



2024/2418

17.9.2024

COMMISSION DECISION (EU) 2024/2418

of 11 December 2023

on the measure State aid SA.53625 (2021/C) implemented by Germany for Lignite phase-out

(notified under document C(2023) 8551)

(Only the English text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular the first subparagraph of Article 108(2) thereof,

Having regard to the Agreement on the European Economic Area, and in particular Article 62(1)(a) thereof,

Having called on interested parties to submit their comments pursuant to the provision(s) ⁽¹⁾ and having regard to their comments,

Whereas:

1. PROCEDURE

- (1) Following pre-notification contacts, Germany notified to the Commission, by electronic notification of 2 December 2020, pursuant to Article 108(3) TFEU, support to Lausitz Energie Kraftwerke AG ('LEAG') (the 'LEAG measure') and to RWE Power AG ('RWE') (the 'RWE measure') for the phase-out of lignite powered electricity generation (together referred to as the 'measure'). Germany submitted additional information on 13 and 14 January 2021.
- (2) The Commission also received spontaneous submissions from third parties. Submissions of Green Planet Energy ('GPE') and an anonymous party were forwarded to Germany for comments on 7 October 2020, to which Germany responded on 17 November 2020. In addition, LEAG submitted observations on 10 December 2020.
- (3) On 2 March 2021, the Commission adopted a decision (hereinafter 'the Opening Decision') ⁽²⁾ to initiate the formal investigation procedure in relation to the support to LEAG and to RWE.
- (4) Germany submitted comments on the Opening Decision on 1 April 2021. In addition to the comments of Germany, the Commission received comments from 27 third parties. LEAG and RWE submitted their comments on the Opening Decision on 7 June 2021. Germany presented its observations on the third parties' comments on 6 September 2021, and replied on 3 September 2021 to a request for information from the Commission dated 11 August 2021.
- (5) On 17 May 2022, a notice was published in the *Official Journal of the European Union* inviting third parties to submit comments, pursuant to Article 108(2) of the TFEU, on the applicability and application of the Commission's Guidelines on State aid for climate, environmental protection and energy 2022 (the 'CEEAG') ⁽³⁾ and, where relevant, on the compatibility grounds set out in those guidelines, including in Section 3 and Section 4.12 thereof, in relation to the LEAG measure and the RWE measure, in respect of which the Commission initiated the formal investigation (the 'Public Consultation') ⁽⁴⁾.

⁽¹⁾ OJ C 177, 7.5.2021, p. 50; OJ C 199, 17.5.2022, p. 9; OJ C 131, 14.4.2023, p. 45.

⁽²⁾ Commission decision of 2 March 2021 in State Aid SA.53625 (2020/N) – Germany – Lignite phase-out (OJ C 177, 7.5.2021, p. 50).

⁽³⁾ OJ C 80, 18.2.2022, p. 1.

⁽⁴⁾ OJ C 199, 17.5.2022, p. 9.

- (6) By letters of 18 May 2022, the Commission informed Germany and the third parties which had submitted comments following the publication of the Opening Decision, of the invitation published on 17 May 2022 and invited them to submit comments.
- (7) Germany did not submit comments. The Commission received comments from 19 third parties. LEAG and RWE submitted their comments on 17 June 2022. By its letter of 7 September 2022, Germany submitted that it does not intend to submit observations on the new third parties' comments.
- (8) On 23 December 2022, Germany submitted to the Commission amendments to the notification of 2 December 2020 concerning the RWE measure in view of the agreement with RWE of 4 October 2022 for an accelerated phase-out of coal-fired power generation by 2030 in the Rhenish lignite mining area (the 'amended RWE measure' or the 'notified measure').
- (9) On 16 November 2022, the Commission received spontaneous comments from eight parties concerning the amended RWE measure, which were transmitted to Germany on 2 December 2022. Germany presented its observations on these comments on 11 January 2023.
- (10) On 2 March 2023, the Commission adopted a decision extending the formal investigation procedure into the RWE measure (the 'Extension Decision') ⁽⁵⁾.
- (11) Germany submitted comments on the Extension Decision on 31 March 2023. The Commission received comments from 12 third parties. RWE and LEAG submitted their comments on the Extension Decision on 12 and 15 May 2023, respectively. Germany presented its observations on the third parties' comments on 6 July 2023.
- (12) Germany exceptionally agrees to waive its rights deriving from Article 342 TFEU in conjunction with Article 3 of Regulation No 1/1958 ⁽⁶⁾ and to have this Decision adopted and notified in English.

2. SCOPE OF THE DECISION

- (13) The Commission considers that some of the facts and circumstances described in the Opening Decision have changed after the adoption of that decision, notably the RWE measure, as identified in the Opening Decision, has been modified since the adoption of that decision, in particular as regards the closure dates and the calculation of RWE's forgone profits. Consequently, the Commission extended the scope of its investigation in the Extension Decision.
- (14) The scope of this decision is limited to the assessment of the amended RWE measure. The Commission's formal investigation into the LEAG measure is ongoing and LEAG measure does not fall within the scope of this decision but will be assessed separately.
- (15) The Commission notes that the RWE measure, initially and as amended, is not awarded on the basis of an aid scheme and does not constitute a notifiable award of aid on the basis of an aid scheme. The Commission thus considers that it constitutes an individual aid measure, as defined in Article 1(e) of the State aid Procedural Regulation ⁽⁷⁾. The compensation in favour of RWE and LEAG constitute two separate individual measures and are not part of an aid scheme. This is in view of the following: i) the legal basis (see recital (30) below) does not define the beneficiaries of the measure in a general and abstract manner, but clearly and explicitly mentions that there are two recipients (RWE and LEAG); ii) the compensation is linked to a specific situation (the lignite phase-out); and iii) the legal basis lays down the specific and distinct amounts to be paid to the two recipients and the period. Paragraph 44(1) of the legal basis sets out the entitlement of RWE and LEAG to a compensation of EUR 2.6 billion and EUR 1.75 billion respectively. In addition, Germany and these operators signed the 'Public-law contract on the reduction and termination of lignite-fired electricity generation in Germany' (the '2021 contract').

⁽⁵⁾ OJ C 131, 14.4.2023, p. 45.

⁽⁶⁾ Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385/58).

⁽⁷⁾ 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).

3. DETAILED DESCRIPTION OF THE NOTIFIED MEASURE

3.1. Germany's climate objectives and the objective of the notified measure

- (16) Germany aims to achieve greenhouse gas ('GHG') neutrality by 2045. In this context, Germany has set an interim target for 2030 of reducing the economy-wide GHG emissions on the national level by at least 65 % compared to 1990 levels. Germany's national climate targets are enshrined in the Federal Climate Change Act (*Bundes-Klimaschutzgesetz*), which was approved in 2019 and amended in 2021. For 2020 to 2030, the Federal Climate Change Act defines quantified, annual GHG emissions limits for six individual sectors: energy, industry, buildings, transport, agriculture, and waste and others. The targets are set in line with the European GHG reduction plans, following a linear trajectory⁽⁸⁾. Furthermore, emission limits under the EU Effort Sharing Regulation⁽⁹⁾ (covering the non-ETS sector) are legally binding. In order to stay within these limits, Germany submits that the specific target for the energy sector needs to be reached in time. The CO₂ emissions from the energy sector will have to be reduced from approximately 257 million tonnes CO₂ eq. in 2022⁽¹⁰⁾ to 108 million tonnes CO₂ eq. by 2030.
- (17) Germany considers the reduction of coal-fired power generation critical to achieve its climate goals. Germany envisages the phase-out from coal-fired power generation by 2038 at the latest. This includes both hard coal and lignite. In 2022, coal-fired power generation accounted for 31 % of Germany's electricity mix, whereof lignite contributed 20 %-points⁽¹¹⁾. Lignite-fired power plants emitted 110 million tonnes of CO₂ in 2021 according to preliminary data⁽¹²⁾. This represents approximately 51 % of the CO₂ emissions of the electricity sector in that year⁽¹³⁾.
- (18) Germany estimated that RWE's lignite installations affected by the phase-out accounted for approximately 67 million tonnes of CO₂ emissions in 2018 and approximately 52 million tonnes of CO₂ emissions in 2019⁽¹⁴⁾. Germany submitted that the exact quantification of the environmental benefits of the notified measure is complex and highly dependent on the assumptions to be made. Based on the assumptions used in the revised calculation (see section 3.6), Germany calculated that the notified measure would save a gross amount of 51 million tonnes of CO₂ emissions. However, as the revised calculation only concerns a part and not all of RWE's lignite-fired power plants, this estimate significantly underestimates the entire effect, and an indication of the amount of aid per tonne of CO₂ equivalent emissions avoided is not possible. Such a figure would also be very inaccurate because a possible rebound effect⁽¹⁵⁾ would not be taken into account.

⁽⁸⁾ Online: <https://www.gesetze-im-internet.de/ksg/BJNR251310019.html>.

⁽⁹⁾ Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

⁽¹⁰⁾ Online: <https://www.umweltbundesamt.de/daten/umweltindikatoren/indikator-emission-von-treibhausgasen#:~:text=Die%20deutschen%20E2%81%A0Treibhausgas%E2%81%A0, die%20vollst%C3%A4ndige%20Treibhausgasneutralit%C3%A4t%20erreicht%20werden.>

⁽¹¹⁾ Online: <https://www.ag-energiebilanzen.de/>. According to Strommix 2022, lignite power generation was 116 TWh, which corresponds to a 20 % share.

⁽¹²⁾ Entwicklung der spezifischen Treibhausgas-Emissionen des deutschen Strommix in den Jahren 1990 – 2022, Umweltbundesamt, April 2023, p. 23, available at https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2023_05_23_climate_change_20-2023_strommix_bf.pdf.

⁽¹³⁾ The CO₂ emissions of the electricity sector amounted to 215 million tonnes in 2021 according to Entwicklung der spezifischen Treibhausgas-Emissionen des deutschen Strommix in den Jahren 1990 – 2022, Umweltbundesamt, April 2023, p. 23.

⁽¹⁴⁾ This calculation is based on block-specific data from the ENTSO-E Transparency Platform on hourly electricity generation volumes evaluated with the emission factor for lignite in the Rhenish lignite mining area and the power plant-specific efficiencies.

⁽¹⁵⁾ Efficiency increase oftentimes reduces product or service costs, which can in turn ramp up consumption (due to reduced prices), thus partly cancelling out the original savings. This is known as the rebound effect. More info online: <https://www.umweltbundesamt.de/en/topics/waste-resources/economic-legal-dimensions-of-resource-conservation/rebound-effects>.

- (19) Further, Germany submits that the legal basis of the notified measure (described in recital (30)) foresees the cancellation of CO₂ emission allowances amounting to the additional emission reductions caused by the closure of lignite-fired power installations taking the intervention of the Market Stability Reserve into account ⁽¹⁶⁾. When determining the number of CO₂ allowances that will be deleted, Germany would factor in replacement technologies.
- (20) Germany submits that the notified measure aims at decommissioning the power plants before the end of their technical and economic lifetime, on the basis of a predictable and mandatory decommissioning path. This leads to a reduction of power generation capacity in the market although the demand for electricity remains the same or will increase in the future. Other market participants also benefit from the predictability provided by the mandatory decommissioning path, because it is also clear to them when which generation capacities will leave the market. Thus, the reduction of generation capacity by the phase-out of lignite fired power plants creates room for the additional expansion of other generation capacities, including those of renewable energy sources ('RES').
- (21) Germany further submits that the objective of the notified measure is to phase-out lignite-fired power plants to significantly reduce GHG emissions in the electricity sector, which in turn will lead to Germany achieving its climate neutrality target by 2045 and fulfilling the interim target of 2030. Germany further points out that, although the presence of RES in the German electricity mix is already high (for example in 2022, the electricity production from RES increased to 47 % ⁽¹⁷⁾ and during Q1 of 2023, RES production rose to 50,3 % of Germany's power consumption ⁽¹⁸⁾), it is not sufficient to achieve the climate neutrality targets set by Germany in time.
- (22) In Germany's view, irrespective of the rising RES penetration, the emissions reduction associated with the lignite phase-out are needed to achieve Germany's climate targets. Growing RES penetration alone would increase the supply of carbon-free electricity in the market without creating new emissions, but it would not lead to a sufficiently fast reduction of already existing generation capacities producing emissions. This is especially true for lignite power plants that have relatively low operating costs and are less likely to be pushed out of the market than more costly and less emissions-intensive fossil fuel alternatives (such as gas). Therefore, in order to achieve the targets, both, rising RES penetration and reduction of existing fossil fuel-based generation capacities is needed. Hence, according to Germany, State intervention is necessary.

3.2. Elaboration of policy measures

- (23) In order to secure a social consensus on a revised energy and climate policy, the German government appointed on 6 June 2018 the Commission on Growth, Structural Change and Employment (the 'Coal Commission'), whose members represented a broad cross-section of societal, political and economic actors.
- (24) The Coal Commission's proposals were presented in January 2019 and aimed at reaching the national climate targets, whilst at the same time meeting the objectives of security of supply, affordable electricity and safeguarding prospects for those employed in coal regions. With regard to hard coal and lignite-fired power generation, it proposed a phase-out by 2038. To achieve this goal, it proposed a combination of mutually agreed closure arrangements between the government and lignite operators, as well as tenders to encourage early closure of hard coal and small lignite plants.
- (25) In addition to the Coal Commission's proposals, Germany assessed the following alternative policy options to achieve the envisaged CO₂ emission reductions: (i) reliance on the existing EU Emissions Trading System ('ETS') and the targets for renewable energy; (ii) a national minimum price for CO₂ for sectors already covered by the EU ETS; and (iii) regulatory closure without a compensation. Germany explained that these options were not retained in view of the following:

⁽¹⁶⁾ The market stability reserve aims to address the surplus of emission allowances that has built up in the EU emission trading system since 2009 and to improve the system's resilience to major shocks by adjusting the supply of allowances to be auctioned.

⁽¹⁷⁾ Online: <https://www.bdew.de/service/publikationen/jahresbericht-energieversorgung/>.

⁽¹⁸⁾ Online: <https://www.bdew.de/presse/erneuerbare-energien-deckten-im-ersten-quartal-die-haelfte-des-stromverbrauchs/>.

- (26) Option (i): Relying on the EU ETS would have led to emission reductions at European level but would not have allowed reaching national emission reduction targets in a similarly targeted way. It would not have been possible to plan a gradual closure path upfront, which would have had a more significant impact on security of supply and employees in the sector.
- (27) Option (ii): A minimum price for CO₂ would have led to higher costs for the energy sector, as well as industry. This would disadvantage German undertakings and distort the internal market. Like for the Option (i), the impact on coal-fired power generation would be difficult to predict and it would not have been possible to plan a gradual reduction path upfront. In addition, setting the price at the correct level is challenging. If the price were to be set too low, it would take longer to reach the desired environmental results. If the price were to be set too high, this could lead to the sudden closure of a significant amount of coal-fired generation, which could have negative social impacts and threaten security of supply. The same arguments hold true for other policies with comparable effects, such as higher excise duties for hard coal and lignite, a carbon tax or stricter environmental performance standards.
- (28) Option (iii): Regulatory closure as of 2020 without any compensation would have been a stronger interference with the property rights of the individual operators.
- (29) Germany also carried out additional assessments to help shape the design of the coal phase-out measures. In particular, Germany examined the expected profitability of lignite-fired power plants going forward and the additional mine rehabilitation costs the operators face due to the fact that their lignite installations close down earlier than envisaged.

3.3. Legal basis

3.3.1. Initial legal basis

- (30) The initial legal basis for the measure is the ‘Act on the reduction and termination of coal-fired power generation and on the amendment of other laws’ (the ‘closure law’) adopted on 8 August 2020. The closure law sets the following targets for the reduction and termination of coal-fired generation in Germany.

Table 1

Targets for coal-fired generation in Germany

Target date	Overall target level (GW)	Hard coal target (GW)	Lignite target (GW)
31.12.2022	30	15	15
1.4.2030	17	8	9
31.12.2038	0	0	0

Source: closure law, Article 1, Part 2, para. 4.

- (31) In order to reach these reduction targets, the closure law foresees a gradual and steady phase-out of coal-fired generation. The design of the phase-out instruments was largely inspired by the proposals of the Coal Commission. For lignite, the phase-out and the compensation are elaborated through a negotiated procedure between the German government and the operators. For hard coal, the phase-out would be encouraged through annual auctions from 2020 to 2026, accompanied by a regulatory closure path without compensation for the period 2027–2038 ⁽¹⁹⁾.

