



EUROPEAN COMMISSION

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<p>In the published version of this decision, some information has been omitted, pursuant to articles 30 and 31 of Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...]</p>	<p>PUBLIC VERSION</p> <p>This document is made available for information purposes only.</p>
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Subject: State Aid SA.104880 (2024/N) – Germany
“Förderprogramm Klimaschutzverträge” – Climate Protection
Contracts scheme – RRF

Excellency,

1. PROCEDURE

- (1) Following pre-notification contacts, Germany notified on 2 February 2024 a scheme to support investments in industrial decarbonisation (‘the scheme’, ‘the measure’ or ‘the Climate Protection Contracts scheme’), pursuant to Article 108(3) of the Treaty on the Functioning of the European Union (‘TFEU’).
- (2) The Commission requested clarifications on the measure on 2 February 2024. Germany provided these clarifications on 5 February 2024.

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- (3) Germany agrees to exceptionally waive its rights deriving from Article 342 TFEU in conjunction with Article 3 of Regulation 1/1958 and to have the present decision notified and adopted in English.

2. DETAILED DESCRIPTION OF THE MEASURE

2.1. Background and objectives of the measure

- (4) The EU has set an ambitious climate protection target of reducing greenhouse gas ('GHG') emissions by at least 55 % by 2030, with a view to becoming climate neutral by 2050 ⁽¹⁾.
- (5) In order to reach the 2030 and 2050 climate targets, far-reaching changes are required in all sectors of the economy and in particular in the industry. Because of its importance in the economic structure of Germany, but also due to its high energy intensity, the industrial sector is an important GHG emitter in Germany. In 2021 ⁽²⁾, it was responsible for 183.3 million tonnes of GHG emissions, an equivalent of 24.1% of Germany's total GHG emissions. Out of the overall share imputable to industry, 79.6% of those emissions were produced by companies active in sectors falling under the EU Emissions Trading Scheme ('EU ETS' or 'ETS').
- (6) The German authorities therefore consider that focusing on reducing the emissions of the industrial sectors falling under the ETS is indispensable to achieve Germany's climate objectives. In that regard, the Federal Climate Protection Act ⁽³⁾ sets a target for reducing the GHG emissions of the industrial sector down to 118 million tonnes in 2030.
- (7) According to the German authorities, the existing regulatory framework is not sufficient to achieve the climate objectives. While the EU ETS partially addresses the negative externalities of carbon-intensive activities, these externalities are not fully reflected in the cost of GHG emissions. Finally, some investment support programs are already available at national level, such as the Federal Funding Program for Energy and Resource Efficiency in the Economy ⁽⁴⁾ and the Funding Program for the Decarbonisation of the Industry Sector ⁽⁵⁾, but they mainly target small undertakings and/or focus on specific types of investments (e.g. resource and energy efficiency).

⁽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⁾ From a report published by the *Umweltbundesamt* (UBA), Federal Environment Agency, available at: <https://www.umweltbundesamt.de/themen/klima-energie/treibhausgas-emissionen>.

⁽³⁾ "*Bundes-Klimaschutzgesetz*", available at: <https://www.bmuv.de/gesetz/bundes-klimaschutzgesetz>.

⁽⁴⁾ "*Bundesförderung für Energie- und Ressourceneffizienz in der Wirtschaft*" available at: https://www.bafa.de/DE/Energie/Energieeffizienz/Energieeffizienz_und_Prozesswaerme/energieeffizienz_und_prozesswaerme_node.html.

⁽⁵⁾ "*Förderprogramm Dekarbonisierung der Industrie*", available at: <https://www.bmwk.de/Redaktion/DE/Artikel/Industrie/dekarbonisierung-der-industrie.html>.

- (8) The German authorities have explained that, in order to meet their decarbonisation objectives, beyond the applicable Union environmental standards, energy-intensive companies active in sectors falling under the ETS often have to modify their entire production processes. Such changes entail high investments, that undertakings tend to postpone because of the lack of profitability of such investments in a context of market uncertainty. By providing support for both operating and investment additional costs of decarbonization technologies, as well as reducing part of the business risks linked to prices volatility, the scheme is expected to enable decarbonisation at a large scale that, according to the German authorities, would otherwise not be possible.
- (9) The scheme will be partly funded by the Recovery and Resilience Facility ('RRF') as part of component 1.1.3 of Germany's Recovery and Resilience Plan ('RRP').

2.2. National legal bases

- (10) The national legal bases for the measure are composed of (1) the guideline for the promotion of climate-neutral production processes in industry through Climate Protection Contracts (or 'Climate Protection Contracts funding guideline' ⁽⁶⁾) and (2) the call for funding ⁽⁷⁾, which further specifies some features of the scheme. The German authorities indicated that the entry into force of the national legal bases was planned on 19 February 2024, subject to the approval of the aid scheme by the Commission.

2.3. Budget and financing of the measure

- (11) The budget of the measure was set by Germany at EUR 4 billion.
- (12) The measure will be financed with the general budget of the German State as well as with the resources allocated to Germany from the Recovery and Resilience Facility.

2.4. Administration of the measure

- (13) The aid granting authority for the measure is the German Federal Ministry for Economic Affairs and Climate Action.

2.5. Beneficiaries

- (14) To be eligible for aid under the measure, the beneficiaries must:
- (a) not be undertakings in difficulty, as defined in the Commission Guidelines on State aid for rescuing and restructuring non-financial enterprises in difficulty ⁽⁸⁾;

⁽⁶⁾ "Richtlinie zur Förderung von klimaneutralen Produktionsverfahren in der Industrie durch Klimaschutzverträge, or Förderrichtlinie Klimaschutzverträge".

⁽⁷⁾ "Förderaufruf".

⁽⁸⁾ Communication from the Commission Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, OJ C 249, 31.07.2014, p.1.

- (b) not have benefited from previous illegal aid declared incompatible by a Commission decision (either as individual aid or as aid under an aid scheme that has been declared incompatible), unless that aid has been reimbursed or the total amount of illegal and incompatible aid and the corresponding recovery interest were paid to a blocked account;
 - (c) not be subject to any EU sanctions; and
 - (d) not have submitted or be obliged to submit a declaration of assets pursuant to provision 802c of the German Code of Civil Procedure or 284 of the German Fiscal Code.
- (15) Several eligible undertakings may form a consortium with a view to applying together to the scheme if they intend to jointly manufacture one or more eligible products in Germany, and if there is a technological link between the manufacturing processes of the products.

2.6. Form of aid and level of support

- (16) Under the measure, aid will be granted in the form of direct grants.
- (17) In order to receive support, beneficiaries shall submit a written application to the granting authority before the start of works ⁽⁹⁾ on the project. The application shall include the applicant's name, a description of the project to be supported as well as the bid that the applicant requests to undertake the project. The latter shall include the location of the plant concerned by the project, explanations on the technical feasibility and pathway to decarbonise the production processes of the applicant, as well as a presentation of the economic feasibility of the project.
- (18) The level of aid awarded to each application will be defined on the basis of a competitive bidding process (Section 2.9.4). The bid submitted in the bidding process constitutes the written aid application.

2.7. Duration of the support

- (19) Aid can be granted until 31 December 2024. By that date, Germany will have awarded all the Climate Protection Contracts.

⁽⁹⁾ 'Start of works' means the first firm commitment (for example, to order equipment or start construction) that makes an investment irreversible, including the conclusion of a product delivery or service contract attributable to the execution of the project. The buying of land and preparatory works such as obtaining permits and conducting preliminary feasibility studies are not considered as start of works. For take-overs, 'start of works' means the moment of acquiring the assets directly linked to the acquired establishment. There is no project start if a right of cancellation or a condition subsequent is agreed in a product delivery or service contract attributable to the execution in the event that the application is definitively rejected, or a condition precedent is agreed in the event that the application is approved, and the product delivery or service contract is not executed by the notification of the grant decision.

- (20) Successful beneficiaries will be awarded yearly payments for a duration of 15 years ⁽¹⁰⁾.
- (21) The 15-year payment schedule will begin upon the operational start of the project. Such start may occur at the latest 36 months after the award of the Climate Protection Contract. The German authorities have explained that a longer period between the granting of the aid and the operational start of the project may be accepted, if the beneficiary demonstrates that this delay is due to reasons beyond its control.

2.8. Territorial scope

- (22) The measure applies to the entire territory of Germany.

2.9. Basic elements of the measure

2.9.1. Scope – eligible projects

- (23) The scheme will support projects aimed at abating GHG emissions by decarbonising the production processes of beneficiaries.
- (24) According to the German authorities, the scheme will apply to projects that decrease the GHG emissions of production facilities operated in Germany in sectors covered by Annex I to the EU ETS Directive ⁽¹¹⁾. The German authorities explained that they expect potential beneficiaries to only be in competition with undertakings that are active in sectors subject to the EU ETS, to which the scheme applies. Furthermore, Germany explained that industries subject to the ETS are responsible for around 80% of all industrial emissions (recital (5)). Finally, the German authorities explained that limiting the schemes to undertakings operating in the EU ETS sectors would also allow the granting authority to rely on data on GHG emissions from applicants that are known and monitored based on an established methodology, facilitating the comparison of bids and monitoring of emission reductions.
- (25) Germany has indicated that the following activities will not be eligible to receive funding under the scheme:
 - (a) carbon capture and storage ('CCS') projects and carbon capture and usage ('CCU') projects, as the dedicated national regulatory framework concerning such projects is not yet ready; as well as
 - (b) the production of secondary energy sources (which correspond to electricity and any energy source produced from fossil fuels) or hydrogen, insofar as these are not used directly for the production of an eligible product within the scope of the applicant's project. The German authorities explained that the scheme was specifically designed to support

⁽¹⁰⁾ Such 15-year duration may be prolonged over the period of 16 calendar years for projects starting in the course of a given calendar year, so that all contracts have the same duration of 15 rolling years.

⁽¹¹⁾ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.

the decarbonisation of the industrial sector and not the production of renewable energy sources, which is already covered by other measures ⁽¹²⁾.

- (26) In order to evaluate the GHG emissions reduction potential of applicant projects, a so-called ‘reference system’ will be identified for each such project. This ‘reference system’ shall correspond to the dominant production technology for the respective product at the time of the bidding and will be used as a proxy for determining the decarbonization potential of the project (recitals (32) and (33)). The definition of reference systems follows the established product categories of the EU ETS benchmarks (with the use of the so-called fallback benchmarks for heat supply and fuel input ⁽¹³⁾ for sub-installations not covered by product-based ETS benchmarks).
- (27) Reference systems were defined by the German authorities following the preparatory phase organized between 6 June 2023 and 7 August 2023 in order to collect information for the subsequent bidding (‘the preparatory phase’). The guidance published by the German authorities about the preparatory procedure included the draft eligibility requirements, among which the obligation to participate in the preparatory phase in order to be eligible to the scheme ⁽¹⁴⁾. This guidance was available to all interested parties.
- (28) The following 31 reference systems were identified and cover all projects which participated in the preparatory phase:

Reference system	Corresponding ETS benchmark
Refinery products	1
Primary steel	2-4

⁽¹²⁾ Such measures include the support program for electrolyzers producing hydrogen for the transport sector (“Förderung von Elektrolyseanlagen zur Wasserstoffherzeugung für den Verkehrssektor”), available at: <https://www.now-gmbh.de/foerderung/foerderfinder/foerderung-von-elektrolyseanlagen-zur-wasserstoffherzeugung-fuer-den-verkehrssektor-01-2023/>; the Bavarian support programme for the development of an electrolyser infrastructure in Bavaria (“Bayerisches Förderprogramm zum Aufbau einer Elektrolyseur-Infrastruktur in Bayern”), available here: <https://www.stmwi.bayern.de/foerderungen/elektrolyseurinfrastruktur/#:~:text=Mit%20dem%20Bayerischen%20F%C3%B6rderprogramm%20zum,allen%20Teilen%20Bayerns%20zu%20erreichen>; the Program for Rational Energy Use, Renewable Energies and Energy Saving (“Programm für Rationelle Energieverwendung, Regenerative Energien und Energiesparen”), available here: <https://www.foerderdatenbank.de/FDB/Content/DE/Foerderprogramm/Land/NRW/progres-nrw-rationell-energieverwendung-regen.html>. The two first measures, respectively SA.109263 and SA.48217, were granted under Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. The third measure was approved by the State aid decision SA.37392 of 18 November 2013.

⁽¹³⁾ As product benchmarks cannot be defined in all cases, e.g., because of a too diverse or changing product mix, so-called ‘fall-back’ benchmarks have been defined under the EU ETS.

⁽¹⁴⁾ The launch of the preparatory procedure was announced on the website of the German Federal Ministry for Economic Affairs and Climate Action: <https://www.bmwk.de/Redaktion/DE/Artikel/Klimaschutz/klimaschutzvertraege-vorverfahren.html>. An announcement was also published in the Federal Gazette that referred to this requirement to participate to the preparatory phase in order to be eligible to the scheme.

EAF carbon steel	5
EAF high alloy steel	6
Iron casting	7
Grey cement clinker	10
Lime	12
Float glass	15
Bottles and jars of colourless glass	16
Bottles and jars of coloured glass	17
Facing bricks	19
Pavers	20
Roof tiles	21
Mineral wool	23
Plaster	24
Dried secondary gypsum	25
Plasterboard	26
Recovered pulp paper	30
Newsprint	31
Uncoated fine paper	32
Coated fine paper	33
Tissue	34
Testliner and fluting	35
Uncoated carton board	36
Carton black	38
Ammonia	41
Steam cracking	42
Hydrogen	50
Synthesis gas	51
Heat supply	Heat benchmark sub-installation
Fuel input	Fuel benchmark sub-installation

Table 1 Overview of 'reference systems'

- (29) Several reference systems may be identified for a single project if the production processes to be decarbonised are used for manufacturing several products.
- (30) The German authorities have indicated that if an applicant undertaking already operates in Germany one or several plants manufacturing projects falling under the same reference system(s) as the project for which aid is requested, it will have to commit to reducing the production capacity of these existing plant(s) by at least 90% of the production capacity of the project, in the course of the term of the Climate Protection Contract.

2.9.2. Eligibility conditions

- (31) In order to be eligible under the scheme, a project has to consist in the implementation of ‘transformative’ production processes. In order to qualify as ‘transformative’, production processes must (i) entail fundamental technological changes compared to the applicable reference system (i.e. to conventional production processes of ETS benchmarks), (ii) require a substantial investment in new technologies that have not yet been established on the market and (iii) substitute fossil fuels or raw materials with less polluting energy sources or raw materials. A production process that is not operated in an energy- and resource-efficient manner and does not contribute to the climate neutrality of the industry will not be found transformative. If the granting authority finds that an applicant project does not qualify as ‘transformative’, it will consider it as ineligible under the scheme, provided such assessment is confirmed by the opinion of an independent technical expert.
- (32) In addition, to ensure the effective contribution of all selected projects to the overall objective of decarbonization of the German economy, each of them shall:
- (a) have a minimum size of 10 thousand of tonnes of CO₂ equivalent emissions ⁽¹⁵⁾ (‘CO₂e’) in the reference system;
 - (b) enable a relative CO₂e reduction of at least 60% compared to the reference system during the third full calendar year within the term of the Climate Protection Contract. If the operational start of the project is postponed, this requirement must be fulfilled from the fourth full calendar year within the term of the Climate Protection Contract at the latest; and
 - (c) enable a relative CO₂e reduction of at least 90% compared to the reference system during the last twelve months of the Climate Protection Contract duration. If the operational start of the project is postponed, this requirement must still be fulfilled.
- (33) The CO₂e of the reference systems will be calculated in accordance with the revised benchmark values determined in the Annex to the Commission Implementing Regulation (EU) 2021/447 ⁽¹⁶⁾.
- (34) To be supported by the scheme, projects involving the use of hydrogen must solely use hydrogen that complies either with the definition of renewable hydrogen within the meaning of the Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources ⁽¹⁷⁾ (‘RED II’) and which has been produced in accordance with the methodologies set out in the Commission

⁽¹⁵⁾ CO₂ equivalent is a metric measure used to compare the emissions from various GHGs on the basis of their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

⁽¹⁶⁾ Commission Implementing Decision (EU) 2021/927 of 31 May 2021 determining the uniform cross-sectoral correction factor for the adjustment of free allocations of emission allowances for the period 2021 to 2025 (OJ L 203, 9.6.2021, p. 14).

⁽¹⁷⁾ 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.

Delegated Regulation (EU) 2023/1184⁽¹⁸⁾ and Commission Delegated Regulation (EU) 2023/1185⁽¹⁹⁾ ('green hydrogen'), or hydrogen the energy content of which comes from biomass, biogas, landfill gas or sewage gas or from non-renewable sources and which achieves life cycle GHG emissions savings of at least 73.4 % relative to a fossil fuel comparator of 94 g CO₂eq/MJ⁽²⁰⁾ ('low-carbon hydrogen'). The life cycle GHG emission savings must be determined in accordance with Commission Delegated Regulation (EU) 2023/1185⁽²¹⁾.

- (35) While the scheme does not exclude the use of biofuels, bioliquids, biogas and biomass fuels as an energy source, any such support will be subject to compliance with the sustainability and GHG emissions saving criteria laid down in RED II. In addition, a project using biofuels, bioliquids, biogas or biomass fuel will only be considered eligible if the applicant can demonstrate that neither electricity nor hydrogen or hydrogen derivatives that are not produced from biomass, biogas, landfill gas or sewage gas are credible technical and economical alternatives⁽²²⁾, as well as that the planned use of biofuels, bioliquids, biogas or biomass fuel is scalable in view of the limited existing biomass⁽²³⁾. Should the German

(¹⁸) Commission Delegated Regulation (EU) 2023/1184 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin.

(¹⁹) Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels.

(²⁰) Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (OJ L 442, 9.12.2021).

(²¹) Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels.

(²²) As required in the call for funding, proof must be provided (1) for the demonstration that electricity is not a credible technical and economical alternative, by submitting a corresponding confirmation from the grid operator or, if the provision of electrical energy by the grid operator is possible, by providing a sufficiently plausible technical justification at system level that rules out direct electrification; (2) for the demonstration that hydrogen or hydrogen derivatives that are not produced from biomass, biogas, landfill gas or sewage gas are not a credible technical and economical alternative, by a confirmation from the infrastructure operator that grid access is not possible in the foreseeable future. If grid access or the use of hydrogen or hydrogen derivatives that are not produced from biomass, biogas, landfill gas or sewage gas is possible, the applicant must demonstrate on the basis of an economic viability analysis over the useful life of the plant that the use of hydrogen or hydrogen derivatives that are not produced from biomass, biogas, landfill gas or sewage gas is not likely to be economically viable. Economic viability is not given if the sum of investment and energy costs for the use of hydrogen or hydrogen derivatives that are not produced from biomass, biogas, landfill gas or sewage gas exceeds the sum of investment and energy costs for the use of biomass by at least 50 %.

(²³) As required in the call for funding, proof must be provided by submitting a declaration from the applicant in which the applicant justifies that increasing (scaled) biomass requirements can probably also be covered during the term of the contract, taking into account sustainability requirements. The

authorities consider that these eligibility requirements are fulfilled, the beneficiary will have to provide evidence of the origin and source of the biofuels, bioliquids, biogas or biomass fuel used in the project.

- (36) The German authorities explained that projects using natural gas as a feedstock or energy source can be supported under the scheme only insofar as such use is indispensable in view of the state of the art of the relevant technology. In such circumstances, the aid applicant must also include in its aid application a plan for the phasing out of natural gas over the duration of the contract.
- (37) New investments in energy or industrial production based on the most environmentally harmful fossil fuels, such as hard coal, diesel, lignite, oil, peat and oil shale, will not be eligible under the scheme.
- (38) The German authorities also explained that projects that have already been selected for the Important Projects of Common European Interest ('IPCEI') in the field of hydrogen or for which funding has already been applied for or approved under the calls for proposals of the EU Innovation Fund for Renewable Hydrogen (European Hydrogen Bank) with funds from the EU Innovation Fund or additional national funds, are not eligible under the scheme.
- (39) Support may only be granted to projects implemented in industrial installations that already comply with Union standards. As part of their bids, applicants have to submit a comparison of the proposed projects with the applicable best available techniques⁽²⁴⁾ ('BAT'). Such compliance will be verified by the granting authority.
- (40) Only projects that are compliant with the 'do not significant harm' principle as referred to in Article 17 of Regulation (EU) 2020/852⁽²⁵⁾ ('DNSH principle') may be eligible under the scheme. The German authorities have indicated that applicants will have to submit a declaration confirming the compliance of their proposed projects with the DNSH principle. Such declarations will be checked by the authorities, with the support of an independent technical expert, where necessary.

2.9.3. Reference projects

- (41) Germany has provided six reference projects, which were selected based on the results of the preparatory phase held by the German authorities:
 - (a) in the steel sector, the replacement of a blast furnace operated with natural gas and coal by a direct reduction plant ('Project A');

declaration should be accompanied by a confirmation from the biomass suppliers or a study on the necessary availability.

⁽²⁴⁾ Such comparison shall be conducted following the Commission Implementing Decision (EU) 2012/135/EU defining the BATs for iron and steel production and setting emission limits for air pollutants.

⁽²⁵⁾ 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, OJ L 198, 22.6.2020, p. 13.

- (b) in the process heat sector, the installation of a hydrogen steam boiler ('Project B') to replace old production processes running on natural gas;
 - (c) in the glass sector, the construction of a new melting tank using electricity and hydrogen ('Project C') instead of natural gas in the reference system;
 - (d) in the chemistry sector, the replacement of natural gas heating by electric heating in a drying plant ('Project D');
 - (e) in the metal sector, the conversion of various hood and continuous annealing systems to run on hydrogen instead of natural gas ('Project E'); and
 - (f) in the paper sector, the replacement of existing production processes operated with natural gas by a new steam production running on electricity and hydrogen ('Project F').
- (42) According to the German authorities, the sectors of the reference projects are among the largest sectors falling under the ETS in terms of emissions. Furthermore, Germany provided the list of projects which signalled interest during the preparatory phase, and the sectors of the reference projects were among the ones for which the most submissions had been submitted. The size of the reference projects, in terms of capital expenditures or energy consumptions, has also been determined based on projects received during the preparatory phase. These projects are therefore considered by Germany as representative of the different typologies of projects that will be granted aid under the scheme. The CO_{2e} savings that can be achieved have been compared to a reference system meeting the emission levels of ETS product benchmarks.
- (43) To demonstrate the necessity of the aid under the scheme, including with respect to the ETS, and prove their incentive effect, Germany has submitted a quantification of the costs of each of the six reference projects compared to the ones of the reference system over the 15 years of the payment schedule, the main features of which are summarised in the table below.

Project	Average yearly CO₂ emission savings compared to relevant reference system (in kt of CO_{2e})	Capital expenditure (investment costs) (in million euros)	Average CO₂ abatement costs over project duration (in €/t of CO_{2e} avoided)	Expected subsidy amount (€/tonne of CO_{2e} avoided)
A	[100-200]	[110-120]	[200-300]	[80-90]
B	[100-200]	[70-80]	[200-300]	[50-60]
C	[0-100]	[110-120]	[300-400]	[110-120]
D	[100-200]	[180-190]	[300-400]	[160-170]
E	[0-100]	[10-20]	[300-400]	[150-160]
F	[0-100]	[190-200]	[200-300]	[110-120]

Table 2 Overview of investment costs and average CO₂ abatement costs of reference projects

- (44) In order to compute the average CO₂ abatement costs of the reference projects, energy price assumptions (electricity, hydrogen, natural gas, CO₂ allowances) have been established based on projections from the German Environment Agency (*Umweltbundesamt*) and inflation assumptions from the IMF. A pre-tax weighted average cost of capital ('WACC') of 6% was used to discount future cash-flows for all six reference projects.
- (45) The German authorities have explained that although CO₂ abatement costs follow a declining trend over the duration of the contract as the costs of renewable energy decrease and the costs of CO₂ allowances increase, the average CO₂ abatement cost remains significantly above the expected price of CO₂ allowances over the contract duration⁽²⁶⁾. Germany therefore considers that, in the absence of aid, these decarbonisation projects would not be implemented, as the undertakings concerned would have no incentive to invest in less carbon-intensive production processes. The counterfactual scenario is therefore that the beneficiary would manufacture the product with the technologies of the reference system.
- (46) Germany also provided, for each project, the expected subsidy amount per tonne of CO₂e avoided, calculated based on the expected total aid amount which would be disbursed to the project (assuming that the applicant would bid at the level of its abatement costs) and on the expected total emission savings compared to the relevant reference system.

2.9.4. Allocation procedure

- (47) Under the scheme, aid will be allocated through a competitive bidding procedure open to all undertakings and to all eligible projects as described, respectively, in Sections 2.5, 2.9.1 and 2.9.2. This process aims at ensuring that projects compete for the available aid in a transparent and non-discriminatory manner.
- (48) Germany explained that the call for applications under the measure will be open for a period of four months. The granting authority already made public the draft content of the bidding process during the nine-week preparatory phase (recital (27)), thereby allowing all potential aid applicants sufficient time to prepare and submit their applications.
- (49) The applications that meet the eligibility criteria set out in Sections 2.5, 2.9.1 and 2.9.2 will be ranked on the basis of:
 - (a) The funding cost efficiency, defined based on the level of the bid, which corresponds to the aid requested per tonne of CO₂e emissions avoided thanks to the project. If, at the time of the bidding, an applicant project has already been granted other funding, the level of the bid will be corrected by the level of these subsidies to determine the funding cost efficiency (see recital (65)).

⁽²⁶⁾ While the so-called 'green premium' that companies could get from selling less polluting products is not taken into account in the abatement costs estimations, the estimated abatement costs seem sufficiently large so that it remains positive even if compensated by some 'green premium'.

- (b) The relative reduction of GHG emissions that the proposed project plans to achieve in comparison with the identified reference system, calculated based on the period from the operational start of the project until the end of the fifth full year within the term of the Climate Protection Contract.
- (50) The German authorities indicated that the second criterion would account for up to 20% of the weighing of the two selection criteria ⁽²⁷⁾.
- (51) Germany confirmed that ex post adjustments to the outcome of the tendering procedure would not be allowed under the scheme.
- (52) Germany explained that the budget of the measure took into account the expected supply of projects and is set at a level that should ensure that the budget constitutes a bidding constraint in a competitive allocation process, meaning that it expects that not all bidders will receive aid. In particular, in a preliminary preparatory phase, Germany received 108 expressions of potential interest. Limiting the calculations to eligible projects only, the German authorities estimated that the competing projects would represent a total budget between EUR 8.3 billion and EUR 10.9 billion, therefore exceeding the planned budget (see recital (11)) by at least EUR 4.3 billion.
- (53) Germany provided simulations of the competitive bidding based on the data of the preparatory phase. These simulations showed that projects from different eligible sectors were likely to be selected, and that there was a large variety of potential bids within sectors. In other terms, while abatement costs estimation on representative projects showed a potential discrepancy between sectors, simulations on a variety of projects showed that bid variations were wide within sectors and that the ranges of abatement costs seemed to be overlapping for all sectors.

2.9.5. Aid amount

- (54) Aid will be paid on a yearly basis. It will be equal to the difference between the bid of the beneficiary (in terms of EUR per tonne of CO₂e saved) and the avoided carbon price (i.e. the ETS allowance cost savings that the project will enable compared to continue using the reference technology, also considering ETS free allowances, depending on the applicable reference system), plus a ‘dynamisation component’ corresponding to the differential price evolution of energy inputs compared to the reference system, multiplied by the total CO₂ emission reduction achieved by the beneficiary in the given year, as a result of the project. Additional funding awarded after the bidding process will also be deducted from this calculation. The calculation formula of the yearly aid amount therefore reads as follows:

$$a_i = (b - c_i + d_i) \times e_i - f_i,$$

where a_i is the aid amount in year i , b is the bid of the project, c_i is the effective carbon price (taking into account ETS free allowances) in year i , d_i is the

⁽²⁷⁾ In practice, both criteria will be multiplied, but the second criterion will be normalised to the range [0.8;1.2], so that it does not affect the first criterion by more than 20%.

dynamisation component in year i , e_i is the total volume of emission reduction in year i , and f_i is the additional funding received in year i .

- (55) The dynamisation accounts for part of the differential price evolution between some of the energy inputs of the project and all of the energy inputs of the reference system. The dynamisation component will be based on energy intensities corresponding to the energy use of the project and reference system, on price indexes allowing to measure the future actual price of the energy inputs, and on basic prices corresponding to the initially expected price of these inputs. The German authorities will publish in the funding call the energy mix of the reference systems, as well as the basic prices and the indexes they will use to observe future prices of all energy inputs considered within the dynamisation. Beneficiaries will provide along with their bid their planned energy mix for the project. The cost evolution of the project is then determined every year by multiplying the planned energy mix by the difference between the actual price observed with the index and the basic price. The cost evolution of the reference system is determined every year by multiplying the published energy mix by the difference between the actual price observed with the index and the basic price. The annual dynamisation component is then calculated as 90% of the difference between the cost evolution of some of the energy inputs of the project and of the reference system. German authorities have explained that the energy inputs which will be considered within the dynamisation are electricity and (renewable and low-carbon) hydrogen for the project, and all energy inputs for the reference systems. They also indicated that the electricity index that will be considered will include, in addition to a baseload component (hourly day-ahead electricity price), an element reflecting the price evolution of electricity produced from renewable sources (projected day-ahead electricity generation from wind onshore, wind offshore and solar photovoltaic plants).
- (56) The German authorities have indicated that if the result of the calculation formula a_i is negative, the beneficiary would have to pay the negative aid amount to the State.
- (57) In addition, Germany explained that the granting authority would monitor the GHG emissions generated by the supported projects according to EU ETS monitoring and reporting rules ⁽²⁸⁾. If a project is not carried out or if the emission savings achieved by the project are below the minimum requirements of 60% and 90% (recital (32)), the level of support will be reduced through penalties which increase with the deviation from the emission savings objective, up to the total repayment of the grant awarded to the beneficiary if at least the 60% target is not reached.

2.9.6. Maximum annual funding and maximum total funding amount

- (58) The German authorities have explained that a maximum annual funding amount would be determined for each applicant project. It will be calculated by adding to

⁽²⁸⁾ 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).

the bid a term reflecting an important decrease in the effective CO₂ price as well as to extreme variations in the costs of dynamised energy sources. The maximum total funding amount of a given project will correspond to the sum of the maximum annual funding amounts over the 15 years of the contract duration. This corresponds to the budget per project.

- (59) Germany has indicated that the maximum total funding amount per project will be capped at EUR 1 billion. In addition, a project will not be considered eligible if its maximum funding amount is below EUR 15 million. According to the German authorities, this requirement is meant to deter companies with small projects from participating to the application process, in order to avoid a double administrative burden for these companies which typically already apply to other funding schemes targeting specifically small companies, for instance the Federal Funding Program for Energy and Resource Efficiency in the Economy ⁽²⁹⁾.

2.10. Environmental benefits of the measure

- (60) According to the German authorities, the scheme will avoid the release of over 10 million tonnes of CO₂e over the entire duration of the Climate Protection Contracts. This calculation was carried out by comparing the projects' expected emissions with the relevant reference systems' emissions, hence the emission levels of the relevant ETS benchmarks. However, the industrial installations that will be replaced by the supported projects' new production processes are not necessarily aligned with the environmental performance of the 10% best installations covered by the EU ETS: the German authorities explained that most production facilities that will be replaced thanks to the Climate Protection Contracts are more polluting than the reference systems assigned to them. As a result, the calculation provided by Germany underestimates the actual total emission reduction that will be achieved by the projects.
- (61) Moreover, the German authorities explained that they do not expect electrification projects that may be supported under the scheme to lead to an increase of indirect emissions that would substantially offset the reduction of direct emissions achieved thanks to the scheme, i.e. they do not expect a material displacement of GHG emissions to the electricity generation sector. The German authorities provided estimates of the indirect emissions stemming from the electricity used for the projects selected by the scheme. Based on the results of the preparatory phase and on the planned evolution of the German grid factor (decrease from 357.78 kg CO₂e/MWh ⁽³⁰⁾ in 2020 to 50.4 kg CO₂e/MWh ⁽³¹⁾ in 2035), they estimate that those indirect emissions would represent – over the entire duration

⁽²⁹⁾ “Bundesförderung für Energie- und Ressourceneffizienz in der Wirtschaft“ available at: https://www.bafa.de/DE/Energie/Energieeffizienz/Energieeffizienz_und_Prozesswaerme/energieeffizienz_und_prozesswaerme_node.html.

⁽³⁰⁾ Corresponding to approx. 99.3 g CO₂e/MJ, i.e. the 2020 emission intensity of electricity in Germany as indicated in the Annex to the Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels.

⁽³¹⁾ As forecasted by the German Environment Agency (*Umweltbundesamt*).

of all contracts to be awarded under the Climate Protection Contracts scheme – from 1.62 million tonnes of CO₂e in the scenario where the electricity mix evolves as planned, to 6.35 million tonnes of CO₂e in the scenario where the electricity mix does not evolve.

2.11. Public consultation

- (62) The German authorities organised from 2 December 2022 until 31 January 2023 a public consultation whereby they published a draft Climate Protection Contracts funding guideline, on which they requested written feedback following several workshops with interested undertakings. This feedback was taken into account to establish the final design of the scheme and finalise the funding guideline, which was subsequently published on the same webpage as the public consultation ⁽³²⁾.
- (63) The draft Climate Protection Contracts funding guideline included information about the following elements:
 - (a) eligibility;
 - (b) method to estimate the subsidy per tonne of CO₂e emissions avoided per project;
 - (c) proposed use and scope of competitive bidding processes and any proposed exceptions;
 - (d) parameters for the aid allocation process including for enabling competition between different types of beneficiary;
 - (e) assumptions informing the quantification used to demonstrate the incentive effect, necessity and proportionality;
 - (f) proposed safeguards to ensure compatibility with the Union's climate targets.

2.12. Cumulation

- (64) The German authorities have indicated that while aid under the scheme may be awarded concurrently under State aid or de minimis aid ⁽³³⁾, such cumulation will be taken into account in several ways.
- (65) First, applicants may factor into their bids any other aid awarded prior to applying to the scheme. Such aid will then be considered by the German authorities in the calculation of the funding cost efficiency, which is the main criterion for ranking bids.

⁽³²⁾ It was made available at the following link:

<https://www.bmwk.de/Redaktion/DE/Artikel/Klimaschutz/klimaschutzvertraege.html>.

⁽³³⁾ Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid (OJ L 352, 24.12.2013, p. 1).

- (66) Second, as regards aid granted to a project after its selection in the scheme, its level will be deducted at the moment of disbursement from the aid paid to the beneficiary, as explained in recitals (54) and (56).
- (67) Germany has explained that this consideration of any other funding awarded to a project ensures that any cumulation does not lead to overcompensation.

2.13. Transparency

- (68) The legal bases of the measure include a requirement for the granting authority to ensure compliance with the transparency requirements laid down in points 58 to 61 of the Guidelines on State aid for climate, environmental protection and energy 2022 ('CEEAG'). The relevant data of the measure will be published on a national website (<https://www.klimaschutzvertraege.info/>) and on the Commission's transparency register.

2.14. Assessment of the results of the auction

- (69) The German authorities indicated that they would carry out an assessment of the auction in order to improve its design in case Germany notifies a prolongation of the scheme.
- (70) The assessment will analyse the bids submitted, the selection process and the competition. In particular, it will aim at investigating how the selection criteria impact the ranking of bids and whether the auction is not under- or over-subscribed. Germany explained that they will primarily rely on descriptive statistics to conduct the assessment.
- (71) Germany has indicated that this assessment will take place directly after the conclusion of the auction and selection of the successful bids. The assessment report will be submitted to the Commission within four months of the signature of the grant agreements.

3. ASSESSMENT OF THE MEASURE

3.1. Existence of State aid

- (72) Article 107(1) TFEU provides that 'any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, shall, in so far as it affects trade between Member States, be incompatible with the common market'.
- (73) Germany declared that the support under the scheme would be financed from the State general budget as well as from the resources allocated to Germany from the Recovery and Resilience Facility, which is managed by Germany. The scheme would therefore be financed from State resources.
- (74) The scheme is established in national law (recital (10)) and the German authorities determine all elements of the scheme, including the beneficiaries, the conditions of eligibility in the scheme, and the scheme's budget. The measure is therefore imputable to the State.

- (75) The aid beneficiaries will receive an advantage in the form of a direct grant that covers the CO₂ abatement costs of their decarbonisation projects which they would otherwise have to face under normal market conditions. The scheme therefore provides for the granting of an economic advantage.
- (76) In addition, the measure favours undertakings carrying out certain types of investments, namely those described under Sections 2.9.1 and 2.9.2 and will therefore not be available to all undertakings active in the relevant sectors. The measure is therefore selective.
- (77) Finally, the scheme targets industrial undertakings involved in the production of products that are widely traded within the European Economic Area ('EEA'). The scheme is therefore liable to distort competition on the related markets and affect trade across the EEA.
- (78) Therefore, the measure constitutes State aid within the meaning of Article 107(1) TFEU.

3.2. Compatibility of the aid

- (79) The Commission has assessed the compatibility of the scheme on the basis of Article 107(3), point (c), TFEU. The scheme aims at promoting economic activities in a manner that reduces GHG emissions and increases the level of environmental protection, as described in Section 2.1. The supported activities fall within the scope of the CEEAG. More specifically, they fall under the category of aid for the reduction and removal of GHG emissions, including through support for renewable energy and energy efficiency ⁽³⁴⁾.
- (80) The Commission has therefore assessed the measure under the general compatibility provisions in Section 3 CEEAG, as well as the specific compatibility criteria for aid for the reduction and removal of GHG emissions including through support for renewable energy and energy efficiency in Section 4.1 CEEAG. In particular, point 78 CEEAG sets out that Section 4.1 covers aid measures involving a wide range of technologies aiming at reducing GHG emissions, which includes both brownfield and greenfield investments.

3.2.1. Positive condition: the aid must facilitate the development of an economic activity

3.2.1.1. Contribution to the development of an economic activity

- (81) Article 107(3), point (c), TFEU provides that the Commission may declare compatible 'aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest'. Therefore, compatible aid under that provision of the Treaty must contribute to the development of a certain economic activity (or of a certain economic area) ⁽³⁵⁾. In accordance with

⁽³⁴⁾ See points 16(a) and (82) CEEAG.

⁽³⁵⁾ Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraphs 20 and 24.

this, point 23 CEEAG states that, when notifying aid, Member States must identify the economic activities that will be facilitated as a result of the aid and how the development of those activities is supported.

- (82) Germany has explained that the scheme supported investments leading to a reduction of GHG emissions in ETS sectors, beyond the applicable Union environmental standards (recital (8)). More precisely, aid will be granted under the scheme to beneficiaries implementing new production processes enabling substantial GHG emission reductions. The aid will therefore contribute to the development of economic activities in the ETS and related sectors.

3.2.1.2. Incentive effect

- (83) State aid can only be considered to facilitate an economic activity if it has an incentive effect. An incentive effect occurs when the aid induces the beneficiary to change its behaviour towards the development of an economic activity pursued by the aid, and if this change in behaviour would otherwise not occur without the aid ⁽³⁶⁾.
- (84) Point 29 CEEAG stipulates that aid does not normally present an incentive effect in cases where works on the projects started prior to the aid application. Point 30 CEEAG further explains that the aid application may take various forms, including for example a bid in a competitive bidding process.
- (85) The German authorities confirmed that aid would not be granted for projects the works on which started prior to the submission of the aid application (recital (17)), in line with points 29 and 30 CEEAG. The Commission also notes that the notion of ‘start of works’ as described in the national legal bases (as set out in footnote 9 of the present decision) complies with the definition in point 19(82) of CEEAG as it corresponds to the first firm commitment (for example, to order equipment or start construction) that makes an investment irreversible; moreover, should a contract include a right of cancellation or a condition subsequent linked to the approval of the aid application, this contract would not determine the start of works, in compliance with the irreversibility requirement of point 19(82) CEEAG.
- (86) Moreover, the aid measure changes the beneficiaries’ behaviour, as demonstrated by the quantifications for the six factual reference projects submitted by Germany, which show that the projects would not be profitable and thus not be carried out by a rational investor without additional support (recital (45)). These six distinct reference projects were found representative of the different typologies of technologies with a high potential to decarbonize GHG emissions in industrial production processes and the most likely to take part in the competitive bidding. Germany indicated that the most likely counterfactual scenario for all identified reference projects is that the beneficiary will not carry out the investment without the aid (recital (45)) but would continue producing based on the existing conventional equipment in use, merely aligning to the most efficient installations in a given sector. This is corroborated by the positive and substantial

⁽³⁶⁾ See in that sense Section 3.1.2 CEEAG, as well as judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraphs 20 and 24.

CO₂ abatement costs⁽³⁷⁾ identified for reference projects (recital (43)). The calculations of the average CO₂ abatement cost for each of the projects and the main assumptions underlying those calculations were made available and explained to the Commission (recitals (43) and (44)). The Commission also notes that most estimates are based on publicly available data from independent market research and considers that the respective parameters, including the investment costs, the fixed and variable operating costs including energy prices and the discount rate (WACC) are plausible. The calculations and cost estimates for the six reference projects were carried out at the same and sufficient level of accuracy. Moreover, the counterfactual scenarios provided for the six reference projects were found representative and credible considering the cost and revenue conditions currently prevalent on the relevant markets.

- (87) The Commission therefore considers that the requirements of point 28 CEEAG, following which Member States must identify the factual scenario and the likely counterfactual scenario in the absence of aid, and provide a quantification for the reference projects supported under the scheme, are fulfilled.
- (88) Germany indicated that support may only be granted to projects implemented in industrial installations that already comply with Union standards (recital (39)), thereby ensuring that the scheme only supports projects going beyond Union standards, in accordance with point 32 CEEAG.
- (89) The Commission therefore considers that the measure has an incentive effect.

3.2.1.3. Compliance with EU law

- (90) State aid cannot be declared compatible with the internal market if the supported activity, the aid measure, or the conditions attached to it entail a violation of relevant Union law⁽³⁸⁾.
- (91) Based on the information submitted by the German authorities, the Commission has no indication that the measure would involve any breach of relevant Union law.
- (92) Furthermore, the Commission notes that projects using hydrogen must solely use either renewable hydrogen as defined by RED II and which has been produced in accordance with the methodologies set out in the Commission Delegated Regulation (EU) 2023/1184⁽³⁹⁾ and Commission Delegated Regulation (EU)

⁽³⁷⁾ The abatement costs correspond to the total cost of implementing the project compared to the counterfactual scenario of continuing to produce based on the existing conventional technology, divided by the emissions savings generated by the project. In this calculation, the revenues are assumed to be the same for the factual and counterfactual scenario (see footnote 26 about the green premium).

⁽³⁸⁾ See point 33 CEEAG, and Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, EU:C:2020:742, paragraph 44.

⁽³⁹⁾ Commission Delegated Regulation (EU) 2023/1184 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin.

2023/1185⁽⁴⁰⁾, or low-carbon hydrogen the energy content of which comes from biomass, biogas, landfill gas or sewage gas or from non-renewable sources and which achieves life cycle GHG emissions savings, computed in accordance with Commission Delegated Regulation (EU) 2023/1185⁽⁴¹⁾, of at least 73.4 % relative to a fossil fuel comparator of 94 g CO₂eq/MJ⁽⁴²⁾ (recital (34)). Equally, any project using biofuels, bioliquids, biogas and biomass fuels as an energy source must comply with the sustainability and GHG emissions saving criteria laid down in RED II (recital (35)).

- (93) Therefore, the Commission considers that the measure does not infringe relevant Union law, and that the requirements of point 33 CEEAG are fulfilled.

3.2.1.4. Conclusion

- (94) The Commission therefore concludes that the measure facilitates the development of certain economic activities pursuant to the requirements set out in Section 3.1 CEEAG, as required by Article 107(3), point (c), TFEU.

3.2.2. Negative condition: the aid cannot unduly affect trading conditions to an extent contrary to the common interest

3.2.2.1. Necessity of the aid

- (95) Point 89 CEEAG states that the Member State must identify the policy measures already in place to reduce GHG emissions and that the full costs of GHG emissions may not yet fully be internalised despite the implementation of measures to that effect, such as the EU ETS and other related measures or policies. In order to demonstrate the necessity of aid, points 38 and 90 CEEAG explain that, in the case of schemes, the Member State must show that the reference project(s) would not be carried out without the aid, taking into account the counterfactual situation, as well as relevant costs and revenues including those linked to measures identified in point 89 CEEAG. Point 91 CEEAG explains that where the Member State demonstrated that there is a need for aid, the Commission presumes that a residual market failure remains, which can be addressed through aid for decarbonisation, unless it has evidence to the contrary.

⁽⁴⁰⁾ Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels.

⁽⁴¹⁾ Commission Delegated Regulation (EU) 2023/1185 of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels.

⁽⁴²⁾ Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (OJ L 442, 9.12.2021).

- (96) The Commission recalls its analysis in recital (86) that the reference decarbonisation projects would not be carried out without the aid given the significant gap between their costs and the projected revenues as well as the significant gap between their CO₂ abatement costs and ETS allowances. The Commission also recalls that the projects concerned aim at achieving CO₂ avoidance far beyond emission reductions that the ETS system would incentivise. Moreover, while the existing negative externalities are partially mitigated by the EU ETS, the current carbon price is not sufficiently high to trigger the necessary investments in technologies that bring emissions substantially below current benchmarks (recital (7)). The other existing measures put in place by Germany mainly target small undertakings and/or focus on specific types of investments (recital (7)). On this basis, the Commission considers that without further measures incentivising undertakings to reduce the GHG emissions associated with their economic activities, the market will not deliver the necessary investments. Therefore, the requirements in point 90 CEEAG are fulfilled. As the German authorities demonstrated that aid under the measure is necessary, in line with point 91 CEEAG, the Commission considers that a residual market failure remains and that it can be adequately addressed by the measure.
- (97) The Commission therefore considers that the measure is necessary to support the targeted economic activities in a manner that increases environmental protection.
- (98) Point 90 CEEAG also provides that ‘where there is significant uncertainty concerning future market developments related to a large part of the business case (as for example may be the case for renewable energy investments where electricity revenues are not coupled to input costs), support in the form of a certain guaranteed remuneration to limit exposure to negative scenarios may be considered necessary to ensure that the private investment takes place. In such cases, limits to profitability and/or clawbacks linked to possible positive scenarios may be required to ensure proportionality’. The Commission observes that the climate contracts can be viewed to a certain extent as providing – within certain limits – a guaranteed remuneration of the beneficiaries for the CO₂ emission avoided (corresponding to the basic price adding the dynamisation minus the CO₂ price). Moreover, the Climate Protection Contracts contain in their design an automatic limitation of the profitability given that the climate contracts are two-ways: when the market price of CO₂ allowances exceed the basic price (with the dynamisation), the difference needs to be paid back to the State.

3.2.2.2. Appropriateness of the aid

- (99) Point 93 CEEAG states that the Commission presumes the appropriateness of State aid for achieving decarbonisation goals provided all other compatibility conditions are met. It further sets out that, given the scale and urgency of the decarbonisation challenge, a variety of instruments, including direct grants, may be used.
- (100) The Commission therefore considers that, in light of the overall assessment of the compatibility of the measure, the aid in the form of direct grants is an appropriate instrument to support the targeted economic activities in a manner that increases environmental protection.

3.2.2.3. Eligibility

- (101) Point 95 CEEAG explains that decarbonisation measures targeting specific activities which compete with other unsubsidised activities can be expected to lead to greater distortions of competition, compared to measures open to all competing activities. As such, Member State should give reasons for measures that do not include all technologies and projects that are in competition. Furthermore, Member States must regularly review eligibility rules and any rules related thereto to ensure that reasons provided to justify a more limited eligibility continue to apply for the lifetime of each scheme, as set out in point 97 CEEAG.
- (102) As explained by the German authorities, aid can be granted under the scheme for projects aimed at reducing GHG emissions related to the beneficiaries' industrial production processes, irrespective of the technology used, with the exception of CCS and CCU projects on the one hand, given that the dedicated national regulatory framework concerning such projects is not yet ready, and of projects solely consisting in the production of secondary energy sources or hydrogen on the other hand, as the scheme was specifically designed to support the decarbonization of the industrial sector and not the production of renewable energy sources (recital (23) and (25)). The Commission notes that these reasons are based on objective considerations, as required by point 95 CEEAG.
- (103) Only projects with maximum funding amounts above EUR 15 million will be considered eligible. In this regard, Germany has explained that there is another funding scheme available for small projects that do not reach this maximum funding amount threshold (recital (59)). The Commission finds the reason provided by the German authorities as objective and sufficient to justify the exclusion of projects with maximum funding amounts below EUR 15 million.
- (104) The German authorities also indicated that the scheme would be applicable to all undertakings, which are active or plan to be active in sectors subject to the EU ETS (recital (24)) and that those companies would not be in competition with undertakings in sectors not subject to the ETS. The German authorities provided reasons to limit the scheme to sectors subject to the ETS (recital (24)). First, this makes it possible to target companies with highest emissions and therefore highest emission reduction potential. In addition, as all applicant projects' reference systems have to be covered by the ETS, the emissions of these projects can be monitored based on an established methodology facilitating the comparison of bids. The Commission therefore considers that the scheme appears to cover all technologies and projects that are in competition and that are technically capable of contributing efficiently to GHG emissions reductions, as required under point 95 CEEAG. Furthermore, Germany explained that since the sectors falling under the ETS produce a substantial share of national GHG emissions, they have the potential to make an important and cost-effective contribution to environmental protection and deep decarbonisation in the longer term, as also enabled by the eligibility requirement for projects to entail the implementation of 'transformative' production processes (recital (31)). The scheme therefore complies with point 96 CEEAG. In any event, the Commission notes that Germany provided objective reasons justifying that the scheme be limited to sectors subject to the ETS only, and having assessed those reasons, the Commission concludes that limiting eligibility under the scheme to undertakings active in certain industrial sectors does not unduly distort competition.

- (105) The Commission also noted that while the German authorities require that all of the supported plants' reference systems be covered by the EU ETS (recital (24)), this does not restrict eligibility as all projects which participated to the preparatory phase comply with such requirement (recital (27)).
- (106) Point 97 CEEAG requires that Member States must regularly review eligibility rules and any rules related thereto to ensure that reasons provided to justify a more limited eligibility continues to apply for the lifetime of each scheme. In this regard, the Commission notes that this requirement does not apply to the notified scheme, as all aid will be granted through only one competitive bidding procedure (recital (47)).

3.2.2.4. Public consultation

- (107) Point 99 CEEAG requires Member States to consult publicly on the competition impacts and proportionality of proposed measure, prior to the notification of aid. As the estimated average annual aid to be granted under the scheme is above EUR 150 million per year, a public consultation of at least six weeks' duration shall be conducted.
- (108) The German authorities explained that they organized a public consultation that lasted for more than eight weeks, from 2 December 2022 until 31 January 2023 (recital (62)). Having reviewed the list of criteria on which the German authorities consulted interested stakeholders (recital (63)), the Commission considers that the public consultation held by Germany covered all aspects listed in point 99 CEEAG, namely:
- (a) eligibility;
 - (b) method and estimate of subsidy per tonne of CO₂e avoided;
 - (c) proposed use and scope of competitive bidding processes and any proposed exceptions;
 - (d) main parameters for the aid allocation process including for enabling competition between different types of beneficiaries;
 - (e) main assumptions informing the quantification used to demonstrate the incentive effect, necessity and proportionality;
 - (f) where new investments in natural gas based generation or industrial production may be supported, proposed safeguards to ensure compatibility with the Union's climate targets.
- (109) Point 101 CEEAG requires Member States to publish consultation questionnaires on a public website. They must publish a response to the consultation summarising and addressing the input received. This should include explaining how possible negative impacts on competition have been minimised through the scope or eligibility of the proposed measure. Member States must provide a link to their response to the consultation as part of the notification of aid measures.
- (110) In this regard, the Commission notes that the German authorities published on the website of the Federal Ministry for Economic Affairs and Climate Action the

draft Climate Protection Contracts funding guideline, on which they requested written feedback. On the same webpage was then uploaded the updated version of the funding guideline, which took into account the results of the public consultation to establish the final design of the scheme (recital (62)).

3.2.2.5. Proportionality of the aid and cumulation

- (111) Point 47 CEEAG explains that State aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed for carrying out the aided project or activity. Point 103 CEEAG specifies that aid for reducing GHG emissions should in general be granted through a competitive bidding process to ensure that the objectives of the measure can be attained in a proportionate manner which minimises distortions of competition and trade.
- (112) Point 49 CEEAG states that when the aid amounts are determined through a competitive bidding process, the result of that process will provide a reliable estimate of the minimum aid required so that detailed assessments of the net extra costs necessary for carrying out the investment will not be required. It further provides the criteria that must be fulfilled so that the aid is deemed proportionate:
 - (a) The bidding process is open, clear, transparent and non-discriminatory, based on objective criteria, defined ex ante in accordance with the objective of the measure and minimising the risk of strategic bidding;
 - (b) The criteria are published sufficiently far in advance of the deadline for submitting applications to enable effective competition;
 - (c) The budget or volume related to the bidding process is a binding constraint in that it can be expected that not all bidders will receive aid, the expected number of bidders is sufficient to ensure effective competition, and the design of undersubscribed bidding processes during the implementation of a scheme is corrected to restore effective competition in the subsequent bidding processes or, failing that, as soon as appropriate; and
 - (d) Ex post adjustments to the bidding process outcome are avoided as they may undermine the efficiency of the process's outcome.
- (113) Point 104 CEEAG further sets out that the bidding process should, in principle, be open to all eligible beneficiaries to enable a cost effective allocation of aid and reduce competition distortions.
- (114) Germany explained that the measure will be a scheme in which aid is allocated through a competitive bidding process that is open to all parties with eligible projects (Section 2.9.1). There are no proposed exceptions to competitive bidding. The criteria for the participation in the bidding process are defined ex ante, in a transparent and non-discriminatory way, and appear justified and proportionate in light of the objective of the measure. In this regard, the Commission notes that any undertakings may submit bids under the measure as long as they fulfil certain minimum criteria referring to their eligibility (Section 2.5 and Section 2.9.2). This is in line with point 49(a) CEEAG. The Commission has also assessed that the risk of strategic bidding was minimised by the design of the scheme: in particular, since the aid calculation is partly based on planned energy consumption, companies have incentives to bid realistic energy mixes for their project.

Furthermore, as explained in recital (53), Germany provided simulations of the potential results of the bidding, which showed that projects from different sectors were likely to be selected, and that no sector displayed sufficiently low abatement costs to not be competing with other sectors. Based on these simulations, projects from all sectors seem to be in similar ranges of abatement costs, ensuring the competitiveness of the bidding and limiting the risks of strategic bidding.

- (115) Moreover, Germany indicated that the preparatory phase included the draft eligibility requirements and lasted nine weeks, from 6 June 2023 to 7 August 2023 (recital (27)). The call for applications will be open for a period of four months, and the granting authority already made public the draft eligibility requirements during the preparatory phase, thereby allowing potential aid applicants sufficient time to prepare and submit their applications (recital (48)) in line with point 49(b) CEEAG. The public consultation and the subsequent preparatory phase have shown that the budget had been set at a level lower than the expected demand for aid. From the 108 expressions of potential interest received during the preparatory phase, the German authorities estimated that the total bidding volume would exceed the planned budget by at least EUR 4.3 billion (see recital (52)). The budget therefore constitutes a binding constraint, in line with point 49(c) CEEAG⁽⁴³⁾. Ex-post adjustments to the outcome of the tendering process will not be possible under the scheme (recital (51)) in line with point 49(d) CEEAG.
- (116) Therefore, points 103 and 49 CEEAG are complied with.
- (117) Point 50 CEEAG explains that the selection criteria used for ranking bids should put the contribution to the main objectives of the measure in relation with the aid amount requested by the applicant.
- (118) The Commission notes that the German authorities will use two selection criteria under the scheme (recitals (49) and (50)):
- (a) the funding cost efficiency, which will be the main criterion in the scheme's scoring system; and
 - (b) the relative reduction of GHG emissions to be achieved within the five years of the contract duration, in comparison with the reference technology. This criterion will be assigned a weight of at most 20% in the scheme's scoring system.
- (119) In this respect, the Commission notes that criterion (a) in recital (118) is appropriate to select projects that make a cost-effective contribution to the main objectives of the schemes as requested by point 50 CEEAG. Criterion (b) in recital (118) aims at incentivizing aid applicants to propose projects that will achieve GHG emissions reduction at a fast pace, in line with the national and EU climate objectives and targets. The competitive bidding process, through the

⁽⁴³⁾ However, the scheme does not foresee any subsequent correction of its design, since only one call will take place. Any undersubscription to the bidding will nevertheless be assessed in the analysis described in section 2.14, in view of future schemes.

ranking of eligible projects, puts the contribution to the main objectives of the measure in direct relation with the aid amount requested by the applicant.

- (120) Therefore, the requirements in point 50 CEEAG are fulfilled.
- (121) Finally, point 56 CEEAG explains that when aid under one measure is cumulated with aid under other measures, Member States must specify the method used to ensure that the total amount of aid for a project or an activity does not lead to overcompensation or exceed the maximum aid amount allowed under the CEEAG. Point 57 requires that where Union funding is combined with State aid, it has to be ensured that the total amount of public funding granted in relation to the same eligible costs does not lead to overcompensation.
- (122) Germany confirmed that cumulation of aid granted under the scheme with aid granted under other measures ⁽⁴⁴⁾ for the same project is possible, except in some circumstances (see recital (38)). In order to avoid overcompensation, applicants are expected to reduce the level of their bids by the amount of aid that was awarded to their project prior to the application to the Climate Protection Contracts scheme; such aid will be considered in the calculation of the funding cost efficiency, which is the main selection criterion (recital (65)). If aid is granted to a project after it was selected as a beneficiary of the Climate Protection Contracts scheme, the corresponding amount will be deducted from the aid granted by the State under the Climate Protection Contracts scheme (recital (66)). The German authorities have indicated that if the result of the aid calculation formula is negative, the beneficiary would have to pay the negative aid amount to the State (recital (56)). Therefore, the requirements in points 56 and 57 CEEAG are fulfilled.
- (123) Therefore, the Commission considers that the aid granted under the measure is proportionate.

3.2.2.6. Transparency of the aid

- (124) Germany will ensure compliance with the transparency requirements laid down in points 58, 59 and 61 CEEAG. The relevant data of the measure will be published on a national website ⁽⁴⁵⁾ and on the Commission's transparency register ⁽⁴⁶⁾ (recital (68)).

3.2.2.7. Avoidance of undue negative effects of the aid on competition and trade

- (125) Point 70 CEEAG explains that the Commission will approve measures under the CEEAG for a maximum period of 10 years. As stated in recital (19), the scheme will run until 31 December 2024. The requirement in point 70 CEEAG is therefore respected.

⁽⁴⁴⁾ Including *de minimis* aid.

⁽⁴⁵⁾ <https://www.klimaschutzvertraege.info/>

⁽⁴⁶⁾ <https://webgate.ec.europa.eu/competition/transparency/public>

- (126) Following point 115 CEEAG, the subsidy per tonne of CO₂ equivalent emissions avoided must be estimated for each reference project, and the assumptions and methodology for that calculation provided. To the extent possible, that calculation should identify the net emissions reduction from the activity, taking into account life-cycle emissions created or reduced. As described in recital (46), Germany calculated the expected subsidy amount per tonne of CO_{2e} avoided for each reference project. Given that the emissions reduction is estimated using ETS benchmark values as reference, all of the relevant life-cycle emissions are not necessarily considered, although, some ETS benchmarks do consider indirect emissions. However, the German authorities explained that the established methodology of the EU ETS was a reliable way to monitor emission reductions (recital (24)). Also, indirect emissions are to a large extent tackled by the requirement to use renewable or low carbon hydrogen.
- (127) Still following 115 CEEAG, to enable a comparison between the costs of different environmental protection measures, the methodology should in principle be similar for all measures promoted by a Member State. In that regard, the Commission notes that the ETS methodology can only be used for measures which beneficiaries are companies active in sectors falling under the ETS, which is not necessarily the case for all German measures.
- (128) The Commission therefore finds point 115 CEEAG to be complied with.
- (129) According to point 117 CEEAG, aid for the decarbonisation of industrial activities must reduce the emissions directly resulting from that industrial activity. As explained by the German authorities, aid can only be granted under the scheme for projects that result in a reduction of GHG emissions directly stemming from the beneficiaries' industrial production processes, compared to a reference system. In particular, in order to ensure that the scheme provides material contributions to the decarbonisation objective, the scheme requires that supported projects lead to a reduction in emissions of at least 60% during the third full calendar year within the term of the Climate Protection Contract, and of at least 90% during the last twelve months of the Climate Protection Contract duration (recital (32)). Therefore, the Commission considers that the scheme complies with point 117 CEEAG.
- (130) Point 116 CEEAG explains that the aid must not merely displace the emissions from one sector to another and must deliver overall GHG emissions reductions. Points 127 to 129 CEEAG require Member States to explain how they intend to avoid the risk of aid eventually stimulating or prolonging the consumption of fossil-based fuels and energy. In that regard, the German authorities explained that emissions linked to the electricity consumption have been calculated, for the entire duration of the contracts to be awarded under the scheme, based on the evolution of the German grid intensity factor (from 357.78 kg CO_{2e}/MWh in 2020 to 50.4 kg CO_{2e}/MWh in 2035) and amount to 1.62 million tonnes of CO_{2e} (recital (61)). The scheme would therefore achieve net reductions of emissions of over 8 million tonnes of CO_{2e}. Even in the worst case scenario (no evolution of the electricity mix and emission factor), the scheme would still achieve material net reductions of emissions (2.65 million tonnes of CO_{2e}, see recital (61)). In addition, the Commission notes that beneficiaries already operating one or several plant(s) falling under the same reference system as the project will have to commit to reducing these existing plants' production capacity by at least 90% of

the production capacity of the project, in the course of the term of the contract (recital (30)). Based on these elements, the Commission concludes that the indirect emissions are lower than the direct emissions avoided thanks to the projects, compared to the applicable reference systems, defined based on the relevant ETS benchmark (recital (33)). The Commission furthermore takes note that the industrial installations that will be replaced by the supported projects' new production processes may not necessarily be aligned with the environmental performance of the 10% best installations covered by the EU ETS: the actual total emission reduction is therefore expected to be higher than the calculation provided by the German authorities, which only considers the emissions avoided in comparison to the emission levels of the ETS benchmarks (recital (60)).

- (131) As regards projects involving the production or use of hydrogen, the Commission notes that the scheme will require that the hydrogen at minimum has life cycle GHG emissions savings of at least 73.4% relative to a fossil fuel comparator of 94 g CO₂e/MJ (recital (34)). Therefore, considering that indirect CO₂ emissions linked to the production or use of hydrogen that has life cycle GHG emissions savings of at least 73.4% relative to a fossil fuel comparator of 94 g CO₂e/MJ are expected to be low compared to the significant GHG emissions savings that the projects will enable, the Commission considers that for those types of projects, point 116 CEEAG is complied with, as the aid does not merely displace the emissions from one sector to another and delivers overall GHG emissions reductions.
- (132) The Commission therefore concludes that the aid does not merely displace the emissions from one sector to another but delivers overall GHG emissions. Therefore, the Commission considers that the measure complies with point 116 CEEAG.
- (133) Point 120 CEEAG explains that Member States must demonstrate that reasonable measures will be taken to ensure that aided projects will actually be developed. In this respect, the Commission notes that the German authorities will monitor the implementation of supported projects and the actual GHG emissions reduction resulting from the supported projects (recital (57)). The aid payments will be reduced by applying a penalty clause should the GHG emissions savings achieved by the project be below the objectives of 60% during the third full calendar year within the term of the Climate Protection Contract and 90% during the last year of the contract duration (recital (57)). Finally, the German authorities will impose certain minimum eligibility criteria as regards the financial capacity of the applicants (recital (14)), which will address the risk that beneficiaries are unable to realise their project even after receiving the aid.
- (134) According to point 121 CEEAG, aid for decarbonisation can take a variety of forms, including contracts for differences. Footnote 69 CEEAG explicitly mentions the possibility to involve in the aid payment a reference price linked to the ETS, thereby amounting to a 'carbon' contract for difference. In this regard, the Commission observes that the aid calculation considers the CO₂ costs avoided by the beneficiaries thanks to the implementation of the supported projects (see recital (54)).
- (135) Still following point 121 CEEAG, aid which covers costs mostly linked to operation rather than investment should only be used where the Member State

demonstrates that this results in more environmentally-friendly operating decisions. As explained by the German authorities, the aid is supposed to cover the overall CO₂ abatement costs of applicant projects, which include both investment and operation costs. The operation costs differential to conventional technologies is large for such projects, and switching inputs expose them further to price variations which are not perfectly reflected in the market price of inputs. Therefore, the Commission considers that covering operation costs is necessary to limit the risk of the project and incentivise companies to invest and later to maintain operational decisions in line with environmental objectives. In particular, several of the energy inputs are interchangeable so that making sure that the costs of for instance renewable hydrogen are correctly covered by the scheme will incentivise beneficiaries to use it instead of alternative less environmentally friendly energy inputs. Concerning the index that will be used for the dynamisation of electricity, the Commission notes that it will be partly based on the price of electricity generated from wind onshore, wind offshore and solar photovoltaic plants (see recital (55)), thereby incentivising beneficiaries to operate their production processes flexibly and increase the share of electricity from renewable sources in their electricity mix wherever possible technically and in terms of availability, in order for the latter to correspond to the index that will be used for dynamisation purposes.

- (136) Point 122 CEEAG states that where aid is primarily required to cover short-term costs that may be variable, such as biomass fuel costs or electricity input costs, and paid over periods exceeding one year, Member States should confirm that the production costs on which the aid amount is based will be monitored and the aid amount updated at least once per year. As recalled in recital (135), the aid covers both investment and operation costs, including some variable short-term costs like electricity input costs. As to the fraction of the beneficiaries' bids that is supposed to reflect the additional operation costs incurred by the new production processes compared to the reference technology, the yearly aid calculation formula will consider the differential price evolution of the project's energy inputs compared to the reference technology (Section 2.9.5). The Commission therefore considers that the Climate Protection Contracts scheme complies with point 122 CEEAG.
- (137) The aid must be designed to prevent any undue distortion to the efficient functioning of markets, and preserve efficient operating incentives and price signals, as set out in point 123 CEEAG. In that regard, the Commission notes that the dynamisation component will be based on market indexes and not on the supported projects' actual costs (recital (55)), thereby maintaining the incentives for beneficiaries to procure the necessary energy inputs at the lowest possible cost. Incidentally, only 90% of the differential price evolution of the project's energy inputs compared to the reference technology will be considered in the yearly aid amounts awarded to beneficiaries, thus not fully hedging them against market price developments (see recital (55)). The Commission therefore considers that aid granted under the measure avoids undue negative effects on competition and trade, and complies with point 123 CEEAG.
- (138) As set out in point 127 CEEAG, the aid measure may not stimulate or prolong the consumption of fossil-based fuels and energy, thereby hampering the development of cleaner alternatives and significantly reducing the overall environmental benefit of the investment. Member States should explain how they intend to avoid that risk, including by way of binding commitments to use mainly

renewable or low-carbon fuels or phase out fossil fuel sources. In this respect, the Commission notes that the German authorities require that projects be compliant with the DNSH principle and that fossil fuels may only be supported to the extent that the DNSH principle so allows. They will check the applicants' declarations, if necessary with the support of an independent technical expert (recital (40)). Furthermore, as confirmed by the German authorities, the most environmentally harmful fossil fuels shall not be used in aided projects (recital (37)). Natural gas shall only be used as feedstock or as energy source insofar as technically necessary and according to a phase-out plan included in the aid application (recital (36)). Germany also explained that CCS and CCU projects will not be eligible under the scheme (recital (25)). In addition, projects will be constrained by the requirement to achieve a 90% CO₂e reduction compared to the reference system (recital (32)). The Commission therefore considers that the measure complies with point 127 CEEAG.

- (139) Point 128 CEEAG states that measures that incentivise new investments in energy or industrial production based on the most polluting fuels, such as coal, diesel; lignite, oil, peat and oil shale, increase the negative environmental externalities in the market and will therefore not be considered to have any positive environmental effects. In this regard, the Commission observes that new investments in energy or industrial production based on the most polluting fuels will not be eligible to the scheme (recital (37)). The Commission thus considers that the requirements of point 128 CEEAG are met by the measure.
- (140) Following point 129 CEEAG, for investments in natural gas to be seen as having positive environmental effects, Member States must explain how a lock in of this gas-fired energy generation or gas-fired production equipment will be avoided. In this respect, the Commission notes that such lock-in is prevented by the 90% CO₂e reduction requirement (recital (32)). Furthermore, projects will only be authorized to use natural gas as feedstock or energy source insofar as technically necessary, and only to an extent specified in the natural gas phase-out plan included in the aid application (recital (36)). Therefore, the Commission considers that aid under the scheme is not expected to lock-in industrial production technologies based on natural gas.

3.2.3. Ex-post evaluation plan

- (141) The CEEAG enable the Commission to require that notifiable aid schemes be subject to ex-post evaluation, and they stipulate that ex-post evaluation should be required where the potential distortions of competition and trade stemming from the scheme at hand are particularly high. In particular, ex-post evaluation is required for (1) schemes with State aid budgets or accounted expenditures exceeding EUR 150 million in any given year or EUR 750 million over the total duration of the scheme, (2) schemes with novel characteristics, or (3) schemes in areas where significant market, technology or regulatory changes are foreseen. The ex-post evaluation requirement only applies for aid schemes with a total duration exceeding three years, starting from 1 January 2022.
- (142) The Commission considers that the scheme does not qualify for ex-post evaluation, as its duration does not exceed three years (recital (19)).

- (143) The Commission however notes that the German authorities will conduct an assessment of the results of the auction conducted under the scheme, in order to assess its competitiveness and design (recitals (69) and (70)). The conclusions of this assessment will be used to improve the design of the scheme should Germany decide to notify its prolongation to the Commission (recital (71)).

3.2.4. Weighing up the positive and negative effects of the aid

- (144) As indicated in recital (82), the measure contributes to the development of certain economic activities and will contribute to the decarbonisation of the ETS sectors.
- (145) Point 134 CEEAG explains that the Commission will typically find that the balance for decarbonisation measures is positive (that is to say, distortions to the internal market are outweighed by positive effects) in light of their contribution to meeting Union climate objectives, as long as there are no obvious indications of non-compliance with the ‘do no significant harm’ principle and as long as all other compatibility conditions are met.
- (146) The Commission notes that the measure will contribute to the achievement of the Union and German energy and climate objectives and that all other compatibility conditions are met. The Commission finds no obvious indications of non-compliance with the ‘do not significant harm’ principle, as the German authorities will check that beneficiaries submit a declaration confirming the compliance of their project with such principle (recital (40)). Furthermore and in application of footnote 73 CEEAG, as the measure corresponds to measure 1.1.3 of the German RRP as approved by the Council (recital (9)), its compliance with the ‘do no significant harm’ principle is considered fulfilled as this has already been verified.
- (147) Based on the above, the Commission concludes that the positive effects of the measure outweigh its negative effects on the internal market. Therefore, the Commission considers the aid compatible with the internal market under Article 107(3), point (c), TFEU.

4. AUTHENTIC LANGUAGE

As mentioned in recital (3), Germany has accepted to have the decision adopted and notified in English. The authentic language will therefore be English.

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), point (c), of the Treaty on the Functioning of the European Union.

If this letter contains confidential information which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the Internet site: <https://competition-cases.ec.europa.eu/search?caseInstrument=SA> Your request should be sent electronically to the following address:

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Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President