

**Federal Ministry
for Economic Affairs and Climate Action**

**Support scheme for the promotion of
climate neutral production processes in industry through climate protection agreements
(Support scheme for the promotion of climate protection agreements – the "scheme")**

of [date]

TABLE OF CONTENTS

	PAGE
1. Preamble	3
2. Definitions	3
3. Legal basis, objective of the support, purpose of grant, responsibility	7
4. Object of the grant	7
5. Beneficiaries of the grants	10
6. Nature of the grant, special grant requirements and repayment obligation	11
7. Amount of the grant and repayments	11
8. Bidding process	14
9. Calculation procedure, disbursements and repayments	18
10. Evaluation, control and transparency	19
11. Materiality of subsidies	22
12. Legal consequences in the event of infringements	22
13. Validity period	24

1. PREAMBLE

The European Climate Law stipulates that the EU must become climate neutral by 2050. According to the Federal Climate Change Act, greenhouse gas emissions must be reduced by at least 65% by 2030 and by at least 88% by 2040 compared to 1990 levels, and climate neutrality must be achieved by 2045. In view of the national climate neutrality target and the requirements of the European Union Emissions Trading Scheme for the electricity sector and energy-intensive industries (EU ETS), less than two decades remain for the transformation of the primary industries to climate neutrality.

The overall economic costs of climate change, which are partly caused by today's prevailing production processes, are not yet fully priced into production costs worldwide. As a result, climate-damaging production processes are often still cheaper for companies than climate-friendly ones. Climate-friendly production is often so cost-intensive that companies cannot switch to it because they would otherwise suffer a great cost disadvantage in competition. Investments in climate-friendly production processes are therefore at least highly risky and are still too often not made today, especially because they concern facilities with a technical life span of several decades.

This is the starting point for climate protection agreements based on the concept of Carbon Contracts for Difference. On this basis, companies from energy-intensive industries are compensated for the additional costs they incur through the construction (CAPEX) and the operation (OPEX) of more climate-friendly facilities compared to conventional facilities. This enables the companies to switch to more climate-friendly production. Climate protection agreements thus make new technologies marketable. Risks and ultimately costs become more predictable, which also enables debt financing through equity and debt capital in climate-friendly technologies. As a result, the transition to macroeconomic net greenhouse gas neutrality in the industrial sector is already being tackled, and, in accordance with the Paris Agreement, a contribution to the avoidance of a shift of greenhouse gas emissions abroad is being made. Climate protection agreements thus not only lead to emission reductions for the supported industry. They also provide an incentive for the technologies and infrastructures required for this to be developed and executed in Germany now already. This is not only an important step for Germany as a centre of innovation, and towards achieving Germany's climate goals. The innovations triggered by the climate protection agreements will also advance the decarbonisation of industry worldwide.

At the same time, the German government takes care to promote efficiency and avoid overcompensation. Climate protection agreements take special account of this through various regulations. If, in the course of the agreement period, the effective CO₂ price exceeds the agreement price stipulated in the climate protection agreement, the state support not only ends, but is reversed and the companies are obliged to pay to the state. This reduces the burden on the state budget.

Overall, climate protection agreements create secure investment framework conditions for companies and initiate the transformation in Germany at an early stage. However, the state does not only bear the economic risk for the climate protection that is necessary for society as a whole, but also participates in the economic opportunities of a conversion to climate-friendly technologies. This mechanism makes climate protection agreements a modern and efficient instrument of climate protection and funding policy.

2. DEFINITIONS

In this scheme, the following terms apply:

- 2.1 **Absolute greenhouse gas emission reductions:** the reduction in greenhouse gas emissions achieved through the operation of the transformative production system compared to the reference system in tonnes of CO₂ equivalents for the same planned or actually realised production volume. For the purposes of this scheme, a distinction can be made between planned absolute greenhouse gas emission reductions and actually realised absolute greenhouse gas emission reductions.
- 2.2 **Administering agency:** an agency commissioned by the Federal Ministry for Economic Affairs and Climate Action (*Bundesministerium für Wirtschaft und Klimaschutz as BMWK*).
- 2.3 **Other fundings:** fundings received by the beneficiary for the same eligible costs outside of this scheme, provided that this qualifies as aid within the meaning of Article 107(1) TFEU or as centrally administered Union funds that are not directly or indirectly subject to control by Germany.
- 2.4 **Biomass:** all organic matter of biological origin that is not of fossil origin. In particular, this includes the biodegradable fraction of products, wastes and residues of biological origin from agriculture, forestry, other forms of land use and related industries, including fisheries and aquaculture. It also includes the biodegradable fraction of waste, including industrial and household waste of biological origin, and organic matter of biological origin resulting from technical transformation or previous use, as well as raw materials and energy sources produced from biomass.
- 2.5 **Blue hydrogen:** hydrogen produced from natural gas by steam reforming that meets the technical assessment criteria for demonstrating significant contribution to climate change mitigation set out in Delegated Regulation 2021/2139 supplementing Regulation (EU) 2020/852 (Taxonomy Regulation)¹. With regard to the mitigation of greenhouse gas emissions, the minimum threshold for life-cycle greenhouse gas emission savings of 73.4% compared to a fossil fuel baseline must be achieved. According to the Delegated Regulation (EU) 2021/2139 supplementing Regulation (EU) 2020/852 (Taxonomy Regulation), this mitigation shall be demonstrated against a reference value of 94 gCO₂-eq/MJ by capturing and storing the resulting carbon dioxide (Carbon Capture and Storage ("CCS")) or permanently binding it in products (Carbon Capture and Usage ("CCU")). For the fulfilment of the obligation to demonstrate the permanent storage/sequestration of carbon dioxide, the requirements set out in Commission Implementing Regulation (EU) 2018/2066² or equivalent EU requirements shall apply. Life-cycle greenhouse gas emission savings shall be calculated in accordance with the methodology referred to in Article 28(5) of Directive (EU) 2018/2001³ or alternatively in accordance with ISO 14067:2018 (119) or ISO 14064-1:2018 (120). Insofar as the EU specifies stricter sustainability requirements in another binding legal act for the production of blue hydrogen for the fields of application relevant in the context of this scheme, these shall apply.

¹ Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria 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 442/1).

² 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.

³ Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (OJ L 328/82).

- 2.6 **Green hydrogen:** hydrogen in the production of which the electricity used was generated exclusively from renewable energy sources, whereby the production of this electricity must meet the technical assessment criteria applicable in accordance with the Delegated Regulation 2021/2139 supplementing Regulation (EU) 2020/852 (Taxonomy Regulation) to demonstrate the significant contribution to climate protection. Insofar as the EU stipulates other sustainability requirements on the basis of Directive (EU) 2018/2001 (RED II)⁴ or in another binding legal act for the production of green hydrogen for the relevant fields of application under this scheme, these shall apply.
- 2.7 **Operational start:** time of the first intended use of the supported facilities after completion of a trial operation. Trial operation is the temporary operation of a facility to test its operational capability prior to the first intended use of the supported facility.
- 2.8 **Green surplus revenue lump sum (*pauschaler grüner Mehrerlös*):** The surplus revenue that the beneficiary can generate by achieving higher prices for the partial or total sale of the products manufactured with the supported climate-friendly production process. The green surplus revenues lump sum is calculated from the share of production that can be sold at a price premium and the achievable price premiums for each product unit.
- 2.9 **Actual green surplus revenue:** The green surplus revenue actually generated by the beneficiary. The actual green surplus revenue results from the share of production sold at a price premium and the price premiums achieved for each product unit. The burden of proof for the actual green surplus revenue is borne by the beneficiary.
- 2.10 **Reference system:** the technologically dominant facility constellation in the respective market segment at the time of the funding call (*Förderaufruf*), which is used to determine the cost differences and greenhouse gas emission reductions by the supported facility constellation. For the definition of the reference system, the provisions of the EU ETS shall apply. For this purpose, Article 2 of Delegated Regulation (EU) 2019/331 of the European Commission⁵ shall apply; for facilities with product benchmarks, in particular Annex I of Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003⁶.
- 2.11 **Relative greenhouse gas emission reduction:** the specific greenhouse gas emission reduction divided by the specific greenhouse gas emissions of the reference system. For the purposes of this scheme, a distinction can be made between planned relative greenhouse gas emission reductions and actually realised relative greenhouse gas emission reductions.
- 2.12 **Collateral:** for the purposes of this scheme, are bank guarantees or sureties, sureties or guarantees of the beneficiary's parent company or hard letters of comfort.
- 2.13 **Specific greenhouse gas emission reduction:** the difference between the greenhouse gas emissions of the reference system and the remaining residual emissions of the production system operated in the transformative production process, according to section 7.1(e), in each case related to one tonne of the manufactured product.

⁴ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328/82).

⁵ Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59/8).

⁶ 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.

- 2.14 **System boundaries:** all essential production steps that are necessary to manufacture the product and are carried out at the sites covered by the climate protection agreement.
- 2.15 **Transformative production process:** a production process that is characterised by fundamental technological changes to conventional production processes, i.e. entails considerable need for investment in new technologies that have not yet dominated the market or set the market price, as well as substituting fossil energy sources or raw materials with energy sources or raw materials that are provided in a climate-friendly way (such as electricity, hydrogen, biomass) or using technologies for the separation and long-term storage or long-term product sequestration or recycling of CO₂. A production process that is not operated in an energy- and resource-efficient manner and does not enable the transformation of the industry towards climate neutrality of the national economy is not transformative.
- 2.16 **Greenhouse gases:** carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), nitrogen trifluoride (NF₃) and hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) according to Annex V, Part 2 of the European Governance Regulation⁷.
- 2.17 **Greenhouse gas emissions:** the anthropogenic release of greenhouse gases in tonnes of carbon dioxide equivalent, where one tonne of carbon dioxide equivalent is one tonne of carbon dioxide or the quantity of another greenhouse gas equivalent to one tonne of carbon dioxide in terms of its potential to warm the atmosphere, as determined by Commission Delegated Regulation (EU) 2020/1044⁸, or any successor regulation adopted pursuant to Article 26(6)(b) of the European Governance Regulation.
- 2.18 **Beneficiary's repayments:** payments made by the beneficiary under the climate protection agreement in the event of a negative difference between the basic agreement price pursuant to section 7.1(a)(i) or the dynamised agreement price pursuant to section 7.1(a)(ii) and the effective CO₂ price.
- 2.19 **Project start:** the conclusion of a supply or service agreement attributable to the execution. Planning and consulting services as well as feasibility studies are not in themselves considered to be the start of a project. The acquisition of land or preparatory work such as obtaining permits shall also not be deemed to be the start of a project. In the case of acquisitions, the start of the project is the date of acquisition of the assets directly associated with the acquired establishment.
- 2.20 **Hydrogen derivatives:** gaseous or liquid energy carriers and raw materials based on blue or green hydrogen (e.g. methane, ammonia, methanol and synthetic fuels).

