant to Article 6 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;

(n) 'certified emission reduction' or 'CER' means a unit issued pursuant to Article 12 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;

(o) 'aircraft operator' means the person who operates an aircraft at the time it performs an aviation activity listed in Annex I or, where that person is not known or is not identified by the owner of the aircraft, the owner of the aircraft;

(p) 'commercial air transport operator' means an operator that, for remuneration, provides scheduled or non-scheduled air transport services to the public for the carriage of passengers, freight or mail;

(q) 'administering Member State' means the Member State responsible for administering the EU ETS in respect of an aircraft operator in accordance with Article 18a;

(r) 'attributed aviation emissions' means emissions from all flights falling within the aviation activities listed in Annex I which depart from an aerodrome situated in the territory of a Member State and those which arrive in such an aerodrome from a third country;

(s) 'historical aviation emissions' means the mean average of the annual emissions in the calendar years 2004, 2005 and 2006 from aircraft performing an aviation activity listed in Annex I;

(t) 'combustion' means any oxidation of fuels, regardless of the way in which the heat, electrical or mechanical energy produced by this process is used, and any other directly associated activities, including waste gas scrubbing;

(v) 'non-CO_2 aviation effects' means the effects on the climate of the release, during fuel combustion, of oxides of nitrogen (NOx), soot particles, oxidised sulphur species, and effects from water vapour, including contrails, from an aircraft performing an aviation activity listed in Annex I.

(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 ([4]);

[4] 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).

(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 ([5]);

(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 ([6]), 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

[5] 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).
[6] 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).

subparagraph, of Council Directive 2003/96/EC ([7]) 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.

CHAPTER II
AVIATION AND MARITIME TRANSPORT

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.

Article 3b
Aviation activities

By 2 August 2009, the Commission shall, in accordance with the examination procedure referred to in Article 22a (2), develop guidelines on the detailed interpretation of the aviation activities listed in Annex I.

[7] 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)

Article 3c
Total quantity of allowances for aviation

1. For the period from 1 January 2012 to 31 December 2012, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 97 % of the historical aviation emissions.

3. The Commission shall review the total quantity of allowances to be allocated to aircraft operators in accordance with Article 30(4).

3a. Any allocation of allowances for aviation activities to and from aerodromes located in countries outside the European Economic Area ('EEA') after 31 December 2023 shall be subject to the review referred to in Article 28b.

4. By 2 August 2009, the Commission shall decide on the historical aviation emissions, based on best available data, including estimates based on actual traffic information. That decision shall be considered within the Committee referred to in Article 23(1).

5. The Commission shall determine the total quantity of allowances to be allocated in respect of aircraft operators for the year 2024 on the basis of the total allocation of allowances in respect of aircraft operators that were performing aviation activities listed in Annex I in the year 2023, reduced by the linear reduction factor as referred to in Article 9, and shall publish that quantity, as well as the amount of free allocation which would have taken place in 2024 under the rules for free allocation in force prior to the amendments introduced by Directive (EU) 2023/958 of the European Parliament and of the Council ([8]) .

6. For the period from 1 January 2024 until 31 December 2030, a maximum of 20 million of the total quantity of allowances referred to in paragraph 5 shall be reserved in respect of commercial aircraft operators, on a transparent, equal-treatment and non-discriminatory basis, for the use of sustainable aviation fuels, and other aviation fuels that are not derived from fossil fuels, identified in a regulation on ensuring a level playing field for sustainable air transport as counting towards reaching the minimum share of sustainable aviation fuels that aviation fuel made available to aircraft operators at Union airports by aviation fuel suppliers is required to contain under that Regulation, for subsonic flights for which allowances have to be surrendered in accordance with Article 12(3) of this Directive. Where eligible aviation fuel cannot be physically attributed in an airport to a specific flight, the allowances reserved under this subparagraph shall be available for eligible aviation fuels uplifted at that airport proportionate to the emissions from flights, of the aircraft operator from that airport, for which allowances have to be surrendered in accordance with Article 12(3) of this Directive.

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

[8] Directive (EU) 2023/958 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC as regards aviation's contribution to the Union's economy-wide emission reduction target and the appropriate implementation of a global market-based measure (OJ L 130, 16.5.2023, p. 115).

The allowances allocated under this paragraph shall cover:

(a) 70 % of the remaining price differential between the use of fossil kerosene and hydrogen from renewable energy sources, and advanced biofuels as defined in Article 2, second paragraph, point (34), of Directive (EU) 2018/2001 of the European Parliament and of the Council ([9]), for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive;

(b) 95 % of the remaining price differential between the use of fossil kerosene and renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001, used in aviation, for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive;

(c) 100 % of the remaining price differential between the use of fossil kerosene and any eligible aviation fuel that is not derived from fossil fuels covered by the first subparagraph of this paragraph, at airports situated on islands smaller than 10 000 km^2 and with no road or rail link with the mainland, at airports which are insufficiently large to be defined as Union airports in accordance with a regulation on ensuring a level playing field for sustainable air transport and at airports located in an outermost region;

(d) in cases other than those referred to in points (a), (b) and (c), 50 % of the remaining price differential between the use of fossil kerosene and any eligible aviation fuel that is not derived from fossil fuels covered by the first subparagraph of this paragraph.

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

On a yearly basis, commercial aircraft operators may apply for an allocation of allowances based on the quantity of each eligible aviation fuel referred to in this paragraph used on flights for which allowances have to be surrendered in accordance with Article 12(3) between 1 January 2024 and 31 December 2030, excluding flights for which that requirement is considered to be satisfied pursuant to Article 28a(1). If, for a given year, the demand for allowances for the use of such fuels is higher than the availability of allowances, the quantity of allowances shall be reduced in a uniform manner for all aircraft operators concerned by the allocation for that year.

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

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by establishing the detailed rules for the yearly calculation of the cost difference referred to in the sixth subparagraph of this paragraph, for the allocation of allowances for the use of the fuels identified in the first subparagraph of this paragraph and for the calculation of the greenhouse gas emissions saved as a result of the use of fuels as reported under the implementing act adopted pursuant to Article 14(1), and establishing the arrangements for taking

[9]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).

into account incentives from the price of carbon and from harmonised minimum levels of taxation on fossil fuels.

By 1 January 2028, the Commission shall carry out an evaluation regarding the application of this paragraph and submit the results of that evaluation in a report to the European Parliament and to the Council in a timely manner. The report may, where appropriate, be accompanied by a legislative proposal to allocate a capped and time-limited amount of allowances until 31 December 2034 to further incentivise the use of the fuels identified in the first subparagraph of this paragraph, in particular the use of renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001, used in aviation, for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive.

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

7. In respect of flights departing from an aerodrome located in the EEA which arrive at an aerodrome located in the EEA, in Switzerland or in the United Kingdom, and which were not covered by the EU ETS in 2023, the total quantity of allowances to be allocated to aircraft operators shall be increased by the levels of allocations, including free allocation and auctioning, which would have been made if they were covered by the EU ETS in that year, reduced by the linear reduction factor as referred to in Article 9.

8. By way of derogation from Article 12(3), Article 14(3) and Article 16, Member States shall consider the requirements set out in those provisions to be satisfied and shall take no action against aircraft operators in respect of emissions released until 31 December 2030 from flights between an aerodrome located in an outermost region of a Member State and an aerodrome located in the same Member State, including another aerodrome located in the same outermost region or in another outermost region of the same Member State.

Article 3d

Method of allocation of allowances for aviation through auctioning

1. In the years 2024 and 2025, 15 % of the allowances referred to in Article 3c(5) and (7), as well as 25 % in 2024 and 50 % in 2025, respectively, of the remaining 85 % of those allowances, in respect of which free allocation would have taken place, shall be auctioned, except for the quantities of allowances referred to in Article 3c(6) and Article 10a(8), fourth subparagraph. The remainder of the allowances for those years shall be allocated for free.

From 1 January 2026, the entire quantity of allowances in respect of which free allocation would have taken place in that year shall be auctioned, except for the quantity of allowances referred to in Article 3c(6) and Article 10a(8), fourth subparagraph.

1a. Allowances which are allocated for free shall be allocated to aircraft operators proportionately to their share of verified emissions from aviation activities reported for 2023. That calculation shall also take into account verified emissions from aviation activities reported in respect of flights that are only covered by the EU ETS from 1 January 2024. By 30 June of the relevant year, the competent authorities shall issue the allowances which are allocated for free for that year.

3. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the detailed arrangements for the auctioning by Member

States of aviation allowances in accordance with paragraphs 1 and 1a of this Article, including the detailed arrangements for the auctioning which are necessary for the transfer of a share of revenue from such auctioning to the general budget of the Union as own resources in accordance with Article 311, third paragraph, of the Treaty on the Functioning of the European Union (TFEU). The quantity of allowances to be auctioned in each period by each Member State shall be proportionate to its share of the total attributed aviation emissions for all Member States for the reference year reported pursuant to Article 14(3) and verified pursuant to Article 15. For each period referred to in Article 13, the reference year shall be the calendar year ending 24 months before the start of the period to which the auction relates. The delegated acts shall ensure that the principles set out in the first subparagraph of Article 10(4) are respected.

4. Member States shall determine the use of revenues generated from the auctioning of allowances covered by this Chapter, except for the revenues established as own resources in accordance with Article 311, third paragraph, TFEU and entered in the general budget of the Union. Member States shall use the revenues generated from the auctioning of allowances or the equivalent in financial value of those revenues in accordance with Article 10(3) of this Directive.

5. Information provided to the Commission pursuant to this Directive does not free Member States from the notification obligation laid down in Article 88(3) of the Treaty.

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.

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.

CHAPTER III
STATIONARY INSTALLATIONS

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.

Article 4
Greenhouse gas emissions permits

Member States shall ensure that, from 1 January 2005, no installation carries out any activity listed in Annex I resulting in emissions specified in relation to that activity unless its operator holds a permit issued by a competent authority in accordance with Articles 5 and 6, or the installation is excluded from the EU ETS pursuant to Article 27. This shall also apply to installations opted in under Article 24.

Article 5
Applications for greenhouse gas emissions permits

An application to the competent authority for a greenhouse gas emissions permit shall include a description of:

(a) the installation and its activities including the technology used;

(b) the raw and auxiliary materials, the use of which is likely to lead to emissions of gases listed in Annex I;

(c) the sources of emissions of gases listed in Annex I from the installation; and

(d) he measures planned to monitor and report emissions in accordance with the acts referred to in Article 14.

The application shall also include a non-technical summary of the details referred to in the first subparagraph.

Article 6
Conditions for and contents of the greenhouse gas emissions permit

1. The competent authority shall issue a greenhouse gas emissions permit granting authorisation to emit greenhouse gases from all or part of an installation if it is satisfied that the operator is capable of monitoring and reporting emissions.

   A greenhouse gas emissions permit may cover one or more installations on the same site operated by the same operator.

2. Greenhouse gas emissions permits shall contain the following:

(a) the name and address of the operator;

(b) a description of the activities and emissions from the installation;

(c) a monitoring plan that fulfils the requirements under the acts referred to in Article 14. Member States may allow operators to update monitoring plans without changing the permit. Operators shall submit any updated monitoring plans to the competent authority for approval;

(d) reporting requirements; and

(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).

Article 7
Changes relating to installations

The operator shall inform the competent authority of any planned changes to the nature or functioning of the installation, or any extension or significant reduction of its capacity, which may require updating the greenhouse gas emissions permit. Where appropriate, the competent authority shall update the permit. Where there is a change in the identity of the installation's operator, the competent authority shall update the permit to include the name and address of the new operator.

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.

Article 9
Union wide quantity of allowances

The Union wide quantity of allowances issued each year starting in 2013 shall decrease in a linear manner beginning from the mid-point of the period from 2008 to 2012. The quantity shall decrease by a linear factor of 1,74 % compared to the average annual total quantity of allowances issued by Member States in accordance with the Commission Decisions on their national allocation plans for the period from 2008 to 2012. The Union-wide quantity of allowances will be increased as a result of Croatia's accession only by the quantity of allowances that Croatia shall auction pursuant to Article 10(1).

Starting in 2021, the linear factor shall be 2,2 %.

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 CO_2 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).

Article 9a

Adjustment of the Union-wide quantity of allowances

1. In respect of installations that were included in the EU ETS during the period from 2008 to 2012 pursuant to Article 24(1), the quantity of allowances to be issued from 1 January 2013 shall be adjusted to reflect the average annual quantity of allowances issued in respect of those installations during the period of their inclusion, adjusted by the linear factor referred to in Article 9.

2. In respect of installations carrying out activities listed in Annex I, which are only included in the EU ETS from 2013 onwards, Member States shall ensure that the operators of such installations submit to the relevant competent authority duly substantiated and independently verified emissions data in order for them to be taken into account for the adjustment of the Union-wide quantity of allowances to be issued.

   Any such data shall be submitted, by 30 April 2010, to the relevant competent authority in accordance with the provisions adopted pursuant to Article 14(1).

   If the data submitted are duly substantiated, the competent authority shall notify the Commission thereof by 30 June 2010 and the quantity of allowances to be issued, adjusted by the linear factor referred to in Article 9, shall be adjusted accordingly. In the case of installations emitting greenhouse gases other than CO_2, the competent authority may notify a lower amount of emissions according to the emission reduction potential of those installations.

3. The Commission shall publish the adjusted quantities referred to in paragraphs 1 and 2 by 30 September 2010.

4. In respect of installations which are excluded from the EU ETS in accordance with Article 27, the Union -wide quantity of allowances to be issued from 1 January 2013 shall be adjusted downwards to reflect the average annual verified emissions of those installations in the period from 2008 to 2010, adjusted by the linear factor referred to in Article 9.

Article 10
Auctioning of allowances

1. From 2019 onwards, Member States shall auction all allowances that are not allocated free of charge in accordance with Articles 10a and 10c of this Directive and that are not placed in the market stability reserve established by Decision (EU) 2015/1814 of the European Parliament and of the Council ([10]) (the 'market stability reserve') or cancelled in accordance with Article 12(4) of this Directive.

   From 2021 onwards, and without prejudice to a possible reduction pursuant to Article 10a(5a), the share of allowances to be auctioned shall be 57 %.

   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.

   The total remaining quantity of allowances to be auctioned by Member States shall be distributed in accordance with paragraph 2.

1a Where the volume of allowances to be auctioned by Member States in the last year of each period referred to in Article 13 of this Directive exceeds by more than 30 % the expected average auction volume for the first two years of the following period before application of Article 1(5) of Decision (EU) 2015/1814, two thirds of the difference between the volumes shall be deducted from the auction volumes in the last year of the period and added in equal instalments to the volumes to be auctioned by Member States in the first two years of the following period.

2. The total quantity of allowances to be auctioned by each Member State shall be composed as follows:

   (a) 90 % of the total quantity of allowances to be auctioned being distributed amongst Member States in shares that are identical to the share of verified emissions under the EU ETS for 2005 or the average of the period from 2005 to 2007, whichever one is the highest, of the Member State concerned;

   (b) 10 % of the total quantity of allowances to be auctioned being distributed amongst certain Member States for the purposes of solidarity, growth and interconnections within the Union, thereby increasing the amount of allowances that those Member States auction under point (a) by the percentages specified in Annex IIa.

   For the purposes of point (a), in respect of Member States which did not participate in the EU ETS in 2005, their share shall be calculated using their verified emissions under the EU ETS in 2007.

[10] 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 system and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, p. 1).

If necessary, the percentages referred to in point (b) shall be adapted in a proportional manner to ensure that the distribution is 10 %.

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:

   (a) to reduce greenhouse gas emissions, including by contributing to the Global Energy Efficiency and Renewable Energy Fund and to the Adaptation Fund as made operational by the Poznan Conference on Climate Change (COP 14 and COP/MOP 4), to adapt to the impacts of climate change and to fund research and development as well as demonstration projects for reducing emissions and for adaptation to climate change, including participation in initiatives within the framework of the European Strategic Energy Technology Plan and the European Technology Platforms;

   (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 CO_2, 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;

(g) to finance research and development in energy efficiency and clean technologies in the sectors covered by this Directive;

(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 ([11]), starting with the renovation of the worst-performing buildings;

(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 ([12]);

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

(j) to finance climate actions in vulnerable third countries, including the adaptation to the impacts of climate change;

(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 ([13]), supporting the transition and promoting their decarbonisation in accordance with State aid rules.

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).

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.

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

[11] 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).
[12] 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).
[13] 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).

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 ([14]).

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

4. 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.

   Those delegated acts shall ensure that auctions are designed to ensure that:

   (a) operators, and in particular any small and medium-sized enterprises covered by the EU ETS, have full, fair and equitable access;

   (b) all participants have access to the same information at the same time and that participants do not undermine the operation of the auctions;

   (c) the organisation of, and participation in, the auctions is cost-efficient and undue administrative costs are avoided; and

   (d) access to allowances is granted to small emitters.

   Member States shall report on the proper implementation of the auctioning rules for each auction, in particular with respect to fair and open access, transparency, price formation and technical and operational aspects. These reports shall be submitted within one month of the auction concerned and shall be published on the Commission's website.

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.

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

[14] 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).

accordance with Article 32(3) of Regulation (EU) No 1095/2010 of the European Parliament and of the Council ([15]). 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 ([16]).

Article 10a

Transitional Union-wide rules for harmonised free allocation

1. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the Union-wide and fully harmonised rules for the allocation of allowances referred to in paragraphs 4, 5, 7 and 19 of this Article.

   The measures referred to in the first subparagraph shall, to the extent feasible, determine Union-wide ex-ante benchmarks so as to ensure that allocation takes place in a manner that provides incentives for reductions in greenhouse gas emissions and energy efficient techniques, by taking account of the most efficient techniques, substitutes, alternative production processes, high efficiency cogeneration, efficient energy recovery of waste gases, use of biomass and capture and storage of CO_2, where such facilities are available, and shall not provide incentives to increase emissions. No free allocation shall be made in respect of any electricity production, except for cases falling within Article 10c and electricity produced from waste gases.

   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 ([17]) 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 installlations

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[15] 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).

[16] 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).

[17] 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).

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.

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.

In defining the principles for setting ex-ante benchmarks in individual sectors and subsectors, the Commission shall consult the relevant stakeholders, including the sectors and subsectors concerned.
The Commission shall, upon the approval by the Union of an international agreement on climate change leading to mandatory reductions of greenhouse gas emissions comparable to those of the Union, review those measures to provide that free allocation is only to take place where this is fully justified in the light of that agreement.

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 pro-duction 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 inno-vation 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.

2. In defining the principles for setting ex-ante benchmarks in individual sectors or subsectors, the starting point shall be the average performance of the 10 % most efficient installations in a sector or subsector in the Union in the years 2007-2008. The Commission shall consult the relevant stakeholders, including the sectors and subsectors concerned.

   The acts pursuant to Articles 14 and 15 shall provide for harmonised rules on monitoring, reporting and verification of production-related greenhouse gas emissions with a view to determining the ex-ante benchmarks.

   The Commission shall adopt implementing acts for the purpose of determining the revised benchmark values for free allocation. Those acts shall be in accordance with the delegated acts adopted pursuant to paragraph 1 of this Article and shall comply with the following:

   (a) For the period from 2021 to 2025, the benchmark values shall be determined on the basis of information submitted pursuant to Article 11 for the years 2016 and 2017. On the basis of a comparison of those benchmark values with the benchmark values contained in Commission Decision 2011/278/EU ([18]), as adopted on 27 April 2011, the Commission shall determine the annual reduction rate for each benchmark, and shall apply it to the benchmark values applicable in the period

[18] Commission Decision 2011/278/EU of 27 April 2011 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 130, 17.5.2011, p. 1).

from 2013 to 2020 in respect of each year between 2008 and 2023 to determine the benchmark values for the period from 2021 to 2025.

(b) Where the annual reduction rate exceeds 1,6 % or is below 0,2 %, the benchmark values for the period from 2021 to 2025 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 2023.

(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.

(d) here 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.

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.

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

In order to promote efficient energy recovery from waste gases, for the period referred to in point (b) of the third subparagraph, the benchmark value for hot metal, which predominantly relates to waste gases, shall be updated with an annual reduction rate of 0,2 %.

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.

5a. By way of derogation from paragraph 5, an additional amount of up to 3 % of the total quantity of allowances shall, to the extent necessary, be used to increase the maximum amount available under paragraph 5.

5b. Where less than 3 % of the total quantity of allowances is needed to increase the maximum amount available under paragraph 5:

- a maximum of 50 million allowances shall be used to increase the amount of allowances available to support innovation in accordance with Article 10a(8); and

- a maximum of 0,5 % of the total quantity of allowances shall be used to increase the amount of allowances available to modernise the energy systems of certain Member States in accordance with Article 10d.

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

   Member States shall also seek to use no more than 25 % of the revenues generated from the auctioning of allowances for the financial measures referred to in the first subparagraph. Within three months of the end of each year, Member States that have such financial measures in place shall make available to the public, in an easily accessible form, the total amount of compensation provided per benefitting sector and subsector. As from 2018, in any year in which a Member State uses more than 25 % of the revenues generated from the auctioning of allowances for such purposes, it shall publish a report setting out the reasons for exceeding that amount. The report shall include relevant information on electricity prices for large industrial consumers benefiting from such financial measures, without prejudice to requirements regarding the protection of confidential information. The report shall also include information on whether due consideration has been given to other measures to sustainably lower indirect carbon costs in the medium to long term.

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

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

7. Allowances from the maximum amount referred to in paragraph 5 of this Article which were not allocated for free by 2020 shall be set aside for new entrants, together with 200 million allowances placed in the market stability reserve pursuant to Article 1(3) of Decision (EU) 2015/1814. Of the allowances set aside, up to 200 million shall be returned to the market stability reserve at the end of the period from 2021 to 2030 if not allocated for that period.

   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.

Allocations shall be adjusted by the linear factor referred to in Article 9.

No free allocation shall be made in respect of any electricity production by new entrants.

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 ([19]), 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 CO_2, in particular for unavoidable industrial process emissions, and the direct capture of CO_2 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.

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[19] 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 CO_2 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).

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 ([20]). 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.

[20] 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).

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 CO_2. 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.

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 ([21]). 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.

9. Greece, which had a gross domestic product (GDP) per capita at market prices below 60 % of the Union average in 2014, may claim, prior to the application of paragraph 7 of this Article, up to 25 million allowances from the maximum amount referred to in paragraph 5 of this Article which are not allocated for free by 31 December 2020, for the co-financing of up to 60 % of the decarbonisation of the electricity supply of islands within its territory. Article 10d(3) shall apply *mutatis mutandis* to such allowances. Allowances may be claimed where, due to restricted access to the international debt markets, a project aiming at the decarbonisation of the electricity supply of Greece's islands could otherwise not be realised and where the European Investment Bank (EIB) confirms the financial viability and socio-economic benefits of the project.

11. Subject to Article 10b, the amount of allowances allocated free of charge under paragraphs 4 to 7 of this Article in 2013 shall be 80 % of the quantity determined in accordance with the measures referred to in paragraph 1. Thereafter the free allocation shall decrease each year by equal amounts resulting in 30 % free allocation in 2020, with a view to reaching no free allocation in 2027

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.

[21] 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).

20. The level of free allocations given to installations whose operations have increased or decreased, as assessed on the basis of a rolling average of two years, by more than 15 % compared to the level initially used to determine the free allocation for the relevant period referred to in Article 11(1) shall, as appropriate, be adjusted. Such adjustments 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.

21. In order to ensure the effective, non-discriminatory and uniform application of the adjustments and threshold referred to in paragraph 20 of this Article, to avoid any undue administrative burden, and to prevent manipulation or abuse of the adjustments to the allocation, the Commission may adopt implementing acts which define further arrangements for the adjustments. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

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.

Article 10b

Transitional measures to support certain energy intensive industries in the event of carbon leakage

1. Sectors and subsectors in relation to which the product resulting from multiplying their intensity of trade with third countries, defined as the ratio between the total value of exports to third countries plus the value of imports from third countries and the total market size for the European Economic Area (annual turnover plus total imports from third countries), by their emission intensity, measured in $kgCO_2$, divided by their gross value added (in euros), exceeds 0,2, shall be deemed to be at risk of carbon leakage. Such sectors and subsectors shall be allocated allowances free of charge for the period until 2030 at 100 % of the quantity determined pursuant to Article 10a.

2. Sectors and subsectors in relation to which the product resulting from multiplying their intensity of trade with third countries by their emission intensity exceeds 0,15 may be included in the group referred to in paragraph 1, using data for the years from 2014 to 2016, on the basis of a qualitative assessment and of the following criteria:

   (a) the extent to which it is possible for individual installations in the sector or subsector concerned to reduce emission levels or electricity consumption;

   (b) current and projected market characteristics, including, where relevant, any common reference price;

   (c) profit margins as a potential indicator of long-run investment or relocation decisions, taking into account changes in costs of production relating to emission reductions.

3. Sectors and subsectors that do not exceed the threshold referred to in paragraph 1, but have an emission intensity measured in $kgCO_2$, divided by their gross value added (in euros), which exceeds 1,5, shall also be assessed at a 4-digit level (NACE-4 code). The Commission shall make the results of that assessment public.

   Within three months of the publication referred to in the first subparagraph, the sectors and subsectors referred to in that subparagraph may apply to the Commission for either a qualitative assessment of

their carbon leakage exposure at a 4-digit level (NACE-4 code) or an assessment on the basis of the classification of goods used for statistics on industrial production in the Union at an 8-digit level (Prodcom). To that end, sectors and subsectors shall submit duly substantiated, complete and independently verified data to enable the Commission to carry out the assessment together with the application.

Where a sector or subsector chooses to be assessed at a 4-digit level (NACE-4 code), it may be included in the group referred to in paragraph 1 on the basis of the criteria referred to in points (a), (b) and (c) of paragraph 2. Where a sector or subsector chooses to be assessed at an 8-digit level (Prodcom), it shall be included in the group referred to in paragraph 1 provided that, at that level, the threshold of 0,2 referred to in paragraph 1 is exceeded.

Sectors and subsectors for which free allocation is calculated on the basis of the benchmark values referred to in the fourth subparagraph of Article 10a(2) may also request to be assessed in accordance with the third subparagraph of this paragraph.

By way of derogation from paragraphs 1 and 2, a Member State may request, by 30 June 2018, that a sector or subsector listed in the Annex to Commission Decision 2014/746/EU ([22]) in respect of classifications at a 6-digit or an 8-digit level (Prodcom) be considered to be included in the group referred to in paragraph 1. Any such request shall only be considered where the requesting Member State establishes that the application of that derogation is justified on the basis of duly substantiated, complete, verified and audited data for the five most recent years provided by the sector or subsector concerned, and includes all relevant information with its request. On the basis of those data, the sector or subsector concerned shall be included in respect of those classifications where, within a heterogeneous 4-digit level (NACE-4 code), it is shown that it has a substantially higher trade and emission intensity at a 6-digit or an 8-digit level (Prodcom), exceeding the threshold set out in paragraph 1.

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

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:

[22] Commission Decision 2014/746/EU of 27 October 2014 determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage, for the period 2015 to 2019 (OJ L 308, 29.10.2014, p. 114).

(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).

5. The Commission is empowered to adopt, by 31 December 2019, delegated acts in accordance with Article 23 to supplement this Directive concerning the determination of sectors and subsectors deemed at risk of carbon leakage, as referred to in paragraphs 1, 2 and 3 of this Article, for activities at a 4-digit level (NACE-4 code) as far as paragraph 1 of this Article is concerned, based on data for the three most recent calendar years available.

Article 10c

Option for transitional free allocation for the modernisation of the energy sector

1. By way of derogation from Article 10a(1) to (5), Member States which had in 2013 a GDP per capita at market prices (in euros) below 60 % of the Union average may give a transitional free allocation to installations for electricity generation for the modernisation, diversification and sustainable transformation of the energy sector. The investments supported shall be consistent with the transition to a safe and sustainable low-carbon economy, the objectives of the Union's 2030 climate and energy policy framework, and reaching the long-term objectives expressed in the Paris Agreement. The derogation provided for in this paragraph shall end on 31 December 2030.

2. The Member State concerned shall organise a competitive bidding process, to take place in one or more rounds between 2021 and 2030, for projects involving a total amount of investment exceeding EUR 12,5 million, in order to select the investments to be financed with free allocation. That competitive bidding process shall:

(a) comply with the principles of transparency, non-discrimination, equal treatment and sound financial management;

(b) ensure that only projects which contribute to the diversification of their energy mix and sources of supply, the necessary restructuring, environmental upgrading and retrofitting of the infrastructure, clean technologies, such as renewable energy technologies, or modernisation of the energy production sector, such as efficient and sustainable district heating, and of the transmission and distribution sector, are eligible to bid;

(c) define clear, objective, transparent and non-discriminatory selection criteria for the ranking of projects, so as to ensure that only projects are selected which:

(i) on the basis of a cost-benefit analysis, ensure a net positive gain in terms of emission reduction and realise a pre-determined significant level of CO_2 reductions taking into account the size of the project;

(ii) are additional, clearly respond to replacement and modernisation needs and do not supply a market-driven increase in energy demand;

(iii) offer the best value for money; and

(iv) do not contribute to or improve the financial viability of highly emission-intensive electricity generation or increase dependency on emission-intensive fossil fuels.

By way of derogation from Article 10(1) and without prejudice to the last sentence of paragraph 1 of this Article, in the event that an investment selected through the competitive bidding process is cancelled or the intended performance is not reached, the earmarked allowances may be used through a single additional round of the competitive bidding process at the earliest one year thereafter to finance other investments.

By 30 June 2019, any Member State intending to make use of optional transitional free allocation for the modernisation of the energy sector shall publish a detailed national framework setting out the competitive bidding process, including the planned number of rounds referred to in the first subparagraph, and the selection criteria, for public comment.

Where investments with a value of less than EUR 12,5 million are to be supported with free allocation and are not selected through the competitive bidding process referred to in this paragraph, the Member State shall select projects based on objective and transparent criteria. The results of this selection process shall be published for public comment. On this basis, the Member State concerned shall, by 30 June 2019, establish, publish and submit to the Commission a list of investments. Where more than one investment is carried out within the same installation, they shall be assessed as a whole to establish whether or not the value threshold of EUR 12,5 million is exceeded, unless those investments are, independently, technically or financially viable.

3. The value of the intended investments shall at least equal the market value of the free allocation, while taking into account the need to limit directly linked price increases. The market value shall be the average of the price of allowances on the common auction platform in the preceding calendar year. Up to 70 % of the relevant costs of an investment may be supported using the free allocation, provided that the remaining costs are financed by private legal entities.

4. Transitional free allocations shall be deducted from the quantity of allowances that the Member State would otherwise auction. The total free allocation shall be no more than 40 % of the allowances which

the Member State concerned will receive, pursuant to Article 10(2)(a), in the period from 2021 to 2030, spread out in equal annual volumes over that period.

5. Where a Member State, pursuant to Article 10d(4), uses allowances distributed for the purposes of solidarity, growth and interconnections within the Union in accordance with Article 10(2)(b), that Member State may, by way of derogation from paragraph 4 of this Article, use for transitional free allocation a total quantity of up to 60 % of the allowances received in the period from 2021 to 2030 pursuant to Article 10(2)(a), using a corresponding amount of the allowances distributed in accordance with Article 10(2)(b).

   Any allowances not allocated under this Article by 2020 may be allocated over the period from 2021 to 2030 to investments selected through the competitive bidding process referred to in paragraph 2, unless the Member State concerned informs the Commission by 30 September 2019 of its intention not to allocate some or all of those allowances over the period from 2021 to 2030, and of the amount of allowances to be auctioned instead in 2020. Where such allowances are allocated over the period from 2021 to 2030, a corresponding amount of allowances shall be taken into account for the application of the 60 % limit set out in the first subparagraph of this paragraph.

6. Allocations to operators shall be made upon demonstration that an investment selected in accordance with the rules of the competitive bidding process has been carried out. Where an investment leads to additional electricity generation capacity, the operator concerned shall also demonstrate that a corresponding amount of electricity-generation capacity with higher emission intensity has been decommissioned by it or another associated operator by the start of operation of the additional capacity.

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.

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.

Article 10d
Modernisation Fund

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 ([23]) 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.

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

[23] 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).

plans in accordance with Article 8(2), first subparagraph, point (k), of Regulation (EU) 2021/1056, where relevant.

3. The Modernisation Fund shall operate under the responsibility of the beneficiary Member States. The EIB shall ensure that the allowances are auctioned in accordance with the principles and modalities laid down in Article 10(4), and shall be responsible for managing the revenues. The EIB shall pass on the revenues to the Member States upon a disbursement decision from the Commission, where this disbursement for investments is in line with paragraph 2 of this Article or, where the investments do not fall into the areas listed in paragraph 2 of this Article, is in line with the recommendations of the investment committee. The Commission shall adopt its decision in a timely manner. The revenues shall be distributed amongst the Member States and according to the shares set out in Annex IIb, in accordance with paragraphs 6 to 12 of this Article.

4. Any Member State concerned may use the total free allocation granted pursuant to Article 10c(4), or part of that allocation, and the amount of allowances distributed for the purposes of solidarity, growth and interconnections within the Union in accordance with Article 10(2)(b), or part of that amount, in accordance with Article 10d, to support investments within the framework of the Modernisation Fund, thereby increasing the resources distributed to that Member State. By 30 September 2019, the Member State concerned shall notify the Commission of the respective amounts of allowances to be used under Article 10(2)(b), Article 10c and Article 10d.

5. An investment committee for the Modernisation Fund is hereby established. The investment committee shall be composed of a representative from each beneficiary Member State, the Commission and the EIB, and three representatives elected by the other Member States for a period of five years. It shall be chaired by the representative of the Commission. One representative of each Member State that is not a member of the investment committee may attend meetings of the committee as an observer.

   The investment committee shall operate in a transparent manner. The composition of the investment committee and the curricula vitae and declarations of interests of its members shall be made available to the public and, where necessary, updated.

6. Before a beneficiary Member State decides to finance an investment from its share in the Modernisation Fund, it shall present the investment project to the investment committee and to the EIB. Where the EIB confirms that an investment falls into the areas listed in paragraph 2, the Member State may proceed to finance the investment project from its share.

   Where an investment in the modernisation of energy systems, which is proposed to be financed from the Modernisation Fund, does not fall into the areas listed in paragraph 2, the investment committee shall assess the technical and financial viability of that investment, including the emission reductions it achieves, and issue a recommendation on financing the investment from the Modernisation Fund. The investment committee shall ensure that any investment relating to district heating achieves a substantial improvement in energy efficiency and emission reductions. That recommendation may include suggestions regarding appropriate financing instruments. Up to 70 % of the relevant costs of an investment which does not fall into the areas listed in paragraph 2 may be supported with resources from the Modernisation Fund provided that the remaining costs are financed by private legal entities.

7. The investment committee shall strive to adopt its recommendations by consensus. If the investment committee is not able to decide by consensus within a deadline set by the chairman, it shall take a decision by simple majority.

If the representative of the EIB does not endorse financing an investment, a recommendation shall only be adopted if a majority of two-thirds of all members vote in favour. The representative of the Member State in which the investment is to take place and the representative of the EIB shall not be entitled to cast a vote in this case. This subparagraph shall not apply to small-scale projects funded through loans provided by a national promotional bank or through grants contributing to the implementation of a national programme serving specific objectives in line with the objectives of the Modernisation Fund, provided that not more than 10 % of the Member States' share set out in Annex IIb is used under the programme.

8. Any acts or recommendations by the EIB or the investment committee made pursuant to paragraphs 6 and 7 shall be made in a timely manner and state the reasons on which they are based. Such acts and recommendations shall be made public.

9. The beneficiary Member States shall be responsible for following up on the implementation with respect to selected projects.

10. The beneficiary Member States shall report annually to the Commission on investments financed by the Modernisation Fund. The report shall be made public and include:

    (a) information on the investments financed per beneficiary Member State;

    (b) an assessment of the added value, in terms of energy efficiency or modernisation of the energy system, achieved through the investment.

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.

12. The Commission shall adopt implementing acts concerning detailed rules on the operation of the Modernisation Fund. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

Article 10e
Recovery and Resilience Facility

1. As an extraordinary and one-time measure, until 31 August 2026, the allowances auctioned pursuant to paragraphs 2 and 3 of this Article shall be auctioned until the total amount of revenue obtained from such auctioning has reached EUR 20 billion. That revenue shall be made available to the Recovery and Resilience Facility established by Regulation (EU) 2021/241 of the Parliament and of the Council ([24]) and shall be implemented in accordance with the provisions of that Regulation.

2. By way of derogation from Article 10a(8), until 31 August 2026, a part of the allowances referred to in that paragraph shall be auctioned to support the objectives set out in Article 21c(3), points (b) to (f),

[24] Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing a Recovery and Resilience Facility (OJ L 57, 18.2.2021, p. 17).

of Regulation (EU) 2021/241, until the amount of revenue obtained from such auctioning has reached EUR 12 billion.

3. Until 31 August 2026, a number of allowances from the quantity which would otherwise be auctioned from 1 January 2027 to 31 December 2030 by the Member States under Article 10(2), point (a), shall be auctioned to support the objectives set out in Article 21c(3), points (b) to (f), of Regulation (EU) 2021/241 until the amount of revenue obtained from such auctioning has reached EUR 8 billion. Those allowances shall, in principle, be auctioned in equal annual volumes over the relevant period.

4. By way of derogation from Article 1(5a) of Decision (EU) 2015/1814, until 31 December 2030, 27 million unallocated allowances in the market stability reserve from the total quantity which would otherwise be invalidated over that period shall be used to support innovation, as referred to in Article 10a(8), first subparagraph, of this Directive.

5. The Commission shall ensure that the allowances to be auctioned under paragraphs 2 and 3, including, where appropriate, for pre-financing payments in accordance with Article 21d of Regulation (EU) 2021/241, are auctioned in accordance with the principles and modalities laid down in Article 10(4) of this Directive and in accordance with Article 24 of Commission Regulation (EU) No 1031/2010 ([25]) to ensure an adequate amount of innovation fund resources in the period from 2023 to 2026. The period for auctioning referred to in this Article shall be reviewed one year after its start in the light of the impact of the auctioning provided for in this Article on the carbon market and price.

6. The EIB shall be the auctioneer for the allowances to be auctioned pursuant to this Article on the auction platform appointed pursuant to Article 26(1) of Regulation (EU) No 1031/2010 and shall provide the revenues generated from the auctioning to the Commission.

7. The revenues generated from the auctioning of allowances 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 ([26]).

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.

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[25] 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).

[26] 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).

Article 11
National implementation measures

1. Each Member State shall publish and submit to the Commission, by 30 September 2011, the list of installations covered by this Directive in its territory and any free allocation to each installation in its territory calculated in accordance with the rules referred to in Article 10a(1) and Article 10c.

   A list of installations covered by this Directive for the five years beginning on 1 January 2021 shall be submitted by 30 September 2019, and lists for each subsequent period of five years shall be submitted every five years thereafter. Each list shall include information on production activity, transfers of heat and gases, electricity production and emissions at sub-installation level over the five calendar years preceding its submission. Free allocations shall only be given to installations where such information is provided.

2. By 30 June of each year, the competent authorities shall issue the quantity of allowances that are to be allocated for that year, calculated in accordance with Articles 10, 10a and 10c.

3. Member States may not issue allowances free of charge under paragraph 2 to installations whose inscription in the list referred to in paragraph 1 has been rejected by the Commission.

CHAPTER IV
PROVISIONS APPLYING TO AVIATION, MARITIME TRANSPORT AND STATIONARY INSTALLATIONS

Article 11a
Use of CERs and ERUs from project activities in the EU ETS before the entry into force of an international agreement on climate change

1. Subject to paragraphs 2 and 3 of this Article, aircraft operators that hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State, shall be able to use the following units to comply with their obligations to cancel units in respect of the quantity notified pursuant to Article 12(6) as laid down in Article 12(9):

   (a) credits authorised by parties participating in the mechanism established under Article 6(4) of the Paris Agreement;

   (b) credits authorised by the parties participating in crediting programmes which have been considered eligible by the ICAO Council as identified in the implementing act adopted pursuant to paragraph 8;

   (c) credits authorised by parties to agreements pursuant to paragraph 5;

   (d) credits issued in respect of Union level projects pursuant to Article 24a.

2. Units referred to in paragraph 1, points (a) and (b), may be used if the following conditions have been met:

   (a) they originate from a State that is a Party to the Paris Agreement at the time of use;

(b) they originate from a State that is listed in the implementing act adopted pursuant to Article 25a(3) as participating in ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This condition shall not apply in respect of emissions released before 2027, nor shall it apply in respect of least developed countries or small island developing States, as defined by the United Nations, except for those States whose GDP per capita equals or exceeds the Union average.

3. Units referred to in paragraph 1, points (a), (b) and (c), may be used if arrangements are in place for authorisation by the participating parties, timely adjustments are made to the reporting of anthropogenic emissions by sources and removals by sinks covered by the nationally determined contributions of the participating parties, and double counting and a net increase in global emissions are avoided.

The Commission shall adopt implementing acts laying down detailed requirements for the arrangements referred to in the first subparagraph of this paragraph, which may include reporting and registry requirements, and for listing the States or programmes which apply those arrangements. Those arrangements shall take account of flexibilities accorded to least developed countries and small island developing States in accordance with paragraph 2 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

5. To the extent that the levels of CER and ERU use, allowed to operators or aircraft operators by Member States for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted under paragraph 8 and in the event that the negotiations on an international agreement on climate change are not concluded by 31 December 2009, credits from projects or other emission reducing activities may be used in the EU ETS in accordance with agreements concluded with third countries, specifying levels of use. In accordance with such agreements, operators shall be able to use credits from project activities in those third countries to comply with their obligations under the EU ETS.

6. Any agreements referred to in paragraph 5 shall provide for the use of credits in the EU ETS from project types which were eligible for use in the EU ETS during the period from 2008 to 2012, including renewable energy or energy efficiency technologies which promote technological transfer and sustainable development. Any such agreement may also provide for the use of credits from projects where the baseline used is below the level of free allocation under the measures referred to in Article 10a or below the levels required by Union legislation.

7. Once an international agreement on climate change has been reached, only credits from projects from third countries which have ratified that agreement shall be accepted in the EU ETS from 1 January 2013.

8. The Commission shall adopt implementing acts listing units which have been considered eligible by the ICAO Council and that fulfil the conditions set out in paragraphs 2 and 3 of this Article. The Commission shall also adopt implementing acts to update that list, as appropriate. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

Article 11b
Project activities

1. Member States shall take all necessary measures to ensure that baselines for project activities, as defined by subsequent decisions adopted under the UNFCCC or the Kyoto Protocol, undertaken in countries having signed a Treaty of Accession with the Union fully comply with the *acquis communautaire*, including the temporary derogations set out in that Treaty of Accession.

   The Union and its Member States shall only authorise project activities where all project participants have headquarters either in a country that has concluded the international agreement relating to such projects or in a country or sub-federal or regional entity which is linked to the EU ETS pursuant to Article 25.

2. Except as provided for in paragraphs 3 and 4, Member States hosting project activities shall ensure that no ERUs or CERs are issued for reductions or limitations of greenhouse gas emissions from activities falling within the scope of this Directive.

3. Until 31 December 2012, for JI and CDM project activities which reduce or limit directly the emissions of an installation falling within the scope of this Directive, ERUs and CERs may be issued only if an equal number of allowances is cancelled by the operator of that installation.

4. Until 31 December 2012, for JI and CDM project activities which reduce or limit indirectly the emission level of installations falling within the scope of this Directive, ERUs and CERs may be issued only if an equal number of allowances is cancelled from the national registry of the Member State of the ERUs' or CERs' origin.

5. A Member State that authorises private or public entities to participate in project activities shall remain responsible for the fulfilment of its obligations under the UNFCCC and the Kyoto Protocol and shall ensure that such participation is consistent with the relevant guidelines, modalities and procedures adopted pursuant to the UNFCCC or the Kyoto Protocol.

6. In the case of hydroelectric power production project activities with a generating capacity exceeding 20 MW, Member States shall, when approving such project activities, ensure that relevant international criteria and guidelines, including those contained in the World Commission on Dams November 2000 Report 'Dams and Development - A New Framework for Decision-Making', will be respected during the development of such project activities.

Article 12
Transfer, surrender and cancellation of allowances

1. Member States shall ensure that allowances can be transferred between:

   (a) persons within the Union;

   (b) persons within the Union and persons in third countries, where such allowances are recognised in accordance with the procedure referred to in Article 25 without restrictions other than those contained in, or adopted pursuant to, this Directive.

1a. The Commission shall, by 31 December 2010, examine whether the market for emissions allowances is sufficiently protected from insider dealing or market manipulation and, if appropriate, shall bring

forward proposals to ensure such protection. The relevant provisions of Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (market abuse) ([27]) may be used with any appropriate adjustments needed to apply them to trade in commodities.

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.

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.

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.

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[27] OJ L 96, 12.4.2003, p. 16.

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.

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.

3a. An obligation to surrender allowances shall not arise in respect of emissions verified as captured and transported for permanent storage to a facility for which a permit is in force in accordance with Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide ([28]).

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.

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).

5. Paragraphs 1 and 2 apply without prejudice to Article 10c.

[28] OJ L 140, 5.6.2009, p. 114.

6. In accordance with the methodology set out in the implementing act referred to in paragraph 8 of this Article, Member States shall calculate the offsetting requirements each year for the preceding calendar year in respect of flights to, from and between States that are listed in the implementing act adopted pursuant to Article 25a(3), and in respect of flights between Switzerland or the United Kingdom and States that are listed in the implementing act adopted pursuant to Article 25a(3), and by 30 November each year inform the aircraft operators.

   In accordance with the methodology set out in the implementing act referred to in paragraph 8 of this Article, Member States shall also calculate the total final offsetting requirements for a given CORSIA compliance period and, by 30 November of the year following the last year of the relevant CORSIA compliance period, inform aircraft operators that fulfil the conditions set out in the third subparagraph of this paragraph of those requirements.

   Member States shall inform aircraft operators that fulfil all of the following conditions of the level of offsetting:

   (a) the aircraft operators hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State; and

   (b) they produce annual CO_2 emissions greater than 10 000 tonnes from the use of aeroplanes with a maximum certified take-off mass greater than 5 700 kg conducting flights covered by Annex I, other than those departing and arriving in the same Member State, including outermost regions of the same Member State, from 1 January 2021.

   For the purposes of the first subparagraph, point (b), CO_2 emissions from the following types of flights shall not be taken into account:

   (i) State flights;

   (ii) humanitarian flights;

   (iii) medical flights;

   (iv) military flights;

   (v) firefighting flights;

   (vi) flights preceding or following a humanitarian, medical or firefighting flight provided that such flights were conducted with the same aircraft and were required to accomplish the related humanitarian, medical or firefighting activities or to reposition the aircraft after those activities for its next activity.

7. Pending a legislative act amending this Directive as regards the contribution of aviation to the Union's economy-wide emission reduction target and appropriately implementing a global market-based measure, and in the event that the period for the transposition of such a legislative act has not expired by 30 November 2023, and the Sector Growth Factor (SGF) for 2022 emissions, to be published by ICAO, equals zero, Member States shall, by 30 November 2023, notify aircraft operators that, in respect of the year 2022, their offsetting requirements within the meaning of paragraph 3.2.1 of ICAO's CORSIA SARPs amount to zero.

8. The calculation of offsetting requirements referred to in paragraph 6 of this Article for the purposes of CORSIA shall be made in accordance with a methodology to be specified by the Commission in respect of flights to, from and between States that are listed in the implementing act adopted pursuant to Article 25a(3), and of flights between Switzerland or the United Kingdom and States that are listed in the implementing act adopted pursuant to Article 25a(3).

   The Commission shall adopt implementing acts specifying the methodology for the calculation of offsetting requirements for aircraft operators referred to in the first subparagraph of this paragraph.

   Those implementing acts shall in particular detail further the application of the requirements following from the relevant provisions of this Directive, in particular Articles 3c, 11a, 12 and 25a, and, to the extent possible in light of the relevant provisions of this Directive, from the International Standards and Recommended Practices on Environmental Protection for CORSIA (CORSIA SARPs).

   Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2). The first such implementing act shall be adopted by 30 June 2024.

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

Article 13
Validity of allowances

Allowances issued from 1 January 2013 onwards shall be valid indefinitely. Allowances issued from 1 January 2021 onwards shall include an indication showing in which ten-year period beginning from 1 January 2021 they were issued, and be valid for emissions from the first year of that period onwards.

Article 14
Monitoring and reporting of emissions

1. 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-CO_2 aviation effects on routes for which emissions are reported under this Directive, which shall be based on the principles for monitoring and reporting set out in Annex IV to this Directive and the requirements set out in paragraphs 2 and 5 of this Article. Those implementing acts shall also specify the global warming potential of each greenhouse gas and take into account up-to-date scientific knowledge on the effects of non-CO_2 aviation emissions in the requirements for monitoring and reporting of emissions and their effects, including non-CO_2 aviation effects. 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.

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

2. The acts referred to in paragraph 1 shall take into account the most accurate and up-to-date scientific evidence available, in particular from the IPCC, and may also specify requirements for operators to report on emissions associated with the production of goods produced by energy intensive industries which may be subject to international competition. These acts may also specify requirements for this information to be verified independently.

   Those requirements may include reporting on levels of emissions from electricity generation covered by the EU ETS associated with the production of such goods.

3. Member States shall ensure that each operator of an installation or an aircraft operator monitors and reports the emissions from that installation during each calendar year, or, from 1 January 2010, the aircraft which it operates, to the competent authority after the end of that year in accordance with the acts referred to in paragraph 1.

4. The acts referred to in paragraph 1 may include requirements on the use of automated systems and data exchange formats to harmonise communication on the monitoring plan, the annual emission report and the verification activities between the operator, the verifier and competent authorities.

5. Aircraft operators shall report once a year on the non-CO_2 aviation effects occurring from 1 January 2025. For that purpose, the Commission shall adopt by 31 August 2024 an implementing act pursuant to paragraph 1 in order to include non-CO_2 aviation effects in a monitoring, reporting and verification framework. That monitoring, reporting and verification framework shall contain, at a minimum, the three-dimensional aircraft trajectory data available, and ambient humidity and temperature to enable a CO_2 equivalent per flight to be produced. The Commission shall ensure, subject to available resources, that tools are available to facilitate and, to the extent possible, automatise monitoring, reporting and verification in order to minimise any administrative burden.

   From 1 January 2025, Member States shall ensure that each aircraft operator monitors and reports the non-CO_2 effects from each aircraft that it operates during each calendar year to the competent authority after the end of each year in accordance with the implementing acts referred to in paragraph 1.

   The Commission shall submit annually from 2026, as part of the report referred to in Article 10(5), a report on the results from the application of the monitoring, reporting and verification framework referred to in the first subparagraph of this paragraph.

   By 31 December 2027, based on the results from the application of the monitoring, reporting and verification framework for non-CO_2 aviation effects, the Commission shall submit a report and, where appropriate and after having first carried out an impact assessment, a legislative proposal to mitigate non-CO_2 aviation effects by expanding the scope of the EU ETS to include non-CO_2 aviation effects.

6. The Commission shall publish, at least, the following aggregated annual emissions related data from aviation activities reported to Member States or transmitted to the Commission in accordance with Commission Implementing Regulation (EU) 2018/2066 ([29]) and Article 7 of Commission Delegated

[29] 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).

Regulation (EU) 2019/1603 ([30]), at the latest three months after the respective reporting deadline and in a user-friendly manner:

(a) per aerodrome pair within the EEA:

(i) emissions from all flights;

(ii) total number of flights;

(iii) total number of passengers;

(iv) types of aircraft;

(b) per aircraft operator:

(i) data on emissions from flights within the EEA, from flights departing from the EEA, flights arriving in the EEA and flights between two third countries, broken down by State pair, and data on emissions subject to the obligation to cancel CORSIA eligible emission units;

(ii) the amount of offsetting requirements, calculated in accordance with Article 12(8);

(iii) the amount and type of credits pursuant to Article 11a used to comply with the aircraft operator's offsetting requirements referred to in point (ii) of this point;

(iv) the amount and type of fuels used for which the emission factor is zero under this Directive or which entitle the aircraft operator to receive allowances pursuant to Article 3c(6).

For points (a) and (b) of the first subparagraph, in specific circumstances where an aircraft operator operates on a very limited number of aerodrome pairs or on a very limited number of State pairs that are subject to offsetting requirements or on a very limited number of State pairs that are not subject to offsetting requirements, that aircraft operator may request the administering Member State not to publish such data at the aircraft operator level, explaining why disclosure would be considered to harm its commercial interests. Based on that request, the administering Member State may request the Commission to publish those data at a higher level of aggregation. The Commission shall decide on the request.

Article 15
Verification and accreditation

Member States shall ensure that the reports submitted by operators and aircraft operators pursuant to Article 14(3) are verified in accordance with the criteria set out in Annex V and any detailed provisions adopted by the Commission in accordance with this Article, and that the competent authority is informed thereof.

Member States shall ensure that an operator or aircraft operator whose report has not been verified as satisfactory in accordance with the criteria set out in Annex V and any detailed provisions adopted by the Commission in accordance with this Article by 31 March each year for emissions during the preceding

[30] Commission Delegated Regulation (EU) 2019/1603 of 18 July 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards measures adopted by the International Civil Aviation Organisation for the monitoring, reporting and verification of aviation emissions for the purpose of implementing a global market-based measure (OJ L 250, 30.9.2019, p. 10).

year cannot make further transfers of allowances until a report from that operator or aircraft operator has been verified as satisfactory.

The Commission shall adopt implementing acts concerning the verification of emission reports based on the principles set out in Annex V and for the accreditation and supervision of verifiers. The Commission may also adopt implementing acts for the verification of reports submitted by aircraft operators pursuant to Article 14(3) and applications under Articles 3e and 3f, including the verification procedures to be used by verifiers. It shall specify conditions for the accreditation and withdrawal of accreditation, for mutual recognition and peer evaluation of accreditation bodies, as appropriate.

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

Article 15a
Disclosure of information and professional secrecy

Member States and the Commission shall ensure that all decisions and reports relating to the quantity and allocation of allowances and to the monitoring, reporting and verification of emissions are immediately disclosed in an orderly manner ensuring non-discriminatory access.
Information covered by professional secrecy may not be disclosed to any other person or authority except by virtue of the applicable laws, regulations or administrative provisions.

Article 16
Penalties

1. Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that such rules are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify these provisions to the Commission by at the latest, and shall notify it without delay of any subsequent amendment affecting them.

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.

3. Member States shall ensure that any operator or aircraft operator who does not surrender sufficient allowances by 30 September of each year to cover its emissions during the preceding year shall be held liable for the payment of an excess emissions penalty. The excess emissions penalty shall be EUR 100 for each tonne of carbon dioxide equivalent emitted for which the operator or aircraft operator has not surrendered allowances. Payment of the excess emissions penalty shall not release the operator or aircraft operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year.

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

4. The excess emissions penalty relating to allowances issued from 1 January 2013 onwards shall increase in accordance with the European index of consumer prices.

5. In the event that an aircraft operator fails to comply with the requirements of this Directive and where other enforcement measures have failed to ensure compliance, its administering Member State may

request the Commission to decide on the imposition of an operating ban on the aircraft operator concerned.

6. Any request by an administering Member State under paragraph 5 shall include:

   (a) evidence that the aircraft operator has not complied with its obligations under this Directive;

   (b) details of the enforcement action which has been taken by that Member State;

   (c) a justification for the imposition of an operating ban at Union level; and

   (d) a recommendation for the scope of an operating ban at Union level and any conditions that should be applied.

7. When requests such as those referred to in paragraph 5 are addressed to the Commission, the Commission shall inform the other Member States through their representatives on the Committee referred to in Article 23(1) in accordance with the Committee's Rules of Procedure.

8. The adoption of a decision following a request pursuant to paragraph 5 shall be preceded, when appropriate and practicable, by consultations with the authorities responsible for regulatory oversight of the aircraft operator concerned. Whenever possible, consultations shall be held jointly by the Commission and the Member States.

9. When the Commission is considering whether to adopt a decision following a request pursuant to paragraph 5, it shall disclose to the aircraft operator concerned the essential facts and considerations which form the basis for such decision. The aircraft operator concerned shall be given an opportunity to submit written comments to the Commission within 10 working days from the date of disclosure.

10. At the request of a Member State, the Commission may, in accordance with the examination procedure referred to in Article 22a(2), adopt a decision to impose an operating ban on the aircraft operator concerned.

11. Each Member State shall enforce, within its territory, any decisions adopted under paragraph 10. It shall inform the Commission of any measures taken to implement such decisions.

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.

12. The Commission shall adopt implementing acts concerning detailed rules in respect of the procedures referred to in this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

Article 17
Access to information

Decisions relating to the allocation of allowances, information on project activities in which a Member State participates or authorises private or public entities to participate, and the reports of emissions required under the greenhouse gas emissions permit and held by the competent authority, shall be made available to the public in accordance with Directive 2003/4/EC.

Article 18
Competent authority

Member States shall make the appropriate administrative arrangements, including the designation of the appropriate competent authority or authorities, for the implementation of the rules of this Directive. Where more than one competent authority is designated, the work of these authorities undertaken pursuant to this Directive must be coordinated.

Member States shall in particular ensure coordination between their designated focal point for approving project activities pursuant to Article 6 (1)(a) of the Kyoto Protocol and their designated national authority for the implementation of Article 12 of the Kyoto Protocol respectively designated in accordance with subsequent decisions adopted under the UNFCCC or the Kyoto Protocol.

Article 18a
Administering Member State

1. The administering Member State in respect of an aircraft operator shall be:

   (a) in the case of an aircraft operator with a valid operating licence granted by a Member State in accordance with the provisions of Council Regulation (EEC) No 2407/92 of 23 July 1992 on licensing of air carriers ([31]), the Member State which granted the operating licence in respect of that aircraft operator; and

   (b) in all other cases, the Member State with the greatest estimated attributed aviation emissions from flights performed by that aircraft operator in the base year.

[31] OJ L 240, 24.8.1992, p. 1.

2. Where in the first two years of any period referred to in Article 13, none of the attributed aviation emissions from flights performed by an aircraft operator falling within point (b) of paragraph 1 of this Article are attributed to its administering Member State, the aircraft operator shall be transferred to another administering Member State in respect of the next period. The new administering Member State shall be the Member State with the greatest estimated attributed aviation emissions from flights performed by that aircraft operator during the first two years of the previous period.

3. Based on the best available information, the Commission shall:

   (a) before 1 February 2009, publish a list of aircraft operators which performed an aviation activity listed in Annex I on or after 1 January 2006 specifying the administering Member State for each aircraft operator in accordance with paragraph 1; and

   (b) from 2024, at least every two years, update the list to include aircraft operators which have subsequently performed an aviation activity listed in Annex I; where an aircraft operator has not performed an aviation activity listed in Annex I during the four consecutive calendar years preceding the updating of the list, that aircraft operator shall not be included in the list.

4. The Commission may, in accordance with the examination procedure referred to in Article 22a(2), develop guidelines relating to the administration of aircraft operators under this Directive by administering Member States.

5. For the purposes of paragraph 1, 'base year' means, in relation to an aircraft operator which started operating in the Union after 1 January 2006, the first calendar year of operation, and in all other cases, the calendar year starting on 1 January 2006.

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.

Article 19
Registries

1. Allowances issued from 1 January 2012 onwards shall be held in the Union registry for the execution of processes pertaining to the maintenance of the holding accounts opened in the Member State and the allocation, surrender and cancellation of allowances under the Commission Acts referred to in paragraph 3.

   Each Member State shall be able to fulfil the execution of authorised operations under the UNFCCC or the Kyoto Protocol.

2. Any person may hold allowances. The registry shall be accessible to the public and shall contain separate accounts to record the allowances held by each person to whom and from whom allowances are issued or transferred.

3. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by laying down all necessary requirements concerning the Union Registry for the trading period commencing on 1 January 2013 and subsequent periods, in the form of standardised electronic databases containing common data elements to track the issue, holding, transfer and cancellation, as applicable, of allowances, and to provide for public access and confidentiality, as appropriate. Those delegated acts shall also include provisions to put into effect rules on the mutual recognition of allowances in agreements to link emission trading systems.

4. The Acts referred to in paragraph 3 shall contain appropriate modalities for the Union registry to undertake transactions and other operations to implement arrangements referred to in Article 25(1b). These Acts shall also include processes for the change and incident management for the Union registry with regard to issues in paragraph 1 of this Article. It shall contain appropriate modalities for the Union registry to ensure that initiatives of the Member States pertaining to efficiency improvement, administrative cost management and quality control measures are possible.

Article 20
Central Administrator

1. The Commission shall designate a Central Administrator to maintain an independent transaction log recording the issue, transfer and cancellation of allowances.

2. The Central Administrator shall conduct an automated check on each transaction in registries through the independent transaction log to ensure there are no irregularities in the issue, transfer and cancellation of allowances.

3. If irregularities are identified through the automated check, the Central Administrator shall inform the Member State or Member States concerned who shall not register the transactions in question or any further transactions relating to the allowances concerned until the irregularities have been resolved.

Article 21
Reporting by Member States

1. Each year the Member States shall submit to the Commission a report on the application of this Directive. That report shall pay particular attention to the arrangements for the allocation of allowances, the operation of registries, the application of the implementing measures on monitoring and reporting, verification and accreditation and issues relating to compliance with this Directive and on the fiscal treatment of allowances, if any. The first report shall be sent to the Commission by 30 June 2005. The report shall be drawn up on the basis of a questionnaire or outline adopted by the Commission in the form of implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2). The questionnaire or outline shall be sent to Member States at least six months before the deadline for the submission of the first report.

2. On the basis of the reports referred to in paragraph 1, the Commission shall publish a report on the application of this Directive within three months of receiving the reports from the Member States.

3. The Commission shall organise an exchange of information between the competent authorities of the Member States concerning developments relating to issues of allocation, the use of ERUs and CERs in the EU ETS, the operation of registries, monitoring, reporting, verification, accreditation, information technology, and compliance with this Directive.

4. Every three years, the report referred to in paragraph 1 shall also pay particular attention to the equivalent measures adopted for small installations excluded from the EU ETS. The issue of equivalent measures adopted for small installations shall also be considered in the exchange of information referred to in paragraph 3.

Article 21a
Support of capacity-building activities

In accordance with the UNFCCC, the Kyoto Protocol and any subsequent decision adopted for their implementation, the Commission and the Member States shall endeavour to support capacity-building activities in developing countries and countries with economies in transition in order to help them take full advantage of JI and the CDM in a manner that supports their sustainable development strategies and to facilitate the engagement of entities in JI and CDM project development and implementation.

Article 22
Amendments to the Annexes

The Commission is empowered to adopt delegated acts in accordance with Article 23 to amend, where appropriate, the Annexes to this Directive, with the exception of Annexes I, IIa and IIb, in the light of the reports provided for in Article 21 and of the experience of the application of this Directive. Annexes IV and V may be amended in order to improve the monitoring, reporting and verification of emissions.

Article 22a
Committee procedure

1. The Commission shall be assisted by the Climate Change Committee established by Article 26 of Regulation (EU) No 525/2013 of the European Parliament and of the Council ([32]). That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council ([33]).

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

   Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

[32] Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC (OJ L 165, 18.6.2013, p. 13).

[33] 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 the Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

Article 23
Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

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.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making ([34]).

5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

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.

Article 24
Procedures for unilateral inclusion of additional activities and gases

1. From 2008, Member States may apply emission allowance trading in accordance with this Directive to activities and to greenhouse gases which are not listed in Annex I, taking into account all relevant criteria, in particular the effects on the internal market, potential distortions of competition, the environmental integrity of the EU ETS and the reliability of the planned monitoring and reporting system, provided that the inclusion of such activities and greenhouse gases is approved by the Commission, in accordance with delegated acts which the Commission is empowered to adopt in accordance with Article 23.

[34] OJ L 123, 12.5.2016, p. 1.

2. When the inclusion of additional activities and gases is approved, the Commission may at the same time authorise the issue of additional allowances and may authorise other Member States to include such additional activities and gases.

3. On the initiative of the Commission or at the request of a Member State, these acts may be adopted on the monitoring of, and reporting on, emissions concerning activities, installations and greenhouse gases which are not listed as a combination in Annex I, if that monitoring and reporting can be carried out with sufficient accuracy.

   The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive to this effect.

Article 24a

Harmonised rules for projects that reduce emissions

1. In addition to the inclusions provided for in Article 24, the Commission may adopt measures for issuing allowances or credits in respect of projects administered by Member States that reduce greenhouse gas emissions not covered by the EU ETS.

   Such measures shall be consistent with acts adopted pursuant to former Article 11b(7) as in force before 8 April 2018. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by setting out the procedure to be followed.

   Any such measures shall not result in the double-counting of emission reductions nor impede the undertaking of other policy measures to reduce emissions not covered by the EU ETS. Measures shall only be adopted where inclusion is not possible in accordance with Article 24, and the next review of the EU ETS shall consider harmonising the coverage of those emissions across the Union.

3. A Member State can refuse to issue allowances or credits in respect of certain types of projects that reduce greenhouse gas emissions on its own territory.

   Such projects will be executed on the basis of the agreement of the Member State in which the project takes place.

Article 25

Links with other greenhouse gas emissions trading systems

1. Agreements should be concluded with third countries listed in Annex B to the Kyoto Protocol which have ratified the Protocol to provide for the mutual recognition of allowances between the EU ETS and other greenhouse gas emissions trading systems in accordance with the rules set out in Article 300 of the Treaty.

1a. Agreements may be made to provide for the recognition of allowances between the EU ETS and compatible mandatory greenhouse gas emissions trading systems with absolute emissions caps established in any other country or in sub-federal or regional entities.

1b. Non-binding arrangements may be made with third countries or with sub-federal or regional entities to provide for administrative and technical coordination in relation to allowances in the EU ETS or other mandatory greenhouse gas emissions trading systems with absolute emissions caps.

Article 25a

Third country measures to reduce the climate change impact of aviation

1. Where a third country adopts measures for reducing the climate change impact of flights departing from that third country which land in the Union, the Commission, after consulting with that third country, and with Member States within the Committee referred to in Article 22a(1), shall consider options available in order to provide for optimal interaction between the EU ETS and that country's measures.

   The Commission is empowered to adopt delegated acts in accordance with Article 23 to amend Annex I to this Directive to provide for flights arriving from the third country concerned to be excluded from the aviation activities listed in Annex I or to provide for any other amendments to the aviation activities listed in Annex I, except in relation to scope, which are required by an agreement concluded pursuant to Article 218 of the Treaty on the Functioning of the European Union.

   The Commission may propose to the European Parliament and the Council any other amendments to this Directive.

   The Commission may also, where appropriate, make recommendations to the Council in accordance with Article 300(1) of the Treaty to open negotiations with a view to concluding an agreement with the third country concerned.

2. The Union and its Member States shall continue to seek agreements on global measures to reduce greenhouse gas emissions from aviation, aligned with the objectives of Regulation (EU) 2021/1119 and of the Paris Agreement. In the light of any such agreements, the Commission shall consider whether amendments to this Directive as it applies to aircraft operators are necessary.

3. The Commission shall adopt an implementing act listing States other than EEA countries, Switzerland and the United Kingdom which are considered to be applying CORSIA for the purposes of this Directive, with a baseline of 2019 for 2021 to 2023 and a baseline of 85 % of 2019 emissions for each year from 2024. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

4. In respect of emissions released until 31 December 2026 from flights to or from States that are listed in the implementing act adopted pursuant to paragraph 3 of this Article, aircraft operators shall not be required to surrender allowances in accordance with Article 12(3) in respect of those emissions.

5. In respect of emissions released until 31 December 2026 from flights between the EEA and States that are not listed in the implementing act adopted pursuant to paragraph 3 of this Article, other than flights to Switzerland and to the United Kingdom, aircraft operators shall not be required to surrender allowances in accordance with Article 12(3) in respect of those emissions.

6. In respect of emissions from flights to and from least developed countries and small island developing States as defined by the United Nations, other than those listed in the implementing act adopted pursuant to paragraph 3 of this Article and those States whose GDP per capita equals or exceeds the Union average, aircraft operators shall not be required to surrender allowances in accordance with Article 12(3) in respect of those emissions.

7. Where the Commission determines that there is a significant distortion of competition, such as a distortion caused by a third country applying CORSIA in a less stringent manner in its domestic law

or failing to enforce CORSIA provisions in an equal manner for all aircraft operators, which is detrimental to aircraft operators that hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State, the Commission shall adopt implementing acts to exempt those aircraft operators from offsetting requirements as laid down in Article 12(9) in respect of emissions from flights to and from such States. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

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

Article 26
Amendment of Directive 96/61/EC

In Article 9(3) of Directive 96/61/EC the following subparagraphs shall be added:

'Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC ([35]) in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas unless it is necessary to ensure that no significant local pollution is caused.

For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.

Where necessary, the competent authorities shall amend the permit as appropriate.

The three preceding subparagraphs shall not apply to installations temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Community in accordance with Article 27 of Directive 2003/87/EC.'

Article 27
Exclusion of small installations subject to equivalent measures

1. Following consultation with the operator, Member States may exclude from the EU ETS installations which have reported to the competent authority emissions of less than 25 000 tonnes of carbon dioxide equivalent and, where they carry out combustion activities, have a rated thermal input below 35 MW, excluding emissions from biomass, in each of the three years preceding the notification under point

[35] OJ L 275, 25.10.2003, p. 32.'

(a), and which are subject to measures that will achieve an equivalent contribution to emission reductions, if the Member State concerned complies with the following conditions:

(a) it notifies the Commission of each such installation, specifying the equivalent measures applying to that installation that will achieve an equivalent contribution to emission reductions that are in place, before the list of installations pursuant to Article 11(1) has to be submitted and at the latest when this list is submitted to the Commission;

(b) it confirms that monitoring arrangements are in place to assess whether any installation emits 25 000 tonnes or more of carbon dioxide equivalent, excluding emissions from biomass, in any one calendar year. Member States may allow simplified monitoring, reporting and verification measures for installations with average annual verified emissions between 2008 and 2010 which are below 5 000 tonnes a year, in accordance with Article 14;

(c) it confirms that if any installation emits 25 000 tonnes or more of carbon dioxide equivalent, excluding emissions from biomass, in any one calendar year or the measures applying to that installation that will achieve an equivalent contribution to emission reductions are no longer in place, the installation will be reintroduced into the EU ETS;

(d) it publishes the information referred to in points (a), (b) and (c) for public comment.

Hospitals may also be excluded if they undertake equivalent measures.

2. If, following a period of three months from the date of notification for public comment, the Commission does not object within a further period of six months, the exclusion shall be deemed approved.

Following the surrender of allowances in respect of the period during which the installation is in the EU ETS, the installation shall be excluded and the Member State shall no longer issue free allowances to the installation pursuant to Article 10a.

3. When an installation is reintroduced into the EU ETS pursuant to paragraph 1(c), any allowances issued pursuant to Article 10a shall be granted starting with the year of the reintroduction. Allowances issued to these installations shall be deducted from the quantity to be auctioned pursuant to Article 10(2) by the Member State in which the installation is situated.

Any such installation shall stay in the EU ETS for the rest of the period referred to in Article 11(1) during which it was reintroduced.

4. For installations which have not been included in the EU ETS during the period from 2008 to 2012, simplified requirements for monitoring, reporting and verification may be applied for determining emissions in the three years preceding the notification under paragraph 1 point (a).

Article 27a

Optional exclusion of installations emitting less than 2 500 tonnes

1. Member States may exclude from the EU ETS installations that have reported to the competent authority of the Member State concerned emissions of less than 2 500 tonnes of carbon dioxide equivalent, disregarding emissions from biomass, in each of the three years preceding the notification under point (a), provided that the Member State concerned:

(a) notifies the Commission of each such installation before the list of installations pursuant to Article 11(1) is to be submitted or at the latest when that list is submitted to the Commission;

(b) confirms that simplified monitoring arrangements are in place to assess whether any installation emits 2 500 tonnes or more of carbon dioxide equivalent, disregarding emissions from biomass, in any one calendar year;

(c) confirms that if any installation emits 2 500 tonnes or more of carbon dioxide equivalent, disregarding emissions from biomass, in any one calendar year, the installation will be reintroduced into the EU ETS; and

(d) makes the information referred to in points (a), (b) and (c) available to the public.

2. When an installation is reintroduced into the EU ETS pursuant to point (c) of paragraph 1 of this Article, any allowances allocated pursuant to Article 10a shall be granted starting from the year of the reintroduction. Allowances allocated to such an installation shall be deducted from the quantity to be auctioned pursuant to Article 10(2) by the Member State in which the installation is situated.

3. Member States may also exclude from the EU ETS reserve or backup units which did not operate more than 300 hours per year in each of the three years preceding the notification under point (a) of paragraph 1, under the same conditions as set out in paragraphs 1 and 2.

Article 28

Adjustments applicable upon the approval by the Union of an international agreement on climate change

1. Within three months of the signature by the Union of an international agreement on climate change leading, by 2020, to mandatory reductions of greenhouse gas emissions exceeding 20 % compared to 1990 levels, as reflected in the 30 % reduction commitment as endorsed by the European Council of March 2007, the Commission shall submit a report assessing, in particular, the following elements:

(a) the nature of the measures agreed upon in the framework of the international negotiations as well as the commitments made by other developed countries to comparable emission reductions to those of the Union and the commitments made by economically more advanced developing countries to contributing adequately according to their responsibilities and respective capabilities;

(b) the implications of the international agreement on climate change, and consequently, options required at Union level, in order to move to the more ambitious 30 % reduction target in a balanced, transparent and equitable way, taking into account work under the Kyoto Protocol's first commitment period;

(c) the Union manufacturing industries' competitiveness in the context of carbon leakage risks;

(d) the impact of the international agreement on climate change on other Union economic sectors;

(e) the impact on the Union agriculture sector, including carbon leakage risks;

(f) the appropriate modalities for including emissions and removals related to land use, land use change and forestry in the Union;

(g) afforestation, reforestation, avoided deforestation and forest degradation in third countries in the event of the establishment of any internationally recognised system in this context;

(h) the need for additional Union policies and measures in view of the greenhouse gas reduction commitments of the Union and of Member States.

2. On the basis of the report referred to in paragraph 1, the Commission shall, as appropriate, submit a legislative proposal to the European Parliament and to the Council amending this Directive pursuant to paragraph 1, with a view to the amending Directive entering into force upon the approval by the Union of the international agreement on climate change and in view of the emission reduction commitment to be implemented under that agreement.

   The proposal shall be based upon the principles of transparency, economic efficiency and cost-effectiveness, as well as fairness and solidarity in the distribution of efforts between Member States.

3. The proposal shall allow, as appropriate, operators to use, in addition to the credits provided for in this Directive, CERs, ERUs or other approved credits from third countries which have ratified the international agreement on climate change.

4. The proposal shall also include, as appropriate, any other measures needed to help reach the mandatory reductions in accordance with paragraph 1 in a transparent, balanced and equitable way and, in particular, shall include implementing measures to provide for the use of additional types of project credits by operators in the EU ETS to those referred to in paragraphs 2 to 5 of Article 11a or the use by such operators of other mechanisms created under the international agreement on climate change, as appropriate.

5. The proposal shall include the appropriate transitional and suspensive measures pending the entry into force of the international agreement on climate change.

Article 28a

Derogations applicable in advance of the mandatory implementation of ICAO's global market-based measure

1. By way of derogation from Article 12(3), Article 14(3) and Article 16, Member States shall consider the requirements set out in those provisions to be satisfied and shall take no action against aircraft operators in respect of:

   (a) all emissions from flights to and from aerodromes located in States outside the EEA, with the exception of flights to aerodromes located in the United Kingdom or Switzerland, in each calendar year from 1 January 2021 to 31 December 2026, subject to the review referred to in Article 28b;

   (b) all emissions from flights between an aerodrome located in an outermost region within the meaning of Article 349 TFEU and an aerodrome located in another region of the EEA in each calendar year from 1 January 2013 to 31 December 2023, subject to the review referred to in Article 28b.

   For the purposes of Articles 11a, 12 and 14, the verified emissions from flights other than those referred to in the first subparagraph of this paragraph shall be considered to be the verified emissions of the aircraft operator.

2. By way of derogation from Article 3d(3), the quantity of allowances to be auctioned by each Member State in respect of the period from 1 January 2013 to 31 December 2026 shall be reduced to correspond to its share of attributed aviation emissions from flights which are not subject to the derogations provided for in points (a) and (b) of paragraph 1 of this Article.

3. By way of derogation from Article 3g, aircraft operators shall not be required to submit monitoring plans setting out measures to monitor and report emissions in respect of flights which are subject to the derogations provided for in points (a) and (b) of paragraph 1 of this Article.

4. By way of derogation from Articles 3g, 12, 15 and 18a, where an aircraft operator has total annual emissions lower than 25 000 tonnes of CO_2, or where an aircraft operator has total annual emissions lower than 3 000 tonnes of CO_2 from flights other than those referred to in points (a) and (b) of paragraph 1 of this Article, its emissions shall be considered to be verified emissions if determined by using the small emitters tool approved under Commission Regulation (EU) No 606/2010 ([36]) and populated by Eurocontrol with data from its ETS support facility. Member States may implement simplified procedures for non-commercial aircraft operators as long as such procedures provide no less accuracy than the small emitters tool provides.

5. Paragraph 1 of this Article shall apply to countries with whom an agreement pursuant to Article 25 or 25a has been reached only in line with the terms of such agreement.

Article 28b

Reporting and review by the Commission concerning the implementation of ICAO's global market-based measure

1. Before 1 January 2027 and every three years thereafter, the Commission shall report to the European Parliament and to the Council on progress in the ICAO negotiations to implement the global market-based measure to be applied to emissions from 2021, in particular with regard to:

   (a) the relevant ICAO instruments, including standards and recommended practices, as well as the progress in the implementation of all elements of the ICAO basket of measures towards the achievement of the long-term global aspirational goal adopted at ICAO's 41st Assembly;

   (b) ICAO Council-approved recommendations relevant to the global market-based measure, including any possible changes to baselines;

   (c) the establishment of a global registry;

   (d) domestic measures taken by third countries to implement the global market-based measure to be applied to emissions from 2021;

   (e) the level of participation in offsetting under CORSIA by third countries, including the implications of their reservations as regards such participation; and

   (f) other relevant international developments and applicable instruments, as well as progress to reduce aviation's total climate change impacts.

[36] Commission Regulation (EU) No 606/2010 of 9 July 2010 on the approval of a simplified tool developed by the European organisation for air safety navigation (Eurocontrol) to estimate the fuel consumption of certain small emitting aircraft operators (OJ L 175, 10.7.2010, p. 25).

In line with the global stocktake of the Paris Agreement, the Commission shall also report on efforts to meet the aviation sector's long-term global aspirational goal of reducing aviation CO_2 emissions to net zero by 2050, assessed in line with the criteria referred to in the first subparagraph, points (a) to (f).

2. By 1 July 2026, the Commission shall submit to the European Parliament and to the Council a report in which it shall assess the environmental integrity of ICAO's global market-based measure, including its general ambition in relation to targets under the Paris Agreement, the level of participation in offsetting under CORSIA, its enforceability, transparency, the penalties for non-compliance, the processes for public input, the quality of offset credits, monitoring, reporting and verification of emissions, registries, accountability as well as rules on the use of biofuels. The Commission shall publish that report also by 1 July 2026.

3. The Commission's report referred to in paragraph 2 shall be accompanied by a legislative proposal, where appropriate, to amend this Directive in a way that is consistent with the Paris Agreement temperature goal, the Union's economy-wide greenhouse gas emission reduction commitment for 2030 and the objective of achieving climate neutrality by 2050 at the latest, and with the aim of preserving the environmental integrity and effectiveness of the Union's climate action. An accompanying proposal shall, as appropriate, include the application of the EU ETS to departing flights from aerodromes located in States in the EEA to aerodromes located outside the EEA from January 2027 and exclude arriving flights from aerodromes located outside the EEA where the report referred to in paragraph 2 shows that:

   (a) the ICAO Assembly by 31 December 2025 has not strengthened CORSIA in line with achieving its long-term global aspirational goal, towards meeting the Paris Agreement goals; or

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

   The accompanying proposal shall also, as appropriate, allow the possibility for aircraft operators to deduct any costs incurred from CORSIA offsetting on those routes, to avoid double charging. If the conditions referred to in the first subparagraph, points (a) and (b) of this paragraph are not met, the proposal shall amend this Directive, as appropriate, to continue applying the EU ETS only to flights within the EEA, to flights to Switzerland and to the United Kingdom and to flights to States not listed in the implementing act adopted pursuant to Article 25a(3).

Article 28c

Provisions for monitoring, reporting and verification for the purpose of the global market-based measure

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the appropriate monitoring, reporting and verification of emissions for the purpose of implementing the ICAO's global market-based measure on all routes covered by it. Those delegated acts shall be based on the relevant instruments adopted in the ICAO, shall avoid any distortion of competition and be consistent with the principles contained in the acts referred to in Article 14(1), and shall ensure that the emissions reports submitted are verified in accordance with the verification principles and criteria laid down in Article 15.

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.

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).

Article 30

Review in the light of the implementation of the Paris Agreement and the development of carbon markets in other major economies

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.

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.

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.

4. Before 1 January 2020, the Commission shall present an updated analysis of the non-CO_2 effects of aviation, accompanied, where appropriate, by a proposal on how best to address those effects.

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 ([37]) 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 installlations, 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.

8. In 2026, the Commission shall include the following elements in the report provided for in Article 10(5):

   (a) an evaluation of the environmental and climate impacts of flights of less than 1 000 km and consideration of options to reduce those impacts, including an examination of the alternative modes of public transport available and the increased use of sustainable aviation fuels;

   (b) an evaluation of the environmental and climate impacts of flights performed by operators exempted pursuant to point (h) or (k) of the entry ‘Aviation’ of the column ‘Activities’ in the table of Annex I, and considerations of options to reduce those impacts;

   (c) an evaluation of the social impacts of this Directive in the aviation sector, including on its work force and air travel costs; and

   (d) an evaluation of the air connectivity of islands and remote territories, including consideration of competitiveness and carbon leakage, as well as environmental and climate impacts.

   The report provided for in Article 10(5), where appropriate, shall be also taken into account for the future revision of this Directive.

[37] 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).

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 ([38]) 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.

[38] 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).

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 ([39]) 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 30f

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.

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[39] 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).

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 CO_2 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.

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 ([40]) 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:

[40] 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).

(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).

CHAPTER V
FINAL PROVISIONS

Article 31
Implementation

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 2003 at the latest. They shall forthwith inform the Commission thereof. The Commission shall notify the other Member States of these laws, regulations and administrative provisions.

   When Member States adopt these measures, they shall contain a reference to this Directive or be accompanied by such a 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 provisions of national law which they adopt in the field covered by this Directive. The Commission shall inform the other Member States thereof.

Article 32
Entry into force

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

Article 33

Addressees

This Directive is addressed to the Member States.

ANNEX I

CATEGORIES OF ACTIVITIES TO WHICH THIS DIRECTIVE APPLIES

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.

2. The thresholds values given below generally refer to production capacities or outputs. Where several activities falling under the same category are carried out in the same installation, the capacities of such activities are added together.

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.

4. If a unit serves an activity for which the threshold is not expressed as total rated thermal input, the threshold of this activity shall take precedence for the decision about the inclusion in the EU ETS

5. When the capacity threshold of any activity in this Annex is found to be exceeded in an installation, all units in which fuels are combusted, other than units for the incineration of hazardous or municipal waste, shall be included in the greenhouse gas emission permit.

6. From 1 January 2012 all flights which arrive at or depart from an aerodrome situated in the territory of a Member State to which the Treaty applies shall be included.

Activities	**Greenhouse gases**
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
Refining of oil, where combustion units with a total rated thermal input exceeding 20 MW are operated	Carbon dioxide
Production of coke	Carbon dioxide
Metal ore (including sulphide ore) roasting or sintering, including pelletisation	Carbon dioxide
Production of iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour	Carbon dioxide
Production or processing of ferrous metals (including ferro-alloys) where combustion units with a total rated thermal input exceeding 20 MW are operated. Processing includes, inter alia, rolling mills, re-heaters, annealing furnaces, smitheries, foundries, coating and pickling	Carbon dioxide
Production of primary aluminium or alumina	Carbon dioxide and perfluorocarbons
Production of secondary aluminium where combustion units with a total rated thermal input exceeding 20 MW are operated	Carbon dioxide
Production or processing of non-ferrous metals, including production of alloys, refining, foundry casting, etc., where combustion units with a total rated thermal input (including fuels used as reducing agents) exceeding 20 MW are operated	Carbon dioxide
Production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day	Carbon dioxide
Production of lime or calcination of dolomite or magnesite in rotary kilns or in other furnaces with a production capacity exceeding 50 tonnes per day	Carbon dioxide
Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day	Carbon dioxide
Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day	Carbon dioxide
Manufacture of mineral wool insulation material using glass, rock or slag with a melting capacity exceeding 20 tonnes per day	Carbon dioxide
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
Production of pulp from timber or other fibrous materials	Carbon dioxide
Production of paper or cardboard with a production capacity exceeding 20 tonnes per day	Carbon dioxide

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
Production of nitric acid	Carbon dioxide and nitrous oxide
Production of adipic acid	Carbon dioxide and nitrous oxide
Production of glyoxal and glyoxylic acid	Carbon dioxide and nitrous oxide
Production of ammonia	Carbon dioxide
Production of bulk organic chemicals by cracking, reforming, partial or full oxidation or by similar processes, with a production capacity exceeding 100 tonnes per day	Carbon dioxide
Production of hydrogen (H_2) and synthesis gas with a production capacity exceeding 5 tonnes per day	Carbon dioxide
Production of soda ash (Na_2CO_3) and sodium bicarbonate ($NaHCO_3$)	Carbon dioxide
Capture of greenhouse gases from installations covered by this Directive for the purpose of transport and geological storage in a storage site permitted under Directive 2009/31/EC	Carbon dioxide
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
Geological storage of greenhouse gases in a storage site permitted under Directive 2009/31/EC	Carbon dioxide
Aviation Flights between aerodromes that are located in two different States that are listed in the implementing act adopted pursuant to Article 25a(3) and flights between Switzerland or the United Kingdom and States that are listed in the implementing act adopted pursuant to Article 25a(3) and, for the purposes of Article 12(6) and (8) and Article 28c, any other flight between aerodromes that are located in two different third countries by aircraft operators that fulfil all of the following conditions: (a) the aircraft operators hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State; and (b) they produce annual CO_2 emissions greater than 10 000 tonnes from the use of aeroplanes with a maximum certified take-off mass greater than 5 700 kg conducting flights covered by this Annex, other than those departing and arriving in the same Member State, including outermost regions of the same Member State, from 1 January 2021; for the purposes of this point, emissions from the following types of flights shall not be taken into account: (i) State flights; (ii) humanitarian flights;	Carbon dioxide

(iii) medical flights; (iv) military flights; (v) firefighting flights; (vi) flights preceding or following a humanitarian, medical or firefighting flight provided that such flights were conducted with the same aircraft and were required to accomplish the related humanitarian, medical or firefighting activities or to reposition the aircraft after those activities for its next activity. Flights which depart from or arrive in an aerodrome situated in the territory of a Member State to which the Treaty applies. This activity shall not include: (a) flights performed exclusively for the transport, on official mission, of a reigning Monarch and his immediate family, Heads of State, Heads of Government and Government Ministers, of a country other than a Member State, where this is substantiated by an appropriate status indicator in the flight plan; (b) military flights performed by military aircraft and customs and police flights; (c) flights related to search and rescue, fire-fighting flights, humanitarian flights and emergency medical service flights authorised by the appropriate competent authority; (d) any flights performed exclusively under visual flight rules as defined in Annex 2 to the Chicago Convention; (e) flights terminating at the aerodrome from which the aircraft has taken off and during which no intermediate landing has been made; (f) training flights performed exclusively for the purpose of obtaining a licence, or a rating in the case of cockpit flight crew where this is substantiated by an appropriate remark in the flight plan provided that the flight does not serve for the transport of passengers and/or cargo or for the positioning or ferrying of the aircraft; (g) flights performed exclusively for the purpose of scientific research or for the purpose of checking, testing or certifying aircraft or equipment whether airborne or ground-based; (h) flights performed by aircraft with a certified maximum take-off mass of less than 5 700 kg; (i) flights performed in the framework of public service obligations imposed in accordance with Regulation (EEC) No 2408/92 on routes within outermost regions, as specified in Article 299(2) of the Treaty, or on routes where the capacity offered does not exceed 50 000 seats per year;	

(j) flights which, but for this point, would fall within this activity, performed by a commercial air transport operator operating either: — fewer than 243 flights per period for three consecutive four-month periods, or — flights with total annual emissions lower than 10 000 tonnes per year. Flights referred to in points (l) and (m) or performed exclusively for the transport, on official mission, of reigning Monarchs and their immediate family, Heads of State, Heads of Government and Government Ministers, of a Member State may not be excluded under this point; (k) from 1 January 2013 to 31 December 2030, flights which, but for this point, would fall within this activity, performed by a non-commercial aircraft operator operating flights with total annual emissions lower than 1 000 tonnes per year (including emissions from flights referred to in points (l) and (m)); (l) flights from aerodromes situated in Switzerland to aerodromes situated in the EEA; (m) flights from aerodromes situated in the United Kingdom to aerodromes situated in the EEA.	
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

ANNEX II

GREENHOUSE GASES REFERRED TO IN ARTICLES 3 AND 30

Carbon dioxide (CO_2)

Methane (CH_4)

Nitrous Oxide (N_2O)

Hydrofluorocarbons (HFCs)

Perfluorocarbons (PFCs)

Sulphur Hexafluoride (SF_6)

ANNEX IIa

Increases in the percentage of allowances to be auctioned by Member States pursuant to Article 10(2)(a), for the purpose of Union solidarity and growth in order to reduce emissions and adapt to the effects of climate change

	Member State share
Bulgaria	53 %
Czech Republic	31 %
Estonia	42 %
Greece	17 %
Spain	13 %
Croatia	26 %
Cyprus	20 %
Latvia	56 %
Lithuania	46 %
Hungary	28 %
Malta	23 %
Poland	39 %
Portugal	16 %
Romania	53 %
Slovenia	20 %
Slovakia	41 %

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 %

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;	Carbon dioxide
(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). Additional sectors shall correspond to the following sources of emissions, defined in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: (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).

ANNEX IV

PRINCIPLES FOR MONITORING AND REPORTING REFERRED TO IN ARTICLE 14(1)

PART A — Monitoring and reporting of emissions from stationary installations

Monitoring of carbon dioxide emissions

Emissions shall be monitored either by calculation or on the basis of measurement.

Calculation

Calculations of emissions shall be performed using the formula:

Activity data × Emission factor × Oxidation factor

Activity data (fuel used, production rate etc.) shall be monitored on the basis of supply data or measurement.

Accepted emission factors shall be used. Activity-specific emission factors are acceptable for all fuels. Default factors are acceptable for all fuels except non-commercial ones (waste fuels such as tyres and industrial process gases). Seam-specific defaults for coal, and EU-specific or producer country-specific defaults for natural gas shall be further elaborated. IPCC default values are acceptable for refinery products. 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.

If the emission factor does not take account of the fact that some of the carbon is not oxidised, then an additional oxidation factor shall be used. If activity-specific emission factors have been calculated and already take oxidation into account, then an oxidation factor need not be applied.

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.

A separate calculation shall be made for each activity, installation and for each fuel.

Measurement

Measurement of emissions shall use standardised or accepted methods, and shall be corroborated by a supporting calculation of emissions.

Monitoring of emissions of other greenhouse gases

Standardised or accepted methods, developed by the Commission in collaboration with all relevant stake-holders and adopted pursuant to Article 14(1), shall be used.

Reporting of emissions

Each operator shall include the following information in the report for an installation:

A. Data identifying the installation, including:
   - Name of the installation;
   - Its address, including postcode and country;
   - Type and number of Annex I activities carried out in the installation;
   - Address, telephone, fax and email details for a contact person; and
   - Name of the owner of the installation, and of any parent company.

B. For each Annex I activity carried out on the site for which emissions are calculated:
   - Activity data;
   - Emission factors;
   - Oxidation factors;
   - Total emissions; and
   - Uncertainty.

C. For each Annex I activity carried out on the site for which emissions are measured:
   - Total emissions;
   - Information on the reliability of measurement methods; and
   - Uncertainty.

D. For emissions from combustion, the report shall also include the oxidation factor, unless oxidation has already been taken into account in the development of an activity-specific emission factor.

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

PART B — Monitoring and reporting of emissions from aviation activities

Monitoring of carbon dioxide emissions

Emissions shall be monitored by calculation. Emissions shall be calculated using the formula:

Fuel consumption × emission factor

Fuel consumption shall include fuel consumed by the auxiliary power unit. Actual fuel consumption for each flight shall be used wherever possible and shall be calculated using the formula:

Amount of fuel contained in aircraft tanks once fuel uplift for the flight is complete – amount of fuel contained in aircraft tanks once fuel uplift for subsequent flight is complete + fuel uplift for that subsequent flight.

If actual fuel consumption data are not available, a standardised tiered method shall be used to estimate fuel consumption data based on best available information.

Default IPCC emission factors, taken from the 2006 IPCC Inventory Guidelines or subsequent updates of these Guidelines, shall be used unless activity-specific emission factors identified by independent accredited laboratories using accepted analytical methods are more accurate. 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. The emission factor for jet kerosene (Jet A1 or Jet A) shall be 3,16 (t CO_2/t fuel).

Emissions from renewable fuels of non-biological origin using hydrogen from renewable sources compliant with Article 25 of Directive (EU) 2018/2001 shall be rated with zero emissions for the aircraft operators using them until the implementing act referred to in Article 14(1) of this Directive is adopted.

A separate calculation shall be made for each flight and for each fuel.

Reporting of emissions

Each aircraft operator shall include the following information in its report under Article 14(3):

A. Data identifying the aircraft operator, including:

- name of the aircraft operator,
- its administering Member State,
- its address, including postcode and country and, where different, its contact address in the administering Member State,
- the aircraft registration numbers and types of aircraft used in the period covered by the report to perform the aviation activities listed in Annex I for which it is the aircraft operator,

- the number and issuing authority of the air operator certificate and operating licence under which the aviation activities listed in Annex I for which it is the aircraft operator were performed,

- address, telephone, fax and e-mail details for a contact person, and

- name of the aircraft owner.

B. For each type of fuel for which emissions are calculated:

- fuel consumption,

- emission factor,

- total aggregated emissions from all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator,

- aggregated emissions from:

    - all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator and which departed from an aerodrome situated in the territory of a Member State and arrived at an aerodrome situated in the territory of the same Member State,

    - all other flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator,

- aggregated emissions from all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator and which:

    - departed from each Member State, and

    - arrived in each Member State from a third country,

- uncertainty.

Monitoring of tonne-kilometre data for the purpose of Articles 3e and 3f

For the purpose of applying for an allocation of allowances in accordance with Article 3e(1) or Article 3f(2), the amount of aviation activity shall be calculated in tonne-kilometres using the following formula:

tonne-kilometres = distance × payload

where:

‘distance’ means the great circle distance between the aerodrome of departure and the aerodrome of arrival plus an additional fixed factor of 95 km; and

‘payload’ means the total mass of freight, mail and passengers carried.

For the purposes of calculating the payload:

- the number of passengers shall be the number of persons on-board excluding crew members,

- an aircraft operator may choose to apply either the actual or standard mass for passengers and checked baggage contained in its mass and balance documentation for the relevant flights or a default value of 100 kg for each passenger and his checked baggage.

Reporting of tonne-kilometre data for the purpose of Articles 3e and 3f

Each aircraft operator shall include the following information in its application under Article 3e(1) or Article 3f(2):

A. Data identifying the aircraft operator, including:

- name of the aircraft operator,

- its administering Member State,

- its address, including postcode and country and, where different, its contact address in the administering Member State,

- the aircraft registration numbers and types of aircraft used during the year covered by the application to perform the aviation activities listed in Annex I for which it is the aircraft operator,

- the number and issuing authority of the air operator certificate and operating licence under which the aviation activities listed in Annex I for which it is the aircraft operator were performed,

- address, telephone, fax and e-mail details for a contact person, and

- name of the aircraft owner.

B. Tonne-kilometre data:

- number of flights by aerodrome pair,

- number of passenger-kilometres by aerodrome pair,

- number of tonne-kilometres by aerodrome pair,

- chosen method for calculation of mass for passengers and checked baggage,

- total number of tonne-kilometres for all flights performed during the year to which the report relates falling within the aviation activities listed in Annex I for which it is the aircraft operator.

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.

ANNEX V

CRITERIA FOR VERIFICATION REFERRED TO IN ARTICLE 15

PART A — Verification of emissions from stationary installations

General Principles

1. Emissions from each activity listed in Annex I 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, in particular:

   (a) the reported activity data and related measurements and calculations;

   (b) the choice and the employment of emission factors;

   (c) the calculations leading to the determination of the overall emissions; and

   (d) if measurement is used, the appropriateness of the choice and the employment of measuring methods.

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 operator to show that:

   (a) the reported data is 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 installation 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 installation 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 activities carried out in the installation. This requires the verifier to have an overview of all the activities and their significance for emissions.

Process analysis

7. The verification of the information submitted shall, where appropriate, be carried out on the site of the installation. 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 sources of emissions in the installation to an evaluation with regard to the reliability of the data of each source contributing to the overall emissions of the installation.

9. On the basis of this analysis the verifier shall explicitly identify those sources 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 choice of the emission factors and the calculations necessary to determine the level of the emissions from individual sources. Particular attention shall be given to those sources 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 operator 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 requirements for the verifier

12. The verifier shall be independent of the operator, carry out his 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 each source of emissions in the installation, in particular, relating to the collection, measurement, calculation and reporting of data.

PART B — Verification of emissions from aviation activities

13. The general principles and methodology set out in this Annex shall apply to the verification of reports of emissions from flights falling within an aviation activity listed in Annex I.

For this purpose:

(a) in paragraph 3, the reference to operator shall be read as if it were a reference to an aircraft operator, and in point (c) of that paragraph the reference to installation shall be read as if it were a reference to the aircraft used to perform the aviation activities covered by the report;

(b) in paragraph 5, the reference to installation shall be read as if it were a reference to the aircraft operator;

(c) in paragraph 6 the reference to activities carried out in the installation shall be read as a reference to aviation activities covered by the report carried out by the aircraft operator;

(d) in paragraph 7 the reference to the site of the installation shall be read as if it were a reference to the sites used by the aircraft operator to perform the aviation activities covered by the report;

(e) in paragraphs 8 and 9 the references to sources of emissions in the installation shall be read as if they were a reference to the aircraft for which the aircraft operator is responsible; and

(f) in paragraphs 10 and 12 the references to operator shall be read as if they were a reference to an aircraft operator.

Additional provisions for the verification of aviation emission reports

14. The verifier shall in particular ascertain that:

(a) all flights falling within an aviation activity listed in Annex I have been taken into account. In this task the verifier shall be assisted by timetable data and other data on the aircraft operator's traffic including data from Eurocontrol requested by that operator;

(b) there is overall consistency between aggregated fuel consumption data and data on fuel purchased or otherwise supplied to the aircraft performing the aviation activity.

Additional provisions for the verification of tonne-kilometre data submitted for the purposes of Articles 3e and 3f

15. The general principles and methodology for verifying emissions reports under Article 14(3) as set out in this Annex shall, where applicable, also apply correspondingly to the verification of aviation tonne-kilometre data.

16. The verifier shall in particular ascertain that only flights actually performed and falling within an aviation activity listed in Annex I for which the aircraft operator is responsible have been taken into account in that operator's application under Articles 3e(1) and 3f(2). In this task the verifier shall be assisted by data on the aircraft operator's traffic including data from Eurocontrol requested by that operator. In addition, the verifier shall ascertain that the payload reported by the aircraft operator corresponds to records on payloads kept by that operator for safety purposes.

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.