⁽¹⁹⁾ Commission decision of 25 November 2020 in State Aid SA.58181 (2020/N) – Germany – Tender mechanism for the phase-out of hard coal in Germany, OJ C 41, 5.2.2021, p. 1, (the ‘German hard coal phase-out decision’).

- (32) Germany explained that it has not chosen to phase-out lignite-fired power installations via auctions, because lignite installations are inextricably linked to the mining facilities, which requires a more systemic approach. Due to its relatively low calorific value, which renders transport over long distance uneconomical, lignite is traditionally consumed at locations in close proximity from the places of its extraction. Thus, power plants in the Rhenish region use lignite extracted in the same region from mines belonging exclusively to RWE. This means that decisions influencing the lifespan and extraction volumes of mines have direct implications for adjacent power plants, as the latter cannot operate without the former. Germany has further shown that due to the vastness of areas involved, lignite mining requires long spatial planning horizons and lead time for planning changes. Therefore, the plant closing schedule is also informed by technical and planning considerations, which would make an auction with uncertain results difficult to implement. Such spatial planning considerations do not exist for the German hard coal plants which can import their fuel from places as far away as Australia. In addition, there are only two major players with sizeable generation capacity (RWE and LEAG who together controlled 90 % of the lignite capacity in Germany at the beginning of the coal phase-out process), which makes a truly competitive auction difficult.
- (33) The closure law authorises the German government to conclude a public law contract with the lignite operators in order to regulate the terms and conditions of the reduction and termination of the lignite-fired power generation⁽²⁰⁾. On that basis, Germany and the lignite operators elaborated terms and conditions included in the 2021 contract. The 2021 contract was approved by the German Parliament on 13 January 2021.
- (34) In line with the closure law, Germany will regularly evaluate the impact of these phase-out instruments, notably their contribution to the CO₂ emission reductions, as well as their impact on security of supply and electricity prices. The evaluations are scheduled for 2022⁽²¹⁾, 2026, 2029 and 2032⁽²²⁾.
- (35) In addition to the compensation for early closure under the measure, Germany intends to compensate three units when they enter the deferred closure mechanism (*Zeitlich gestreckte Stilllegung*) for 1 to 4 years before their permanent closure⁽²³⁾. This concerns two LEAG units and one RWE unit (Niederaußem G or H). The compensation for early closure, as described in the closure law and in the 2021 contract, would not include any compensation received for the deferred closure mechanism. This latter compensation is separate and would be based primarily on the forgone profits that the power plants would have made in the years they stay in the mechanism if they were allowed to continue operating on the market those years. Such compensation would be based on a fixed formula-based approach, annexed to the applicable legal basis⁽²⁴⁾. Germany has not notified the deferred closure mechanism to the Commission for assessment under EU State aid rules.

3.3.2. Amendment to the initial legal basis

- (36) On 19 December 2022, Germany adopted the 'Law to accelerate the lignite phase-out in the Rhenish mining area'⁽²⁵⁾ (the 'amendment law'), which amends the closure law. Furthermore, on 16 December 2022, Germany and RWE signed an amendment contract (the 'amendment contract') amending the 2021 contract. Germany submitted these amendments to the Commission on 23 December 2022.

⁽²⁰⁾ Article 1, Part 5, para. 49 of the closure law.

⁽²¹⁾ Germany has confirmed that the evaluation for 2022 was postponed due to the energy crisis. The evaluation is scheduled to be completed as soon as possible.

⁽²²⁾ Article 1, Part 7, para. 54 of the closure law.

⁽²³⁾ See section 2.2.4 of the Opening Decision.

⁽²⁴⁾ See Annex 3 to para. 50 of the closure law.

⁽²⁵⁾ Original title of the law: „Gesetz zur Beschleunigung des Braunkohleausstiegs im Rheinischen Revier“. Online: http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl122s2479.pdf.

- (37) The closure law (see Article 10 ⁽²⁶⁾), the 2021 contract (see paragraph 25 ⁽²⁷⁾) and the amendment law (see Article 3 ⁽²⁸⁾) contain a suspensive clause making the compensation to RWE subject to the Commission's State aid approval. Regarding the amendment contract, since it is an amendment contract amending the 2021 contract and since there is no modification in terms of the suspensive clause, the original suspensive clause of the 2021 contract remains valid. The aid has not been granted yet and no payments have been made yet to RWE.
- (38) The 2021 contract foresees the possibility of amending the contract by mutual agreement (paragraphs 20-21). This possibility was used by Germany and RWE for the amendment contract, which brought changes to the closure dates of certain RWE units, as described in section 3.5 of this decision.

3.4. Grounds for initiating the formal investigation procedure

- (39) The Commission had doubts about the proportionality of the RWE measure. On the basis of the available information and the elements described in the Opening Decision, the Commission sought clarification and solicited comments on the following matters (see section 3.3.1. of the Opening Decision): (i) forgone profits reaching far into the future; (ii) deferred closure mechanism; (iii) alternative scenarios submitted by Germany; and (iv) additional mine rehabilitation costs.

3.4.1. Forgone profits reach far into the future

- (40) The Commission raised doubts in the Opening Decision (see recitals (123) to (132)) regarding the assumptions feeding into Germany's forgone profits calculation for RWE and LEAG in both factual and counterfactual scenarios. In particular:
- (a) Duration of operation of the lignite installations absent the closure law: the Commission raised doubts that the lignite installations would run for an additional 48 to 70 years in the absence of the closure law, or that they would not require substantial investments for their upgrade to possibly allow them to reach such long lifespans.
 - (b) Uncertainties surrounding future projections: the Commission questioned whether the discount rate of 7,5 % sufficiently takes into account the high risks and uncertainties linked to the forecasts or whether additional correction mechanisms would have to be foreseen.

⁽²⁶⁾ The provisions on the award of the contract and the accrual of the entitlement to the hard coal surcharge in the hard coal tender pursuant to Article 1 section 18(8), section 20(1), sections 21 and 23, **the provisions on the reduction and termination of lignite-based electricity generation pursuant to Article 1 Part 5, including the public-law contract concluded in accordance with these provisions**, and the amendments to the Act on the Cogeneration of Heat and Power by Article 7 **may not be applied until approval under state aid law has been granted by the European Commission**. In the event of approval pursuant to sentence 1, the provisions referred to in sentence 1 may only be applied in accordance with and for the duration of the respective approval. The Federal Ministry for Economic Affairs and Energy shall publish the date of notification of the approval under the law on state aid in the Federal Gazette.' (machine translated, emphasis added)

⁽²⁷⁾ **The rights and obligations** of a Contracting Party under Parts 1 and 2 of this Agreement are **subject to the approval of this Agreement under state aid law and the relevant provisions in [Article 9 of the closure law]** on the reduction and cessation of lignite-based electricity generation by the European Commission or a corresponding notification by the European Commission that the examination under state aid law can be brought to a positive conclusion by means other than approval. The Federal Ministry for Economic Affairs and Energy shall inform the plant operators without delay of the existence of the approval or the notification.' (machine translated, emphasis added)

⁽²⁸⁾ **The provisions on compensation for the decommissioning of lignite-fired installations** pursuant to sections 44 and 45 of the Coal-Fired Power Generation Termination Act of 8 August 2020 (Federal Law Gazette I p. 1818), which was last amended by Article 1 of the Act to Accelerate the Phase-Out of lignite in the Rhenish Mining Area (Gesetz zur Beschleunigung des Braunkohleausstiegs im Rheinischen Revier) of 19 December 2022 (Federal Law Gazette I p. 2479), and the provisions on compensation for extended decommissioning pursuant to section 50(1) sentence 2 of the Coal Electricity Termination Act **may only be applied if and to the extent that approval under state aid law has been granted by the European Commission** or if and to the extent that the European Commission has notified that the examination under state aid law can be completed in another manner.- (machine translated, emphasis added)

- (c) Fuel and CO₂ prices: the Commission expressed doubts about the calculation of the forgone profits of the plants, as Germany's model used 2018 International Energy Agency projections and did not seem to take into account more recent market developments, especially increases in the CO₂ price occurring in 2019 and beyond (i.e. until the signature of the contract between the German government and the two beneficiaries) and more ambitious climate policies at EU level.
- (d) Data at the level of individual installations were provided only for two units, which made it difficult for the Commission to verify Germany's calculation for all the installations to be closed.
- (e) Germany did not submit a sensitivity analysis to the Commission, which would allow the Commission to evaluate the impact of the input parameters on the output of the model.

3.4.2. *Deferred closure mechanism*

- (41) In the Opening Decision (see recital (133)), the Commission noted that RWE and LEAG will also receive compensation for three installations when they enter into the deferred closure mechanism and expressed doubts whether these additional payments are required for the installations to close down.

3.4.3. *Alternative scenarios submitted by Germany*

- (42) In the Opening Decision (see recital (134)), the Commission expressed doubts whether the frontloading decommissioning scenarios, which Germany submitted as alternative scenarios to justify the compensation amounts, are relevant for the proportionality assessment. The Commission noted that it is uncertain that the frontloading option will indeed materialise and if it does, it is uncertain that the frontloading would be applied for 3 years and whether it would be applied to all units closing after 2030, as is assumed in Germany's scenario.
- (43) The Commission also noted in the Opening Decision (see recital (135)), as regards the LEAG measure only, that according to Germany's calculations, the net present value ('NPV') of LEAG's expected forgone profits would not exceed the NPV of the compensation amount in a scenario in which LEAG would not expand its mining activities to Mühlrose and Welzow-Süd TA 2. The Commission thus expressed doubts whether the compensation to LEAG is proportionate.

3.4.4. *Additional mine rehabilitation costs*

- (44) In the Opening Decision (see recitals (137) to (139)), the Commission expressed doubts about the amount of the additional costs as the BET/EY study submitted by Germany is based on different closure dates than the closure dates in the closure law and the study is based on publicly available information and concedes that the costs can vary.
- (45) As regards the LEAG measure, the Commission also doubted whether the counterfactual to establish the additional costs should include the extension to the mining subsections Mühlrose and Welzow-Süd TA 2, as that study does not consider such extension necessary for LEAG to meet its demand in a scenario without the closure law.

3.5. **Amended RWE measure/developments after the Opening Decision**

- (46) On 4 October 2022, the German government and RWE reached an agreement for an accelerated lignite phase-out in the Rhenish lignite mining area by 2030, instead of by 2038 as was previously envisaged⁽²⁹⁾. Germany announced that this agreement will help meet climate protection targets, while at the same time strengthening security of supply in the current energy crisis⁽³⁰⁾. The German authorities have thus amended the closure law by adopting the amendment law and by signing the amendment contract with RWE.

⁽²⁹⁾ See paper issued by the German ministry on 4 October 2022 with the key elements of this agreement, available in German here: <https://www.bmwk.de/Redaktion/DE/Downloads/Energie/221004-Eckpunktepapier-RWE-Kohleausstieg.html>.

⁽³⁰⁾ See press release issued by the German ministry on 4 October 2022, available in German here: <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2022/10/20221004-bundeswirtschaftsminister-habeck-landesministerin-neubaur-und-rwe-verstaeundigen-sich-auf-beschleunigten-kohleausstieg-2030.html>.

- (47) In addition to the amendment law and amendment contract, the Commission further notes that some of the facts and circumstances surrounding the electricity market described in the Opening Decision changed after the adoption of that decision. In particular, electricity prices have been changing in the recent past. The average day ahead electricity price in the German market rose from 30,5 EUR/MWh in 2020 to 96,8 EUR/MWh in 2021. This trend continued in 2022 when the average day ahead price reached 235,4 EUR/MWh and the market environment became highly volatile, with monthly average prices ranging from 129 EUR/MWh to 465 EUR/MWh ⁽³¹⁾. The extreme rise and volatility in electricity prices was influenced, among other factors, by the unprovoked and unjustified Russian military aggression against Ukraine launched on 24 February 2022 and by Russia's deliberate weaponisation of gas flows. Furthermore, the prices of emission allowances also followed a rising trend, increasing from 25 EUR/tCO₂ in 2020 on average, to 53 EUR/tCO₂ in 2021 and to 81 EUR/tCO₂ in 2022 ⁽³²⁾.
- (48) Germany has also informed the Commission that since 2020 RWE has closed six lignite-fired units, in line with the schedule set out in the closure law.

Table 2

RWE units that closed since 2020

Operator	Name of the installation	MW (net)	Date of transfer to deferred closure mechanism	Closure date
RWE	Niederaußem D	297	-	31.12.2020
RWE	Niederaußem C	295	-	31.12.2021
RWE	Neurath B	294	-	31.12.2021
RWE	Weisweiler E	321	-	31.12.2021
RWE	Neurath A	294	-	1.4.2022
RWE	Frechen /Wachtberg (Brikettierung)	120 (out of 176)	-	31.12.2022

- (49) The main features of the amended RWE measure are summarised in recitals (50) to (62) below. Germany explains that the other provisions (e.g. concerning tax treatment, securing funds for recultivation, non-litigation clause) remain unchanged.

3.5.1. Postponement of final decommissioning of two units from end-2022 to March 2024

- (50) Two units (Neurath D and Neurath E, with capacity of approx. 600 MW each), which according to the closure law and the 2021 contract were scheduled to close by 31 December 2022, will remain available on the market until 31 March 2024. Germany submits that this is in order to mitigate further the impact of the current energy crisis, to save gas in the electricity sector and thereby strengthen security of supply.
- (51) The German government can decide, by 30 September 2023, whether to retain these units on the market until 31 March 2025 or to transfer them to a new reserve (*Reserve*). Such new reserve has not been defined yet and does not constitute a part of this decision. To the extent such new reserve involves State aid, Germany would notify it in line with its obligation laid down in Article 108(3) TFEU.

⁽³¹⁾ Source: ENTSO-E Transparency Platform, available at <https://transparency.entsoe.eu>.

⁽³²⁾ Source: Data from Platts Market Data.

- (52) Based on paragraph 3 of the amendment contract, if Germany decides for the continued operation of those two units for another year (1 April 2024 to 31 March 2025) as described in recital (51) above, RWE bears the costs of upgrading the units, the costs of adapting staff planning, operating costs and the cost of CO₂ emission allowances. At the same time, the revenues from the marketing of electricity remain with RWE, subject to a market revenue cap introduced for electricity generators by the German Electricity Price Brake Law (*Gesetz zur Einführung einer Strompreisbremse und zur Änderung weiterer energierechtlicher Bestimmungen vom 20. Dezember 2022*) and designed to contribute to financing measures alleviating high electricity prices for final consumers ⁽³³⁾.
- (53) The amended table with the closure dates, which is included in Article 1, paragraph 9 of the amendment law and in the Annex to the amendment contract, is as follows:

Table 3

Lignite installations: entry into the deferred closure mechanism and closure dates (revised dates are displayed in bold) ⁽³⁴⁾

Operator	Name of the installation	MW (net)	Date of transfer to deferred closure mechanism	Closure date
RWE	Niederaußem D	297	-	31.12.2020
RWE	Niederaußem C	295	-	31.12.2021
RWE	Neurath B	294	-	31.12.2021
RWE	Weisweiler E or F ⁽³⁵⁾	321	-	31.12.2021
RWE	Neurath A	294	-	1.4.2022
RWE	Frechen/Wachtberg (Brikettierung)	120 (out of 176)	-	31.12.2022
RWE	Neurath D	607	-	31.3.2024
RWE	Neurath E	604	-	31.3.2024
RWE	Weisweiler E or F ⁽³⁶⁾	321	-	1.1.2025
LEAG	Jänschwalde A	465	31.12.2025	31.12.2028
LEAG	Jänschwalde B	465	31.12.2027	31.12.2028
RWE	Weisweiler G or H	663 or 656	-	1.4.2028
LEAG	Jänschwalde C	465	-	31.12.2028
LEAG	Jänschwalde D	465	-	31.12.2028
RWE	Weisweiler G or H	663 Or 656	-	1.4.2029

⁽³³⁾ For lignite-fired power plants, the revenue cap is set based on a formula that takes into account their fixed and operating costs.

⁽³⁴⁾ The changes compared to Table 2 of the Opening Decision are highlighted in bold.

⁽³⁵⁾ In the end, unit E was chosen to retire at this date.

⁽³⁶⁾ In the end unit F was chosen to retire at this date.

Operator	Name of the installation	MW (net)	Date of transfer to deferred closure mechanism	Closure date
LEAG	Boxberg N	465	-	31.12.2029
LEAG	Boxberg P	465	-	31.12.2029
RWE	Niederaußem G or H	628 or 648	-	31.12.2029
RWE	Niederaußem K	944	-	31.3.2030
RWE	Neurath F (BoA 2)	1 060	-	31.3.2030
RWE	Neurath G (BoA 3)	1 060	-	31.3.2030
RWE	Niederaußem G or H	628 or 648	31.12.2029	31.12.2033
Saale Energie ⁽³⁷⁾	Schkopau A	450	-	31.12.2034
Saale Energie	Schkopau B	450	-	31.12.2034
LEAG	Lippendorf R	875	-	31.12.2035
EnBW	Lippendorf S	875	-	31.12.2035
LEAG	Schwarze Pumpe A	750	-	31.12.2038
LEAG	Schwarze Pumpe B	750	-	31.12.2038
LEAG	Boxberg R	640	-	31.12.2038
LEAG	Boxberg Q	857	-	31.12.2038

- (54) Germany further presented data on the initial opening of RWE's power plants and the closure dates as presented in Table 4. The majority (13 out of 16) of RWE's installations have opened between mid-1960s and mid-1970s, meaning that up until now, such installations have operated for approximately 50 to 60 years. Out of the 16 installations three are newer and have opened respectively: Niederaußem K (opening date 2003); Neurath F (BoA 2) (opening date 2012); Neurath G (BoA 3) (opening date 2012).
- (55) Germany submits that according to the data submitted by RWE to the German authorities, the costs of the oldest 14 of 16 RWE power plants (would) have been depreciated by the time of their closure date according to the closure law in accordance with the RWE accounting rules.
- (56) Further, Germany submits that according to the data provided by RWE, the power plant units Neurath F and G would have a carrying value in total of ca. EUR 570 million as of 31 March 2030. This carrying value represents the amortised costs and does not include property (land). Germany further pointed out that the depreciation schedule has been adjusted to reflect the obligation to decommission the power plants in accordance with the closure law. The above-described values reflect the book values that would probably have resulted if the original depreciation schedule had been continued. Furthermore, future CAPEX for inspection costs is not considered. There are regular inspections and improvements of both power plants usually every 4 years with costs of EUR 60 to 70 million each. The latest inspection for Neurath F took place in 2023 and for Neurath G in 2021.

⁽³⁷⁾ Saale Energie and EnBW will not receive a compensation for early closure, as their power plants (Schkopau A and B and Lippendorf S, respectively) will not be mandated to close earlier than already planned by the companies.

Table 4

RWE's lignite installations: opening date vs closure date

Operator	Name of the installation	Opening / operation date	Closure date
RWE	Niederaußem D	1968	31.12.2020
RWE	Niederaußem C	1965	31.12.2021
RWE	Neurath B	1972	31.12.2021
RWE	Weisweiler E or F ⁽³⁸⁾	1965, 1967	31.12.2021
RWE	Neurath A	1972	1.4.2022
RWE	Frechen/Wachtberg (Brikettierung)	1962	31.12.2022
RWE	Neurath D	1975	31.3.2024
RWE	Neurath E	1976	31.3.2024
RWE	Weisweiler E or F ⁽³⁹⁾	1965, 1967	1.1.2025
RWE	Weisweiler G or H	1974, 1975	1.4.2028
RWE	Weisweiler G or H	1974, 1975	1.4.2029
RWE	Niederaußem G or H	1974, 1974	31.12.2029
RWE	Niederaußem K	2003	31.3.2030
RWE	Neurath F (BoA 2)	2012	31.3.2030
RWE	Neurath G (BoA 3)	2012	31.3.2030
RWE	Niederaußem G or H	1974, 1974	31.12.2033

3.5.2. Acceleration of final decommissioning of three units from 2038 to 2030

- (57) The closure of three units (Niederaußem K, Neurath F and Neurath G, with capacity of approx. 1 000 MW each) will be brought forward from 31 December 2038 to 31 March 2030. Germany submits that this means cutting the remaining time of operation of 3 GW of the newest and most efficient power plants operated by RWE by almost 50 %.
- (58) Germany notes that the earlier closure dates also have a significant impact on the mining sites that supply those three units scheduled to be closed earlier than initially foreseen. More specifically, as part of the amended RWE measure it was agreed that the mine 'Garzweiler' will produce significantly less lignite over the coming years.

⁽³⁸⁾ In the end, unit E was chosen to retire at this date.

⁽³⁹⁾ In the end unit F was chosen to retire at this date.

- (59) The German government can decide, by 15 August 2026, whether to transfer these three units in a reserve (*Reserve*) until 31 December 2033. Such new reserve has not been defined yet and does not constitute part of this decision. To the extent such new reserve involves State aid, Germany would notify it in line with its obligation laid down in Article 108(3) TFEU. If these units are needed for such a reserve, no more changes will be required to the opencast mine planning process than if these units had been definitively closed by 2030. In addition, the rehabilitation that will start in 2030 will also continue unchanged.

3.5.3. No additional compensation to RWE

- (60) The amended RWE measure does not provide for additional compensation to RWE above the 2021 contract, but instead confirms the sum of EUR 2,6 billion.
- (61) In Germany's view, revenue losses in the years 2030 to 2038 from the operation of approx. 3 GW of capacity and the additional costs of rescheduling are offset by, among others, higher than expected revenues, stemming from additional 15 months of operation of Neurath D and E between 2023 and the 1st quarter of 2024.
- (62) The amendment law (Article 1, paragraph 4) and the amendment contract (paragraph 4) foresee that the number of instalments for the payment of the compensation to RWE is decreased from 15 to 10, and that the instalments are not equal in size as previously foreseen. The annual instalments for the years 2020 to 2023 will be of EUR 173 million, while the annual instalments for the years 2024 to 2029 will be of EUR 318 million. In line with the amendment law and the amendment contract, the first instalment to RWE is due on 31 December 2020, subject to the standstill clause, which is when RWE closed its first plant.

3.6. Revised calculation

- (63) As part of the submission of 23 December 2022, Germany submitted to the Commission revised calculations of forgone profits for nine RWE units that have either closed already or are scheduled to close by 31 March 2025 ⁽⁴⁰⁾ in line with the amendment law (Article 1, paragraph 9) (the 'revised calculation'). This calculation, dated 16 December 2022, was carried out by r2b energy consulting.
- (64) Based on this calculation, the NPV of forgone profits of eight RWE plants (closing between 31 December 2021 and 31 March 2025) is approximately EUR 2,2 billion (EUR 2,3 billion in nominal terms) and thus higher than the NPV of the agreed compensation to RWE of EUR 1,7 billion (EUR 2,6 billion in nominal terms) ⁽⁴¹⁾. Therefore, in view of this calculation, Germany argues that the compensation amount is justified.
- (65) The revised calculation shows that eight out of the nine RWE units included in the revised calculation are estimated to have forgone profits in the period between 2021 and 2026. Of the eight units with forgone profits, five were already closed between 2021 and 2022 (Neurath A and B, Niederaußem C, Weisweiler E and Frechen/Wachtberg) and the remaining three (Weisweiler F and Neurath D and E) are scheduled to close in 2025 at the latest. For all nine units in the revised calculation, forgone profits were calculated only for the period between their closure and the end of 2026. The forgone profits never extend more than 3 years beyond the scheduled closure date of each respective plant. For the ninth plant included in the revised calculation (Niederaußem D), which closed as the first unit on 31 December 2020, no forgone profits are claimed.
- (66) For the seven units scheduled to be closed after 2026 (Weisweiler G and H, Niederaußem H, K and G and Neurath F and G), no forgone profits are included in the revised calculation as they are decommissioned after 2026.

⁽⁴⁰⁾ For the purpose of the revised calculation, units Neurath D and E, which are indicated to be closed on 31 March 2024 in Table 3 above, are assumed to be closed on 31 March 2025, as if the Federal government already decided to retain them in the market for 1 more year (see recital (47)). In Germany's view, this makes the revised calculation more conservative since the assumed longer operation reduces the estimated forgone profits.

⁽⁴¹⁾ When looked at in nominal terms, the compensation amount appears higher than the forgone profits because the compensation instalments are spread over a longer period of time (until 2030) than the forgone profits (until 2026).

- (67) The revised calculation applies the following main parameters to estimate the forgone profits of the nine units for which data have been submitted:
- (1) The calculation assumes that the power plants, as their sole source of revenue, sell baseload electricity at market rates corresponding to quotes from the German commodity exchange EEX. More specifically,
 - (a) For the units already closed at the time of the submission of the revised calculation to the Commission (Neurath A and B, Niederaußem C and D, Weisweiler E), the calculation uses the assumptions regarding electricity and CO₂ prices, inflation and regulatory environment ⁽⁴²⁾ according to market expectations immediately before the respective closure dates. For electricity and CO₂ prices, the calculation uses an average of futures prices for delivery in the relevant month, quarter or year (depending on product availability) between 2021 and 2026 as recorded on the EEX exchange in the two weeks before the respective closure dates.
 - (b) For the four units closing between 31 December 2022 and 31 March 2025 (Frechen/Wachtberg, Weisweiler F and Neurath D and E), the assumptions regarding electricity and CO₂ prices, inflation and regulatory environment ⁽⁴³⁾ were taken according to recent market expectations available at the time of the submission of the revised calculation. For electricity and CO₂ prices, the calculation uses an average of futures prices for delivery in the relevant month, quarter or year (depending on product availability) between 2021 and 2026 as recorded on the EEX exchange between 21 October 2022 and 4 November 2022.
 - (2) For the fuel costs of lignite supply, variable lignite mining costs were assumed at 1,5 EUR/MWh(th), while fixed costs of lignite mining were assumed at 4,7 EUR/MWh(th). Those assumptions were taken from an independent study carried out by Öko-Institut and published in January 2022 ⁽⁴⁴⁾ When divided per unit of production, total mining costs are assumed to be stable due to the short period of duration of the counterfactual scenario. Fixed costs, which form the largest part of the total mining costs, typically take longer time to adjust to changing output volumes.
- (68) The calculation uses key technical characteristics of each power plant such as efficiency, electrical output, fixed costs, typical availability and utilisation rates. Fixed costs were based on representative values for the respective power plant class and correspond to the findings of the Öko-Institut study.
- (69) Revenues from heat generation and from the balancing market were not included in the revised calculation.
- (70) For the units closing between 31 December 2022 and 31 March 2025, a market revenue cap is applied from 1 December 2022 until 30 April 2024 in the calculation. The legal basis for the implementation of the market revenue cap is laid out in the German Electricity Price Brake Law. When expected electricity prices exceed the cap, 90 % of the surplus market revenue above this cap is collected by the German state. The level of the cap, as stipulated in the German Electricity Price Brake Law, is influenced by the cost of CO₂ allowances. A CO₂ price of 81 EUR/t (which was the average spot market price in 2022) leads to a cap at around 160 EUR/MWh. The German Electricity Price Brake Law foresees the application of the cap from 1 December 2022 until 30 June 2023 and provides for the possibility to prolong it until 30 April 2024, subject to a decision by the German government. In the end, the German government decided not to extend the application of the cap beyond 30 June 2023. The German authorities point out that the market revenue cap affects the forgone profits of only one plant (Frechen/Wachtberg) since the other RWE lignite-fired units either close after the end of the implementation period of the cap or were closed before concrete plans for the cap were adopted by the German government.

⁽⁴²⁾ This concerns the implementation of the cap on market revenues.

⁽⁴³⁾ This concerns the implementation of the cap on market revenues.

⁽⁴⁴⁾ Öko-Institut (2022): Die deutsche Braunkohlenwirtschaft 2021. Historische Entwicklungen, Ressourcen, Technik, wirtschaftliche Strukturen und Umweltauswirkungen. Studie im Auftrag von Agora Energiewende und der European Climate Foundation. Available here: <https://www.oeko.de/publikationen/p-details/die-deutsche-braunkohlenwirtschaft-2021>. The study is an update (containing data going up to 2021) of previous studies exploring the economics of lignite mining and lignite-fired electricity generation, which contributed to the fact-finding efforts of the Coal Commission.

- (71) For Neurath D and E, whose closure was postponed to 31 March 2024 with the possibility of extending the closure date to 31 March 2025, the calculation takes into account only forgone profits achieved as of the latter date.
- (72) The weighted average cost of capital ('WACC' ⁽⁴⁵⁾), used for the purpose of discounting the forgone profits and the compensation payments, was set at 7,5M.
- (73) Considering the significant size of the generation capacity taken out of the market due to the early lignite phase-out, its systemic effect on German electricity prices is taken into account. Namely, in the counterfactual scenario, electricity prices are lower compared to the actual scenario because more units are in operation in the former case and more demand can be met with relatively cheaper generation capacities. To quantify the effect, the revised calculation uses the results of two analyses assessing the effect of the phase-out of two nuclear power plants (Isar 2 and Neckarwestheim 2) on the German electricity market ⁽⁴⁶⁾. The German authorities argue that the estimated impact on prices in the German market could be used as representative also for lignite generation since the two technologies have relatively similar positions in the merit order and tend to have high utilisation rates. The effect of the early closure is relatively weak initially (since the first units that closed according to the schedule are relatively small) but becomes stronger as years pass by and more capacity is closed. Thus, electricity prices in the counterfactual scenario are lower by 1,7 % in 2023 and by 3,2 % in 2026 than in the factual scenario.
- (74) Germany argued that it is not necessary to submit an update of the revised calculation based on the most recent data available (from the second quarter of 2023) for the three units closing in January and March 2025 (Weisweiler F and Neurath D and E) ⁽⁴⁷⁾ given the methodology applied. The calculation uses as the two main parameters, which significantly influence revenues and costs and are subject to uncertainty and frequent fluctuations, the prices of futures products of electricity and CO₂ allowances, which lignite power plant operators typically purchase to secure (or hedge) their operating margin for months and years ahead. The German electricity market, as one of the most developed and liquid markets in Europe, enables market participants such hedging in sufficient volumes for up to 3 years ahead of the actual delivery. ⁽⁴⁸⁾ Accordingly, Germany explained that in a counterfactual scenario, it would have been possible for the three units to enter the market between 21 October 2022 and 4 November 2022 (when the data from the market for these units were extracted for the purpose of the revised calculation) and hedge their margin for several months or years of operation after the closure date planned in the factual scenario. This would be done by selling electricity volumes planned to be produced and buying a corresponding amount or emission allowances to cover the carbon footprint of the produced electricity. Germany thus argued that the revised calculation does not need to be updated since the three RWE units could have used standard market instruments to secure the calculated forgone profits at the time when the data for the revised calculation were extracted.

⁽⁴⁵⁾ The WACC represents a firm's cost of capital where each category of capital is proportionately weighted. The WACC is calculated by multiplying the cost of each capital source (debt and equity) by its relevant weight by market value, then adding the products together to determine the total. The WACC is also used as the discount rate for future cash flows in discounted cash flow analysis.

⁽⁴⁶⁾ The results of these analyses are published by Öko-Institut on 6 September 2022 (<https://blog.oeko.de/atomausstieg-mythen-zu-streckbetrieb-und-laufzeitverlaengerung/>) and by enervis on 29 September 2022 (https://enervis.de/wp-content/uploads/2022/09/20220929_enervis-Pressmitteilung_AKW-Weiterbetrieb-erhoeht-Versorgungssicherheit-und-reduziert-Gasverbrauch.pdf). The two nuclear power plants had a combined capacity of 2,8 GW, while in the present case the lignite-fired units of a combined capacity of 3,2 GW will have been retired by the end of 2026, the end point of the revised calculation.

⁽⁴⁷⁾ The contribution of these three units to the total sum of forgone profits in the revised calculation is 22 % (or EUR 479 million) in NPV terms. Out of those, EUR 348 million occur in 2025 and EUR 131 million occur in 2026.

⁽⁴⁸⁾ See for instance BloombergNEF European Utility Hedging Profiles 2021, 21 April 2021, online: <https://about.bnef.com/>.

- (75) Further, Germany submits that the introduction of a mechanism to update the calculation of the compensation based on the most recent assumptions is not justified for the amended RWE measure, as the assumptions used to calculate the forgone profits in the revised calculation were close to the actual closure of those units (see recital (67) (1)). Germany points out that an update mechanism in accordance with point 433 CEEAG would in principle only be necessary if the closure of power plants occurs more than 3 years after the compensation for such closures was granted. According to Germany, this serves to ensure that the assumptions on which the calculation is based are current at the time of the actual closure of the power plants. For those power units already closed at the time of the submission of the revised calculation to the Commission, Germany states that it calculated the forgone profits based on assumptions and market expectations that existed immediately before the relevant closure dates. The other units whose forgone profits were calculated will shut down in the period between 31 December 2022 and 31 March 2025. Germany submits that this will be no longer than 3 years after the notification of the Commission's decision, which will be the granting moment of the aid (see recital (78)). Therefore, according to Germany, an update mechanism is not necessary.

3.7. Budget

- (76) The budget of the amended RWE measure is EUR 2,6 billion and it will be financed from the Federal budget of Germany. The compensation will be paid out in 10 annual instalments: for the years 2020 to 2023, the instalment will be EUR 173 million and for the years 2024 to 2029, it will be EUR 318 million.

3.8. Granting moment and duration

- (77) The granting moment of the amended RWE measure is the notification of the Commission's decision. The final disbursement of funds will happen on 31 December 2029.

3.9. Beneficiary

- (78) The notified measure is a grant to RWE Power AG. RWE Power AG employs 8 800 persons, of which around 7 500 jobs are related to the lignite industry. RWE Power AG is a 100 % owned subsidiary of RWE AG. According to publicly available information, as of 15 March 2023, an estimated 87 % of RWE AG shares were held by institutional investors and 13 % were owned by individuals (including employees). Since 15 March 2023, the single-largest shareholder of RWE AG is Qatar Holding LLC with a stake of 9,1 %.
- (79) RWE AG is a German energy company active in electricity production and trading. According to the market study conducted by the German Competition Authority, in 2020, RWE AG produced around 25 % of the total of the German-Luxembourg market area, making it the producer with the largest generation capacity of 67,8 TWh ⁽⁴⁹⁾. In 2021, the total revenue of RWE AG was around EUR 24,5 billion.
- (80) The German authorities confirm that neither RWE AG nor RWE Power AG are undertakings in difficulty, as defined by the Commission Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty ⁽⁵⁰⁾.
- (81) The German authorities also confirm that neither RWE AG nor RWE Power AG are subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal and incompatible with the internal market ⁽⁵¹⁾.

⁽⁴⁹⁾ Online: https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Marktmachtbericht_2021.pdf?__blob=publicationFile&v=3.

⁽⁵⁰⁾ 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).

⁽⁵¹⁾ See judgment of the Court of First Instance of 13 September 1995, *TWD v Commission*, T-244/93 and T-486/93, ECLI:EU:T:1995:160, paragraph 56. See also Communication from the Commission – Commission Notice on the recovery of unlawful and incompatible State aid, OJ C 247, 23.7.2019, p. 1.

3.10. Cumulation and transparency

- (82) Germany confirms that it will comply with points 56 and 57 CEEAG. Aid under the notified measure may not be cumulated with ad hoc or de minimis aid or with Union funding in relation to the same eligible costs.
- (83) Germany will ensure compliance with the transparency requirements laid down in points 58 to 61 CEEAG. The relevant data of the notified measure will be published on a national website that will link to the Commission's transparency register: <https://webgate.ec.europa.eu/competition/transparency>.

4. COMMENTS FROM THIRD PARTIES

- (84) A large number of third parties have submitted their comments following the publication of the Opening Decision, the Public Consultation and the Extension Decision.
- (85) Following the publication of the Opening Decision, a large number of third parties (27) submitted their comments. Submissions from the two beneficiaries (LEAG and RWE), from LEAG's shareholders (EPH and PPF Investments – PPFI) and from LEAG's group works council (*Konzernbetriebsrat*). Submissions from companies included GPE, identical submissions from eight local energy companies (the 'eight local companies'), and two further local energy companies made identical submissions (the 'two local companies'). Seven NGOs sent submissions, as well as the three German states in which the mining fields of LEAG and RWE are located, i.e. North Rhine-Westphalia, Saxony and Brandenburg. An association of municipalities (Lausitzrunde), where LEAG's mining fields are located, and the association representing the lignite industry in Germany ('DEBRIV') also submitted comments.
- (86) Following the publication of the Public Consultation, a large number of third parties (19) submitted comments. There were submissions from the two beneficiaries (LEAG and RWE), from LEAG's shareholders (EPH and PPFI) and from LEAG's group works council. Submissions from companies included GPE, identical submissions from the eight local companies and identical submissions by the two local companies. DEBRIV, European Environmental Bureau ('EEB'), Greenpeace and ClientEarth also submitted comments.
- (87) On 16 November 2022, the Commission received spontaneous identical submissions from the eight local companies concerning the amended RWE measure.
- (88) Following the publication of the Extension Decision, several third parties (12) submitted their comments. There were submissions from the two beneficiaries (LEAG and RWE), identical submissions from the eight local companies, from GPE and from ClientEarth.
- (89) The comments submitted by the third parties are summarised below in the following categories: (i) comments on the existence of aid (see section 4.1), (ii) comments on the legal basis for compatibility (see section 4.2) and (iii) comments on the compatibility of aid (see section 4.3).
- (90) This decision will concentrate on the comments made by the third parties concerning the scope of the present decision.

4.1. Existence of aid

4.1.1. RWE

- (91) RWE submitted in its comments on the Opening Decision that the measure does not constitute State aid. RWE claimed that it is a compensation for damages as the closure law violates RWE's right to property, and thus there is no economic advantage conferred to RWE.

- (92) According to RWE, such interference with the right to property is compatible with Article 14 German Constitutional Law (*Grundgesetz*, 'GG') only if the State provides adequate compensation for this. The amount of compensation depends on the economic significance of the legal interests affected, i.e. the value of the property positions and the value of the property rights seized, as well as the additional burdens associated with the interference. The protection provided for in Article 14 GG covers (i) the plant and land ownership and respective usability of the power plants and the mines to generate electricity and thus make a profit; (ii) the right to set up and operate the entire 'lignite-fired electricity generation' business (RWE submitted that the German nuclear phase-out could be used as an analogy); (iii) the irrevocable mine property, which is completely devalued by the decommissioning obligations; and (iv) the unlimited operating licenses under the German emissions control law for the power plants and mines affected by the closure law.
- (93) RWE submitted that in recognition of the long-term capital commitments and staff and investment plans required for projects of this type and size, it enjoys enhanced and prominent constitutional protection of legitimate expectations. The long-term perspective is inherent in the lignite-fired electricity generation business. This particularly strong protection of legitimate expectations significantly increases the intensity of the interference with RWE's property positions.
- (94) RWE submitted that it has fulfilled its obligations in relation to the EU ETS, which, in its view, exhaustively regulates the reduction of CO₂ emissions by the affected plants. Nevertheless, the decommissioning obligation under the closure law requires an additional climate protection contribution by the RWE plants, which leads to an exceptional burden (*Sonderopfer*) that must be taken into account for the compensation.
- (95) RWE further submitted that Germany has acted as a market economy operator when signing the 2021 contract with the operators. Germany had to assess from an *ex ante* perspective whether the contractually secured coal phase-out solution was preferable or at least equivalent to a purely regulatory solution, whose constitutional form or enforceability had also to be assessed *ex ante*. RWE submits that Germany acted in this context as a rational actor by entering into a contract that grants it the rights set out therein and at the same time relieving it with legal certainty from an obligation to pay compensation which it would otherwise have been forced to pay under national or international law. Therefore, in RWE's view, there is no State aid element.
- (96) In its comments on the Extension Decision, RWE once again submitted that the measure does not constitute aid. In its view, the total compensation falls short of the total damage incurred by RWE and therefore no advantage is granted to RWE.

4.1.2. LEAG

- (97) In its comments on the Opening Decision and on the Public Consultation, LEAG expressed doubts as to the qualification of the measure as State aid within the meaning of Article 107(1) TFEU. Specifically, LEAG considers that the measure does not grant it an economic advantage, as the compensation falls short of the financial damage caused by the closure law. Should the German authorities not have granted adequate compensation, operators would have had the right to obtain damage compensation, as it considers that the closure law violates its right to property under Article 14, paragraph 1, sentence 2 of GG and Article 1 of the European Convention on Human Rights ('ECHR') and Article 13 of the Energy Charter Treaty ('ECT'). In LEAG's view, the usability of its property is completely annulled, which constitutes a particularly severe encroachment of their rights, and thus the content-and-limit provisions are subject to increased proportionality requirements.
- (98) In its comments to the Opening Decision, LEAG argued that the legitimate expectations of the lignite operators, which were also reflected in the approved lignite plans for the opencast mines, are being thwarted by the legally mandated early coal phase-out, after the operators had made their decisive investment decisions for the construction of the power plants and the development of the opencast mines. Hence, LEAG submitted that there is a legitimate expectation to continue mining activities and operation of lignite-fired power plants.

- (99) Furthermore, LEAG claimed in its comments on the Opening Decision that the transitional period granted for the lignite phase-out in the present case is insufficient. In its view, the staggered early closure of lignite-fired power plants stipulated in the closure law is not in itself appropriate to dispel the constitutional concerns. Therefore, Germany has to provide a financial compensation in order to establish the proportionality of the encroachment on the affected property positions. LEAG argues that the financial compensation must place the operators of the lignite-fired power plants and the opencast mines at least in the same position as if they had been granted a transitional period measured according to the relevant standards. According to LEAG, the relevant standard for compensation for an opencast mine must take into account the production volume necessary to enable the amortisation of the investments made and still to be made in the opencast mine (including the re-cultivation costs) and the generation of an appropriate profit, and at the same time to bring the opencast mine into an appropriate final position approved by a final Court decision (necessary residual production volume). The time required for this is therefore based on the technically possible extraction rate and the fuel requirements of the lignite-fired power plants. For a lignite-fired power plant, it must be the revenue necessary to enable the amortisation of the construction and retrofitting costs, as well as the generation of an appropriate profit. A lignite-fired power plant can only generate income if it is supplied with fuel from a connected opencast mine. The exhaustion of the necessary transitional period therefore presupposes that an opencast mine ensuring the supply can still be operated economically for a corresponding period, including the coverage of the mine rehabilitation costs. The amount of the compensation must therefore reach at least the revenue that could have been generated in the transitional period.
- (100) LEAG further claimed that the additional costs are consequential damages of the mandated early coal phase-out, as the costs are directly caused by the expropriation (or the intervention equivalent to expropriation). In its view, consequential damages are property damages that do not lead to a loss of rights or substance, but represent an exceptional burden (*Sonderopfer*), e.g. through a reduction in value.
- (101) In its comments on the Public Consultation and on the Extension Decision, LEAG reiterated its view that the measure does not qualify as State aid.
- (102) LEAG's parent companies, EPH and PPFI, also submitted comments to the Opening Decision wherein they concur that the measure cannot qualify as State aid as it merely provides compensation for the loss of rights, property and business opportunity. In particular, EPH and PPFI consider that, in the absence of compensation from Germany, the operators would have been compensated for the closure under the ECT in any case.

4.1.3. Undertakings

- (103) In its comments to the Opening Decision, GPE considered that the compensation amounts to State aid and regretted that the conditions of advantage and selectivity were assessed together as one single condition.
- (104) In their comments to the Opening Decision, the eight local companies argued that the compensation constitutes State aid. The companies argue that the compensation goes beyond a mere compensation for damages and therefore provides RWE with a selective advantage. They concede that under GG a compensation for damages is in principle possible, but that this only happens in exceptional circumstances when there is an exceptional burden (*Sonderopfer*). They submit that there is no right to be shielded from regulatory changes until all investments have been fully amortised⁽⁵²⁾. They point to a legal paper published by the Scientific Service (*Wissenschaftlicher Dienst*) of the German Parliament in 2018 which, based on the Constitutional Court's judgment on the nuclear closures, concludes that it should in principle be possible under German law to close older installations which have already been amortised without a compensation⁽⁵³⁾. According to them, out of 16 RWE units, 13 started operating before 1976 and thus they should have been amortised by now.

⁽⁵²⁾ Standige Rechtsprechung des Bundesverfassungsgerichts (BVerfG), siehe nur das Urteil zum Atomausstieg BVerfGE 143, 246ff., zuvor schon BVerfGE 58, 137 ff.; BVerfGE 100, 226 ff.; s. auch BVerfG NVwZ 2012, 429 (430 f.); BGH NVwZ 2010, 1444 (1447).

⁽⁵³⁾ Ausarbeitung, Wissenschaftliche Dienste, Deutscher Bundestag (WD 3 – 3000 – 360/18); Stilllegung von Kraftwerken, Kurzinformation, Wissenschaftliche Dienste, Deutscher Bundestag (WD 3 – 3000 – 360/19).

- (105) In their comments to the Opening Decision, the two local companies concurred that the compensation constitutes State aid, going beyond a mere compensation for damages and therefore providing RWE with a selective advantage. They point out that the right of ownership, which is enshrined in Article 14 of GG does not protect future revenue or profit prospects. Whilst they concede that the limitation of the use of property is also protected under the GG and would apply to generation facilities, this is not the same for the mining activities. They explain that the permissions (*Hauptbetriebspläne*) are usually only granted for 2 to 3 years and thus the use of property in the case of the mines does not go beyond these approval periods. They also claim that the discussions about the coal phase-out have been going on for a while and that undertakings could therefore not expect that the beneficial regulatory situation would remain. They also explain that only an exceptional burden (*Sonderopfer*) or case of hardship (*Härtefall*) entitle an undertaking that is limited in the use of its property to a compensation. The long transition periods, the possibility to convert to another generation fuel and the fact that many installations have been amortised lead to a situation where there is no such case of hardship.

4.1.4. Associations/NGOs

- (106) In its comments to the Opening Decision, ClientEarth considered that the compensation constitutes State aid. In its view, RWE is granted a selective advantage, as it is unlikely that a national court would award damages corresponding to the amounts promised to RWE by the German authorities. A compensation for damages under German GG would only be admissible if the State intervention led to an exceptional burden. Article 14 of the GG does not cover (i) modifications, cancellation or expiry of permits under the Emission Control Law (*Bundesimmissionsschutzgesetz*) nor under mining law (*Bundesberggesetz*) ⁽⁵⁴⁾; (ii) fully amortised investments ⁽⁵⁵⁾; (iii) missed sales opportunities and forgone profits or other plans that are based on the expectation that a favourable legal situation remains unchanged ⁽⁵⁶⁾. In addition, Client Earth argues that the negative impact of new regulations on assets value cannot be compensated after the investments have been amortised ⁽⁵⁷⁾, adding that lignite operators would have to argue that they had a legitimate expectation to continue their operation and are suffering an exceptionally harsh undue economic hardship as a consequence of the legal coal phase-out. ClientEarth points to the paper by the Scientific Service of the German Parliament and a study commissioned by the Ministry of the Environment ⁽⁵⁸⁾, which provide further details on the legal framework on compensations in the context of the coal phase-out.
- (107) In its comments on the Public Consultation, DEBRIV submitted that the measure does not confer an advantage on the lignite companies concerned. On the contrary, the lignite companies would have been able to claim compensation under German constitutional law, the ECHR and the ECT if they had not been granted adequate compensation under the coal closure law or the 2021 contract. The amount of compensation claims for lost profits and costs, damages, additional expenses and economic disadvantages caused by the lignite phase-out is at least equal to, or even significantly higher than, the compensation granted.

4.1.5. German states

- (108) Three German States (Brandenburg, Saxony and North Rhine-Westphalia) submitted comments following the Opening Decision. The comments related solely to the LEAG measure will not be presented in detail in this decision as the LEAG measure is outside of the scope of this decision (see recitals (13) and (14)).

⁽⁵⁴⁾ Vgl. Urteil des Bundesverfassungsgerichts vom 6.12.2016, 1 BvR 2821/11, 1 BvR 321/12, 1 BvR 1456/23, Rn. 231 für atomrechtliche Genehmigungen.

⁽⁵⁵⁾ Vgl. m.w.N. Klinskim, S. 4. Jedoch können haushaltsrechtliche Gründe (dazu unter 2) auch bei der verfassungsrechtlichen Betrachtung in Einzelfällen und in der Zusammenschau mit anderen Gründen eine Reduzierung der Entschädigung, z.B. für einen Ausgleich unter dem Verkehrswert, begründen, m.w.N. Schomerus/Franßen, S. 317f.

⁽⁵⁶⁾ Urteil des Bundesverfassungsgerichts vom 6.12.2016, 1 BvR 2821/11, 1 BvR 321/12, 1 BvR 1456/23, Rn. 270; Jarass, in: Jarass/Pieroth, GG, 15. Auflage 2018, Art. 14 Rn. 19.

⁽⁵⁷⁾ BVerwG NVwZ 2009, S. 1443.

⁽⁵⁸⁾ Schomerus/Franßen: Klimaschutz und die rechtliche Zulässigkeit der Stilllegung von Braun- und Steinkohlekraftwerken. 13.12.2018, https://www.bet-energie.de/fileadmin/redaktion/PDF/Studien_und_Gutachten/Gutachten_Folgekosten/Gutachten_Folgekosten_Braunkohleausstieg_Abschlussbericht.pdf.

- (109) North Rhine-Westphalia submitted that the current phase-out date for lignite for RWE is much earlier than what was foreseen for the company on the basis of the final operating licences for its power plants. This statutory operating ban from 2038 at the latest (or at 2035 if the frontloading decommissioning option were exercised) constitutes an interference with RWE's own management. According to North Rhine-Westphalia, RWE would certainly be able to challenge in constitutional court proceedings these interferences in its business-activities and the devaluation of its business assets by reference to the protection of property guaranteed by the GG.

4.2. Legal basis for compatibility

4.2.1. RWE

- (110) In its comments on the Public Consultation, RWE considers that the CEEAG are not applicable on two grounds. First, RWE refers to its comments on the Opening Decision, where RWE claimed that the measure does not constitute State aid (see recital (92) et seq.). Given that the CEEAG describe the criteria used by the Commission to examine the compatibility of measures which are considered to be State aid, the entry into force of the CEEAG is not relevant to the assessment of the compensation.
- (111) Second, RWE argues that the CEEAG are not applicable due to the temporal scope of the guidelines. Pursuant to point 466 CEEAG, the Commission intends to apply the guidelines to all notifiable aid granted or to be granted from 27 January 2022, but there is no express provision as to whether and when the CEEAG should also apply to aid already notified before that date. RWE notes that the measure was notified before 27 January 2022, making the CEEAG inapplicable. RWE considers that the measure has already been implemented in 2020 when the closure path for RWE began, with the entry into force of the closure law. The first annual payment dates were due in December 2020 and December 2021, but these payments have been suspended in compliance with the standstill obligation under Article 108(3) TFEU. Therefore, RWE considers that the alleged aid was granted before 27 January 2022 and that the standstill obligation was complied with.
- (112) In its comments on the Extension Decision, RWE submitted that even if the measure was classified as State aid, it would nevertheless be compatible with the internal market under Article 107(3)(c) TFEU, irrespective whether CEEAG applies or not. RWE submitted that CEEAG do not apply to the measure and pointed out that the CEEAG were adopted only after the adoption of the Opening Decision.

4.2.2. LEAG

- (113) In its comments following the Public Consultation, LEAG conceded that while the CEEAG may have a retroactive applicability to the case, their application is not justified. An assessment under the CEEAG entails serious disadvantages and calls into question the swift conclusion of the procedure.
- (114) In its comments on the Extension Decision, LEAG reiterated that CEEAG are not applicable, as according to point 466 CEEAG, it only applies to aid awarded from 27 January 2022. Even if the measure were considered aid, it would in any case have been awarded before 27 January 2022, since the closure law and the 2021 contract entered into force before the adoption of the CEEAG. LEAG further submitted that even if the measure were to be considered State aid and if it were assessed under CEEAG, it would be compatible with section 4.12 CEEAG.
- (115) LEAG also refers to case law distinguishing the granting and payment moment of aid. ⁽³⁹⁾ LEAG submits that in the absence of actual payment of the compensation, which in the present case is also subject to approval by the Commission pursuant to Article 10 of the closure law, there is also no violation of the implementation prohibition pursuant to Article 3 of the State aid Procedural Regulation. The wording of the implementation prohibition speaks for such a distinction between the creation of the compensation claim and the actual payment, since, according to Article 3 of that regulation, aid must not be put into effect before the Commission has taken, or is deemed to have taken, a decision authorising the aid.

⁽³⁹⁾ Judgment of the Court of 21 March 2013, *Magdeburger Mühlenwerke GmbH v Finanzamt Magdeburg*, C-129/12, ECLI:EU:C:2013:200, paragraph 40.

- (116) In their comments on the Public Consultation, LEAG's shareholders (EPH and PPFI) expressed the view that CEEAG do not apply because the compensation does not qualify as State aid. Even if it were State aid, it was awarded before the CEEAG entered into force, as the relevant events are the entry into force of the closure law (August 2020) or the signing of the 2021 contract (February 2021). Even if CEEAG were applicable, the measure would in any event be compatible with the internal market, as all the conditions of section 3 and section 4.12 CEEAG are fulfilled.
- (117) In its comments on the Public Consultation, LEAG's group works council (*Konzernbetriebsrat*) submitted that CEEAG do not apply to this case.

4.2.3. Undertakings

- (118) In its comments to the Opening Decision, GPE argued that using Article 107(3)(c) TFEU as legal basis for the assessment is questionable as that provision targets aid to facilitate the development of certain economic activities or of certain economic areas. However, in this case there is no development of an economic activity/area, but rather a winding down of an economic activity. To further illustrate the alleged inappropriateness of Article 107(3)(c) TFEU, GPE made reference to the Council Decision of 10 December 2010 on the closure of uncompetitive coal mines ⁽⁶⁰⁾, wherein the legal basis used was Article 107(3)(e) TFEU. GPE further stated that the mere fact that the previous Energy and Environmental Aid Guidelines ⁽⁶¹⁾ do not include any provisions regarding closure aid does not mean that Article 107(3)(c) TFEU is necessarily and automatically the correct legal basis for such a measure.
- (119) In its comments following the Public Consultation, GPE pointed to point 466 CEEAG and stated that the aid in the form of compensation was awarded to RWE and LEAG at the time the closure law was adopted in 2020 and at the latest when the 2021 contract between Germany and RWE was signed (February 2021), and that thus the CEEAG are not applicable. To this end, GPE cites the *Magdeburg* case law ⁽⁶²⁾, which established that an aid is granted when the legal right to obtain it is awarded. GPE therefore considered since the CEEAG were adopted after the aid was allegedly granted, the assessment should be carried out directly under the Treaty.
- (120) In its comments on the Extension Decision, GPE reiterated the views summarised in recital (120) and added that the fact that some changes have been made with the amendment contract does not have the effect of altering the key elements of the measure, which should be assessed directly under the Treaty.
- (121) In their comments following the Public Consultation, the eight local companies submitted that the CEEAG confirms the unlawfulness of the aid and gives rise to the criticisms submitted by these companies following the Opening Decision.
- (122) In their comments on the Public Consultation, the two local companies submitted that the CEEAG are applicable. They refer to point 466 CEEAG and the standstill clause in the 2021 contract and note that since the payment of the compensation has not yet been granted in the present case, as it is legally dependent on the Commission's approval, the scope of the CEEAG within the meaning of point 466 CEEAG is applicable.

⁽⁶⁰⁾ Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines (OJ L 336, 21.12.2010, p. 24).

⁽⁶¹⁾ Communication from the Commission – Guidelines on State aid for environmental protection and energy 2014–2020 (OJ C 200, 28.6.2014, p. 1).

⁽⁶²⁾ Judgment of the Court of 21 March 2013, *Magdeburger Mühlenwerke GmbH v Finanzamt Magdeburg*, Case C-129/12, ECLI:EU:C:2013:200.

4.2.4. Associations/NGOs

- (123) In its comments on the Public Consultation, DEBRIV submitted that even if the measure constitutes State aid (*quod non*, see recital (108)), CEEAG are not applicable, because they apply only to aid granted from 27 January 2022. In the present case, if it were to be assumed that the measure constitutes aid, it would in any event have been granted before 27 January 2022, since the closure law already entered into force on 14 August 2020 and the 2021 contract was signed on 10 February 2021. According to the case-law⁽⁶³⁾, the only relevant point in time when aid is granted is the moment at which the recipient of the aid acquires a legal right to the aid under the applicable national law, so that the aid was already granted at the time when that right arose. Further, even if the Commission found CEEAG applicable, the measure would be in any case compatible with the internal market and should be assessed under section 4.12.1, as the measure concerns the closure of profitable coal activities and neither RWE nor LEAG are undertakings in difficulty within the meaning of Commission's Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty⁽⁶⁴⁾. Point 425 CEEAG fully covers both the lost profits and the additional damages and economic disadvantages, and thus the elements of the compensation in the present case fit under the scope of CEEAG.
- (124) In its comments on the Public Consultation, ClientEarth submitted that the aid that had been foreseen under the closure law had already been granted with the signing of the 2021 contract. While the contract contains a clause making reference to the Commission's approval, the legal validity of this contract is technically not subject to the State aid clearance and thus it grants to RWE the right to obtain the compensation, in line with the case-law⁽⁶⁵⁾. The amendment contract does not alter this right. As the CEEAG are not applicable for the reasons set out in recital (124) above, the only possible legal basis for compatibility is Article 107(3)(c) TFEU. However, that provision allows only aid measures that are targeted at the development of an economic activity, and the measure does not meet this criterion as it is targeted to the closure of activities. If any, the only economic activity that is supported with the measure is the shift from coal electricity production to renewables but for such measures, there are other specific rules to assess compatibility of public support, which are not fulfilled in this case. ClientEarth further pointed out that another possibility would be to use Article 107(3)(e) TFEU, which foresees the possibility for the Council to adopt rules regarding compatibility of other categories of aid as may be specified by decision of the Council on a proposal from the Commission.
- (125) In its comments on the Extension Decision, ClientEarth reiterated that the CEEAG would not be applicable. In its view, the reference to the *Freistaat Sachsen* judgment⁽⁶⁶⁾ to justify the applicability of the CEEAG implies a misreading of that judgment. According to paragraph 44 of that judgment, the substantive rules of Union law must be interpreted as applying to situations existing before their entry into force only in so far as it clearly follows from their terms, their objectives or their general scheme that such effect must be given to them. In the present case, the German authorities decided to compensate RWE for the closure of lignite power plants in full awareness of the absence of Commission guidelines regarding the compatibility of this type of aid. Thus, at the time the compensation was awarded to RWE, Germany knew that the assessment of this intervention would be carried out directly under the Treaty. Also, by referring to paragraph 46 of that judgment, ClientEarth argues that a distinction must be made between the notions of 'putting into effect' and 'granting an aid'. The Court considered in paragraph 49 of that judgment that Article 4(1) of the State aid Procedural Regulation, which provided that the Commission must examine a notification as soon as it is received, imposed merely an obligation of particular diligence on the Commission, and therefore is not a rule of application *ratione temporis* of the criteria for assessment of the compatibility of notified aid.

⁽⁶³⁾ Judgment of the Court of 21 March 2013, *Magdeburger Mühlenwerke GmbH v Finanzamt Magdeburg*, Case C-129/12, ECLI:EU:C:2013:200, paragraph 40.

⁽⁶⁴⁾ 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.

⁽⁶⁵⁾ Judgment of the Court of 21 March 2013, *Magdeburger Mühlenwerke GmbH v Finanzamt Magdeburg*, Case C-129/12, ECLI:EU:C:2013:200, paragraph 41.

⁽⁶⁶⁾ Judgment of the Court of 11 December 2008, *Commission v Freistaat Sachsen*, C-334/07 P, ECLI:EU:C:2008:709.

- (126) In its comments on the Public Consultation, Greenpeace submitted that the CEEAG do not apply to the measure due to point 466 CEEAG, as the closure law entered into force already on 21 December 2020, and thus the assessment must be carried out directly under Article 107(3) TFEU. In its view, the aid could fall within the scope of section 4.12.1 CEEAG but it is not necessary, appropriate and proportionate. Section 4.12.2 CEEAG would not apply, as the entire process of the Coal Commission and the explanatory memorandum to the closure law speak against such applicability.

4.3. Compatibility of aid

4.3.1. Development of an economic activity

4.3.1.1. RWE

- (127) RWE submitted that the measure makes an important contribution to promoting the development of an economic activity within the meaning of Article 107(3)(c) TFEU.
- (128) In its comments on the Opening Decision, RWE referred to the Commission's decision on the hard-coal phase-out in Germany⁽⁶⁷⁾ and pointed out that the same argumentation applies to the lignite phase-out and even to a greater extent as the environmental contribution of accelerating the lignite phase-out is even greater. On the one hand, the specific CO₂ emissions of lignite-based electricity generation are higher than those of hard coal-based electricity generation. On the other hand, the electricity production costs of lignite-based electricity generation are lower, so that the additional expansion of renewable energy plants without additional government measures would be the last to force lignite-based power plants out of the market. In addition, Germany's commitment to cancel the saved CO₂ emission allowances (see recital (19)), rules out the possibility of shifting emissions to other sectors or other Member States, which further strengthens the effectiveness of the German coal phase-out.
- (129) Furthermore, RWE submitted that the measure provides predictability and legal certainty, and it thus promotes the development of not only the economic activity of lignite-fired power generation but the energy sector as a whole, as all market participants need reliability about the decommissioning path for lignite for their future investment decisions. This applies to the companies that generate electricity from lignite, which have to change their opencast mine planning in the long term, but also to those market players that want to use the resulting capacity gap as an opportunity to make new investments since they, too, would bear unnecessary investment risks and possibly refrain from investments if the enforceability of a legally prescribed closure path alone remained questionable for years due to legal disputes. This uncertainty would also entail risks for other stages of the value chain in the energy sector, such as for example, a reliable grid planning would also be impaired if the decommissioning path remained uncertain.
- (130) In addition, RWE pointed out that Germany considered the security of supply when designing the modalities of the decommissioning path, as it coordinated with the operating companies with regard to the overall supply system and contractually secured, thus providing reliable investment incentives for the addition of generation capacities. The measure thus serves to accelerate the energy transition while ensuring security of supply.
- (131) In its comments on the Public Consultation, RWE referred to its submission after the Opening Decision, which is summarised in recital (129) to (131) above, and submitted that the RWE measure complies with point 426 CEEAG. In its comments on the Extension Decision, RWE reiterated that the amended RWE measure makes a significant contribution to the accelerated decarbonisation and to the transformation of the energy sector and thus it facilitates the development of an economy activity, in line with point 426 CEEAG.

4.3.1.2. LEAG

- (132) In its comments on the Public Consultation, LEAG submitted that the phase-out of lignite-based electricity generation will facilitate the development of additional electricity generation capacity based on other technologies, especially renewable energies. Furthermore, in LEAG's view, the measure will have a positive impact on the environment and provides predictability with regard to the early closure of lignite-fired power plants.

⁽⁶⁷⁾ German hard coal phase-out decision, recitals 100–109.

4.3.1.3. Undertakings

- (133) In its comments to the Opening Decision, GPE submitted that the aid cannot be considered as support for an economic activity, as there is no development of an economic activity/area, but rather, a winding down of an economic activity. In its comments on the Public Consultation, GPE commented that it is not clear which economic activity is being facilitated by the compensation. If the compensation addresses the costs of closing a coal-fired power plant earlier than foreseen, it is questionable to what extent closing an activity can be considered a facilitation of an economic activity. In addition, GPE noted that if the compensation is not *de facto* linked to the costs of closing power plant and will be used for the investment into renewable energy production, the compatibility of the state support should be assessed on the basis of the applicable provisions for renewable electricity production. In its comments to the Extension Decision, GPE reiterated its view that the aid cannot be considered as support for an economic activity.

4.3.1.4. Associations/NGOs

- (134) In its comments on the Opening Decision, the Public Consultation and the Extension Decision, ClientEarth expressed doubts that aid for the early closure of economic activities meets the condition under Article 107(3)(c) TFEU that aid must aim at developing an economic activity, as the direct purpose of aid for closure is to close down an activity even if such closure may indirectly lead to the development of new activities.
- (135) The EEB submitted in its comments following the Public Consultation that the German government failed to identify the economic activities that will be facilitated as a result of the aid.

4.3.2. Incentive effect

4.3.2.1. RWE

- (136) In its comments on the Opening Decision, RWE submitted that the measure has an incentive effect. In the absence of the State intervention or contractual agreement with the German Government, RWE would have continued to generate electricity from lignite much more heavily than is now permitted, in order to achieve further contribution margins and to be able to maintain the original opencast mining plan. Without the compensation laid down in the closure law and agreed in the 2021 contract, RWE would not have agreed to the early termination of lignite power generation. RWE would have challenged a corresponding regulatory closure in court.
- (137) In its comments on the Public Consultation, RWE reiterated these arguments and claimed that the measure complies with point 427 CEEAG. In RWE's view, the compensation is far below the total damage caused to it by the early closure due to the lost profits and the additional costs compared to the counterfactual scenario. Comparing with a counterfactual scenario without the lignite phase-out, RWE is not relieved of any burden on an activity that RWE would have had to carry out anyway, nor is compensated for RWE's usual business risk. On the contrary, only partial compensation is provided for the damage caused by a State intervention.
- (138) In its comments on the Extension Decision, RWE reiterated that it would not have closed any lignite-fired power plants prematurely since 2020 and would not close any further plant prematurely if there had been no contractual agreement and legal arrangement for the full early termination of lignite-fired power generation against compensation. In RWE's view, the evolution of the market shows that the lignite-fired power generation is profitable for RWE. With low variable costs, long-term high gas prices and Germany's phasing out of nuclear energy, lignite-fired power generation is the most competitive technology. This applies in particular to the continued operation of existing installations, since, in view of the investment costs already incurred for opencast mines and power plants, these costs are irrelevant to the operational decision.

4.3.2.2. LEAG

- (139) In its comments on the Public Consultation, LEAG submitted that the measure provides an incentive effect as it induces to change its economic behaviour so that it closes plants earlier than initially foreseen, in a more orderly and predictable manner.

4.3.2.3. Undertakings

- (140) In its comments to the Publication Consultation, GPE considered that the closure of certain coal-fired power plants had been foreseen before the introduction of the measure, thereby making the issue of incentive effect particularly salient. In its comments following the Extension Decision, GPE considers that the financial disincentives of operating lignite plants (i.e. the increase in ETS prices alone) would have led RWE to close the plants earlier than foreseen, possibly before 2030. As such, GPE considered that the compensation does not provide an incentive effect.
- (141) In their comments to the Opening Decision and to the Public Consultation, the two local companies considered that the measure does not provide an incentive to RWE to change its behaviour in such a way that the protection of the environment is improved. On the contrary, the companies suggest that the payment will have the opposite intended effect, in that lignite-fired power plants will continue to operate as a result of the payment of compensation. The companies suggest that without the compensation payments, the plants would have been long removed from the grid ⁽⁶⁸⁾.

4.3.2.4. Associations / NGOs

- (142) DEBRIV submitted in its submission on the Public Consultation that the measure has an incentive effect in line with point 427 CEEAG. The lifetime of the assets, which was also used for the calculation model of the forgone profits, goes well beyond the closing date of 2038, which is the latest date for closure in the closure law and the 2021 contract. The measure thus has an incentive effect in the sense of CEEAG as it induces the undertakings concerned to close their plants earlier than foreseen and changes the behaviour, which they otherwise would not change without the measure.
- (143) Greenpeace submitted in its comments on the Opening Decision that the measure does not have an incentive effect as it does not lead to a change in behaviour.
- (144) ClientEarth submitted in its comments on the Extension Decision that the measure does not have an incentive effect and pointed out recital (70) of the Extension Decision, according to which RWE's forgone profits in the past and nearby future already exceed and therefore justify the compensation to be granted to RWE. In its view, if that is the case, the logical consideration is that RWE is compensated for already incurred losses in the form of forgone profits and that therefore the compensation does not have the effect of advancing the closure of power plants but only the objective to lighten the costs of closure of certain plants for RWE.
- (145) In its comments following the Public Consultation, the EEB disputed the fact that the beneficiaries would not have changed their behaviour without the compensation, as both companies are already in the process of transitioning towards cleaner technologies to produce energy, and this is demonstrated by their public communications. Given different market scenarios, it can be assumed that lignite installations and mines would have shut down at some point in any case. Hence, the beneficiaries' business plans should have foreseen not only costs and profits related to the opening and the exploitation of a mine, but also its closure and rehabilitation.

4.3.3. Breach of Union law

4.3.3.1. RWE

- (146) In its comments on the Opening Decision, RWE submitted that costs that would also occur in the counterfactual scenario have not been included in the calculation of the total damage. Therefore, the argument raised by third parties that a compensation for mining costs may be contrary to the Polluter Pays Principle (Opening Decision, recital (83)) is unfounded, as only those additional mining costs that would not have been incurred in the absence of State intervention are to be compensated.

⁽⁶⁸⁾ Öko-Institut, Assessment of the planned compensation payments for decommissioning German lignite power plants in the context of current developments, 29 June 2020, p. 30, available here: <https://www.oeko.de/publikationen/p-details/assessment-of-the-planned-compensation-payments-for-decommissioning-german-lignite-power-plants-in-the-context-of-current-developments>; Sandbag, smarter climate policy, 'The cash cow has stopped giving: Are Germany's lignite plants now worthless?', available here: <https://ember-climate.org/insights/research/the-cash-cow-has-stopped-giving/>.

4.3.3.2. Undertakings

- (147) In its comments to the Opening Decision, GPE claimed that the compensation violates the Polluter Pays Principle under Article 191 TFEU. In its comments to the Extension Decision, GPE elaborated that the costs and revenues taken into account to determine the compensation cannot be identified on the basis of the information available in Germany or the information provided in the Commission decision. It cannot be excluded that those costs that RWE will have to finance and are due to compliance with the Polluter Pays Principle are covered by the compensation. This is contrary to the Polluter Pays Principle and jeopardises the possibility to consider such a support measure compatible with the rules of the TFEU. GPE also considered that the compensation counteracts EU measures for climate protection by making the taxonomy less effective.

4.3.3.3. Associations/NGOs

- (148) In its comments on the Opening Decision and on the Public Consultation, Greenpeace submitted that the measure violates the Polluter Pays Principle if the compensation covers also the mining costs.
- (149) In its comments on the Opening Decision, ClientEarth submitted that the mine rehabilitation costs must be borne by the mine operators in accordance with the Polluter Pays Principle. Compliance of the closure compensations with the Polluter Pays Principle is an issue in and of itself that must be dealt with separately from the part of the compensations meant to indemnify the operators for their forgone profits and other losses. Any payment by the State of costs linked to pollution management relieves the beneficiary of costs that it should normally bear⁽⁶⁹⁾. ClientEarth further submitted that the mines' operators are identified and legally liable for rehabilitation costs of the opencast mines, throughout their operations and after their closure.
- (150) In its comments to the Opening Decision, the EEB considered that the compensation violates the Polluter Pays Principle laid down in Article 191(2) TFEU and environmental law derived therefrom. The compensation does not account for the rising price of carbon emissions, which will increasingly rise due to the new 2030 EU targets (under the 'Fit for 55' package) and the EU's international commitments under the Paris Agreement. By 2039, the carbon allowance costs will be in the range of EUR 19,5 billion for RWE and EUR 39 billion for LEAG, and thus any profits would be impossible. Hence, the compensation has no sound basis and contradicts the Polluter Pays Principle. The EEB also considered that the Polluter Pays Principle is violated as it entails compensation to polluters without clarity on the calculations, whilst the negative externalities of their activities are not considered. There is a failure to internalise air pollution damage costs, which is regulated by the Industrial Emissions Directive ('IED')⁽⁷⁰⁾. The compliance with the EU Best Available Techniques ('BAT') for Large Combustion Plants ('LCPs') are currently exceeding mercury to air pollution levels prescribed by the BAT and if the largest lignite plants were required to apply the stricter performance levels achieved by the use of BAT, the health damage burden of continued lignite operation could have been reduced by billions per year in terms of health and other air pollution-related costs. In addition, the EEB alleged that the German authorities failed to comply with the Commission's implementing rules 2018/1135 on IED reporting; data for the reporting years 2017 and 2018. Finally, there has been a failure to internalise water fees and damage costs, and taxpayers are carrying the burden of RWE and LEAG's lignite business through health costs. The costs of water are not fixed in line with Article 9 of the Water Framework Directive⁽⁷¹⁾ by the German states in question, and do not internalise the environmental cost in any of the German states.

⁽⁶⁹⁾ Commission decision of 1 December 2004 on State aid C 39/2004 – Nuclear Decommissioning Agency (OJ C 315, 21.12.2004, p. 4).

⁽⁷⁰⁾ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

⁽⁷¹⁾ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).

- (151) The Health and Environment Alliance ('HEAL') stated in its comments to the Opening Decision that the German government has not taken all means to ensure that lignite operators reduce pollution until the phase-out as much as possible. It pointed out that this is reinforced by the Hinkley Point C ruling ⁽⁷²⁾, and that the climate neutrality, pollution and just transition objectives of the Green Deal must be considered.

4.3.4. Necessity

4.3.4.1. RWE

- (152) In its comments on the Opening Decision, RWE claimed that the State intervention, through the closure law and the 2021 contract, is necessary in order to achieve the early lignite phase-out and to make an additional and substantial contribution from the lignite sector to the reduction of CO₂ emissions, as without this intervention, RWE would have continued to burn lignite until the middle of the century as it was allowed to do so.
- (153) Furthermore, RWE referred to the German hard coal phase-out and claimed that the Commission's assessment in that decision ⁽⁷³⁾, i.e. that it is unlikely that such amount of coal-fired generation capacity would have left the market without the State intervention, applies also to the lignite phase-out. This is because electricity generation based on lignite is more competitive than hard-coal electricity generation, and thus the lignite-fired power plants would be the last to leave the market. The operators have made considerable investments (opencast mines and power plants), which are incurred as fixed costs anyway, irrespective of power plant utilisation. For existing plants, the combination of high fixed costs and low variable costs ensures that electricity generation from existing plants remains economical even when new investments are no longer worthwhile.
- (154) RWE also claimed that lignite-fired power plants would not leave the market without the State intervention also considering the impact on the mines. If the quantities of coal converted into electricity are significantly reduced, the mine planning must be changed, and such an adjustment of the mine planning causes massive additional costs. Therefore, it may even be more economical to accept insufficient contribution margins when viewed in isolation than to reduce electricity generation.
- (155) In RWE's view, the measure is necessary also in its form as a compensated market intervention, as an exit without compensation would be unconstitutional. Without the 2021 contract, it would not have been legally feasible to implement the lignite phase-out taking into account the effects on coal regions, employees and security of supply and its impact on the success of the energy transition.
- (156) In its comments on the Public Consultation and on the Extension Decision, RWE repeated the view that the measure is necessary and submitted that it complies with point 428 CEEAG.

4.3.4.2. LEAG

- (157) In its comments on the Public Consultation, LEAG submitted that without the measure, the electricity market would not achieve comparable savings on its own, so the measure is necessary in order to achieve the relevant objectives. Due to the phase-out of nuclear energy in Germany and the increasing discontinuation of Russian energy supplies, lignite-based electricity generation will remain competitive even if there is a strong increase in the generation of energy from renewable sources, and hence there would be therefore no incentive for the plant operators of the lignite-fired power plants to shut them down before 2038. As stated in the Opening Decision (recital (4)), lignite-fired power plants emitted 130,74 million tonnes of CO₂ in 2018. This corresponds to about 40 % of the energy sector's CO₂ emissions in that year. The closure law and the 2021 contract create legal certainty and predictability that these CO₂ emission savings will be achieved in Germany.

⁽⁷²⁾ Judgment of 22 September 2020, *Austria v. Commission*, C-594/18P, ECLI:EU:C:2020:742.

⁽⁷³⁾ German hard coal phase-out decision, recitals 110 to 117.

4.3.4.3. Undertakings

- (158) In its comments to the Opening Decision and the Public Consultation, GPE submitted that the German authorities defined the plants eligible for compensation without taking into account the actual age of the plant, its level of amortisation, and its expected closure date. The measure is not necessary as a normally functioning market would have led to the closure of coal-fired power plants in any case considering that: (i) the proposal to phase out coal-fired power plants has been in the public domain for some time and undertakings should have taken such a policy into account when defining their business/investments plans; and (ii) some of the units were aging and their closure was already planned. In its comments to the Extension Decision, GPE added that also the effects of climate policies, the price cap on revenues applicable to all electricity producers, the increasing price and upcoming scarcity of ETS licences, the rapid and efficient development of cleaner energy sources would have driven the lignite-fired power plants out of the market in the short term, thus negating the need for a State intervention.
- (159) The eight local companies considered in their comments to the Opening Decision that market mechanisms (i.e. the increasing costs of carbon emission permits) would have led to the early shut down of lignite plants ⁽⁷⁴⁾.
- (160) In their comments to the Opening Decision and to the Public Consultation, the two local companies submitted that the measure is not necessary and gave examples of how other Member States have phased out coal without compensation ⁽⁷⁵⁾.

4.3.4.4. Associations/NGOs

- (161) In its comments on the Public Consultation, DEBRIV submitted that the measure is necessary, and therefore fulfils the requirement under CEEAG, as without the measure, the electricity market would not generate comparable emission savings on its own. Due to the phase-out of nuclear energy in Germany and the disappearance of Russian energy supplies, lignite-fired power generation will remain competitive even in the event of a sharp increase in the production of electricity from renewable energy sources, and thus there is no incentive for the operators of the power plants to close them before 2038. Therefore, the measure is targeted at a situation where it can bring about substantial improvements which the market alone cannot deliver.
- (162) In its comments on the Opening Decision, Greenpeace submitted that the measure is not necessary, considering that: (i) no compensation or only a limited compensation would have been sufficient to make the closure law compliant with fundamental rights; and (ii) the aid cannot bring about any substantial improvement which the market cannot bring about itself. Although the closure law leads to a predictable and clear phase-out of coal for energy purposes, the aid does not really play a role in it.
- (163) In its comments on the Opening Decision, ClientEarth submitted that there is no need for the measure. The lignite plants and associated mines would close by themselves and sooner than 2038 under market conditions (notably because of rising environmental compliance costs and ETS prices) and thus the measure will only delay the complete lignite phase-out in Germany. In its comments to the Extension Decision, ClientEarth added that the effects of climate policies and changes in the electricity market would have driven the lignite plants out of the market shortly. ClientEarth also referred to Decision SA.54537 Prohibition of coal for the production of electricity in the Netherlands, where the Dutch authorities granted compensation to the only plant – Hemweg – which did not benefit from a transition period as the other plants covered by the closure law did ⁽⁷⁶⁾.

⁽⁷⁴⁾ Öko-Institut, Assessment of the planned compensation payments for decommissioning German lignite power plants in the context of current developments, 29 June 2020, p. 25 et seq, available here: <https://www.oeko.de/publikationen/p-details/assessment-of-the-planned-compensation-payments-for-decommissioning-german-lignite-power-plants-in-the-context-of-current-developments>.

⁽⁷⁵⁾ Power ENGINEERING International, Spain's remaining coal-fired plants likely to be phased out by 2025, 5 August 2020, online: <https://www.powerengineeringint.com/coal-fired/spains-remaining-coal-fired-plants-likely-to-be-phased-out-by-2025/>.

⁽⁷⁶⁾ Commission decision of 12 May 2020 in State Aid SA.54537 (2020/NN) – Netherlands – Prohibition of coal for the production of electricity in the Netherlands, OJ C 220, 3.7.2020, p. 1. See Judgment of the General Court of 16 November 2022, *Kingdom of the Netherlands v European Commission*. Case T-469/20. ECLI:EU:T:2022:713. The judgment has been appealed at the Court of Justice (Case C-40/23 P).

- (164) The EEB, in its Opening Decision comments, noted that historically, coal plants have retired at an average lifetime of 46 years globally, and calculated that the compensation foresees an earlier-than-expected closure date for 3 out of 15 of RWE's units and for 7 out of 11 of LEAG's units. Therefore, the remaining units should not be entitled to any compensation as they either should have been already closed or they should close soon to limit losses due to the increasingly poor coal economics. In addition, and as discussed in recital (151), the EEB also submitted that the compensation does not account for the rising price of carbon emissions.
- (165) In its comments to the Opening Decision, CAN considered that market dynamics could be sufficient to shutter the coal plants. CAN referred to the increasing EU ETS prices and stated that a direct impact of the current EU ETS prices is that it almost halves the profitability of modern lignite-fired power plants in Germany beyond 2024 ⁽⁷⁷⁾, leading to almost half of the country's lignite fleet losing cash based on current expectations.

4.3.5. Appropriateness

4.3.5.1. RWE

- (166) RWE submitted in its comments on the Opening Decision that the measure is appropriate and that the Coal Commission and, following it, the German government have carefully weighed the decision in favour of the instrument of a negotiated, legally and contractually secured exit path from lignite-based electricity generation against other measures. In the hard coal phase-out decision ⁽⁷⁸⁾, the Commission noted the advantages of a contractually secured and compensated coal phase-out against other instruments, such as an EU ETS, a CO₂ minimum price or purely regulatory interventions. The main advantage of a contractual solution is the possibility to steer the phase-out path in a targeted manner, taking into account security of supply and the jobs affected, and to secure it legally. A solution was needed that specified an individual decommissioning path that was coherent overall, that could be implemented in the generation systems concerned from a technical and regulatory law perspective and that was associated with the lowest possible operational, economic and social costs.
- (167) In its comments to the Public Consultation and to the Extension Decision, RWE reiterated that the measure is appropriate as the chosen approach of defining a holistic decommissioning path from the beginning to the end in consultation with the operating companies and establishing it in a legally secure manner, so that system discontinuities and overburdening of the affected coal regions are prevented, is entirely in line with point 429 CEEAG.

4.3.5.2. LEAG

- (168) In its comments on the Public Consultation, LEAG submitted that the measure is appropriate. Germany had analysed during the work of the Coal Commission various scenarios and alternatives to reduce CO₂ emissions and has chosen this solution in view of the legal uncertainty that would be created for plant operators as a result of potential claims for damages.

4.3.5.3. Undertakings

- (169) In its comments on the Opening Decision, the Public Consultation and the Extension Decision, GPE claimed that the Commission failed to adequately analyse the appropriateness of the measure and submitted that a measure that provides compensation for forgone profits without distinguishing between the different installations cannot be appropriate. GPE also referred to a Polish State aid case concerning support for closure of coal mines, where the Commission found the aid for exceptional social and environmental costs to be compatible ⁽⁷⁹⁾, and noted that it is unclear whether the costs taken into account for the RWE measure correspond to exceptional social and environmental costs, as in the Polish case, or whether it is other types of costs.

⁽⁷⁷⁾ Modern German lignite plant margins halve from 2024 | Argus Media.

⁽⁷⁸⁾ German hard coal phase-out decision, recital 118.

⁽⁷⁹⁾ Commission decision in State Aid SA.100533 (2021/NN) – Poland – Amendments to the closure plan in the Polish coal mining (OJ C 231, 30.6.2023, p. 8).

- (170) In their comments to the Opening Decision, the eight local companies argued that the fact that the payments are flat and not dynamised in any way is not appropriate, and that a dynamic pricing model would have been more appropriate for ensuring the coal phase-out while limiting compensation to the necessary level.
- (171) In their comments to the Public Consultation, the two local companies submitted that there are more suitable alternatives that are equally effective in achieving the climate protection objective, and that it should first be examined whether other policies and measures can be used, such as CO₂ levies or price mechanisms such as the ETS. The companies also gave examples of how other Member States have phased out coal without compensation⁽⁸⁰⁾.

4.3.5.4. Associations/NGOs

- (172) In its comments on the Public Consultation, DEBRIV submitted that the measure is appropriate in accordance with point 429 CEEAG. DEBRIV pointed out that Germany had examined alternatives in order to achieve the planned CO₂ emission reductions (see recital (25)) and that the measure is the most appropriate to achieve the pursued objective (i.e. a legally safe and reliable CO₂ emissions reduction).
- (173) ClientEarth submitted in its comments on the Opening Decision, on the Public Consultation and on the Extension Decision that the measure is not appropriate. Whilst there may be instances in which the Commission finds that negotiating a compensation by contract to ensure legal certainty and avoid costly judicial procedures is an appropriate form of aid⁽⁸¹⁾, this is not the case here because: (i) the closure would have happened in any case also without a compensation since most of the units would have closed driven by market forces alone; (ii) German law does not require such compensation for the redefinition of the operator's property rights in the present case, so the legality of the closure obligation could have been ensured without financial compensation (see on the existence of aid, recital (107)); (iii) well-designed tenders would be a more appropriate form of aid than lump sum compensations; (iv) if tenders were not an appropriate form of aid in this case, a compensation based on adjustment parameters would be more appropriate (this is also related to the proportionality of the aid). ClientEarth also referred to the Polish State aid case concerning support for closure of coal mines, where the Commission found the aid for exceptional social and environmental costs to be compatible⁽⁸²⁾, and noted that the fact that lignite mines are closely linked to the power plants does not *per se* justify that they are included in the calculation of the compensation, and that it is unclear whether the costs taken into account for the RWE measure correspond to exceptional social and environmental costs, as in the Polish case, or whether it is other types of costs.
- (174) The EEB in its comments to the Opening Decision submitted two alternatives, which the German government could have undertaken. First, a minimal carbon price floor has not been seriously considered by the German government as a more cost-effective approach to achieve the same result whilst implementing the Polluter Pays Principle and without resorting to State aid. Secondly, the compensation should have been conditioned to full implementation of Union standards, such as BAT for Large Combustion Plants, and including energy efficiency performances. In this regard, the EEB draws a comparison with the approach of the Netherlands in the above-mentioned Dutch coal compensation case⁽⁸³⁾, where the closure law set binding electrical efficiency levels. The EEB considers that for Germany, it would have been possible to pre-condition any compensation to compliance with BAT associated energy efficiency levels, and that it would have been a more sensible measure for GHG abatement to use a performance-based approach and to close more GHG intensive units first.

⁽⁸⁰⁾ *Power ENGINEERING International*, Spain's remaining coal-fired plants likely to be phased out by 2025, 5 August 2020, online: <https://www.powerengineeringint.com/coal-fired/spains-remaining-coal-fired-plants-likely-to-be-phased-out-by-2025/>.

⁽⁸¹⁾ See e.g. the aid for the early closure of Fessenheim nuclear power plant in France.

⁽⁸²⁾ Commission decision in State Aid SA.100533 (2021/NN) – Poland – Amendments to the closure plan in the Polish coal mining (OJ C 231, 30.6.2023, p. 8).

⁽⁸³⁾ Commission decision of 12 May 2020 in State Aid SA.54537 (2020/NN) – Netherlands – Prohibition of coal for the production of electricity in the Netherlands (OJ C 220, 3.7.2020, p. 1).

4.3.6. Proportionality

4.3.6.1. RWE

- (175) In its comments on the Opening Decision, RWE submitted that the measure does not lead to overcompensation and is therefore proportionate. First, the compensation does not exceed the total damages as all the losses of RWE (RWE calculated the amount of total damages due to the early closure at EUR 8,7 billion) surpass the amount of compensation to RWE. RWE further submitted that a competitive tender procedure is out of the question in case of lignite, as it would not have created any competitive efficiency in view of the few market participants and the few generation systems operated in Germany and consisting of power plants and opencast mines.
- (176) In its comments to the Public Consultation, RWE submitted that the measure remains proportionate also under CEEAG for the following reasons:
- a) In line with point 430 CEEAG, a tender procedure would not be appropriate, in view of only two operators and of the small number of generation systems and the risk of system breaks.
 - b) In line with point 432 CEEAG, the amount aims to compensate for lost profits and additional costs incurred to RWE due to the early closure. In 2019, RWE had calculated its total damage caused by the early closure to EUR 8,7 billion: EUR 5,5 billion of lost profits and EUR 3,2 billion of additional costs.
 - c) An update mechanism, as per point 433 CEEAG, is not necessary and proportionate in order to prevent overcompensation, as overcompensation is already prevented by the fact that the compensation amount falls far short of the economic disadvantages actually incurred by RWE. An update mechanism is also not appropriate for the model chosen by Germany of a complete lignite phase-out, which is planned and legally and contractually agreed in the long term, as the mechanism would remove the legal certainty sought by this model. Furthermore, such a mechanism cannot be applied to the additional costs, as these costs do not arise from individual power plant closures, but continuously as a result of the replanning of the mines, and thus the individual decommissioning times are not an appropriate point in time to have the 'most recent assumptions' within the meaning of point 433 CEEAG. RWE also pointed out that an *ex-post* introduction of such mechanism would remove the business base of the consensual lignite phase-out when RWE has already shut down its first units and has already started the re-planning of the mining activities. Further, the closure law and the 2021 contract had been negotiated and agreed long before the implementation of CEEAG and its requirement for an update mechanism, and thus introducing it now would breach RWE's legitimate expectations. Finally, such mechanism is alien to a compensation measure governed by public law; if RWE had obtained a compensation through national court proceedings, the national court would not have made the amount of the compensation dependent on the subsequent development of the State intervention.
- (177) In its comments on the Extension Decision, RWE submitted that (i) a tender procedure would be inappropriate, as explained above; (ii) Germany's calculation of part of the total damage and the accrued profits in the period only until 2026 show that the compensation paid to RWE falls far short of the total damage incurred; (iii) RWE makes a further significant contribution to decarbonisation by bringing forward the lignite phase-out to 2030; and (iv) an update mechanism is not necessary as the compensation payments are already justified by the economic disadvantages occurring within the aforementioned 3-year period. It would not be necessary even if the profits lost in 2025 and 2026 were also assessed and taken into account for the units shut down in 2021 and 2022, considering that CEEAG only refer to the time period between the granting of the aid and the time of closure, but not to the period between the granting of the aid and the occurrence of the damage compensated, as well as considering that Germany's calculations up to 2026 are based on actual and therefore reliable market data, so that there is no need to review the amount of compensation in this respect either.

(178) Specifically concerning the Commission's doubts raised in the Opening Decision, RWE submitted in its comments on the Extension Decision that:

- a) The revised calculation of RWE's forgone profits, which is for a shorter period and more conservative, removed the doubts in the Opening Decision about uncertainties surrounding longer-term projections and about the duration of the operation of lignite installations. All the units considered in the revised calculation could easily have continued operation for another 3 years (and longer). Also the Commission's doubt concerning lifetime of Niederaußem D (see recital (127) of Opening Decision) has been removed, as this plant was not taken into account in the revised calculation of RWE's forgone profits.
- b) There is no uncertainty about electricity and CO₂ prices, as in the revised calculation Germany was able to use actual market data, which provides reliable information about the price and CO₂ costs at which a plant operator could have marketed its capacities at the relevant time. Referring to recital (115) of the Extension Decision, RWE agrees that the Commission was right in pointing out that the sale of the power capacities on the forward market takes place in reality, and that recourse to such actual market data leads to robust calculations.
- c) Sensitivity analyses are superfluous as the electricity prices and CO₂ costs were not derived from market modelling based on possibly uncertain assumptions.
- d) When actual market data is used, the result of the calculations is significantly influenced by two factors: the point in time and the period under consideration. Germany has chosen both factors in such a way that the calculated lost profits are significantly underestimated, and thus Germany's approach is conservative. Limiting the period to 3 years of operation is very restrictive, and lower than in the case of the *Sicherheitsbereitschaft* ⁽⁸⁴⁾, where the Commission approved the compensation of lost profits of 4 years of plant operation. Even for a conservative calculation of a minimum damage, which should be based solely on actual market data with regard to the electricity market data, it would be more appropriate to assume that the units shut down in 2021 and 2022 would have continued to operate at least in the years 2025 and 2026.
- e) As far as the choice of the two-week period from 21 October to 4 November 2022 is concerned, it should first be noted that this is a relatively recent period in the past, which could hardly have been more up-to-date for the calculation made by r2b energy consulting on 16 December 2022. It also seems plausible to use average values over a two-week period in order to balance the aim of the greatest possible data quality with the attempt to use a meaningful value that is unaffected by random short-term price spikes or falls.
- f) The compensation for early closure under the measure and the deferred closure mechanism were conceived from the outset as two different instruments, which compensated for different economic disadvantages without overlapping. The forgone profits identified by Germany for the years 2021 to 2026 are unrelated to any restrictions on the operation of Niederaußem G or H in the years after 2029.
- g) Even in case of the amended closure schedule, there will be additional costs for the early phase-out, such as significant expenditure for the modified mine planning, as well as significant staff restructuring. However, RWE took note of the fact that the Commission does not consider it necessary at this stage to examine these additional costs further in order to establish the compatibility of the amended RWE measure because the partial damage identified by Germany in the form of profits generated in the years 2021 to 2026 is sufficient to ensure that there is no overcompensation.
- h) The revised calculation is not only conservative for the reasons summarised above in this recital, but also a mere partial damage calculation as several other costs have not been considered, i.e. the forgone profits of the units closing from 2026, the revenues from heat deliveries and the balancing market, as well as RWE's considerable additional costs.

⁽⁸⁴⁾ Commission decision of 27 May 2016 in State aid SA.42536 – Germany – Closure of German lignite-fired power plants (OJ C 258, 15.7.2016, p. 1).

4.3.6.2. LEAG

- (179) LEAG submitted that the Commission's decision practice provides an adequate analogy in terms of both proportionality and appropriateness, namely the closure of lignite-fired power plants in Germany in 2016 ⁽⁸⁵⁾, the early closure of the Fessenheim nuclear power plant ⁽⁸⁶⁾ and the German nuclear phase-out. Although the measure is a fundamentally different matter, certain indications for the proportionality of the compensation amount at issue here can nevertheless be derived from the 2016 Commission decision, where Germany assumed costs of around EUR 1,6 billion for these units ⁽⁸⁷⁾. In addition, in the present case, a complete phase-out of lignite-based power generation does not only trigger the premature closure of larger and newer power plant units than those concerned by the 2016 Commission decision, but above all it triggers the premature end of the operation of the opencast mines. Therefore, the compensation amounts must also include the considerable investments in the opencast mines and the additional costs caused by further consequences of the premature termination of the opencast mines ⁽⁸⁸⁾.
- (180) In contrast to the approved closure in 2016, where individual power plant units were temporarily shut down for 4 years before the final decommissioning, a longer compensation period until the final decommissioning in 2038 must be taken into account in the present case. This long-time horizon is justified in the present case, as the counterfactual scenario is decisive for the calculation of the forgone profits, i.e. the profits that the power plants would have achieved on the electricity market without the legally mandated lignite phase-out. This approach is also in line with the Commission's decision of 2021 approving the French State aid for EDF regarding the early closure of the Fessenheim nuclear power plant ⁽⁸⁹⁾, where the Commission found the amount proportionate, insofar as it compensated for the costs and disadvantages incurred and proven by EDF.
- (181) Moreover, in LEAG's view, there are parallels between the present case and the compensation to nuclear power plant operators for the nuclear phase-out. On 5 March 2021, the German government agreed with E.ON, RWE, EnBW and Vattenfall that the operators receive financial compensation of around EUR 2,4 billion for electricity volumes that cannot be used and investments that have been devalued. In return, the companies undertook to terminate all legal disputes pending in connection with the decided nuclear phase-out, as well as ongoing administrative proceedings. They also agreed to a comprehensive waiver of legal remedies. To this end, the German government adopted the draft 18th amendment to the AtG, which approved the signing of a public-law contract. This implements the ruling of the Federal Constitutional Court of 6 December 2016 on the 13th amendment to the AtG, taking into account the decision of 29 September 2020 on the 16th amendment to the AtG. In this ruling, the Court declared the nuclear phase-out permissible, but at the same time awarded the nuclear power plant operators an appropriate compensation, which had previously been withheld from them by the German government or not granted to the required extent.
- (182) LEAG claimed that the compensation of nuclear power operators is significantly higher than the one granted by the closure law and the 2021 contract to operators of lignite-fired power plants when considering EUR/MWh, even though the documented and verifiable extent of damage caused by the premature termination of lignite-fired power generation is significantly higher than that of nuclear power. While in the draft of the 18th AtG-ÄndG the specific compensation ranges between 28,7 EUR/MWh and 33,2 EUR/MWh, [...]. Therefore, even in direct comparison with the compensation under the AtG to nuclear power plant operators, the compensation envisaged for lignite operators is neither unreasonable nor unjustified. On the contrary, it is at the lowest range of what is legally required.

⁽⁸⁵⁾ Commission decision of 27 May 2016 in State aid SA.42536 – Germany – Closure of German lignite-fired power plants (OJ C 258, 15.7.2016, p. 1, recital 11).

⁽⁸⁶⁾ Commission decision of 23 March 2021 in State aid SA.61116 – France – Early Closure of the Fessenheim Nuclear Power Plant in France (OJ C 275, 9.7.2021, p. 1).

⁽⁸⁷⁾ Commission decision of 27 May 2016 in State aid SA.42536 – Germany – Closure of German lignite-fired power plants (OJ C 258, 15.7.2016, p. 1, recital 15).

⁽⁸⁸⁾ On the obligation to compensate consequential damage, see Papier, in: Maunz/Dürig, GG (as of January 2018), Art. 14 paras. 631 et seq.

⁽⁸⁹⁾ Commission, Daily News, 23 March 2021, online: https://ec.europa.eu/commission/presscorner/detail/en/mex_21_1347.

- (183) Furthermore, LEAG claimed that the remuneration under the deferred closure mechanism concerns an additional service, it is independent and thus must not be confused with the compensation for early closure.
- (184) In its comments on the Public Consultation, LEAG submitted that also other factors and aspects must be taken into account when assessing the proportionality of the compensation, including, the comprehensive waiver of legal remedies laid down in the 2021 contract, which avoids complex and lengthy litigation.
- (185) LEAG submitted that the relevant time for the comparison with the counterfactual scenario is the time of notification of the measure. Concerning the application of point 432 CEEAG to the coal phase-out in Germany, due to the overall duration of such a phase-out process and the volatility of the markets concerned, it seems appropriate that the Commission accepts the duly reasoned assumptions discussed and agreed with the beneficiaries and submitted to it at the time of notification by Germany. Otherwise, the Commission would ultimately, also due to the length of the State aid proceedings, intervene in the contractually agreed distribution of risk: market expectations can always change in the future, and the compensation can then turn out to be too high or too low. The purpose of a contract, however, is precisely to reach an agreement on the allocation of such risks that is as definitive as possible. Such an interpretation is in line with the general principle of State aid law, according to which the conformity of a measure must be decided *ex ante* before the measure is implemented ⁽⁹⁰⁾.
- (186) In LEAG's view, the necessary planning for a socially acceptable coal phase-out takes several years. In order to avoid economic and socio-political structural disruptions caused by the politically determined premature coal phase-out for the affected companies and regions, Germany has determined a gradual phase-out of German hard coal and lignite-based electricity generation in the closure law and the 2021 contract by 2038 at the latest after long and intensive discussions in the Coal Commission with all affected stakeholders. In order not to jeopardise this lengthy and complex process, it is necessary that the well-founded assumptions and forecast decisions of the process are not called into question again by uncertain developments at a later point in time. Otherwise, the assessment would depend on unforeseeable future events, which would again jeopardise the legal and planning certainty that must be achieved in such complex processes. The risk of such randomness of timing is currently evident, for example, in the electricity prices on the spot and futures markets, which are significantly higher than the expected electricity prices at the time of notification. In addition, the parties concerned have agreed to a comprehensive waiver of appeal. Should the relevant assessment date of the counterfactual scenario change compared to the agreement, the entire package and the resulting legal and planning certainty would be jeopardised due to volatile electricity prices.
- (187) In addition, LEAG submitted that there is no need for an update mechanism, as per point 433 CEEAG, as the exception of exceptional circumstances applies. As CEEAG does not provide a definition for such circumstances, LEAG refers to the case law, according to which circumstances are exceptional if the character and the extent of the circumstance are unusual and unforeseeable ⁽⁹¹⁾. LEAG submits that the present situation is an exceptional circumstance for the following reasons:
- a) The closure law and the 2021 contract regulate the lignite phase-out for all lignite plants and opencast mines in Germany, which entails far-reaching and partly unforeseeable consequences for entire regions. [...].
 - b) The compensation for power plant operators, which is spread over 15 annual instalments, is intended on the one hand to distribute the budgetary burden on the federal government and on the other hand [...]. This is assured only in case of [...], which will allow the region and businesses [...].

⁽⁹⁰⁾ See Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, C/2016/2946 (OJ C 262, 19.7.2016, p. 1), point 78, according to which the examination of whether a State intervention is in line with market conditions must be performed on an *ex ante* basis, having regard to the information available at the time the intervention was decided upon.

⁽⁹¹⁾ Judgment of the Court of 4 December 2013, *European Commission v Council of the European Union*, C-118/10, ECLI:EU:C:2013:787, paragraph 105; Judgment of the Court of 4 December 2013, *European Commission v Council of the European Union*, C-117/10, ECLI:EU:C:2013:786, paragraph 114.

- c) During the ongoing lignite phase-out, [...]. The beneficiaries of the measure are to make a significant contribution to this, [...].
- d) A compensation agreement between Member States and affected companies also serves to avoid lengthy court proceedings through an amicable settlement, which has also been referred to in point 424 CEEAG. [...].
- e) The legitimate interest of avoiding a distortion of competition through overcompensation must be balanced against the legitimate interest of the affected companies [...]. It must be taken into account that the trigger for State compensation is typically not the company's desire to receive classic investment aid that promotes and expands entrepreneurial activity. [...].

(188) LEAG's shareholders (EPH and PPFI) submitted in their comments on the Opening Decision that they fully endorse LEAG's position that the measure constitutes compatible aid under Article 107(3)(c) TFEU because it is proportionate and does not result in any overcompensation of LEAG. In their comments on the Public Consultation, they expressed the view that the measure is proportionate as the amount of forgone profits and additional damages significantly exceed the compensation amount. The relevant time for comparison of the factual with the counterfactual scenario should be at the time of Germany's notification as any other approach could risk reopening the basis for the coal and lignite phase-out. Finally, there is no need for an update mechanism (point 433 CEEAG), as the exceptional circumstances exception applies here as Germany's lignite phase-out constitutes without doubt an unusual and unforeseeable event.

4.3.6.3. Undertakings

(189) In their comments on the Public Consultation, the eight local companies submitted that the measure is not proportionate as it grants much higher compensation than only forgone profits and additional costs inherent in the closure of coal-fired power plants, as allowed by point 425 CEEAG. The companies also argued that the absence of a competitive tender is not justified, as there are no circumstances that would justify an exception to the rule of competitive tender process. In particular, there was no special situation for RWE which would have made it impossible to award its larger lignite-fired power plants as well as the smaller lignite-fired power stations in the relevant tenders. They further claimed that the aid to RWE does not meet the requirements of CEEAG also because it was based on an (*ex ante*) unrealistic profitability forecast and it was not compared with a counterfactual scenario. Point 55 CEEAG clearly demonstrates the need for a dynamic measure, and this is not provided for either in the closure law or in the 2021 contract. The provisions on significant regulatory changes in paragraphs 20 and 21 of the 2021 contract do not further assist in this regard, because they are not designed for market changes.

(190) In their submission of 16 November 2022, the eight local companies claimed that the amended RWE measure demonstrates again that the compensation to RWE has been determined in a non-transparent and fixed way, i.e. in a manner not taking into consideration potential future changes. The companies questioned how the amount of compensation to be granted to RWE remains the same, despite the changes to the amended RWE measure and the dramatic changes in the energy market situation. In their view, Germany based its estimation of RWE's lost profits due to the early closure on uncertain profitability forecasts and it disregarded the dynamic evolution of electricity and CO₂ prices. In their view, it is already foreseeable for the future that, on the one hand, the demand for electricity produced from fossil fuels will decrease after 2030 and, on the other hand, that CO₂ costs will increase significantly.

(191) In their comments on the Extension Decision, the eight local companies claimed that the revised calculation and the underlying justification of the compensation amount are still insufficient. The revised calculation does not demonstrate that the amount of the advantage to RWE is in fact limited to what is permissible under State aid law. Instead, it offsets the strategically incorrect decisions of RWE and further strengthens its market power by means of State financing of the fuel switch. The high electricity prices resulting from the Russia's war on Ukraine are used as a justification for aid, which has been promised under completely different conditions and has nothing to do with RWE's legitimate expectations of profits protected by ownership. The revised calculation, which is now lagging behind the developments of the energy crisis, is methodologically inadequate and includes unrealistic profitability expectations.

- (192) Moreover, the calculation of selective profit expectations for individual power plants in an opportune reference period alone does not replace the required overall view of the situation of the power plant fleet. In addition, the calculation does not legitimise the full effect of the advantage, as the state support for the expansion of hydrogen-ready gas-fired power plants at the sites of the closed lignite units is not taken into account, which is extremely relevant to investors on the capital markets and the financing conditions of RWE. As a result, the granting of a payment of EUR 2,6 billion to RWE, together with the prospect of supporting the switch to hydrogen-ready gas-fired power plants, must also be prohibited after the amendment contract.
- (193) In its comments on the Extension Decision, GPE submitted that from the information presented in that decision the reasons for not claiming forgone profits after 2026 are not clear; no explanation has been disclosed as to the reason for using this date and the impact on the compensation amount. Also, the German Windfall Tax Act ⁽⁹²⁾ results in a price cap applicable to operators of some lignite power plants EUR 20/MWh higher than for other lignite power plants. The combination of this higher price cap and the compensation already foreseen may result in excessive payments and in overcompensation. In addition, GPE submitted a study from the German institute Forum Ökologische Soziale Marktwirtschaft, which claims that apart from the compensation for early closure, the mining of lignite and the generation of lignite-based electricity is subsidised in Germany through a number of measures, e.g. research funding, an exemption from the extraction levy, an exemption from water abstraction charges, energy tax concessions.
- (194) GPE further submitted that an update mechanism, as per point 433 CEEAG, is needed. First, the calculations have been revised within a period of less than 2 years which shows how fragile and sensitive these types of estimations are, and thus the risk that the aid will not be proportionate and will lead to overcompensation is considerable. Second, as the Commission has accepted that no bidding process would take place, a detailed and thorough analysis should be carried out, which should not merely rely on what according to recital (102) of the Extension Decision 'seems reasonable'. The compensation covers a long period of time, entails the grant of substantial amounts of aid on regular and predetermined instalments. These elements alone warrant the incorporation of an update mechanism.
- (195) GPE also claimed that the Commission seems to have not examined the effects of the possible transfer of some units into the deferred closure mechanism. GPE further submitted that even if it is mentioned explicitly that such transfer is not part of the current case, it may nevertheless substantially impact the amount of compensation that can be awarded to RWE. However, GPE did not explain what that impact would be or how it would come about. Finally, in recital (34) of the Extension Decision, the Commission explains that the German government can decide to transfer three units (Niederaußem K, Neurath F and Neurath G) in a reserve until end-2033. Should the Government take such a decision, final decommissioning would only materialise in 2033 and not in 2030, which has an impact on the forgone revenues.
- (196) In their comments to the Opening Decision, the two local companies submitted that the compensation is not proportionate, in view of the following:
- a) Forgone profits do not constitute costs resulting from an early coal phase-out. First, doubt is cast as to whether the operation of the lignite installations would even be profitable in the future, especially in the context of rising carbon prices. Second, doubt as to whether the early coal phase-out results in additional opencast mining costs at all. This is because there is always a risk that the opencast mines will no longer be operated, as authorisations for operating open-cast mines are generally only granted for 2 to 3 years. Thirdly, it is unclear whether, when calculating the compensation payment, account was also taken of the unnecessary investments and maintenance costs which the operators avoided as a result of the coal phase-out.

⁽⁹²⁾ Gesetz zur Einführung einer Strompreisbremse (Strompreisbremsegesetz – StromPBG), online: <https://www.gesetze-im-internet.de/strompbg/BJNR251210022.html>.

- b) The amount of compensation was not correctly determined, as incorrect compensation periods were used in the calculation of the compensation, and rigid and outdated values for CO₂ allowances and fixed costs were used. The State should have looked at the specific market circumstances more intensively.
- c) An incorrect maximum aid intensity was applied. Aid to support undertakings which improve environmental protection beyond what is required by Union standards may cover between 40 % and 50 % of the eligible costs according to Annex 1 of the Commission's Guidelines on State aid for environmental protection and energy 2014–2020 ⁽⁹³⁾. This means that, even if compensation for lost profits and additional costs were deemed to be permissible, only almost half of the costs incurred could be subsidised.

(197) The two local companies further submitted that the fact that the compensation was determined without a transparent procedure with regard to profitability calculations and market expectations goes against the principles of State aid. The compensation has been agreed individually between the State and the beneficiary, in contrast to a transparent tender mechanism. For lignite there cannot be a competitive bidding process for only two operators of lignite-fired power plants with associated opencast mines, especially with regard to the compensation of profit expectations from opencast mining operations. However, the profitability calculations could be made at least for the power plants of the beneficiary – for example, on the basis of their specific commissioning date, hours of use, efficiency, amortisations already made, etc. – which could be measured against other coal-fired power plants and could be benchmarked against them. In addition, despite the fundamental differences in power plant characteristics and cost structures, it was possible to include small lignite plants in the tenders for the decommissioning of hard coal-fired power plants in accordance with section 43 closure law.

4.3.6.4. Associations/NGOs

(198) In its comments on the Opening Decision, DEBRIV submitted that an adequate compensation must include not only the lost profits but also the significant additional costs throughout the value chain of opencast mining, transport to the power plant, power plant costs and the associated conversion costs, in so far as these are caused by the early statutory closures. In addition, the additional social security costs caused by the measure must be taken into account when assessing the proportionality of the compensation. DEBRIV also notes that the compensation payments will not fully cover the disadvantages and damages actually identified by the operators.

(199) In its comments on the Public Consultation, DEBRIV submitted that the measure is proportionate under section 4.12.1.5 CEEAG. The fact that there is no competitive bidding procedure is justified as there are only two main actors (RWE and LEAG) on the market and the extraction and energy generation from lignite are closely linked to each other. Regarding the additional costs and economic disadvantages caused by the measure, in addition to the consequent costs of opencast lignite mines (including additional costs for restoration operations and related interest and financing losses), all (early) damage caused to operators by the early lignite phase-out imposed by the State, additional costs for replanning and conversion and economic (asset) disadvantages must also be taken into account. Further, the waiver of legal remedies declared in the closure law should also be taken into account.

(200) DEBRIV is of the opinion that an update mechanism under point 433 CEEAG is not justified in the present case, as Germany's lignite phase-out has an exceptional and unforeseeable scale, i.e. there are exceptional circumstances. First, the closure law and the 2021 contract do not regulate only certain individual unit but they regulate the phasing out of lignite for all lignite plants and open-cast mines in Germany, with far-reaching and sometimes unforeseeable consequences for entire regions. Such a wide-ranging intervention requires a consensus in society, which has been achieved with the establishment of the Coal Commission and the consideration of its proposals. Without such consensus – including compensation payments – a coal phase-out covering all German lignite-fired power generation would not be conceivable. The overall consensus reached in society would be jeopardised by the introduction of an update mechanism. Second, there is no risk of overcompensation, which an update mechanism is intended to avoid, since the costs or damage caused by the lignite phase-out are higher than the agreed compensation amount.

⁽⁹³⁾ OJ C 200, 28.6.2014, p. 1.

- (201) Finally, DEBRIV submitted that the legitimate interest in avoiding distortion of competition through overcompensation must be weighed against the legitimate interest of the undertakings concerned in planning and investment certainty. It should be borne in mind that in the present case the trigger for State compensation is not the desire of the lignite undertakings to receive investment aid. Rather, the main focus is to compensate for the State's interference with protected legal positions of undertakings and to put an end to the previous lawful lignite-related business activity. For this reason, it would be unreasonable to impose unilaterally an update mechanism on the lignite undertakings concerned. It is thus clear that the existence of exceptional circumstances makes it necessary to refrain from introducing an update mechanism in the ongoing procedure for the German lignite phase-out.
- (202) In its comments on the Opening Decision, Greenpeace submitted that the measure is not proportionate, as the parameters used by the German authorities to calculate the compensation are unrealistic and inconclusive. In particular, three key assumptions leading to a systematic overestimation of compensation are problematic. First, the assumptions on electricity and CO₂ prices are arbitrary, as the profitability of lignite-fired power plants has steadily decreased over time. Second, the closure of power plants or the closure of opencast mining can reduce fixed costs, but this is not taken into account. Decommissioning will save almost all fixed plant costs and about 20 % of the fixed costs concerning the mines. This alone would result in more than halving the compensation. