

EUROPEAN COMMISSION

Brussels, 10.8.2023 C(2023) 5407 final

PUBLIC VERSION

This document is made available for information purposes only.

Subject: State Aid SA.63191 (2023/N) – Germany Carbon leakage compensation in the context of the German fuel emission trading system

Excellency,

1. **PROCEDURE**

- (1) Following pre-notification contacts, by electronic notification dated 20 June 2023, Germany notified to the Commission, in accordance with Article 108(3) of the Treaty on the Functioning of the European Union ("TFEU"), a compensation scheme to mitigate the risk of carbon leakage in the context of the German fuel ETS ("the measure").
- (2) The Commission services requested additional information by email of 10 July 2023. The German authorities replied to those requests by email of 11 July 2023.
- (3) By letter dated 10 July 2023, Germany exceptionally agreed to waive its rights deriving from Article 342 TFEU, in conjunction with Article 3 of Regulation 1/1958 (¹) and to have this Decision adopted and notified in English.

Ihrer Exzellenz Frau Annalena Baerbock Bundesministerin des Auswärtigen Werderscher Markt 1 10117 Berlin DEUTSCHLAND

Commission européenne/Europese Commissie, 1049 Bruxelles/Brussel, BELGIQUE/BELGIË - Tel. +32 22991111

Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385).

2. DETAILED DESCRIPTION OF THE MEASURE

2.1. Background

2.1.1. The German fuel ETS

- (4) In 2019, Germany introduced a German fuel emissions trading system (the "German fuel ETS") applicable from 1 January 2021 on the basis of its National Fuel Emissions Trading Act (²) ("BEHG"). The objective of the German fuel ETS is to cover emissions from the combustion of fossil fuels not covered by the EU Emissions Trading System ("EU ETS") in order to help Germany reach its climate goals. In particular, the German fuel ETS targets emissions from a) the transport sector (except commercial shipping industry and aviation), b) the heat sector (heat production from the building sector) and c) energy and industrial installations falling outside the EU ETS.
- (5) For administrative reasons linked to the very large number of fuel consumers notably in the transport and heating sectors (e.g. motorists, households with fossil fuel heating systems, etc.), the German fuel ETS applies at the upstream level. Each year, the operators who placed the fuel on the market as defined in German law (the "reporting fuel suppliers") must purchase German fuel emission allowances based on the quantity of fuels they placed on the German market, prepare a report on this quantity and surrender German fuel emission allowances corresponding to the emissions resulting from the fuel placed on the market in the previous year. According to the German authorities, it is expected that reporting fuel suppliers pass on the additional cost of the German fuel ETS to consumers through fuel prices in full (although this is not mandatory from a legal point of view).
- (6) The German Emissions Trading Authority (DEHSt) maintains a national emission trading registry in the form of an electronic database. This registry contains accounts for the emission allowances and an inventory of reported and verified fuel emissions by the undertakings subject to the German fuel ETS. Each undertaking subject to the German fuel ETS is given an account that records the issuance, holding, transfer, cancellation and surrender of the allowances. Surrendered emission allowances will be cancelled by the competent authority. To determine the emissions of the fuel placed on the market, the reported quantity of fuel is multiplied by the corresponding calculation factors (e.g. emission factor, calorific value, bioenergy content) (³).

^{(&}lt;sup>2</sup>) Gesetz über einen nationalen Zertifikatehandel für Brennstoffemissionen (Brennstoffemissionshandelsgesetz - BEHG) of 12 December 2019 (BGBl. I p. 2728), as amended by Article 1 of the Act of 3 November 2020 (Federal Law Gazette of the Federal Republic of Germany Bundesgesetzblatt ('BGBl'). I p. 2291).

^{(&}lt;sup>3</sup>) Regulation on emissions reporting according to the Fuel Emissions Trading Act for the years 2021 and 2022 (Emissions Reporting Regulation 2022 - EBeV 2022) of 12 December 2020 (BGBl. I S. 3016) and Regulation on emissions reporting according to the Fuel Emissions Trading Act for the years 2023 to 2030 (Emissions Reporting Regulation 2030 - EBeV 2030) of 21 December 2022 (BGBl. I S. 2868).

- (7) The German fuel ETS is divided into three phases:
 - a fixed price phase from 2021 to 2025, with a gradual price increase from EUR 25 per tonne of CO₂ in 2021 to EUR 45 per tonne of CO₂ in 2025 (⁴);
 - an auctioning phase in 2026, where the emission allowance price will be determined through auctions with a price corridor, namely between a minimum price of EUR 55 per tonne of CO₂ and a maximum price of EUR 65 per tonne of CO₂; and
 - a full trading system from 2027 onwards, without price corridor.
- (8) Following an open public tender, the German Environment Agency mandated the European Energy Exchange AG (EEX) in Leipzig for the sale of emission allowances under the German fuel ETS for the period 2021-2025.
- (9) The German authorities explained that the German fuel ETS is designed as a 'cap and trade' system, with emission reduction targets based on a decreasing total quantity of emission allowances. The volume of greenhouse gases all participants combined are permitted to emit (the cap) will be determined by the German Federal Government by means of a statutory ordinance, on the basis of Article 4 BEHG. The German authorities explained that during the fixed price phase (2021-2025) and the auctioning phase with a price corridor (2026), this cap will not be strictly rigid, i.e. some flexibility is foreseen depending on whether the annual emission allocations under the EU Effort Sharing Regulation (⁵) ("ESR") are complied with. According to Article 5(1) BEHG, Germany covers the excess demand for emission allowances through the use of flexibility options in accordance with the ESR such as the purchase of a corresponding quantity of additional emission allocations from other Member States. Germany explained that this will allow Germany to achieve its climate targets under the ESR. The cap will become rigid from 2027 onwards when the German fuel ETS will become a full trading system.
- (10) The German authorities explained that the national emission allowances are transferable and therefore freely tradable between companies holding a registry account, even during the fixed price phase (⁶). During the fixed price phase,

^{(&}lt;sup>4</sup>) See Article 10(2) BEHG.

^{(&}lt;sup>5</sup>) 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).

⁽⁶⁾ The German authorities explained that, during the fixed price phase (2021-2025) and the auctioning phase with a price corridor (2026), there are incentives for reporting fuel suppliers to trade the allowances on the secondary market even in the absence of a rigid cap. According to Article 9(2) BEHG, national emission allowances shall be transferable. Reporting fuel suppliers may trade unused allowances. Moreover, on the basis of Article 10(2) BEHG, during the fixed price phase 2021-2025, reporting fuel suppliers can buy a limited amount of up to 10 % of emission allowances acquired in a given year until 30 September of the following year at the (generally) lower fixed price of the previous year (except for 2023 where the allowance price equals the allowance price for 2022) and trade them on the secondary market. The price of the allowances on this secondary market is determined by the market (currently over the counter). The German authorities explained that there are currently intermediaries approximately 30 offering market access listed bv EEX (https://www.eex.com/de/maerkte/umweltprodukte/nehs).

German fuel allowances issued for a given year cannot be surrendered for a subsequent year, whereas German fuel allowances issued for a given year can be surrendered for the previous year.

(11) In 2021 and 2022, the German fuel ETS will only cover fuels mainly used in the heating and transport sectors (petrol, gas oils, heating oils, natural gas and liquefied petroleum gas), as listed in Annex II of the BEHG. From 2023, the other fuels, including coal, will also be covered, as listed in Annex I of the BEHG.

2.1.2. The double burden rule

- (12) In order to preserve the complementarity between the German fuel ETS and the EU ETS and avoid that emissions from fuels purchased by operators subject to the EU ETS are charged twice under the German fuel ETS (at the level of the fuel supplier) and under the EU ETS (at the level of the emitter) the German fuel ETS provides for two mechanisms (the "double burden rule").
- (13) First, in accordance with Article 7(5) of the BEHG, if the fuel is delivered to an installation subject to the EU ETS and there is a direct supply relationship between the reporting fuel supplier and the operator of the EU ETS installation, the fuel supplier can deduct the corresponding quantity of fuel from its emission report in the German fuel ETS (the "deduction rule"). The German authorities confirmed that when the deduction rule applies, the reporting fuel supplier cannot pass on the cost of the German fuel ETS to the operator of the EU ETS installation concerned (⁷).
- (14) Second, in accordance with Article 11(2) of the BEHG, if there is no such direct supply relationship, the deduction rule is not applicable and the operator of the installation covered by the EU ETS can apply for a full subsequent compensation for its additional costs related to the German fuel ETS (the "double burden compensation"). That compensation is calculated as the product of the relevant amount of emissions (counted under both the EU ETS and German fuel ETS) and the applicable CO_2 price under the German fuel ETS. The relevant amount of emissions is calculated based on the quantity of fuel purchased for use in the EU ETS installation multiplied by the default values for the calorific emission factor, the calorific value and the conversion factor of the respective fuel.
- (15) The double burden rule is not the notified measure subject of this decision. Germany considers that rule not to amount to State aid and has accordingly decided not to include it in the scope of the current notification. It is mentioned as only as a contextual background element of the German fuel ETS. The notified measure is the carbon leakage compensation described in Sections 2.2 to 2.11 below.

⁽⁷⁾ See Article 11 of the Emissions Reporting Regulation 2022 of 17 December 2020 (BGBl. I, p. 3016) for the reporting years 2021 and 2022 and Article 17 of the Emissions Reporting Regulation 2030 of 21 December 2022 (BGBl. I, p. 2868) for the subsequent reporting years starting with 2023. The German authorities explained that, in order to benefit from the deduction rule, the reporting fuel supplier and the operator of the EU ETS installation must make identical declarations to the competent authority that the fixed prices for emission allowances applicable to the BEHG for the deployment phase were not part of the agreed fuel delivery price for the fuel delivered on the basis of the deduction, and therefore this CO₂ price component is not passed on to the operator of the EU ETS installation.

2.1.3. The EU ETS and the new EU ETS II for buildings, road transport and additional sectors

- (16) In comparison with the German fuel ETS, the current EU ETS applies at downstream level: emitters must surrender allowances to cover their emissions. The EU ETS applies to emissions from stationary installations in the power and industry sector as well as intra-EU aviation activities. Activities and greenhouse gases covered by the EU ETS are listed in Annexes I and II of Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union (⁸) (the "ETS Directive"). In some sectors, only installations above a certain size or production level are included. Moreover, Member States may exclude small emitters (i.e. installations emitting less than 25 000 tonnes of CO₂ per year) from the EU ETS provided that they are subject to equivalent measures, in accordance with Article 27 of the ETS Directive (⁹).
- (17) Following the Commission's proposal of 14 July 2021 for the revision of the ETS Directive (¹⁰), which is part of the 'Fit for 55' package (¹¹), Directive (EU) 2023/959 of 10 May 2023 amending the EU ETS Directive sets up an emissions trading system for buildings, road transport and additional sectors (the "new EU ETS II"). The new EU ETS II will be separate from the current EU ETS and will start in 2027. It will apply to the emissions from the activities listed in the Annex III of the ETS Directive, which excludes the release for consumption of fuels used in the activities covered by the current EU ETS (¹²), the release for consumption of hazardous or municipal waste used as fuel.
- (18) Due to the very large number of small emitters in the covered sectors, the new EU ETS II will apply upstream for reasons of technical feasibility and administrative efficiency to regulated entities (i.e. the liable fuel suppliers as defined in the EU ETS II).
- (19) According to the ETS Directive as amended, regulated entities should be able to reliably and accurately identify and differentiate the sectors in which the fuels are released for consumption, as well as the final users of the fuels, in order to avoid undesirable effects, such as double burden. The Member States shall take appropriate measures to limit the risk of double counting of emissions covered. The Commission shall adopt implementing acts concerning the detailed rules for avoiding double counting and allowances being surrendered for emissions not covered by the new EU ETS II, as well as for providing financial compensation to

(¹¹) COM/2021/550 final.

⁽⁸⁾ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (OJ L 275 25.10.2003, p. 32).

^{(&}lt;sup>9</sup>) The German authorities explained that there is an opt out possibility for small emitters in Germany according to Article 27 of ETS Directive, but no installation took this option for the period 2021-2030.

^{(&}lt;sup>10</sup>) COM/2021/551 final.

^{(&}lt;sup>12</sup>) It would not cover the release for consumption of fuels used in the activities covered by the current EU ETS, except if used for combustion in the activities of transport of greenhouse gases for geological storage.

the final consumers of the fuels in cases where such double counting or surrender cannot be avoided.

(20) Germany committed to adapting its fuel ETS and the notified measure following the revision of the EU ETS Directive and the adoption of the related implementing acts or if the Commission issues new or amended State aid guidelines applicable to the measure, in order to bring them in line with the provisions and timelines of the applicable EU rules. More specifically, Germany commits to notify the necessary amendments to the European Commission in compliance with the standstill obligation under Article 108(3) TFEU.

2.2. Objective

- (21) The notified measure subject to this decision the carbon leakage compensation takes the form of a direct grant to partially compensate the increase in fuel prices resulting from the German fuel ETS, for undertakings that are not covered by the EU ETS and that belong to a sector or subsector deemed at risk of carbon leakage.
- (22) The German fuel ETS leads to a cost burden for the use of fossil fuels for all fuel consumers (except installations covered by the EU ETS, which benefit from the deduction rule or the double burden compensation, as described in recitals (12) to (15)). For companies that are particularly exposed to international competition, this may lead to the situation that they cannot pass on these additional costs through product prices if foreign competitors are not subject to a comparable level of CO_2 pricing. In those cases, there is a risk that the production of affected companies will move abroad or that the customers turn to foreign competitors (so-called 'carbon leakage' phenomenon), which would undermine the objective of the German fuel ETS of contributing to a reduction of emissions globally.
- (23) Germany argues that the measure, by reducing the financial burden on undertakings deemed at risk of carbon leakage, aims at mitigating the risk of carbon leakage. According to Germany, the measure therefore contributes to promoting climate protection.
- (24) Germany explains that the measure will also increase the environmental sustainability of the undertakings concerned by linking the right to receive aid to investments in climate protection measures (see below section 2.7).

2.3. Legal basis and granting authority

- (25) The national legal basis is:
 - the National Fuel Emissions Trading Act (¹³) of 12 December 2019, establishing the national fuel ETS (BEHG see recital (4)); and
 - the Ordinance on measures to prevent carbon leakage resulting from the national fuel emissions trading system (¹⁴) of 21 July 2021 ("BECV").

^{(&}lt;sup>13</sup>) Gesetz über einen nationalen Zertifikatehandel für Brennstoffemissionen (Brennstoffemissionshandelsgesetz - BEHG) of 12 December 2019 (BGBl. I p. 2728), as amended by Article 1 of the Act of 3 November 2020 (BGBl. I p. 2291).

- (26) Article 11(3) of the BEHG authorises the German federal government to introduce the necessary measures to avoid carbon leakage and to maintain the cross-border competitiveness of affected undertakings, by way of a statutory ordinance. On this basis, the German government adopted the BECV on 21 July 2021.
- (27) According to Article 27 of the BECV, no aid will be granted under the measure before the notification of the Commission's decision approving the measure.
- (28) According to Article 3 of the BECV, the granting authority is the Federal Environment Agency, a federal agency and subdivision of the German Environmental Agency, under the supervisory control of the Federal Ministry for Economic Affairs and Climate Action (BMWK) in the context of the measure. The German Emissions Trading Authority ("DEHSt") at the Federal Environment Agency is responsible for implementing the German fuel ETS and the measure, and in particular for organizing the application process, including the examination of the applications, the granting and the payment of the aid.

2.4. Duration, budget and financing

- (29) The measure covers costs incurred from 2021 to 2030. The granting and payment of the aid for costs incurred in 2021 have been suspended until the present decision and will be made after the approval of the measure by the European Commission. The last payments will be made in 2031 for costs incurred in 2030.
- (30) The estimated total budget is EUR 6.5 billion for the period 2022 to 2030. The estimated annual budget is distributed as follows:

Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Budget (EUR million)	274	329	471	530	657	912	876	840	804	768

- (31) The measure will be financed through the Climate and Transition Fund ("KTF"), a specific purpose-bound fund within the German annual federal budget. The Energy and Climate Fund receives the current revenues from the auctioning of the EU ETS allowances and the revenues from the German fuel ETS and has reserves from previous allocations from the general federal budget. The Climate and Transition Fund finances the measure and other measures related to energy transformation, climate protection and compensation for high energy prices.
- (32) The annual budget of the measure will be approved by the German Parliament in the German annual federal budget.

⁽¹⁴⁾ Verordnung über Maßnahmen zur Vermeidung von Carbon-Leakage durch den nationalen Brennstoffemissionshandel (BEHG Carbon-Leakage-Verordnung - BECV) of 21 July 2021 (BGBl. I p. 3129).

2.5. Beneficiaries

- (33) To be eligible for compensation under the measure, undertakings must be active in an eligible sector and subsector listed in the Annex of the BECV. Those sectors and subsectors are identical to those listed in the Commission Delegated Decision (EU) 2019/708 concerning the determination of sectors and subsectors deemed at risk of carbon leakage for the period 2021 to 2030 (¹⁵) (the "EU ETS Carbon Leakage List"), with the exception of two sectors that are not eligible under the measure (NACE 14.11 Manufacture of leather clothes; and NACE 07.29 Mining of other non-ferrous metal ores). The German authorities explained that the reason for the exclusion of those two sectors is that they do not have any direct emissions from burning fuel. Those sectors are included in the EU ETS Carbon Leakage List due to their indirect emissions from electricity consumption (¹⁶).
- (34) The German authorities explained that the measure uses the EU ETS Carbon Leakage List to ensure as much as possible consistency with the already existing EU-wide instrument of protection against carbon leakage and equal treatment of similar products, regardless of whether they are produced in large installations subject to the EU ETS or in smaller installations not covered by the EU ETS.
- (35) In addition, in order to take account of German specificities, Articles 18 to 22 of the BECV foresee the possibility for a subsequent recognition of other eligible sectors upon application. The German authorities explained that any extension to other eligible sectors based on this subsequent recognition procedure will be notified separately to the Commission for prior approval and therefore any possible extension is not part of the present notification.
- (36) According to Article 4 of the BECV, no aid can be granted to:
 - undertakings in difficulty as defined in the Commission guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (¹⁷).
 - undertakings which are subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal or incompatible with the common market pursuant to Chapter III of Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of

^{(&}lt;sup>15</sup>) Commission Delegated Decision (EU) 2019/708 of 15 February 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council [ETS Directive] concerning the determination of sectors and subsectors deemed at risk of carbon leakage for the period 2021 to 2030 (OJ L 120, 8.5.2019, p. 20).

^{(&}lt;sup>16</sup>) See the dataset used for the establishment of the EU ETS Carbon Leakage List ("EU ETS phase 4 Preliminary Carbon Leakage List – Carbon Leakage Indicator underlying data", available at https://climate.ec.europa.eu/system/files/2018-05/6_cll-ei-ti_results_en.pdf). According to this dataset, the sector NACE 14.11 Manufacture of leather clothes has a direct emission intensity of 0.000 kgCO2/EUR and an indirect emission intensity of 1.383 kgCO2/EUR. The sector NACE 07.29 Mining of other non-ferrous metal ores has a direct emission intensity of 0.000 kgCO2/EUR and an indirect emission intensity of 0.560 kgCO2/EUR.

^{(&}lt;sup>17</sup>) OJ C 249, 31.7.2014, p. 1.

Article 108 of the Treaty on the Functioning of the European Union (the "Procedural Regulation") $(^{18})$.

2.6. Calculation of the aid amount

(37) Pursuant to Article 8 of the BECV, the aid amount is calculated via the following formula:

Aid amount

= Relevant emission quantity x Level of compensation x Relevant allowance price

- (38) The 'relevant emission quantity' (in tCO2) is determined as the 'eligible amount of fuel' used by the undertaking multiplied by the 'fuel benchmark' and the 'net calorific value of the respective fuel' (¹⁹), plus, where applicable, the 'amount of eligible heat' multiplied by the heat benchmark, after deduction of 150 tonnes of CO2 (the retention).
- (39) The 'relevant emission quantity' is calculated via the following formula:

Relevant emission quantity

= eligible amount of fuel_{per fuel} × calorific value_{per fuel} × conversion factor_{per fuel} × fuel benchmark + eligible amount of heat × heat benchmark - retention

- (40) The 'eligible amount of fuel' (in GJ) refers to the quantity of fuel placed on the market in accordance with Article 2(2) of the BEHG and used by the beneficiary undertaking for the production of eligible products during the year for which the aid is granted. For the calculation of the eligible amount of fuel, no account is taken of quantities of fuel that:
 - have been used in an installation of the undertaking subject to the EU ETS;
 - used for electricity generation (²⁰);
 - used for the production of heat for third parties (²¹);
 - are of biogenic origin (i.e. biomass-based fuels) (²²);

(²¹) The German authorities explained that the costs of the German fuel ETS can be passed on to the third party via heat prices.

^{(&}lt;sup>18</sup>) OJ L 248, 24.9.2015, p. 9.

^{(&}lt;sup>19</sup>) Where standard values for the calorific value and conversion factor of a fuel are laid down in the Regulation pursuant to Article 7(4)(2) of the BEHG, those values shall apply.

^{(&}lt;sup>20</sup>) The German authorities explained that the costs of the German fuel ETS can be passed on to the consumers via electricity prices.

^{(&}lt;sup>22</sup>) The German authorities explained that (i) in the case of emissions from sustainable biomass-based fuels, the German fuel ETS does not apply (no carbon pricing takes place) and therefore a carbon leakage compensation is not needed; and (ii) in the case of emissions from non-sustainable biomass-based fuels, the German fuel ETS applies (carbon pricing takes place), but no carbon leakage compensation may be claimed as the RED II Directive (EU) 2018/2001 (OJ L 328, 21.12.2018, p. 82) prohibits any State aid for the use of non-sustainable biomass products (see Article 29 (1) (c)).

- in the case of natural gas, have been used tax-free in accordance with Article 25 of the Energy Tax Act (²³);
- have been used for the production of products or services which do not belong to an eligible sector; or
- were acquired by the company before 1 January 2021.
- (41) The 'calorific value' $(^{24})$ and the 'conversion factor' $(^{25})$ are set per type of fuel by the Regulation pursuant to Article 7(4)(2) of the BEHG $(^{26})$.
- (42) The 'eligible amount of heat' corresponds to quantities of imported heat from a third party that (i) have been produced by non-EU ETS installations in Germany using eligible fuels and imported into the company for the production of eligible products or (ii) have been produced in high-efficiency cogeneration within the company (²⁷).
- (43) The 'fuel benchmark' and the 'heat benchmark' correspond to the fuel benchmark and the heat benchmark set by the Commission Implementing Regulation (EU) 2021/447 (²⁸) ("Implementing Regulation 2021/447") in the context of the EU ETS. For the period 2021-2025, the fuel benchmark and the heat benchmark amount to 42.6 tCO₂/TJ and 47.3 tCO₂/TJ respectively. Updated values will apply from 2026 following the update of the Implementing Regulation 2021/447. Those values have been obtained by applying the maximum reduction rate laid down in Article 10a(2) of the ETS Directive (24 %) to the value for 2013-2020. For 2013-2020, the fuel benchmark amounted to the actual emissions for natural gas as the lowest emitting fossil fuel and the heat benchmark reflects the use of natural gas in a boiler with a 90 % efficiency. As a result, the German authorities explained that the fuel benchmark amounts to 76 % of the actual amount of emissions for

^{(&}lt;sup>23</sup>) Energy Tax Act (*Energiesteuergesetz*) of 15 July 2006 (BGBl. I p. 1534; 2008 I p. 660, 1007), as amended by Article 1 of the Act of 24 May 2022 (BGBl. I p. 810). The German authorities explained that in this situation, the German fuel ETS does not apply and therefore a carbon leakage compensation is not needed. In particular, Article 25 of the Energy Tax Act relates to energy products that are used for purposes other than as motor fuels or as heating fuels (for instance as source material in chemical processes).

^{(&}lt;sup>24</sup>) The calorific value is defined as the specific amount of energy released as heat when a fuel is completely combusted with oxygen under standard conditions, minus the evaporation heat of the steam contained in the flue gas.

^{(&}lt;sup>25</sup>) Conversion factors refer to the parameters for the conversion of physical units such as density or energy.

^{(&}lt;sup>26</sup>) The Emissions Reporting Regulation 2022 of 17 December 2020 (BGBl. I, p. 3016) for the reporting years 2021 and 2022 and Article 17 of the Emissions Reporting Regulation 2030 of 21 December 2022 (BGBl. I, p. 2868) for the subsequent reporting years starting with 2023.

⁽²⁷⁾ Undertakings producing heat in high-efficiency cogeneration are free to apply for aid on the basis of the heat benchmark or on the basis of the fuel benchmark for this amount of heat. Double counting of the quantities of fuel used is excluded.

^{(&}lt;sup>28</sup>) Commission Implementing Regulation (EU) 2021/447 of 12 March 2021 determining revised benchmark values for free allocation of emission allowances for the period from 2021 to 2025 pursuant to Article 10a(2) of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 87, 15.3.2021, p. 29).

natural gas as the lowest emitting fossil fuel and 76 % of the emissions from heat production using natural gas in a boiler with a 90 % efficiency.

- (44) The German authorities explained that the product benchmarks established by Implementing Regulation 2021/447 for free allocation cannot apply for the reasons related to the systematic differences between the EU ETS and the German fuel ETS. On the one hand, the EU ETS and the product benchmarks for free allocation cover all types of emissions, including both fuel-related and other process-related emissions. On the other hand, the German fuel ETS covers only emissions related to fuel consumption. Process-related emissions are not covered by the German fuel ETS. Therefore, according to Germany, the product benchmarks for free allocation could not be used, because otherwise aid would also be granted for process-related emissions for which the eligible undertakings do not incur any additional CO₂ cost under the German fuel ETS from the start and there would be a risk of overcompensation.
- (45) Under the measure, eligible beneficiaries will have to bear a certain share of the costs related to the German fuel ETS for which no aid will be paid out (retention). This retention will be operated by deducting an amount of 150 tCO₂ for the calculation of the relevant emission quantity for the aid amount that a beneficiary can claim for all its installations. The German authorities explained this retention aims at reducing the administrative burden related to the processing of the applications (²⁹).
- (46) For undertakings with a total fossil fuel consumption of less than 10 GWh in the year for which the aid is granted, a reduced retention applies $(^{30})$.
- (47) The 'level of compensation' applicable for each sector and subsector is set in the Annex of the BECV. It follows a tiered approach which classifies the sectors and subsectors according to their emission intensity (³¹) going from 65 % up to 95 %, as follows:

Emission intensity (kg CO2/EUR GVA)	Level of compensation (%)
≤ 0.3	65
$0.3 < EI \le 0.6$	70
$0.6 < EI \le 0.9$	75
$0.9 < EI \le 1.2$	80
$1.2 < EI \le 1.5$	85
$1.5 < EI \le 1.8$	90
> 1.8	95

^{(&}lt;sup>29</sup>) The estimated aid amount for 150 tCO₂ is between EUR 813 (for a level of compensation of 65 %) and EUR 1 188 (for a level of compensation of 95 %) and, for 50 tCO₂, between EUR 2 438 (for a level of compensation of 65 %) and EUR 3 563 (for a level of compensation of 95 %), using the price of the German allowances for 2021 (25 EUR/tCO₂). According to the German authorities, the estimated preparation and administrative costs per application is approximately EUR 12 650.

 $^(^{30})$ See Article 9(6) of the BECV. This reduced retention is between 50 and 130 tCO₂ depending on the energy consumption.

^{(&}lt;sup>31</sup>) The German authorities explained that the measure relies on the emission intensity data used for the establishment of the EU ETS Carbon Leakage List (see footnote 16).

- (48) A group of undertakings within an eligible sub-sector wishing to claim a higher emission intensity than the related upstream sector or sub-sector, may request an ex-post adjustment of the emission intensity pursuant to Article 23 BECV. If the undertakings in the sub-sector concerned demonstrate a higher overall emission intensity in the context of the application procedure, a higher compensation level will apply to that sub-sector in accordance with the gradual allocation described in recital (47).
- (49) From 2023, the level of compensation will also be determined based on the emission intensity at undertaking level. The emission intensity of an undertaking is calculated as the ratio between the relevant emission quantity emitted by the undertaking in the accounting year and the gross value added ('GVA') of the undertaking in the accounting year, expressed in kgCO₂/EUR. The level of compensation set in the Annex of the BECV is applicable if the undertaking demonstrates that its emission intensity exceeds the minimum threshold set for its sector or subsector. In the absence of such proof, the company will be allocated a reduced level of compensation of 60 %. This minimum threshold is:
 - 10 % of the emission intensity of the sector or subsector, for undertakings belonging to a sector or subsector with a level of compensation from 65 % to 90 %; and
 - 10 % of an emission intensity of 1.8 kgCO₂/EUR, for undertakings belonging to a sector or subsector with a level of compensation at 95 %.
- (50) The 'relevant allowance price' (in EUR) is the applicable fixed price for 2021 to 2025 (see recital (7)). From 2026, the relevant price of emission allowances is the volume-weighted average of the auction prices under the German fuel ETS in year t.
- (51) If the total annual aid amount for all eligible undertakings exceeds the available annual budget, the aid amount will be reduced proportionally to the available budget for all beneficiaries.

2.7. Energy and environment management systems and investments in climate protection measures

- (52) In return for the aid under the measure, beneficiaries must implement certain climate protection measures in accordance with Section 4 of the BECV.
- (53) First, according to Article 10 of the BECV, beneficiaries must operate, no later than 1 January 2023, a certified energy management system in accordance with DIN EN ISO 50001 or an environment management system in accordance with Regulation (EC) No 1221/2009 (³²) (EMAS).

^{(&}lt;sup>32</sup>) OJ L 342, 22.12.2009, p. 1.

- (54) Alternatively, undertakings with an average consumption of less than 10 GWh of fuel during the three years preceding the year for which the aid is granted may choose to operate an uncertified energy management system (³³) or to be a member of an energy efficiency and climate network registered with the Energy Efficiency and Climate Change Networks Initiative (³⁴).
- (55) Second, according to Article 11 of the BECV, beneficiaries must demonstrate in their application that they have invested at least 50 % (for the aid granted for 2023 and 2024) or 80 % (for the aid granted for 2025 and the following years) of the aid granted for the year preceding the accounting year in (i) energy efficiency measures or (ii) measures to decarbonise their production process. This obligation applies to energy efficiency measures identified and assessed as economically feasible (³⁵) in the relevant energy management system referred to in recital (53). The measures to decarbonise their production must reduce their greenhouse gas emissions to a level below the applicable product benchmark for free allocation for the relevant accounting year.
- (56) The German authorities will verify compliance with the obligation described in recital (55) before the granting of the aid. No aid will be granted in case of non-compliance.
- (57) The German authorities explained that the obligation described in recitals (55) and (56) does not apply for the aid granted for the accounting years 2021 and 2022 to give beneficiaries sufficient time for the preparation and implementation of such measures.

2.8. Allocation process

- (58) The aid is granted on an ex-post basis, in the form of a direct grant, upon application.
- (59) Eligible undertakings must submit their application for costs incurred in year t by 30 June of year t+1. Applicants have to provide the necessary documentation and information to determine their eligibility to be granted the compensation as well as the amount of it. The application must be accompanied by a certificate from an auditor, a firm of accountants, a cooperative audit association, a sworn accountant or an auditing company attesting to the existence of the factual information contained in the aid application.
- (60) The aid for costs incurred in year t is granted and paid in year t+1.
- (61) For costs incurred in the first year (2021), the German authorities explained that the granting and payment of the aid have been suspended until the present decision in order to comply with the stand-still obligation under Article 108(3) TFEU. The German authorities argue that the incentive effect of the aid is ensured

^{(&}lt;sup>33</sup>) Based on DIN EN ISO 50005:2021 (at least implementation stage 3).

^{(&}lt;sup>34</sup>) https://www.effizienznetzwerke.org/

^{(&}lt;sup>35</sup>) Measures are considered to be economically feasible if they have a positive net present value after a period of time accounting for 60 % (for accounting years 2023 to 2025) or 90 % (from accounting year 2026) of the expected useful life (maximum of nine years from accounting years 2023 to 2025).

for the following reasons. First, the BECV was adopted on 21 July 2021. The application form and all relevant implementing acts were published on the website of the DEHSt on 28 July 2021. Second, applicants submitted their application by 30 June 2022, in accordance with the statutory deadline laid down in the BECV, but the actual granting and payment have been suspended until the present decision. Finally, Germany considers it likely that eligible undertakings have not reduced or relocated their production also in view of the expectations to become eligible under the proposed measure.

(62) In that respect, the German authorities refer to point 31 of the Guidelines on State aid for climate, environmental protection and energy 2022 (³⁶) ("CEEAG"), which foresees that, in certain exceptional cases, aid can have an incentive effect even for projects which started before the aid application. In particular, according to point 31(b) CEEAG, aid is considered to have an incentive effect when the national authorities have published, before the start of works, a notice of their intention to establish the proposed aid measure, conditional upon the Commission's approval of the measure as required by Article 108(3) TFEU. That notice must be made available on a public website or other publicly accessible media with comparably broad and easy access and clearly state the type of projects that the Member State proposes to be eligible and the point in time from which the Member State intends to consider such projects eligible. According to Germany, the measure fulfils those requirements.

2.9. Cumulation

(63) The aid under the measure cannot be cumulated with aid, including *de minimis* aid, from other local, regional or national sources covering the same eligible costs, partly or fully overlapping, and any other State aid without identifiable eligible costs, if such cumulation results in exceeding the maximum aid amount applicable to the aid under the measure.

2.10. Transparency, reporting and monitoring

- (64) Germany will publish the full text of the measure on the website of the DEHSt $(^{37})$.
- (65) Germany commits to ensure the publication of the following information on a comprehensive national State aid website or Commission's IT tool (³⁸) and on the website of the Federal Ministry for Justice (³⁹):
 - the full text of the approved aid scheme and its implementing provisions, or a link to it,
 - the identity of the granting authority,

^{(&}lt;sup>36</sup>) OJ C 80, 18.2.2022, p. 1.

^{(&}lt;sup>37</sup>) https://www.dehst.de/

^{(&}lt;sup>38</sup>) The State aid transparency public search gives access to State aid individual award data provided by Member States in compliance with the European transparency requirements for State aid and can be found at https://webgate.ec.europa.eu/competition/transparency/public?lang=en.

^{(&}lt;sup>39</sup>) https://www.gesetze-im-internet.de/becv/

- the identity of the individual beneficiaries, the form and amount of aid granted to each beneficiary, the date of granting, the type of undertaking (SME / large company), the region in which the beneficiary is located (at NUTS level II) and the principal economic sector in which the beneficiary has its activities (at NACE group level).
- (66) Such a requirement applies to each individual aid award above EUR 100 000.
- (67) The information will be published within 6 months from the granting act and the information will be kept for at least 10 years and will be available to the general public without restrictions.
- (68) Germany will submit annual reports on the implementation of the measure to the Commission. Germany confirmed that those annual reports will comply with the requirements set out in Article 26 of the Procedural Regulation.
- (69) Germany will ensure that detailed records regarding the aid granted are maintained. Such records will contain all information necessary to establish that the conditions regarding, where applicable, eligible costs and maximum allowable aid intensity have been observed. Those records will be maintained for 10 years from the date on which the aid was granted and be provided to the Commission upon request.

2.11. Evaluation

- (70) The German authorities have submitted an evaluation plan for the notified scheme. The main elements of the evaluation plan are described below.
- (71) The evaluation plan notified by the German authorities describes the objectives of the scheme subject to evaluation and includes evaluation questions in order to assess the scheme's direct and indirect effects, as well as the proportionality of the aid and the appropriateness of the chosen aid instrument.
- (72) The evaluation plan contains guiding evaluation questions regarding target achievement, impact monitoring, cost-effectiveness and policy design of the scheme.
- (73) The evaluation will provide general information, in particular, on whether the measure prevents carbon leakage and protects on the other hand companies from any adverse competitiveness effects. Moreover, the evaluation will verify, if the obligations related to the measure lead to higher investments into energy efficiency or climate protection measures in Germany. Finally, the evaluation will verify whether the measure achieves these goals in an efficient, cost-effective manner, e.g. by allocating compensation in accordance with actual risk of carbon leakage or by providing an efficient administrative process.
- (74) For the purpose of evaluation of the scheme, the German authorities will use several result indicators.
- (75) The direct effects of the measure will be assessed on the basis of indicators at firm and sector level concerning climate protection (e.g. direct emissions, direct emission intensity, energy consumption, energy efficiency), carbon leakage and competitiveness (e.g. value added, production volumes, revenues, number of

employees, tangible fixed assets, market share), as well as cost-effectiveness (budget, allocated compensation, total auction volume, compensation as a percentage of the total auction volume). Germany will assess the development of exports to and imports from different Member States, especially those Member States with similar level of carbon pricing in place.

- (76) The indirect effects of the measure will be assessed on the basis of the same indicators at firm and sector level concerning climate protection, carbon leakage and competitiveness if possible and plausible under the evaluation framework.
- (77) The appropriateness and proportionality of the aid will be assessed on the basis of the same indicators at firm and sector level concerning climate protection, carbon leakage and competitiveness as well as cost-effectiveness.
- (78) The evaluation plan underlines the challenges for evaluating the impacts, design and effectiveness of compensation schemes to protect against carbon leakage due to (i) a lack of a suitable control group, i.e. insufficient variation in the regulatory status, and (ii) data restrictions. More precisely, it is unlikely to find a suitable control group, i.e. a group of firms that are both subject to carbon pricing under the German fuel ETS and part of a sector admitted to compensation under the measure but do not in fact receive compensation (in absence of eligibility threshold at firm or installation level).
- (79) Therefore, a thorough assessment on the possibilities of different evaluation methods in light of the specific design features of the measure will be conducted. Potential methods include the Matched Difference-in-Differences method, instrumental variables and synthetic control methods. If those methods turn out to be not applicable to the context of the measure, an alternative approach will be developed. The research design will take into account the most recent state-of-art research in terms of methodology, data and empirical results.
- (80) The evaluation will consider three main data sources: firm level data, sector level data and regulatory data.
- (81) The German authorities have committed to submit a revised version of the evaluation plan, taking into account the early evidence concerning the implementation of the measure, as part of a first interim report in 2024. The first interim report will include a complete description of the methodology that will be used for the evaluation based on the available data and a preliminary analysis of the measure so far. The final evaluation report will be submitted to the Commission in 2028 and will present the results of the completed evaluation.
- (82) The evaluation will be conducted by an independent entity to be selected by Germany through an open tender procedure in 2023. The selection criteria will notably include the effectiveness and feasibility of the research design as well as track record in science and policy consulting. The Federal Ministry for Economic Affairs and Climate Action will publish a call for proposals to select an external evaluation contractor for the development of an adequate research design, conducting the evaluation and the development of the evaluation report.
- (83) The empirical evaluation laid out in the evaluation plan will be integrated into the already existing report and evaluation procedures described in Article 26 of the BECV.

- (84) Pursuant to Article 26(1) of the BECV, the competent authority (the Federal Environment Agency) shall evaluate the measure for the previous accounting year and publish an annual report on the main results of the measure for the previous accounting year on its website.
- (85) Pursuant to Article 26(2) of the BECV, from 2022 and annually thereafter, the competent authority (the Federal Environment Agency) shall consult the interest groups for affected sectors or subsectors, the social partners and experts in the field of carbon leakage protection, in order to assess the impact of the German fuel ETS and the measure on the competitive situation of undertakings in Germany. The Federal Government shall submit a report to the German Bundestag by 30 September each year.
- (86) Pursuant to Article 26(3) of the BECV, after completion of the aid procedure for the accounting year 2022, the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety shall also commission an external body to evaluate the implementation of the measure. The evaluation shall assess whether and to what extent the increase in the price of the allowances under the German fuel ETS leads to job displacements in the individual sectors, as well as a review of the need for further development of the measure. This evaluation shall be carried out by 30 September 2024 and every four years thereafter.
- (87) The German authorities explained that, given its time frame and content, the evaluation defined in Article 26(3) BECV is an adequate framework for the evaluation described in the present section.
- (88) The interim report and the final evaluation report will be published on the website of the Federal Ministry for Economic Affairs and Climate Action and on the website of the DEHSt. Personal and/or confidential data will be used in accordance with the relevant regulations. The published results of the evaluation will comply with provisions of the German statistical law and statistical secrecy. Access to third-party data will be subject to the rules imposed by these third-party bodies. Data collected during the evaluation process will be made accessible for the purpose of replicating results or for further studies.

3. **POSITION OF GERMANY**

- (89) Germany does not dispute that the measure constitutes State aid but claims that the measure is compatible with Article 107(3)(c) TFEU. Germany considers that the measure cannot be directly assessed under existing State aid guidelines.
- (90) In particular, the German authorities explained that the German fuel ETS is designed as a market-based measure with largely identical operating principles compared to the EU ETS. The German fuel ETS does not create a direct obligation to pay, but an obligation to surrender emission allowances in accordance with the reported CO₂ emissions, with several possible ways to acquire the allowances. Payments under the German fuel ETS are made in return for consideration: Germany receives revenues in exchange for the issue of emission allowances, which in turn confers the right to emit greenhouse emissions and are tradable on a secondary market at market price. Therefore, according to Germany, section 4.7.1 CEEAG does not apply to the measure.

- (91) According to Germany, the measure, by reducing the financial burden on undertakings deemed at risk of carbon leakage resulting from the German fuel ETS, mitigates the risk of carbon leakage and therefore contributes to promoting climate protection. In this respect, the German authorities refer to the underlying reasoning for the carbon leakage protection instruments in the context of the EU ETS. More specifically, the German authorities refer to recital 7 of the ETS Directive regarding free allocation and to point 20 of the Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021 (⁴⁰) (the "EU ETS State aid guidelines") regarding aid for indirect emission costs.
- (92) Furthermore, according to Germany, the implementation of the measure promotes the environmental sustainability of the beneficiaries, thanks to the required climate protection measures beneficiaries have to implement (see recitals (52) to (57)). The German authorities consider that those requirements meet and even go beyond the requirements concerning energy audits and energy management systems laid down in points 54 and 55 of the EU ETS State aid Guidelines.
- (93) Concerning the necessity of the measure, the German authorities argue that relying on the EU ETS Carbon Leakage List allows to target sectors that are exposed to an actual risk of carbon leakage. More precisely, the sectors listed in the EU ETS Carbon Leakage List have been identified as exposed to the risk of carbon leakage in the context of the EU ETS, so that undertakings in those sectors (to the extent that they are not already covered by the EU ETS) are in principle considered to be at risk of carbon leakage in the context of the German fuel ETS and therefore a safeguard mechanism for those undertakings is also required in the context of the German fuel ETS.
- (94) Concerning the appropriateness of the measure, Germany explained that, given that the German fuel ETS applies at upstream level, the measure, which is in the form of a direct grant (more precisely a partial compensation granted *ex post* upon application), is an appropriate instrument to address the risk of carbon leakage in the context of the German fuel ETS.
- (95) Concerning the incentive effect of the measure, applicants must submit their applications for the aid for costs incurred in year t by 30 June in year t+1. If all the eligibility requirements are met, the granting authority pay the aid for costs incurred in year t, in year t+1. Concerning the aid for costs incurred in the first year (2021), the German authorities explained that the granting and payment of the aid have been suspended until the present decision in order to comply with the stand-still obligation under Article 108(3) TFEU and that the incentive effect of the aid is ensured for the reasons described in recitals (61) and (62).
- (96) Concerning the proportionality of the measure, first, Germany supports that gradual level of compensation depending of the emission intensity at sector and undertaking level (see recitals (47) to (49)) ensures that the aid is limited to the minimum necessary. In this respect, since a precise empirical assessment of the carbon leakage risk of a sector is not easily possible, the emission intensity is used a proxy. Second, the aid is calculated based on the fuel and heat benchmarks

^{(&}lt;sup>40</sup>) OJ C 317, 25.9.2020, p. 5.

set in the context of the EU ETS (see recital (43)). According to the German authorities, the use of benchmarks and the obligation for companies to invest up to 80 % of the funds received in climate protection measures provide clear incentives for beneficiaries to reduce their CO_2 emissions. The German authorities explained that, should point 308 CEEAG be applied by analogy, even for companies with a level of compensation of more than 80 %, following the application of the benchmarks, the actual aid intensity will be well below 80 % of the cost of purchasing German fuel emission allowances.

(97) Concerning the effects of the measure on competition and trade between Member States, the German authorities argues that, from an economic point of view, the measure does not place the beneficiaries in a more favourable position compared to their competitors in other Member States or third countries, but merely (partially) reduces a cost disadvantage caused exclusively by Germany through the German fuel ETS. The undertakings subject to the German fuel ETS remain subject to an additional burden compared to their competitors in other Member States. Moreover, Germany explains that the sector list for eligibility (the EU ETS Carbon Leakage List) is targeted at third countries as it is based on EU-wide data (including trade intensity relating to third countries) and it does not take into account the trade intensity within the EU. According to Germany, the measure preserves a level playing field for sectors at risk of carbon leakage and the aid is limited to the minimum necessary. Therefore, the measure promotes the development of the eligible sectors without adversely affecting trading conditions to an extent contrary to the common interest, as required by Article 107(3)(c)TFEU.

4. ASSESSMENT OF THE MEASURE

4.1. Existence of aid

- (98) In order for a measure to constitute State aid within the meaning of Article 107(1) TFEU it has to fulfil four conditions. First, the aid must be imputable to the State and involve State resources. Second, the measure must confer a selective advantage to certain undertakings or the production of certain goods. Third, the measure must be liable to affect trade between Member States. Fourth, the measure must distort or threaten to distort competition in the internal market.
- (99) The aid under the measure is granted by the Federal Environment Agency, which is a federal agency, under the supervisory control of the Federal Ministry for Economic Affairs and Climate Action in the context of the measure (see recital (28)), according to the rules and procedure provided by the BECV (see recitals (25) and (27)). The measure is funded through the Climate and Transition Fund, which is a specific purpose-bound fund within the German annual federal budget and has reserves from previous allocations from the general federal budget (see recital (31)). Hence, the measure is imputable to the State and financed through State resources. It confers an advantage to the beneficiaries by compensating for costs they would have borne under normal market conditions. The aid is selective since it is granted only to the undertakings active in certain sectors (see recital (33)). Those sectors are open to competition throughout the EU, making the measure liable to affect trade between Member States and distort competition.

(100) The Commission therefore concludes that the measure constitutes aid within the meaning of Article 107(1) TFEU. Germany does not dispute that conclusion (see recital (89)).

4.2. Legality of the aid

- (101) According to the legal basis, the measure will enter into force after the notification of the Commission's decision approving the measure (see recital (27)).
- (102) By notifying the measure before its implementation, the German authorities have fulfilled their obligation under Article 108(3) TFEU.

4.3. Compatibility of the aid

4.3.1. Legal basis for the assessment of the compatibility of the aid

- (103) The notified compensation scheme aims at mitigating the risk of carbon leakage due to the German fuel ETS by partially compensating the increase in fuel prices resulting from the German fuel ETS, for undertakings belonging to a sector deemed at risk of carbon leakage.
- (104) The Commission notes that it is the first time that the compatibility of such a measure is assessed. This type of aid is not covered by the CEEAG, the ETS State aid guidelines or any other Commission guidelines for assessing the compatibility of State aid with the internal market.
- (105) More specifically, Section 2.2 CEEAG (Aid measures covered by these guidelines) provides a list of measures which are covered by the Guidelines. Measures aiming at mitigating the risk of carbon leakage due to a national fuel ETS are not part of this list. The Commission has examined whether the measure could fall in another category of the CEEAG (notably under Sections 4.7, 4.11, 4.1 or 4.4 CEEAG) and excluded such possibility for the following reasons.
- (106) As regards Sections 4.7 and 4.11 CEEAG (aid in the form of reductions in taxes or parafiscal levies and aid in the form of reductions from electricity levies for energy intensive users), the Commission notes that during the fixed price phase (2021-2025), allowances are issued at a fixed price on EEX. Even during the fixed price phase, paying this fixed price gives right to an allowance and this allowance is freely tradable on a secondary market outside EEX, where the price would be determined by the market (see recital (10)). Moreover, German fuel allowances issued for a given year can be surrendered for the previous year (see recital (10)). From 2026, the issue allowance price will be determined by the market (with and then, without a price corridor). Moreover, the BEHG foresees a cap, i.e. a maximum volume of greenhouse gases all participants combined are permitted to emit (see recital (9)). By analogy with the EU ETS, the German fuel ETS, by reason of its particular features, is therefore a market-based measure (⁴¹). Therefore, Sections 4.7 and 4.11 CEEAG do not apply to the measure.

^{(&}lt;sup>41</sup>) Judgment of 21 December 2011, Air Transport Association of America and Others, C-366/10, EU:C:2011:864, recital 147.

- (107) Finally, the primary objective of the measure is to prevent carbon leakage (see recital (23)). The obligation for beneficiaries to invest in certain climate protection measures as described in recitals (52) to (57), is only a condition for receiving the aid and will increase the environmental sustainability of the undertakings concerned (see recital (24)). This condition therefore adds to the positive effects of the measure (see section 4.3.3.2 below). Sections 4.1 and 4.4 CEEAG (aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy and energy efficiency and aid for resource efficiency and for supporting the transition towards a circular economy) do not apply to measures that primarily aim at preventing carbon leakage and, therefore, do not apply to the measure.
- (108) In light of the above, the measure falls outside the scope of any guidelines for assessing the compatibility of the measure with the internal market. Under these circumstances, Article 107(3)(c) TFEU is the only applicable basis for such assessment.
- (109) The Commission may consider a State aid measure compatible with the internal market under Article 107(3)(c) TFEU if it (i) facilitates the development of an economic activity (positive condition), and (ii) does not adversely affect the trading conditions to an extent contrary to the common interest (negative condition).
 - 4.3.2. Positive condition the aid facilitates the development of an economic activity
 - 4.3.2.1. Contribution to the development of an economic activity
- (110) The measure supports undertakings active in one of the sectors and subsectors listed in the Annex of the BECV, which correspond to sectors deemed at risk of carbon leakage for the period 2021 to 2030 according to the EU ETS Carbon Leakage List.
- (111) In view of the above, the Commission considers that the measure contributes to the development of certain economic activities, namely sectors deemed at risk of carbon leakage.

4.3.2.2. Incentive effect

- (112) State aid has an incentive effect if it incentivises the beneficiary to change its behaviour towards the development of a certain economic activity pursued by the aid and if the change in behaviour would not occur without the aid (⁴²).
- (113) The aid under the measure will be paid out *ex post*, upon application (see recital (58)). Eligible undertakings must submit their application for costs incurred in year t by 30 June of year t+1. The aid for costs incurred in year t is granted and paid in year t+1.

^{(&}lt;sup>42</sup>) Judgment of 22 September 2020, Austria v Commission, C-594/18 P, EU:C:2020:742.

- (114) In light of the reasonably short amount of time between, on the one hand, incurrence of the costs and, on the other hand, the application for, granting and payment of the aid, the Commission considers that the measure has an incentive effect.
- (115) By way of derogation, the granting and payment aid for costs incurred in 2021 has been suspended until the present decision.
- (116) The suspension of the granting and payment of the aid for costs incurred in 2021 is limited as it only concerns the first year of the measure. The legal basis was adopted in July 2021. The application form and all relevant implementing acts have been published in July 2021 on the website of the DEHSt and clearly stated the eligibility criteria and the period covered by the measure. Thereby, the German authorities made their intention to establish the proposed aid measure public and easily accessible for the public, conditional upon the Commission's approval of the measure as required by Article 108(3) TFEU. The applications for 2021 have been submitted before 30 June 2022. The suspension of the actual granting and payment of the aid for costs incurred in 2021 was necessary for Germany to comply with the standstill obligation. Germany considers it likely that eligible undertakings have not reduced or relocated their production also in view of the expectations to become eligible under the proposed measure.
- (117) In light of the above, the Commission considers that the aid has an incentive effect and thus, effectively facilitates the development of the economic activity. The Commission considers that the granting and payment of the aid also for 2021 does not call this conclusion into question.

4.3.2.3. Compliance with relevant EU laws

- (118) State aid measures that entail, by themselves, by the conditions attached to them or by their financing method a non-severable violation of Union law cannot be declared compatible (⁴³).
- (119) The notified scheme is introduced in the context of the German fuel ETS, which is a market-based measure (see recital (106)) that aims at complementing the EU ETS by covering fuel emissions not covered by the EU ETS.
- (120) Germany committed to adapting its fuel ETS and the notified measure following the revision of the EU ETS Directive and the adoption of the related implementing acts or if the Commission issues new or amended State aid guidelines applicable to the measure, in order to bring them in line with the provisions and timelines of the applicable EU rules. More specifically, Germany commits to notify the necessary amendments to the European Commission in compliance with the standstill obligation under Article 108(3) TFEU (see recital (20)).
- (121) Moreover, no aid is granted for non-sustainable biomass-based fuels in line with Article 29(1)(c) of Directive (EU) 2018/2001 (⁴⁴).

⁽⁴³⁾ Judgment of 31 January 2023, Commission v Braesch and Others, C-284/21 P, EU:C:2023:58, paras, 96 et seq.

- (122) The Commission has no indications of any potential violation of relevant Union law. Therefore, the Commission concludes that the measure complies with the relevant EU laws.
 - 4.3.3. Negative condition the aid measure does not unduly affect trading conditions to an extent contrary to the common interest
 - 4.3.3.1. The markets affected by the aid
- (123) The markets affected by the measure are the industrial sectors deemed at risk of carbon leakage, as listed in the EU ETS Carbon Leakage List.
 - 4.3.3.2. The positive effects of the aid
- (124) The measure will contribute to the development of the sectors exposed to a risk of carbon leakage (see recital (111)).
- (125) Addressing the risk of carbon leakage serves an environmental objective since the aid aims to avoid an increase in global greenhouse gas emissions due to shifts of production in a country with less stringent emission rules.
- (126) In addition, through the additional climate protection measures described in Section 2.7 above, the measure contributes to incentivising the beneficiaries to invest in more energy efficient and cleaner production processes.

4.3.3.3. Need for State intervention

- (127) The German fuel ETS creates price signal and aims at internalising the costs of fuel emissions for the society. The measure is necessary as the beneficiaries would otherwise be placed at such a competitive disadvantage that it would not be feasible to introduce such carbon pricing in the first place.
- (128) In the context of the EU ETS, to preserve the environmental benefit of emission reductions in the Union while measures by third countries do not provide industry with comparable incentives to reduce emissions, transitional free allocation has been considered necessary for installations in sectors and subsectors at risk of carbon leakage (⁴⁵). In this context, following an in-depth impact assessment (⁴⁶), the Commission has published a list of sectors that it has assessed as being at risk of carbon leakage (the EU ETS Carbon leakage list).
- (129) The sectors listed in the EU ETS Carbon Leakage List have been identified as exposed to the risk of carbon leakage in the context of the EU ETS, so that undertakings in those sectors (to the extent that they are not already covered by the EU ETS) are in principle considered to be at risk of carbon leakage in the context of the German fuel ETS and therefore a safeguard mechanism for those undertakings is also required in the context of the German fuel ETS.

⁽⁴⁴⁾ 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 (recast) (OJ L 328, 21.12.2018, p. 82).

^{(&}lt;sup>45</sup>) EU ETS Carbon Leakage List, recital 2.

^{(&}lt;sup>46</sup>) SWD(2019) 22 final.

- (130) Concerning the exclusion of the two sectors referred to in recital (33), in light of the explanation provided by the German authorities, the Commission considers that this exclusion is based on objective and non-discriminatory criteria and can be justified in light of the objective of the measure.
- (131) The Commission considers positively that Germany takes recourse to the EU ETS Carbon Leakage List established by the Commission (see recital (33)). The use of the EU ETS Carbon Leakage List to define the scope of eligible sectors ensures that (i) the aid is targeted at the undertakings most affected by the German fuel ETS that would not be able to pursue their economic activities in a sustainable manner without the cost reduction generated by the measure and (ii) the level of environmental protection actually achieved by providing partial compensation for the German fuel ETS costs passed-on by fuel suppliers to the undertakings of the eligible sectors is higher than the one that would be achieved without the implementation of this compensation. By using that list established at EU level, the measure contributes to address the risk of carbon leakage (see recitals (127) to (129)). In light of the price of the allowances under the German fuel ETS (see recital (7)) and the reliance on the EU ETS Carbon Leakage List, it can be considered that the German fuel ETS without the aid would lead to a substantial increase in production costs for the sectors covered by the measure, calculated as a proportion of the gross value added for the concerned sectors. In view of the competitive pressure identified for these sectors, it is credible that such a substantial increase in production costs could not be passed on to customers without leading to significant reductions of sales volumes. Moreover, the measure incentivises beneficiaries to invest in more energy efficient and cleaner production processes (see recital (126)).
- (132) Moreover, the Commission notes that the selection of beneficiaries is based on objective and transparent criteria, and that the aid is granted in the same way for all eligible undertakings operating in the same sector of economic activity that are in the same or similar factual situation in respect of the aims or objectives of the aid measure. In particular, within the eligible sectors, installations covered by the EU ETS are not eligible to the measure, which is justified by the fact that those installations do not bear the costs of the German fuel ETS (see recitals (12) to (14)). In addition, within the eligible sectors, the measure foresees certain adjustments based on the emission level at sub-sector and undertaking level (see recitals (48) and (49)), which is consistent with the objective of the measure since the emission intensity is a well-known indicator to measure the risk of carbon leakage (⁴⁷).
- (133) In light of the above, the Commission concludes that the measure is necessary.

4.3.3.4. Appropriateness

(134) The German fuel ETS is a market-based measure that has been put in place to specifically counter the problem of externalities related to the absence of carbon pricing for emissions from fuel consumption by installations not covered by the EU ETS. The Commission considers that State aid may be an appropriate policy instrument to address the residual market failure related to the risk of carbon

^{(&}lt;sup>47</sup>) See the impact assessment for the establishment of the Carbon Leakage List (see footnote 44).

leakage in this context. In particular, a State aid scheme allows to target specific sectors and beneficiaries at risk of carbon leakage in such a way as to not undermine the efficiency of the market-based mechanism.

- (135) In the context of the EU ETS, in order to mitigate the risk of carbon leakage, installations covered by the EU ETS in sectors and sub-sectors on the EU ETS Carbon Leakage List receive free allocation on the basis of Articles 10a of the ETS Directive. Free allocation reduces the cost of the EU ETS for those installations in order to avoid carbon leakage.
- (136) In the context of the German fuel ETS, for administrative reasons, it is the operators that placed the fuel on the market (the reporting fuel suppliers) that have to buy allowances depending on the amount of fuel placed on the market (see recital (5)). The polluters are the consumers that purchase the fuel and pay for their pollution through an increased fuel price. In comparison, at EU level, a similar upstream approach is also foreseen in the new EU ETS II for buildings, road transport and additional sectors (see recitals (17) and (18)).
- (137) Given the specific scope and the design of the German fuel ETS at upstream level, a system of free allocation is likely to be less appropriate than the measure to achieve the objective pursued. The measure aims at reducing the burden bearing on consumers to which reporting fuel suppliers pass-on the costs of purchasing allowances under the German fuel ETS and are active in one sector or subsector deemed at carbon leakage risk. The consumers at carbon leakage risk that are targeted by the measure are not the reporting fuel suppliers. Therefore, as explained by the German authorities, free allocation is not a suitable instrument to compensate targeted consumers.
- (138) The measure is established for 10 years (2021-2030). Moreover, Germany committed to adapting its fuel ETS and the notified measure following the revision of the EU ETS Directive and the adoption of the related implementing acts or if the Commission issues new or amended State aid guidelines applicable to the measure, in order to bring them in line with the provisions and timelines of the applicable EU rules. More specifically, Germany commits to notify the necessary amendments to the European Commission in compliance with the standstill obligation under Article 108(3) TFEU (see recital (20)).
- (139) In light of the above, the Commission considers that the aid in the form of a direct grant upon application is an appropriate instrument to address the risk of carbon leakage in the context of the German fuel ETS.

4.3.3.5. Proportionality

- (140) An aid is proportionate when the aid amount is limited to the minimum needed to achieve the objective pursued.
- (141) The measure provides for a partial compensation of passed-on costs from the German fuel ETS. The German authorities explained that the measure provides only for a partial compensation to maintain the incentives for beneficiaries to further reduce their electricity consumption (see recital (96)).

- (142) To assess the proportionality of the measure, the Commission has assessed the proportionality of the calculation method of the aid amount described in recitals (37) to (51).
- (143) First, the aid amount is calculated based on the fuel and the heat benchmark established by the Commission Implementing Regulation (EU) 2021/447 in the context of the EU ETS (see recital (43)). The German authorities explained that the fuel benchmark covers 76 % of the actual amount of emissions for natural gas as the lowest emitting fossil fuel (see recital (43)). As a result, undertakings consuming more polluting fuels would bear a higher share of the costs related to the German fuel ETS, which maintains incentives for beneficiaries to switch to less polluting fuels.
- (144) Second, the level of compensation applied to the relevant emission quantity is set for each sector between 65 % and 95 % depending on the emission intensity of that sector (see recital (47)), with transparent adjustment rules at sub-sector and undertaking level (see recitals (48) and (49)). The emission intensity is a wellestablished indicator of the risk of carbon leakage in the context of the EU ETS (⁴⁸). The applicable compensation level is therefore defined as to reflect the risk of carbon leakage of the beneficiary and the measure provides only for partial compensation of the relevant costs, thus maintaining incentives for further efficiency measures.
- (145) Third, the retention described in recitals (45) and (46) further reduces the aid amount, which also maintains incentives for further efficiency measures.
- (146) Moreover, the aid amount is based on historical data concerning the fuel and heat consumption of the beneficiaries (see recitals (40) and (42)) and the average price of the allowances (see recital (50)) in the year for which the aid is granted.
- (147) Finally, the Commission notes that the aid intensity under the measure, expressed as a percentage of the additional costs related to the German fuel ETS, would be below 80 % of the cost of purchasing German fuel emission allowances. In particular, the German authorities explained that the use of the fuel and heat benchmarks means that, even in the case of the use of natural gas, only 76 % of the CO₂ costs are included in the aid calculation (see recital (43)). This ensures that, even before the application of the level of compensation at maximally 95 % (see recitals (47) to (49)) and the retention (see recitals (45) and (46)), the aid intensity cannot exceed 80 %.
- (148) In light of the above, the Commission considers that the aid is limited to the minimum necessary to prevent the risk of carbon leakage and maintain the incentives towards a cost-effective decarbonisation of the industry.

⁽⁴⁸⁾ See Article 10b(1) and (2) of the ETS Directive for free allocation, and the impact assessment accompanying the Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post 2021 (SWD(2020) 190 final, available at https://ec.europa.eu/competition/state_aid/what_is_new/2020_ets_revision/impact_assessment_report_ ets_2021_en.pdf).

4.3.3.6. Energy audits and management system

- (149) The Commission notes that beneficiaries under the measure must implement certain climate protection measures. First, they must operate an energy or environment management system no later than 1 January 2023 (see recitals (53) and (54)). Second, from 2023, beneficiaries must have invested a certain share of the aid received for the previous year in energy efficiency measures or measures to decarbonise their production process (see recital (55)). The German authorities will verify compliance with the obligation described in recital (55) before the granting of the aid.
- (150) The Commission considers that by making the aid conditional upon energy efficiency and decarbonisation efforts, the measure contributes to the objective of maximising the incentives for a cost-effective decarbonisation of the economy.

4.3.3.7. Cumulation

(151) The German authorities have confirmed that the aid under the measure cannot be cumulated with aid, including *de minimis* aid, from other local, regional or national sources covering the same eligible costs, partly or fully overlapping, and any other State aid without identifiable eligible costs, if such cumulation results in exceeding the maximum aid amount applicable to the aid under the measure (see recital (63)).

4.3.3.8. Transparency, reporting and monitoring

- (152) The Commission considers that Germany's commitments described in recitals(64) to (69) ensures the transparency of the measure.
 - 4.3.3.9. Firms in difficulty or subject to an outstanding recovery order
- (153) No aid can be granted to undertakings in difficulty or subject to an outstanding recovery order (see recital (36)).

4.3.3.10. Evaluation

- (154) The Commission may require that certain aid schemes be subject to an evaluation, where the potential distortion of competition is particularly high, that is to say when the measure may risk significantly restricting or distorting competition if their implementation is not reviewed in due time (⁴⁹). Given its objectives, evaluation only applies for aid schemes with large aid budgets, containing novel characteristics or when significant market, technology or regulatory changes are foreseen. The evaluation must be carried out by an independent expert on the basis of a common methodology provided by the Commission. This plan has to be made public.
- (155) The measure fulfils the criteria of being a scheme with a large aid budget and containing novel characteristics. Therefore, it will be subject to an evaluation.

⁽⁴⁹⁾ See the Commission Staff Working Document, Common methodology for State aid evaluation, SWD(2014) 179 final. See also, for State aid measure to which they apply, point 455 of the CEEAG.

- (156) The Commission notes the commitment made by Germany to submit an interim report in 2024 and a final report in 2028 (see recital (81)). The Commission notes that the evaluation method might be further fine-tuned in common accord between the German authorities and the Commission, and it will be described in the interim report.
- (157) Moreover, the Commission acknowledges the commitments made by the German authorities, pursuant to the Commission requirements, that the evaluation will be conducted according to the notified evaluation plan by an independent evaluation body (see recital (82)).
- (158) The procedures envisaged for selecting such evaluation body as described in recital (82) are appropriate for ensuring that the evaluation body is independent and competent. Moreover, the proposed modalities for the publication of the evaluation results (see recital (88)) are adequate to ensure transparency.
- (159) The Commission considers that the notified evaluation plan, taking into account Germany's commitment, will contain all the necessary elements: the objectives of the aid scheme to be evaluated, the evaluation questions, the result indicators, the envisaged methodology to conduct the evaluation, the data collection requirements, the proposed timing of the evaluation including the date of submission of the final evaluation report, the description of the independent body conducting the evaluation and the criteria that will be used for its selection, as well as the modalities for ensuring the publicity of the evaluation (see recitals (70) to (88)).
- (160) The Commission reminds that the measure has to be suspended if the final evaluation report is not submitted in good time and sufficient quality.

4.3.3.11. Remaining distortions of trading conditions

- (161) The German fuel ETS creates an additional burden for undertakings operating in Germany, thus putting German undertakings at disadvantage compared to undertakings that are not subject to a similar carbon pricing.
- (162) By partially compensating the additional costs related to the German fuel ETS, the measure reduces this disadvantage and brings the eligible beneficiaries closer to the situation they would be in without the German fuel ETS.
- (163) To limit the risk of competition distortion within the internal market, the Commission notes that the aid is limited to sectors that are exposed to carbon leakage risk.
- (164) In light of the considerations in recitals (129) to (131)) and (144), the Commission considers that the sector eligibility and the modulation of the level of compensation across beneficiaries within the eligible sectors (which is essentially based on the emission intensity of the beneficiary) are based on objective, non-discriminatory and transparent conditions and they ensure the minimization of distortions of intra-sector and inter-sector competition and trade. In this context, the Commission notes that the sector eligibility list for this measure only includes sectors that are also included in the EU ETS Carbon Leakage List established by the Commission and that the sector eligibility on that list is defined by indicators with a view to carbon leakage towards third countries.

4.3.4. Weighing up the positive and negative effects of the aid and conclusion on the compatibility of the measure

- (165) As explained above, the measure will facilitate the development of sectors the sectors exposed to a risk of carbon leakage, will contribute to avoiding an increase in global greenhouse gas emissions and will give incentives to the beneficiaries to invest in more energy efficient and cleaner production processes (see recitals (111), (125) and (126)).
- (166) Moreover, the necessity, appropriateness and proportionality of the aid limit its impact on competition and trade in the internal market.
- (167) The Commission considers that even if an impact on intra-sector and inter-sector competition cannot be excluded, the negative effects of the aid are sufficiently limited for the overall balance of the measure to be positive.
- (168) Therefore, the Commission concludes that the aid facilitates the development of an economic activity and does not adversely affect trading conditions to an extent contrary to the common interest and that the aid is compatible with the internal market based on Article 107(3)(c) TFEU.

5. CONCLUSION

The Commission has accordingly decided not to raise objections to the aid on the grounds that it is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union.

Yours faithfully,

For the Commission

Margrethe VESTAGER Executive Vice-President