⁷ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council ("European Governance Regulation") (OJ L 328, 21.12.2018, p. 1), as last amended by 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).

⁸ Commission Delegated Regulation (EU) 2020/1044 of 8 May 2020 supplementing Regulation (EU) 2018/1999 of the European Parliament and of the Council with regard to values for global warming potentials and the inventory guidelines and with regard to the Union inventory system and repealing Commission Delegated Regulation (EU) No 666/2014 (OJ L 230, 17.7.2020, p. 1).

3. LEGAL BASIS, OBJECTIVE OF THE SUPPORT, PURPOSE OF GRANT, RESPONSIBILITY

- 3.1 In accordance with this scheme, sections 23 and 44 of the Federal Budget Code (*Bundeshaushaltsordnung*), taking into account the General Administrative Provisions (*Allgemeine Verwaltungsvorschriften*) issued for this purpose and in accordance with the notifications relevant to this scheme and the support (*Förderung*) planned thereunder⁹, the Federal Government awards grants for additional costs of transformative production processes based on climate protection agreements in the area of emission-intensive industrial sectors. The grants are awarded through the issuance of a grant notification (*Zuwendungsbescheid*) and the conclusion of a climate protection agreement. The climate protection agreement also regulates the possible repayments by the beneficiary of the grants.
- 3.2 Climate protection agreements shall enable a rapid and continuous transformation of the industry towards climate neutrality in 2045 in a cost-efficient manner by
- the construction and operation of transformative production processes, particularly large industrial facilities in the most energy-intensive sectors are supported, that lead to high greenhouse gas savings and thus become established in the market,
 - indirectly building up infrastructure, lead markets, knowledge and expertise required for decarbonisation as a whole through the grant, and
 - only supporting processes with a high degree of value chain integration that fit in with the German government's industrial strategy and are also climate-friendly from a global perspective.
- 3.3 In order to achieve the objectives set out in section 3.2, additional costs of low-emission production processes compared to a conventional reference system are granted (purpose of grant).
- 3.4 The administering agency in coordination with the BMWK is responsible for the procedure, the decision on the grant, the issuing of the grant notification and the conclusion of the climate protection agreement.
- 3.5 Unless expressly stated otherwise, the version of the legal and administrative provisions referred to in this scheme in force at the time of the announcement of the respective funding call shall be decisive.

4. OBJECT OF THE GRANT

- 4.1 Climate protection agreements are intended to compensate companies in energy-intensive industries for the additional costs they incur through the construction (CAPEX) and operation (OPEX) of more climate-friendly facilities compared to conventional ones, according to the concept of Carbon Contracts for Differences.
- 4.2 The climate protection agreement has a period of 15 years. The agreement period begins with the operational start of the project, but no later than 24 months after the grant notification becomes effective. A different period may be specified in the funding call. The administering agency may extend the agreement period after issuing the grant notification if the beneficiary demonstrates

⁹ Communication from the Commission, Guidelines on State aid for climate, environmental protection and energy 2022, 2022/C 80/01.

that it cannot commence the supported project within the deadline for reasons beyond its control. If the project begins during the year, the agreement period extends over 16 calendar years.

- 4.3 Only those industrial activities, with the exception of clause 4.11, whose products provide equivalent functionality to products of the reference systems listed in Annex I to the Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 as last amended by Commission Delegated Regulation (EU) 2021/1416 of 17 June 2021¹⁰ shall be supported. Any subsequent amendments to Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 shall not be taken into account. The supported activities are those listed in Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003.
- 4.4 Eligible costs are additional costs for the production of products defined by the reference system. Only production quantities, for which the applicant carries out all essential production steps required to manufacture the product itself at the sites covered by the climate protection agreement, are eligible for support. The essential production steps include the production of process heat. Products that are manufactured from intermediate products not produced at the sites covered by the climate protection agreement are not supported.
- 4.5 The amount of the annual grant or repayment shall be determined in accordance with the methodology set out in section 7.
- 4.6 Hydrogen used shall meet the requirements for green hydrogen or blue hydrogen. In the funding call, the administering agency may specify the locations of electrolyzers with a capacity of more than 10 MW for the purchase of green hydrogen in order to ensure system-compatible operation. Hydrogen derivatives may also be used instead of green or blue hydrogen if they are equivalent to green or blue hydrogen in terms of their contribution to climate protection and comply with the sustainability requirements from binding legal acts applicable at the time of the funding call.
- 4.7 Electricity used must have been generated entirely from renewable energies. This must be proven by means of guarantees of origin within the meaning of section 3 number 29 of the Renewable Energy Sources Act (EEG 2021). The administering agency shall examine the extent to which sector-specific requirements for the system-serving operation of the technology are to be specified and shall – to the extent necessary and practicable – specify corresponding requirements in the funding call.
- 4.8 The use of biomass is only eligible for support insofar as the applicant can demonstrate in a suitable form that direct electrification is technically impossible and an energetic use of hydrogen is not technically or economically foreseeably possible, and insofar as the planned use of biomass is scalable in view of the limited biomass potential available on a sustainable basis. The use of biomass for energy purposes should be limited to residual and waste materials and to raw materials and energy sources obtained from residual and waste materials. The administering agency will define more detailed specifications and criteria for biomass use and its scalability in the funding call, taking into account the state of the art. Where biomass is eligible under these principles, the applicant must provide evidence of the origin and source of supply of the biomass used in the promotion. Energy used from biomass must meet the requirements of the Biomass Regulation, the Biomass Electricity Sustainability Regulation and the sustainability requirements of Article 29 of Directive (EU) 2018/2001 (RED II) and other EU legal acts (e.g. the future RED III).

¹⁰ OJ L 305, 31.8.2021, p. 1–2.

- 4.9 Facilities with otherwise unavoidable process emissions, in which the greenhouse gas emission reductions are significantly achieved through CCS or CCU, are eligible for support if the long-term storage or long-term product sequestration can be certified or the CCS or CCU measures are recognised as emission reductions under the EU ETS, and the connection to the necessary transport and storage infrastructure is sufficiently ensured. The requirements of Commission Implementing Regulation (EU) 2018/2066¹¹ or equivalent EU requirements shall apply to the fulfilment of the obligation to demonstrate the permanent storage/sequestration of carbon dioxide.
- 4.10 Projects must meet the following minimum requirements:
- (a) The project exceeds a minimum size of the absolute average annual greenhouse gas emissions in the reference system. The minimum size is determined by the administering agency with the funding call. It shall be at least 30 kt CO₂-eq. per year.
 - (b) The project is compatible with the climate protection goals of the Federal Republic of Germany and the EU. This is the case in particular under the following conditions:
 - (i) At the latest by the end of the first year after the operational start, a relative greenhouse gas emission reduction of at least 50 % compared to the reference system must be achieved. In the second year after the operational start, the relative greenhouse gas emission reduction must be at least 60 % compared to the reference system.
 - (ii) A relative greenhouse gas emission reduction of at least 95 % compared to the reference system must be technically possible with the technology used when using appropriate energy sources and raw materials (access criterion climate neutrality).
 - (iii) The administering agency may, with the funding call, set higher thresholds for (i) and (ii).
- 4.11 Not eligible for grants are
- (a) projects that the applicant would carry out anyway. This is particularly the case,
 - (i) if the project has already started at the time of application (project start according to section 2.199). Eligible projects are those for which a state aid approval by the European Commission has already confirmed the existence of the incentive effect or if the BMWK has approved an early start of the measure and determined eligibility for grants in accordance with this scheme; or
 - (ii) the project must be implemented in whole or in part due to legal requirements; or
 - (b) production in facilities that use fuels predominantly for the production of secondary energy carriers (such as electricity, district and local heating, mineral oil products, fuels, coke, synthetic gas or hydrogen); or
 - (c) projects that are exclusively dedicated to the transport of greenhouse gases; or
 - (d) projects that are exclusively dedicated to the geological storage of greenhouse gases; or
 - (e) projects that are not directly dedicated to the manufacture of industrial products; or

¹¹ 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.

- (f) production in facilities not operated on the territory of the Federal Republic of Germany; or
- (g) projects that cannot be continued after the end of the climate protection agreement period without state support; or
- (h) projects, insofar as they do not significantly contribute to the achievement of the objectives of this scheme.

5. BENEFICIARIES OF THE GRANTS

- 5.1 Eligible to apply are enterprises within the meaning of section 14 of the German Civil Code (*Bürgerliches Gesetzbuch*), including municipalities (*Gemeinden*), municipally owned enterprises (*kommunale Eigenbetriebe*), municipal enterprises (*kommunale Unternehmen*) and municipal special-purpose associations (*kommunale Zweckverbände*), insofar as they are economically active ("**Eligible Applicants**").
- 5.2 Several Eligible Applicants who jointly manufacture one or more products in Germany may form a consortium ("**Consortium**"). Within the Consortium, one company must be appointed to submit the application ("**Consortium Leader**") and be authorised to accept delivery on behalf of the Consortium. Each member of the Consortium shall be a beneficiary and a contractual partner of the climate protection agreement. The members of the Consortium shall be jointly and severally liable for the obligations arising from the grant notification and the climate protection agreement and for any repayments. Grants shall be paid to the Consortium Leader with discharging effect vis-à-vis the Consortium.
- 5.3 Applicants must be economically and financially capable of carrying out the project to be granted.
- 5.4 Not eligible to apply are:
- (a) Entities that have not complied with a recovery order following a decision of the European Commission declaring an aid illegal and incompatible with the internal market;
 - (b) Firms in difficulty within the meaning of the European Commission Guidelines on State aid for rescuing and restructuring non-financial firms in difficulty.¹² This concerns, inter alia, companies that are subject to insolvency proceedings or meet the conditions for opening insolvency proceedings at the request of creditors;
 - (c) Legal entities that have submitted or are obliged to submit a statement of assets pursuant to section 802c of the Code of Civil Procedure (*Zivilprozessordnung*) or section 284 of the Fiscal Code (*Abgabenordnung*);
 - (d) Legal entities against which the EU has imposed sanctions, e.g. companies which
 - (i) are explicitly mentioned in the legal acts imposing these sanctions,
 - (ii) are owned or controlled by persons, entities or bodies on which the EU has imposed sanctions, or
 - (iii) are active in economic sectors against which the EU has imposed sanctions, to the extent that the benefits would undermine the objectives of the sanctions in question.

¹² Communication from the Commission - Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (OJ C 249, 31.7.2014, p. 1).

6. NATURE OF THE GRANT, SPECIAL GRANT REQUIREMENTS AND REPAYMENT OBLIGATION

6.1 Nature of the grant

- (a) Grants are awarded in the form of subsidies (*Zuschüsse*).
- (b) There is no legal entitlement to the grant. The administering agency decides on the granting of applications at its own discretion and within the limits of the available budget funds.

6.2 Special eligibility requirements

Further approval requirements and procedural requirements may be regulated in addition in ancillary provisions (*Nebenbestimmungen*) to this scheme.

6.3 Repayment obligation

The amount of the repayment obligation is determined by the administering agency on the basis of this scheme.

7. AMOUNT OF THE GRANT AND REPAYMENTS

7.1 Annual calculation

- (a) The amount of the grant and the amount of the repayments are determined annually by calendar year, even if the project begins during the year, and are calculated as follows:
 - (i) A basic agreement price shall be determined. The basic agreement price is the amount that the applicant estimates to cover additional costs compared to the reference system per tonne of avoided greenhouse gas emissions ("**Basic Agreement Price**"), whereby the applicant deducts any other fundings already awarded in accordance with section 8.3(e) shall be deducted.
 - (ii) A dynamisation component is added to the basic agreement price for the respective settlement period in accordance with section 7.2 ("**Dynamised Agreement Price**"). The dynamic modification cushions the price risk of energy sources and thus increases the efficiency of the support. In the case of substitutable energy sources, the Dynamised Agreement Price is adjusted to the energy source mix of the facility for the corresponding year.
 - (iii) The effective CO₂ price for the transformative production process compared to the reference system is deducted from the Basic Agreement Price or the Dynamised Agreement Price. The deduction cushions the risk of CO₂ costs and thus increases the efficiency of the support.
 - (iv) The resulting difference is multiplied by the specific greenhouse gas emission reduction actually realised compared to the reference system and the realised production volume of the transformative production process.
 - (v) The result is the amount the beneficiary receives from the grantor or, in the case of a negative difference between the Basic Agreement Price or Dynamised Agreement Price and the effective CO₂ price, the repayments the beneficiary pays to the grantor.
 - (vi) Of the annual amount resulting from section 7.1 a (i) to (v), any grant awarded after the submission of the application shall be deducted in accordance with section 7.4(b). Insofar as the deduction foreseeably leads to a permanent reduction of the

grant, the fixed annual maximum amount of the grant shall also be adjusted. Further details are set out in Annex 1.

- (vii) From the annual amount resulting from section 7.1 a (i) to (v), 70% of the green surplus revenue lump sum shall be deducted. The green surplus revenue lump sum is generally determined by the administering agency. If the beneficiary has generated an actual green surplus revenue that is less than 70% of the green surplus revenue lump sum, the administering agency shall limit the deduction to the actual green surplus revenue. Further details are set out in Annex 1.
- (b) The effective CO₂ price shall be calculated as the difference between the CO₂ price or CO₂ revenue for the granted facility, taking into account the free allocation of emission allowances under the EU ETS, and the CO₂ price of the reference system, also taking into account the free allocation, which shall be related to the greenhouse gas emission reductions actually achieved compared to the reference system. The exact calculation of the effective CO₂ price results from Annex 1 No. 1 paragraph 9.
- (c) The reference system within the meaning of section 2.1010 shall be defined by the administering agency.
- (d) The emissions of the reference system shall be calculated according to the benchmark values for the period 2021 - 2025 specified in the Annex to the Commission Implementing Regulation (EU) 2021/447¹³. If the emissions of the reference system result from a combination of several benchmarks, the administering agency shall determine this combination.
- (e) The emissions of the project result from the emissions of the supported facilities (scope 1 emissions). If these facilities are included in the EU ETS, their emissions shall be calculated in accordance with the Implementing Regulation (EU) 2018/2066 of the European Commission¹⁴. Regulations in the event that the facilities are not included in the EU ETS on a mandatory basis shall be set out in the funding call or in the climate protection agreement.
- (f) The modalities of the grants and repayments are governed by section 9 and the more detailed provisions of the grant notification or the climate protection agreement.

7.2 Dynamisation of energy carrier costs

- (a) The dynamisation of individual energy sources serves to mitigate the price risk. This means that the applicant is better protected and can calculate with a lower risk premium; at the same time, this makes the grant more favourable for the state.
- (b) When determining the reference system, the administering agency determines one or more energy carriers of the reference system that are dynamised. For this purpose, it specifies the fixed basic price, the price index and the specific requirements of all eligible reference systems in the funding call.

¹³ Commission Implementing Regulation (EU) 2021/447 of 12 March 2021 determining revised benchmark values for free allocation of emission allowances for the period from 2021 to 2025 pursuant to Article 10a(2) of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 87/29).

¹⁴ 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, as last amended by Commission Implementing Regulation (EU) 2022/1371 of 5 August 2022 (OJ L 334/1).

- (c) In addition, the administering agency will stipulate in the funding call that individual energy sources used in the project will also be dynamised, insofar as long-term supply or hedging agreements with fixed prices are not offered for these energy sources or are offered only with considerable risk surcharges to the necessary extent.
- (d) In its funding call, the administering agency may also allow the dynamic modification of individual energy sources for projects in which one energy source is substituted by another over time. In this case, the applicant must indicate in which year it plans to meet which specific demand for the respective energy carrier in relation to the product. In the event that green or blue hydrogen or hydrogen derivatives are used for the project, the information on the hydrogen used shall constitute a minimum pathway.
- (e) Dynamisation is carried out by multiplying the price by the quantity of the energy carrier used per planned tonne of greenhouse gas emission reduction of the project ("**Dynamisation Component**"). The price is based on the price index minus the fixed basic price. The specific quantity of the energy source used must be stated in the application and may not exceed the maximum eligible quantity per energy source. It shall not be deviated from in the subsequent calculation of the grant. The administering agency shall specify the maximum eligible specific quantity per energy source, the price index and the fixed basic price in the funding call.
- (f) Insofar as green or blue hydrogen is subject to dynamisation and the applicable technical assessment criteria for demonstrating significant contribution to climate change mitigation in terms of greenhouse gas emission reductions, measured as emission levels in g CO₂ eq./MJ H₂, as set out in Delegated Regulation 2021/2139 supplementing Regulation (EU) 2020/852 (Taxonomy Regulation), are fallen below by 50% or more, the price level resulting from the applicable price index shall be increased by 10%.
- (g) Insofar as a separate dynamisation is provided for each green and blue hydrogen, the price level resulting from the price index for green hydrogen shall be applied to blue hydrogen from the year 2030 if the price level for green hydrogen is below the price level resulting from the price index for blue hydrogen.
- (h) Further details are set out in Annex 1.

7.3 Maximum grant amount

- (a) The grant notification specifies the maximum annual grant amount and the maximum total grant amount.
- (b) The maximum annual grant amount is calculated on the basis of the Basic Agreement Price. A term is added to the Basic Agreement Price which adequately takes into account the potential additional budget requirement due to the dynamisation of the energy carriers of the reference system and the project. In the case of mutually substitutable energy carriers, this planned energy carrier change is also taken into account in determining the maximum grant amount.
- (c) The maximum total grant amount corresponds to the sum of the maximum annual grant amounts.
- (d) Further details are set out in Annex 1.

7.4 Cumulation, crediting and maximum limits under state aid law

- (a) If the beneficiary receives other fundings for the project, the administering agency shall take appropriate measures to ensure that no overcompensation occurs. In all other respects, section 8.3(e) shall prevail.
- (b) Any other fundings awarded after the submission of the application and not already taken into account in accordance with section 8.3(e) will be deducted from the grant. If the deduction leads to a foreseeable permanent reduction of the grant, the maximum amount set will also be adjusted.
- (c) Insofar as the European Commission has already set a maximum limit for the grant of the project, the total grant of this project, including the grants based on this scheme, may not exceed this maximum limit.

8. BIDDING PROCESS

8.1 Procedure

- (a) The administering agency conducts bidding procedures in which applicants submit their applications for one or more projects. The bidding procedures are initiated by funding calls. The applications include the company's bids as well as all evidence and documents required to receive grants according to the scheme and the respective funding call.
- (b) The administering agency may, in consultation with the European Commission, limit bidding procedures to certain sectors in accordance with Annex I of Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 or technologies in order to increase the effective achievement of the grant objectives in the funding call or specify in the funding call that the grant volume shall benefit at least one or more projects from one or more sectors if
 - (i) a cross-sectoral bidding procedure would not achieve one of the following objectives, which can be specified in funding calls, with equal effectiveness:
 - (A) a sectoral or technology-specific objective laid down in Union law,
 - (B) the special promotion of demonstration projects,
 - (C) the targeted promotion of sectors or innovative technologies that have the potential to make an important and cost-effective contribution to climate protection and comprehensive decarbonisation in the long term, or
 - (ii) it can be assumed that a more selective approach leads to lower climate protection costs, or
 - (iii) there is a risk of harm to competition, or
 - (iv) the level of bids likely to be submitted by different groups of undertakings differs significantly (more than 10 %); in which case groups of undertakings with comparable costs must compete with each other.
- (c) The administering agency may specify in the funding call that only projects to which the EU ETS applies are eligible for grants.
- (d) The funding call shall in particular announce the implementation of a bidding procedure, a possible restriction of the bidding procedure, the grant conditions, the grant volume, the evaluation scheme for the evaluation of the bids (see section 8.3), the deadline for

submitting bids, the forms to be used and documents to be submitted with the application and the procedural rules for the bidding procedure.

- (e) The administering agency may set a maximum price in the funding call for all bids, for bids from companies in a specific sector or for bids from companies using a specific technology. Bids above the maximum price shall be excluded from the bidding process.
- (f) The administering agency publishes the funding call in the Federal Gazette (*Bundesanzeiger*).
- (g) The administering agency provides information on its website about details on how to apply, the formal requirements for applications and the application procedure. It answers questions about the grant programme under the following contact details:

[•]

8.2 Applications

- (a) Applications must be submitted and signed using the fully completed forms provided by the administering agency.
- (b) The applications must include all information and documents required for the examination, the decision on the eligibility requirements and the evaluation of the bids.
- (c) In particular, the following documents must be submitted:
 - (i) an overview sketch of the project,
 - (ii) a technical description of the project with information on the technical, economic and operational feasibility and the feasibility of the minimum relative greenhouse gas emission reduction requirements, the duration, the technological pathway for decarbonisation of the process, including a conceptual and quantitative presentation of how greenhouse gas emissions are saved, what residual emissions remain, including specific consumptions and emissions under different operating modes, if applicable,
 - (iii) a description of the system boundaries and system delimitation, taking into account the provisions made in this scheme and in the funding call,
 - (iv) a monitoring concept drawn up according to the specifications of the administering agency, which documents the procedures and, if necessary, also verifies the parameters to be updated annually,
 - (v) Information on the transferability of the technological concept to other facilities,
 - (vi) a knowledge transfer plan to inform the public about the use of the transformative production process in accordance with section 10.4,
 - (vii) information on the required expertise as well as sufficient creditworthiness, including confirmation from the guarantors of their willingness to provide collateral,
 - (viii) a financial and resource plan with details of own and external funds, explaining the need for and amount of the grant applied for,
 - (ix) proof that the system can continue to be operated after the end of the climate protection agreement period without state support,
 - (x) information on other fundings already awarded or applied for the project,

- (xi) details of Other Obligated Parties to Provide Information and to Cooperate within the meaning of section 10.2(f) as well as
- (xii) the declarations on data processing, subsidy-relevant facts, companies in difficulty, taxes and duties.

The administering agency may, at its due discretion, request further documents and evidence as well as the certification of documents, e.g. by an auditor or tax advisor appointed by it.

8.3 Examination and evaluation of the bids

- (a) The administering agency shall examine the applications in accordance with the provisions set out in this scheme and in the respective funding call. The bids will be awarded in the order of their evaluation within the framework of the grant volume applicable to the respective funding call. The maximum grant amount of the respective projects shall be used as the basis for determining the respective grant volume required. In the event of a tie, the decision shall be made by drawing lots.
- (b) Applications that are not submitted in full and in the form specified by the grantor by the deadline specified in the funding call (material exclusion deadline) will not be considered.
- (c) The bids shall be evaluated on the basis of the following criteria and their weighting:
 - (i) 70 % funding cost efficiency,
 - (ii) 15 % relative greenhouse gas emission reduction and
 - (iii) 15 % relative energy intensity.
- (d) Each criterion is scaled to a range of 0 to 100 points. In total, a maximum of 100 points can be achieved through the weighting. The administering agency may set different weightings for the relative greenhouse gas emission reduction and the relative energy intensity with the funding call. Annex 2 provides the criteria as formulas.
- (e) The funding cost efficiency is the sum of the Basic Agreement Price and the cost efficiency of other fundings, provided that the other fundings have already been approved at the time of bidding.
 - (i) To determine the cost efficiency of other fundings, their sum is calculated with a depreciation period of 15 years and an interest rate of 2 % and divided by the planned absolute greenhouse gas emission reduction during the grant period, also discounted over 15 years and determined in accordance with the provisions of this scheme.
 - (ii) When determining the funding cost efficiency, the Basic Agreement Price, from which the applicant has deducted any other funding already granted, is used unchanged.
 - (iii) Funding cost efficiency is assessed across all projects admitted to the bidding process. The cheapest project receives 100 points and the most expensive project 0 points. All other projects are awarded points based on a linear allocation.
- (f) The relative greenhouse gas emission reduction in accordance with section 8.3 (c)(ii) is calculated as the sum of the planned greenhouse gas emissions of the project divided by the greenhouse gas emissions of the reference system for the planned production volume, based on the first five years after the operational start. This takes into account the objective under the Federal Climate Change Act to reduce greenhouse gas emissions by at least

65% by 2030. In subsequent years, the planned greenhouse gas emission reduction from the fifth year may not be undercut. The projects are standardised between 50 % and 100 % savings on 0 to 100 points. The administering agency may specify different percentages in the funding call.

- (g) The relative energy intensity is calculated from the quotient of the energy demand of the project and the reference system. The energy sources to be used in the calculation for the project are those that are also used to demonstrate the compatibility of the project with climate neutrality pursuant to section 4.10(b)(ii). In the calculation, gaseous energy sources shall be multiplied by a factor of 1.4, liquid energy sources by a factor of 1.7 and solid energy sources by a factor of 2. Electricity is included with a factor of 1. The quotients determined in this way are standardised in the group of all projects with the same reference system by giving 100 points to the project with the lowest value and 0 points to the one with the highest value. The points of all other projects are distributed on the basis of a linear allocation.
- (h) The bidding process will be static and pay-as-bid, so successful applicants will receive the grant based on the Basic Agreement Price they apply for.

8.4 Grant notification (*Zuwendungsbescheid*)

- (a) The administering agency awards the grant to the successful applicants in each case by means of a grant notification.
- (b) The decision is issued subject to the resolutive condition that the beneficiary concludes a climate protection agreement with the administering agency within three months after the grant notification has become final. The administering agency may extend the deadline upon request if the conclusion of the agreement is delayed for reasons beyond the control of the beneficiary. The beneficiary may prematurely bring about the validity of the grant notification by waiving the right to appeal in accordance with the model declaration in the grant notification.

8.5 Climate protection agreement

- (a) On the basis of the grant notification, the beneficiary concludes the climate protection agreement with the grantor for the more detailed structuring of the grant relationship, which also regulates the repayments of the beneficiary.
- (b) The administering agency shall publish a model of the climate protection agreement in compliance with the requirements of this scheme the funding call. For reasons of equality of competition, the model agreement will only be adapted if this is absolutely necessary due to the specifics of the beneficiary.
- (c) The climate protection agreement shall also contain provisions in the event that the supported facilities are to be transferred to a third party. In this case, it must be ensured in particular that repayments to the grantor continue to be made and that the purchaser fulfils the requirements and obligations of the beneficiary under this scheme, the funding call and the climate protection agreement.

8.6 Preparatory procedure

- (a) The administering agency may conduct a preparatory procedure prior to the bidding procedure, through which information for the bidding procedure is obtained and in which the applicants are given the opportunity to ask questions about the bidding procedure. It shall

announce the conduct of a preparatory procedure, including the procedural rules, in the Federal Gazette.

- (b) Applicants who have not participated in the preparatory procedure and have not provided the requested information in full or in due time are excluded from participation in the subsequent bidding procedure (material exclusion period).
- (c) If a preparatory procedure has been carried out, the administering agency may refrain from publishing the funding call in the Federal Gazette in accordance with section 8.1(g) and instead publish the funding call only on its website.

9. CALCULATION PROCEDURE, DISBURSEMENTS AND REPAYMENTS

- 9.1 The grants to the beneficiary or the repayments to the grantor are made on a calendar year basis after a calculation procedure has been carried out.
- 9.2 The administering agency shall carry out the calculation procedure. For this purpose, the beneficiary shall submit in particular its determined and verified emissions, the energy consumption data as well as the essential production parameters in an emissions and energy efficiency report concluding by 31 March of the respective following year ("**Calculation Data**"), which shall refer to the previous calendar year (if applicable, during the year). If the project starts during the year, information on 16 calendar years must be provided.
- 9.3 The administering agency shall carry out the calculation procedure no later than three months after receipt of the Calculation Data. Exceptionally, the administering agency may extend the period for carrying out the calculation procedure to a maximum of six months. The administering agency must explain the extension of the calculation procedure to the beneficiary in writing.
- 9.4 The administering agency is entitled to request further information.
- 9.5 At the request of the beneficiary, the administering agency may grant an instalment per quarter if the beneficiary provides collateral for any reimbursements plus interest.
- 9.6 Recoveries of overpaid instalments shall bear interest at the rate of five percentage points above the basic rate per annum from the date of payment.
- 9.7 The administering agency shall inform the beneficiary of the result of its calculation, taking into account any payments on account made.
- 9.8 Claims of the beneficiary and repayments by the beneficiary are due within 30 days after notification of the result of the calculation.
- 9.9 If the project begins during the year, the climate protection agreement period extends over 16 calendar years. In this case, billing continues to be based on calendar years.
- 9.10 A grant is not awarded in a calendar year,
 - (a) if the absolute greenhouse gas emission reduction for that year specified in the bid is undercut by more than 10 %, or
 - (b) if the minimum pathway for the use of hydrogen specified in accordance with section 7.2(d) is fallen short of by more than 10 %.

If the maximum annual grant amount is reached in a year, the obligation to achieve the absolute minimum greenhouse gas emission reduction or the minimum use of hydrogen is adjusted proportionately only for the remaining part of the year in question. This is based on the assumption

that production, hydrogen use and specific greenhouse gas emission reductions are evenly distributed over the calendar year. The absolute minimum greenhouse gas emission reduction or the minimum use of hydrogen is reduced in such a way that the calculated subsidy amount reaches the maximum annual grant amount. If the lower absolute greenhouse gas emission reduction or the lower use of hydrogen was not the responsibility of the company, in particular in the case of delayed provision of planned and necessary infrastructure or cases of force majeure, the grant shall continue to be awarded in accordance with the grant notification and the climate protection agreement.

- 9.11 If the supported facility is finally decommissioned before the end of the climate protection agreement period, the beneficiary must reimburse the grant awarded to the grantor. The administering agency may limit this reimbursement to 5 % or more of the maximum total grant amount, insofar as this is absolutely necessary to avoid undue hardship, also taking into account the sale value of the facility and the profitability of the beneficiary.

10. EVALUATION, CONTROL AND TRANSPARENCY

10.1 Evaluation, control and review

- (a) In order to ensure compliance with the obligations under state aid and budgetary law and to monitor the success of this scheme, the Federal Ministry for Economic Affairs and Climate Action (BMWK) shall carry out an accompanying review of the achievement of the objectives, effectiveness and economic efficiency of the scheme in accordance with the Administrative Regulations No. 11a to Section 44 in conjunction with No. 2.2 to Section 7 of the Federal Budget Code on the basis of the objectives specified in section 3.2 and the indicators and criteria selected for this purpose.
- (b) The administering agency carries out a performance review of the supported projects.
- (c) The scheme is continuously evaluated for its effectiveness and efficiency on the basis of the bidding procedures and the grants awarded.

10.2 Information and audit rights

- (a) The applicant and the beneficiary are each subject to comprehensive information and cooperation obligations that extend to all phases of the application and the grant as well as their evaluation, as long as they participate in the application procedure, are entitled to the grant or are obliged to repay it.
- (b) The applicant and the beneficiary must notify the administering agency without delay and without being requested to do so of any changes in the facts relevant to the decision on the grant at each stage of the application and the grant.
- (c) The applicant and the beneficiary must provide the administering agency, the Federal Ministry for Economic Affairs and Climate Action, the Federal Audit Office, the audit bodies of the European Union and their respective representatives ("**Information Recipients**"¹⁵) with information on request, allow them to inspect all books, documents and data of the company and conduct audits, so that the information relevant to the disbursement can be

¹⁵ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

verified (also on the basis of suspicion-independent random checks), irregularities can be clarified, notification obligations can be fulfilled and the promotion of decarbonisation projects can be evaluated and improved for the future ("**Information Purposes**").

- (d) The beneficiary must keep all documents relevant to the grant for at least ten years after the end of the climate protection agreement period and submit them in the event of a review.
- (e) The applicant and the beneficiary shall agree that
 - (i) the persons designated by the Information Recipients for this purpose are permitted to enter the operating premises and business premises as well as the associated properties of the beneficiary within normal business hours in order to fulfil their duties,
 - (ii) the Information Recipients are allowed to pass on information and findings to other authorities for the fulfilment of their tasks with reference to the confidentiality of this information,
 - (iii) the Information Recipients may publish data in anonymised or aggregated form, provided this does not violate the legitimate interests of the beneficiary,
 - (iv) the Information Recipients may process information and findings for the Information Purposes, link them to official data and store them on data carriers,
 - (v) the administering agency may verify the information with other authorities,
 - (vi) other authorities may provide information to the administering agency and may also transmit data subject to state secrecy for this purpose.
- (f) The obligations to provide information and to cooperate set out in this section 10.2 to which the applicant and the beneficiary are subject also extend to the companies and enterprises affiliated with the applicant and the beneficiary under company law or in any other contractual form (in particular affiliated companies within the meaning of sections 15 et seq. of the German Stock Corporation Act (AktG)), as well as their beneficial owners within the meaning of section 3 of the German Money Laundering Act (Geldwäschegesetz) and their legal representatives, subject to further provisions in the grant notification or climate protection agreement,
 - (i) who have information which, in the view of the Federal Government or the administering agency, is required for the application, grant or evaluation of the grant or whose cooperation is required for this purpose;
 - (ii) of which the applicant or the beneficiary makes use, directly or indirectly, to achieve the grant purpose set out in this scheme;
 - (iii) to which the applicant or the beneficiary provides the grant, whether directly or indirectly; or
 - (iv) from which the applicant or the beneficiary purchases energy or purchases energy for the beneficiary from a third party in connection with the project.

(hereinafter referred to as "**Other Obligated Parties to Provide Information and to Cooperate**").

- (g) The applicant and the beneficiary shall ensure that the Other Obligated Parties to Provide Information and to Cooperate comply with the information and cooperation obligations under this scheme, the funding call and the climate protection agreement in the same way as the applicant or the beneficiary itself. Violations shall be deemed to be violations on the part of the applicant or the beneficiary.
- (h) The applicant and the beneficiary shall release employees, business partners, authorities (in particular the Federal Network Agency and the German Emissions Trading Authority) as well as Other Obligated Parties to Provide Information and to Cooperate vis-à-vis the Information Recipients from their confidentiality obligation with regard to the documents and information required to fulfil the Information Purposes. They shall ensure that they make the requested information available to the Information Recipients without delay and directly.
- (i) The applicant and the beneficiary shall ensure that the Other Obligated Parties to Provide Information and to Cooperate comply with the information and cooperation obligations under this scheme, the funding call and the climate protection agreement in the same way as the applicant or the beneficiary itself. Violations shall be deemed to be violations on the part of the applicant or the beneficiary.
- (j) During the grant period, the beneficiary must inform the administering agency without being asked of any changes relevant to the grant at the level of the Other Obligated Parties to Provide Information and to Cooperate.
- (k) Consent to compliance with the obligations referred to in this section 10.2 shall be declared in the application.

10.3 Reporting

- (a) The administering agency shall publish the information required under state aid law in the European Commission's state aid transparency database¹⁶ within six months from the date of conclusion of a climate protection agreement if the grant awarded exceeds 100,000 EUR.
- (b) The administering agency shall prepare annual reports¹⁷ on the grants awarded under this scheme, which the Federal Republic of Germany shall submit to the European Commission and the BMWK shall submit to the German Bundestag upon request.

10.4 Knowledge transfer plan

- (a) The beneficiary shall comprehensively inform the public and industry-related stakeholders about the use of the transformative production process in the course of a knowledge transfer, thus contributing to their commercial scaling.
- (b) Confidential information containing business or trade secrets of the beneficiary or other legal entities, the disclosure of which is prohibited by law or may jeopardise public safety and order, may not be disclosed to the public, industry-related stakeholders or other third parties. This information must be reported to the administering agency. In agreement with

¹⁶ The public search function of the aid transparency database is available at: <https://webgate.ec.europa.eu/competition/transparency/public?lang=de>.

¹⁷ 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 (OJ L 248, 24.9.2015, p. 9) and Commission Regulation (EC) No 794/2004 of 21 April 2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty (OJ L 140, 30.4.2004, p. 1).

the beneficiary and in compliance with data protection requirements, the administering agency may publish the information in anonymised and aggregated form or make it available to selected sectoral stakeholders.

- (c) The administering agency may specify further information requirements in the funding call.

11. MATERIALITY OF SUBSIDIES

- 11.1 Grants awarded under this scheme are subsidies within the meaning of section 264 of the Criminal Code (*Strafrechtsgesetzbuch*) and the Subsidies Law (*Subventionsgesetz*).
- 11.2 Prior to submitting the application, the persons entitled to file an application shall be informed of the criminal nature of subsidy fraud and of their duty to notify under section 3 of the Subsidies Law and, in accordance with Administrative Regulation No. 3.4.6 on section 44 of the Federal Budget Code, shall be informed of the facts relevant to the subsidy in the specific case in the form of a conclusive list. The reference, including the list of facts relevant to the subsidy, shall be included in the application form, where it shall be accompanied by a confirmation by the applicant that he/she is aware of the criminal nature of the subsidy fraud and of the facts relevant to the examination of his/her application.
- 11.3 In the application and the request for payment, the persons acting on behalf of the applicant shall confirm their knowledge of any criminal liability for subsidy fraud and of the notification obligations under section 3 of the Subsidies Law.

12. LEGAL CONSEQUENCES IN THE EVENT OF INFRINGEMENTS

12.1 Quashing of the grant notification and extraordinary termination of the climate protection agreement

- (a) The quashing of the grant notification is governed by Sections 48 and 49 of the Administrative Procedure Act.
- (b) A grant notification shall be withdrawn in whole or in part - provided that the revocation does not cause any disadvantages for the awarding authority - even after it has become incontestable, if
 - (i) the administering agency becomes aware that
 - (A) the beneficiary has committed a serious deception with regard to eligibility requirements or has withheld information or is unable to provide the required evidence; or
 - (B) the beneficiary has attempted to obtain confidential information through which it could gain undue advantage in the bidding process; or
 - (C) the beneficiary has negligently or intentionally provided or attempted to provide misleading information that could materially influence the grant notification of the administering agency; or
 - (ii) at the end of the second year after the operational start date of the granted project, a relative greenhouse gas emission reduction of at least 50 % compared to the reference system is not achieved, unless the administering agency has specified a higher threshold in accordance with section 4.10(b)(iii); or

- (iii) the operational start of the granted project does not take place within 48 months after the grant notification becomes final. The administering agency may extend this deadline at the request of the beneficiary if the beneficiary demonstrates that it cannot start the supported production within the deadline for reasons beyond its control, in particular due to force majeure.
- (c) A grant notification may – provided that the revocation does not result in any disadvantages for the grantor and provided that the circumstances mentioned under (i) to (iii) are not already covered by section 12.1(b) – be withdrawn in whole or in part, even after it has become incontestable, if
 - (i) the beneficiary or Other Obligated Parties to Provide Information and to Cooperate fails to meet its obligations under section 10.2 of this scheme; or
 - (ii) the beneficiary does not submit Calculation Data in accordance with section 9.2 is incomplete, untimely or incorrect; or
 - (iii) the beneficiary fails to disclose to the administering agency any other funding applied for or granted at the time of or after submission of the application.
- (d) The case of a quashing of the grant notification (withdrawal or revocation), including the cases referred to in paragraphs (b) and (c) shall also be included in the climate protection agreement as extraordinary grounds for termination.

12.2 Contractual penalty

- (a) The climate protection agreement shall stipulate a contractual penalty to be paid by the beneficiary in the event that the beneficiary violates one of the following obligations intentionally or negligently.
 - (i) The operational start of the granted project does not take place at the latest 36 months after the grant notification becomes effective.
 - (ii) The beneficiary or Other Obligated Parties to Provide Information and to Cooperate does not fully comply with its obligations to provide information and cooperate within the meaning of section 10.2.
 - (iii) The beneficiary does not meet the specific greenhouse gas emission reduction specified in the bidding procedure over a period of five years, which need not be consecutive, from the operational start of the granted project.
 - (iv) The beneficiary submits Calculation Data in accordance with section 9.2 incomplete, untimely or incorrect.
 - (v) The beneficiary does not disclose to the administering agency any other funding applied for or granted at the time of application or after submission of the application.
 - (vi) Legal representatives of the beneficiary who are newly appointed at the beneficiary after the conclusion of the climate protection agreement do not agree within the meaning of section 12.3(b).

For each breach of duty, the contractual penalty to be paid by the beneficiary amounts to up to 10% of the maximum total granted amount, but at least EUR 30,000.

- (b) The climate protection agreement may provide for further cases of forfeiture of a contractual penalty.

12.3 Announcement of final penalty notices, court decisions and violations of this scheme

- (a) The administering agency shall publish the issuance of final penalty notices (*bestandskräftige Bußgeldbescheide*) and final court decisions imposing a fine or a monetary or custodial sentence in connection with a grant under this scheme or a climate protection agreement as well as serious violations of the grant notification or the climate protection agreement on its website for a period of 5 years. The notice shall specify the type of violation, the responsible legal representatives of the beneficiary and the sanction.
- (b) The beneficiary and its legal representatives must agree in the climate protection agreement to the disclosure in accordance with paragraph (a). Legal representatives of the beneficiary who are newly appointed at the beneficiary after conclusion of the climate protection agreement must also declare their consent.

13. VALIDITY PERIOD

This scheme shall enter into force on [•], subject to approval by the European Commission under state aid law.

Berlin, XX.XX.XXXX

Federal Ministry
for Economic Affairs and Climate Action

On behalf
Bernhard Kluttig

Annex 1

Technical annex

The amount of the annual grant or the annual repayments ("disbursement amount") is determined by the administering agency on the basis of the beneficiaries' bid using the following provisions. **Section 1** explains the general calculation rules of the disbursement amount. In doing so, the dynamisation of the reference system, which is applied in all cases and takes into account the dynamic development of the corresponding energy carrier prices, is described. **Section 2** describes how the dynamic development of the project's energy carrier prices can be mapped. In addition, **Section 3** describes the possible consideration of a substitution of the project's energy sources over time. **Section 4** then explains how the maximum granted amount is calculated for all design options. **Section 5** summarises the most important elements that go into determining the disbursement amount. The calculations are based on specific variables (normalised to a unit of the product). **Section 6** therefore defines specific variables starting from the absolute measurable quantities.

1. General calculation of the disbursement amount

(1) In principle, the disbursement amount of the annual granted sum is determined as shown in the following equation. The disbursement amount is limited by the maximum annual granted amount.

$$Z_{KSV} = (p_{KSV}^{Basis} + \Delta k_{KSV}^{ref} - p_{CO_2}^{eff}) \Delta e_{real} Q_{real} - R_{nKSV} [-R_{GP}]$$

The annual disbursement amount Z_{KSV} is therefore the difference between the basic agreement price (adjusted by a dynamisation component Δk_{KSV}^{ref} , see 1(3)) and an effective CO₂ price $p_{CO_2}^{eff}$ (see 1(2)), multiplied by the annual specific greenhouse gas emission reduction achieved in real terms Δe_{real} and multiplied by the annual production volume achieved in real terms Q_{real} , minus other fundings R_{nKSV} received by the company and, if applicable, minus the green surplus revenue lump sum or the actual green surplus revenue R_{GP} .

In addition, further corrections are possible for energy carrier price adjustments and the adjustment of specific demands and planned emission reductions. These and other elements are defined and explained in more detail below.

The basic agreement price p_{KSV}^{Basis} corresponds to the bid of the beneficiary, whereby for the calculation of the bid partly predetermined parameters are to be applied and restrictions are to be taken into account, in accordance with the requirements made in this scheme and explained in more detail in this Technical Annex.

Element	Description	Temporal variability
Z_{KSV}	Amount paid out under the climate protection agreement [EUR]	Determined annually
p_{KSV}^{Basis}	Basic agreement price [EUR/t CO ₂ -eq.]	Constant in time

$p_{CO_2}^{eff}$	Effective CO2 price [EUR/t CO ₂ -eq.]]	Determined annually
Δk_{KSV}^{ref}	Dynamisation component for the dynamic energy price adjustment of the reference [EUR / t CO ₂ -eq.]	Determined annually
Δe_{real}	Real specific greenhouse gas emission reduction of the project [t CO ₂ -eq./ME product]	Determined annually
Q_{real}	Real production volume of the project [ME Product]	Determined annually
R_{nKSV}	Adjustment date for consideration of other fundings [EUR]	Determined annually
$[R_{GP}]$	Adjustment term to take into account the green surplus revenue lump sum or the actual green surplus revenues [EUR]	Determined annually]

(2) The effective CO2 price under this and all other design variants is as follows:

$$p_{CO_2}^{eff} = \frac{((e_{ref} - z_{ref}) - (e_{KSV}^{real} - z_{KSV}^{real}))}{\Delta e_{real}} p_{EUA}^{real}$$

The effective CO2 price takes into account costs and revenues resulting from the European Emissions Trading Scheme (ETS). The difference between the project and the respective reference system subject to the ETS is considered here, taking into account the respective free allocation.

Element	Description	Temporal variability
e_{ref}	Specific emissions of the reference system [t CO ₂ -eq./ME product]	Constant in time
z_{ref}	Free specific allocation for the reference system [t CO ₂ eq./ME product]	Determined annually
e_{KSV}^{real}	Real specific emissions of the project [t CO ₂ eq./ME product]	Determined annually
z_{KSV}^{real}	Real specific free allocation of the project [t CO ₂ eq./ME product]	Determined annually
p_{EUA}^{real}	Indexed EUA price in the EU ETS [EUR/tCO ₂ -eq.]	Determined annually

(3) In order to take into account the development of the energy carrier price during the agreement period (dynamisation) of the reference, the following shall apply to the dynamisation component:

$$\Delta k_{KSV}^{ref} = - \frac{\sum_j d_j^{ref} (p_j^{real} - p_j^{Basis})}{\Delta e^{Basis}}$$

This adjustment compensates for higher or lower differential costs for the implementation of the project relative to the respective reference system, which result from the difference

between the actual energy carrier prices for the energy carriers of the reference system and the prices assumed for the bid calculation.

Element	Description	Temporal variability
d_j^{ref}	Specific demand of the reference system of energy carrier j [ME Input/ME Product]	Constant in time
p_j^{Basis}	Basic price for dynamised energy sources j Reference [EUR/ME Input]	Constant in time
p_j^{real}	Real indexed price for energy carrier j of the reference [ME input/ME product].	Determined annually
Δe^{Basis}	Specific greenhouse gas emission reduction of the project [t CO ₂ -eq./ME product]	Constant in time

(4) The sum of the basic agreement price and the dynamisation component described in 1(3) results in the dynamised agreement price.

(5) Any other fundings not taken into account shall be deducted from the disbursement amount. Fundings for operating costs for the project shall be deducted annually. Fundings for investments approved after the climate protection agreement has been approved shall be deducted in the year in which the grant is disbursed.

(6) The revenue generated by the beneficiary on the basis of the green product characteristic may be deducted from the disbursement amount in accordance with section 7.1 (a)(vii).

2. Calculation of the disbursement amount in the case of dynamisation of energy sources of the project

(1) The administering agency may provide for separate remuneration for individual energy carriers by means of an energy carrier price adjustment (dynamisation). If separate remuneration is paid for energy carriers without substitution of different energy carriers for each other (see section 3), the following equation shall apply to the payment:

$$Z_{\text{KSV}} = \left(p_{\text{KSV}}^{\text{Basis}} + \Delta k_{\text{KSV}}^{\text{Basis}} - p_{\text{CO}_2}^{\text{eff}} \right) \Delta e_{\text{real}} Q_{\text{real}} - R_{\text{nKSV}} [-R_{\text{GP}}]$$

In this case, the dynamisation component explained below replaces the one for the case described in section 1.

Element	Description	Temporal variability
---------	-------------	----------------------

Δk_{KSV}^{uBasis}	Dynamisation component for the dynamic energy carrier price adjustment [EUR / ME Product]	Determined annually
---------------------------	--	---------------------

(2) Together with the bid, the applicants shall define a planned energy carrier mix of those energy carriers that can be dynamised. The administering agency shall make known which energy carriers can be dynamised. This energy carrier mix is defined by the specific consumption of the respective energy carriers d_i^{Basis} . This energy carrier mix (u) i.e. a portfolio of specific energy carrier requirements d_i^{Basis} for a unit of quantity of the product, is referred to here as the basic energy carrier mix u^{Basis} in consistency with the following section. u^{Basis} This energy carrier mix is included in the calculation of the basic agreement price p_{KSV}^{Basis} and is the basis for the planned specific greenhouse gas emission reduction Δe^{Basis} . It is unchangeable for the duration of the agreement.

(3) The dynamisation component is then calculated according to the following formula, also taking into account the dynamisation of the reference:

$$\Delta k_{KSV}^{uBasis} = \frac{\sum_i d_i^{Basis} (p_i^{real} - p_i^{Basis})}{\Delta e^{Basis}} - \frac{\sum_j d_j^{ref} (p_j^{real} - p_j^{Basis})}{\Delta e^{Basis}}$$

The dynamisation component defined in this way represents a positive agreement price adjustment if the energy carrier price adjustment for the dynamised energy carriers of the project is greater than that for the dynamised energy carriers of the respective reference system. In the opposite case, the dynamisation component becomes negative. The risk resulting from changes in the dynamised energy carrier prices compared to the assumed basic prices is thus taken into account within the framework of the further requirements and restrictions of this scheme.

Element	Description	Temporal variability
d_i^{Basis}	Specific demand of the project for energy source i [ME input/ME product].	Constant in time
d_j^{ref}	Specific demand of the reference system for energy carrier j [ME Input/ME Product]	Constant in time
p_i^{Basis}	Basic price for dynamised energy carriers i of the project [EUR/ME input].	Constant in time
p_i^{real}	Actual indexed price for energy carrier i of the project [EUR/ME input].	Determined annually
p_j^{Basis}	Basic price for dynamised energy sources j Reference [EUR/ME Input]	Constant in time
p_j^{real}	Real indexed price for energy carrier j or the reference [EUR/ME product].	Determined annually

Δe^{Basis}

Specific greenhouse gas emission reduction of the project using the specified energy source mix
[t CO₂ -eq./ME product]

Constant in time

3. Calculation of the disbursement amount for substitutable energy sources

(1) The administering agency may provide for the possibility of adjusting the energy carrier mix of the project on a calendar year basis during the agreement period in order to allow for substitution of energy carriers over time, to the extent that such substitution is feasible in terms of substance and scope, taking into account the other requirements and restrictions of this scheme. Substitution here means the (partial) exchange of at least two energy carriers for each other. This only leads to separate provisions if dynamisation is provided for at least one of these energy carriers. If there are no dynamised energy carriers, section 1 continues to apply for the determination of the payment. The energy carrier mix of the respective reference system is unchangeable during the agreement period.

(2) The planned as well as the possible energy carrier mixes (index u) of all relevant energy carriers shall be specified by the applicant with the bid. On the one hand, a planned energy carrier mix shall be indicated for each year of the agreement period in order to show a planned change in the substitutable energy carriers over time at the time of bid submission. The planned energy carrier mixes to be stated annually also determine the planned specific and relative greenhouse gas emission reductions for the individual years.

(3) Secondly, at least 50 technically justifiable energy carrier mixes (i.e. $u = 1 \dots 50$) must be defined in the bid in order to be able to react to changes compared to the plan. These must evenly reflect the technically feasible degrees of freedom (in the sense of the substitutability of the energy carriers) in operation.

(4) For each of the energy carrier mixes specified according to (2) and (3), the specific greenhouse gas emission reduction to the reference system shall be stated. The annual energy carrier mixes must always be compatible with the minimum requirements for relative greenhouse gas emission reductions (section 4.10(b) of the scheme).

(5) The bid must also define at least one technically feasible mix of energy sources, the use of which will reduce the project's remaining greenhouse gas emissions to such a low level that the minimum requirement for a climate-neutrality target state is met (section 4.10(b)(ii) of the scheme). The technical feasibility and achievability of this energy mix must be demonstrated.

(6) The annual grant amount is then determined according to the following equation:

$$Z_{\text{KSV}} = (p_{\text{KSV}}^{\text{Basis}} + \Delta m_{\text{KSV}}^u + \Delta k_{\text{KSV}}^u - p_{\text{CO}_2}^{\text{eff}}) \Delta e_{\text{real}} Q_{\text{real}} - R_{\text{nKSV}} [-R_{\text{GP}}]$$

Here, the dynamisation component for the energy carrier price adjustments described in sections 1 and 2 is replaced accordingly. In addition, there is an adjustment term Δm_{KSV}^u which includes the corrections for, if necessary, calendar-yearly adjustments of the energy carrier mix to be applied.

Element	Description	Temporal variability
Δk_{KSV}^u	Dynamisation component for the dynamic energy price adjustment, determined for the annual energy carrier mix to be applied u [EUR / t CO ₂ -eq.]	Determined annually
Δm_{KSV}^u	Adjustment of the basic agreement price to the annual energy carrier mix to be applied u [EUR/t CO ₂ -eq.]	Determined annually

(7) A basic energy carrier mix u^{Basis} shall be defined for the bid u^{Basis} in accordance with 3(12), with consumptions d_i^{Basis} which lead to the basic agreement price p_{KSV}^{Basis} and achieves the greenhouse gas emission reduction Δe^{Basis} .

(8) In each year of the agreement period, the payout formula shall be adjusted by taking into account the energy carrier mix u to be invested in the following formula for the adjustment term:

$$\Delta m_{KSV}^u = p_{KSV}^{Basis} \left(\frac{\Delta e^{Basis}}{\Delta e^u} - 1 \right) + \frac{1}{\Delta e^u} \sum_i p_i^{Basis} (d_i^u - d_i^{Basis})$$

On the one hand, this term adjusts the basic agreement price to the planned specific greenhouse gas emission reduction of the project to be adjusted by the change in the energy carrier mix, and on the other hand, the differential cost changes resulting from the adjustment of the energy carrier mix are taken into account.

Element	Description	Temporal variability
d_i^u	Specific demand of the project for energy carrier i in the energy carrier mix u [ME Input/ME Product]	Defined ex ante, variable in terms of time of use
Δe^u	Specific planned greenhouse gas emission reduction of the project through use of the energy source mix u [t CO ₂ eq./ME product]	Defined ex ante, variable in terms of time of use

(9) The dynamic modification term for the dynamic energy price adjustment shall be calculated by analogy with Section 2, whereby the energy carrier mix to be applied in the respective year shall be used and the dynamic modification of the reference shall also be taken into account:

$$\Delta k_{KSV}^u = \frac{\sum_i d_i^u (p_i^{real} - p_i^{Basis})}{\Delta e^u} - \frac{\sum_j d_j^{ref} (p_j^{real} - p_j^{Basis})}{\Delta e^u}$$

The supplementary notes to section 2(3), apply accordingly.

(10) The sum of the basic agreement price, the dynamisation component and the adjustment term for the annual energy carrier mix shall form the dynamised agreement price.

(11) The energy source mix u to be applied for a given year which is decisive for the annual disbursement amount and which also determines the planned emission reduction, is that which has the smallest deviation from the consumption actually realised in the operation of the facilities covered by the project. In order to determine the energy carrier mix to be used, the actual consumption of the corresponding energy carriers is required and must be provided by the beneficiary. The energy carrier mix to be used is the one with the smallest deviation F_u where F_u is determined for each energy carrier mix in the list of all technical energy carrier mixes according to (3) for the corresponding year according to the following formula:

$$F_u = \sum_i [d_i^u - d_i^{\text{real}}]^2$$

The minimisation of this formula ensures that the energy carrier mix to be applied always corresponds to the closest permissible energy carrier mix actually realised, irrespective of any upward or downward deviation of the individual actual energy carrier requirements relative to the permissible energy carrier requirements defined ex ante. This procedure ensures a balanced consideration of risk hedging on the one hand and desired incentive effects on the other.

Element	Description	Temporal variability
F_u	Deviation of the energy source mix u from the real measured demand	Determined annually
d_i^{real}	Specific real measured demand of the project using the energy carrier i [ME input/ME product].	Determined annually

(12) The applicant shall determine the basic energy carrier mix u^{Basis} for determining the basic agreement price offered from the portfolio of Energy Carrier Mixes indicated in parallel to the bid as follows:

- a. Over the entire agreement period, average volume-weighted energy carrier consumptions for all calendar years t from the planned energy carrier mixes u_t are determined:

$$d_i^{\emptyset} = \frac{\sum_t Q_t^{\text{Plan}} d_i^{u_t}}{\sum_t Q_t^{\text{Plan}}}$$

- b. The basic energy carrier mix is the one that has the smallest deviation from the respective average values. This is determined according to 3(11). The energy carrier mix to be applied for the basic parameters u is the one with the smallest deviation $F_u^{\emptyset}$ where $F_u^{\emptyset}$ is determined for each energy carrier mix u according to the following formula.

$$F_u^{\emptyset} = \sum_i [d_i^u - d_i^{\emptyset}]^2$$

Element	Description	Temporal variability
---------	-------------	----------------------

$d_i^\emptyset$	Average planned demand of the project for energy sources i [ME Input/ME Product]	Constant in time
Q_t^{Plan}	Planned production volume of the KSV project in year t [ME Product]	Constant in time
$F_u^\emptyset$	Deviation of the energy source mix u from the average planned demand for energy carriers	Constant in time

4. Determination of the maximum grant amount

(1) In the event that no dynamisation of energy carriers of the project takes place, the maximum annual disbursement amount shall be calculated as follows:

$$Z_{\text{KSV}}^{\text{max}} = (p_{\text{KSV}}^{\text{Basis}} + \Delta k_{\text{max.KSV}}^{\text{ref}}) \Delta e_{\text{KSV}}^{\text{Basis}} Q_{\text{plan}}$$

Element	Description	Temporal variability
$Z_{\text{KSV}}^{\text{max}}$	Maximum annual grant amount [EUR]	Determined for each year
$\Delta k_{\text{max.KSV}}^{\text{ref}}$	Maximised dynamisation component for the reference system [EUR/t-CO ₂ -eq.]	Determined for each year

(2) The term of the maximised dynamisation component takes into account the maximum of the additionally required budget that could be paid out through the dynamic modification of the reference. The following applies to the term of the maximised dynamisation component:

$$\Delta k_{\text{max.KSV}}^{\text{ref}} = \frac{\alpha}{1 + \alpha} \frac{\sum_j d_j^{\text{ref}} p_j^{\text{Basis}}}{\Delta e^{\text{Basis}}}$$

Element	Description	Temporal variability
α	Factor for determining the maximised dynamisation component	Constant in time

(3) In the event that dynamisation of energy carriers of the project takes place, but without substitution of energy carriers, the maximum annual disbursement amount shall be calculated as follows:

$$Z_{\text{KSV}}^{\text{max}} = (p_{\text{KSV}}^{\text{Basis}} + \Delta k_{\text{max.KSV}}^{\text{uBasis}}) \Delta e^{\text{Basis}} Q_{\text{plan}}$$

Element	Description	Temporal variability
$\Delta k_{\text{max.KSV}}^{\text{uBasis}}$	Maximised dynamisation component [EUR/t-CO ₂ -eq.]	Determined for each year

(4) Here, the maximised dynamisation component applies:

$$\Delta k_{\max.\text{KSV}}^{\text{Basis}} = \alpha \left(\frac{\sum_i d_i^{\text{Basis}} p_i^{\text{Basis}}}{\Delta e^{\text{Basis}}} + \frac{1}{1 + \alpha} \frac{\sum_j d_j^{\text{ref}} p_j^{\text{Basis}}}{\Delta e^{\text{Basis}}} \right)$$

In addition to 4(2), the basic prices and demands of the dynamised energy sources of the project are thus also used to define the maximised dynamisation component.

(5) In the event that at least one substitutable energy carrier is dynamised, the maximum grant amount shall be calculated using the planned energy carrier mix of the respective year as follows:

$$Z_{\text{KSV}}^{\max} = (p_{\text{KSV}}^{\text{Basis}} + \Delta m_{\text{KSV}}^u + \Delta k_{\max.\text{KSV}}^u) \Delta e^u Q_{\text{plan}}$$

(6) The maximum dynamisation component is defined according to 4(4), but adjusted to the planned energy carrier mix of the year and, as a result of the changed energy carrier mix, also to a changed planned greenhouse gas emission saving:

$$\Delta k_{\max.\text{KSV}}^u = \alpha \left(\frac{\sum_i d_i^u p_i^{\text{Basis}}}{\Delta e^u} + \frac{1}{1 + \alpha} \frac{\sum_j d_j^{\text{ref}} p_j^{\text{Basis}}}{\Delta e^u} \right)$$

Element	Description	Temporal variability
$\Delta k_{\max.\text{KSV}}^u$	Maximised dynamisation component [EUR/t-CO ₂ -eq.]	Determined for each year

(7) The factor α for determining the maximised dynamisation component is 0.2. The administering agency can adjust this factor in the funding call.

(8) In the event that the same energy carrier is dynamised on the part of the project and the reference, only the difference in demands is taken into account in the calculation of the maximum grant amount. If the demand of the reference is greater, the difference is treated as energy carriers that are only used in the reference, otherwise as energy carriers that are only used in the project.

(9) The maximum total grant amount is defined as the sum over the maximum grant amounts of the respective years, calculated according to section (2), (4) or (6) depending on the application.

$$Z_{\text{KSV}}^{\max.\text{gesamt}} = \sum_{t=1}^{10} Z_{\text{KSV}}^{\max,t}$$

Element	Description	Temporal variability
$Z_{\text{KSV}}^{\max.\text{gesamt}}$	Maximum total grant amount [EUR]	Constant
$Z_{\text{KSV}}^{\max,t}$	Annual maximum total grant amount calculated according to section (1), (4) or (7) depending on the application case [EUR]	Determined for each year

5. Bidding procedure and determination of the basic parameters

(1) The administering agency shall publish the following information:

- a. The list of all energy sources that can be dynamised
- b. The basic prices p_i^{Basis} for all energy sources according to a
- c. The indices to be applied for the determination of p_i^{real} for all energy sources according to a
- d. Specific consumption of the reference d_j^{ref} as well as the basic prices of these energy sources p_j^{Basis} and the applicable indices p_j^{real}
- e. Specific direct emissions of the reference e_{ref}

(2) For bids without substitutable energy sources, the applicant shall submit the following information to determine the annual payments:

- a. The basic agreement price $p_{\text{KSV}}^{\text{Basis}}$
- b. The planned baseline emission savings Δe^{Basis} over the agreement period
- c. The energy carrier mix u , which is constant during the agreement period and on which the calculation is based and which is composed of the planned specific demands of the energy carriers d_i^{Basis}
- d. The annual specific free allocation of the project
- e. The annual planning of production volumes over the agreement period.

(3) For bids with substitutable energy sources, the applicant shall submit the following information to determine the annual payments:

- a. The basic agreement price $p_{\text{KSV}}^{\text{Basis}}$
- b. The baseline emission saving Δe^{Basis}
- c. A list of the 50 technically justified, possible energy carrier mixes, including the basic energy carrier mix u^{Basis} which are made up of the planned specific requirements of the energy carriers d_i^u as well as a technically feasible energy carrier mix through the use of which the target state of climate neutrality defined in this scheme is met.
- d. The emission saving Δe^u for each specified energy source mix
- e. The annual specific greenhouse gas emissions of the project over the agreement period
- f. A planned energy source mix for each agreement year
- g. An annual planning of the production quantities over the agreement period.

6. Extended variable definition

(1) The realised specific emissions of the project are calculated from the absolute measured emissions and the realised production volume:

$$e_{\text{KSV}}^{\text{real}} = \frac{E_{\text{KSV}}^{\text{real}}}{Q_{\text{KSV}}^{\text{real}}}$$

(2) The real specific free allocation of the project is calculated from the actual absolute free allocation and the realised production quantity:

$$z_{KSV}^{real} = \frac{Z_{KSV}^{real}}{Q_{KSV}^{real}}$$

(3) The specific emissions of the reference system e_{ref} shall be specified by the administering agency in the funding call.

(4) The free specific allocation of the reference system z_{ref} shall be determined by the administering agency.

(5) The real specific greenhouse gas emission reduction shall be calculated from data collected for the specific project in accordance with

$$\Delta e_{real} = e_{ref} - e_{KSV}^{real}$$

(6) The specific real measured demand parameters of the project are calculated from the absolute measured consumption and the realised production:

$$d_i^{real} = \frac{D_i^{real}}{Q_{KSV}^{real}}$$

Element	Description	Temporal variability
E_{KSV}^{real}	Realised emissions of the project [t CO ₂ -eq.]	Determined annually
Q_{KSV}^{real}	Realised production of the project [ME Product]	Determined annually
Z_{KSV}^{real}	Realised free allocation of the project [t CO ₂ -eq.]	Determined annually
D_i^{real}	Real measured demand of the project for energy sources i [ME Input]	Determined annually

Annex 2

Evaluation criteria

In the following, the criteria for evaluating the projects in the bidding process are described using formulas. **Section 1** defines the criterion of funding cost efficiency, which is given the highest weight. **Sections 2** and **3** describe the criteria of relative greenhouse gas emission reduction and relative energy intensity, which are given a lower weight. **Section 4** presents how the criteria are offset against each other to determine the total score.

1. Funding cost efficiency

(1) The criterion of funding cost efficiency is calculated as follows.

$$F = p_{KSV}^{Basis} + \frac{S_0 + \sum_{t=1}^{15} \frac{S_t}{(1+\epsilon)^t}}{\sum_{t=1}^{15} \frac{\Delta e_t^u Q_t^{plan}}{(1+\epsilon)^t}}$$

The criterion is therefore calculated as the sum of the basic agreement price and the cost efficiency of other fundings already awarded at the time of bidding.

The cost efficiency of other funding is determined from the amounts of other fundings paid before the start of the project (S_0), and the discounted sum of the amounts of other funding that will be paid (S_t) from the start of the project in the respective years t in relation to the discounted sum of the greenhouse gas emissions saved.

Element	Description
F	Funding cost efficiency of the project [EUR/t CO ₂ -eq.]
S_0	Total amount of other fundings already granted at the time of bidding and paid out before the start of the project [EUR]
S_t	Sum of the other fundings already granted at the time of bidding that will be paid out in year t [EUR]
ϵ	Interest rate to be applied of 2%
Δe_t^u	Planned greenhouse gas emission reduction in year t defined for the energy source mix u in this year [t CO ₂ -eq./ME product]
Q_t^{plan}	Planned production volume of the KSV project in year t [ME Product]
t	The year of grant, starting with 1 from the calendar year in which the project begins.

(2) The points for the criterion of funding cost efficiency are then calculated according to:

$$P_F = \frac{F_{max} - F}{F_{max} - F_{min}} \cdot 100$$

Element	Description
P_F	Points from the criterion of funding cost efficiency
$F_{\max}$	Highest value for the funding cost efficiency of all projects admitted to the bidding procedure
$F_{\min}$	Lowest value for the funding cost efficiency of all projects admitted to the bidding procedure

2. Relative greenhouse gas emission reduction

(1) The relative greenhouse gas emission reduction criterion is calculated as follows:

$$R = \frac{1}{5} \sum_{t=1}^5 \frac{\Delta e_t^u}{e_{\text{ref}}}$$

Accordingly, this criterion evaluates the relative greenhouse gas emission reduction averaged over the first five years of the agreement period. Averaging over the first five years ensures that projects that achieve a higher relative greenhouse gas emission reduction in a shorter period of time receive a higher score.

Element	Description
R	Relative greenhouse gas emission reduction of the project in the first 5 years of the agreement period
Δe_t^u	Planned greenhouse gas emission reduction in the year of the funding period t defined for the energy source mix u in this year [t CO ₂ -eq./ME product]
e_{ref}	Specific emissions of the reference [t CO ₂ -eq./ME product]

(2) The points for the criterion of relative greenhouse gas emission reduction are then calculated according to:

$$P_R = \min \left(\max \left(\frac{R - R_{\min}}{R_{\max} - R_{\min}} \cdot 100; 0 \right); 100 \right)$$

Element	Description
P_R	Points from the greenhouse gas emission reduction criterion
$R_{\max}$	Maximum creditable relative greenhouse gas emission reduction, set at 100% or set differently by the administering agency
$R_{\min}$	Minimum creditable relative greenhouse gas emission reduction, set at 50% or set differently by the administering agency

3. Relative energy intensity

(1) When calculating the relative energy intensity, all energy sources are to be included, not only those that are dynamised. The calculation shall be based on the energy carrier mix that also forms the basis for the access criterion of climate neutrality:

$$E = \frac{\sum_i d_i^{u^{KN}} a_i}{\sum_j d_j^{ref} a_j}$$

Accordingly, this criterion evaluates the energy intensity for the production of the respective product. The standardisation to the reference process serves to make the projects comparable with each other.

Element	Description
E	Relative energy intensity of the project using the energy sources used in the access criterion climate neutrality
d_j^{ref}	Specific demand of the reference system for energy carrier j [MWh/ME Product]
a_j	Factor for taking into account the conversion losses in the production of the energy carrier j
$d_i^{u^{KN}}$	Specific demand of the project for energy carrier i for the energy carrier mix u which fulfils the access criterion of climate neutrality [MWh/ME Product]
a_i	Factor for taking into account the conversion losses in the production of the energy carrier i

(2) The factors for taking into account the conversion losses during production shall be determined according to the physical aggregate state of the energy carrier at the time of use in the project or in the reference system. In this context, non-fossil energy carriers shall be treated equally to fossil energy carriers. The factors are set as follows:

Energy source	Factor to account for conversion losses during production
Solid energy sources	2
Liquid energy sources	1,7
Gaseous energy sources	1,4
Electricity	1

(3) In order to determine the specific requirements, the lower calorific value shall be used for the conversion from units of quantity into units of energy.

(4) The points for the criterion of relative energy intensity are then calculated according to:

$$P_E = \frac{E_{\max} - E}{E_{\max} - E_{\min}} \cdot 100$$

Element	Description
P_E	Points from the relative energy intensity criterion
$E_{\max}$	Maximum relative energy intensity of all projects admitted to the bidding procedure with the same reference system
$E_{\min}$	Minimum relative energy intensity of all projects admitted to the bidding procedure with the same reference system

4. Total points

(1) The total number of points of a project is then calculated according to:

$$P_{\text{gesamt}} = g_F P_F + g_R P_R + g_E P_E$$

Element	Description
P_{gesamt}	Total score of the project
$g_F = 0,7$	Weighting of the funding cost efficiency
$g_R = 0,15$	Weighting of the relative greenhouse gas emission reduction
$g_E = 0,15$	Weighting of the relative energy intensity

(2) The administering agency may set different weightings for the relative greenhouse gas emission reduction and the relative energy intensity in the funding call. The sum of the weightings shall be 1 and the weighting of the funding cost efficiency shall be 0,7.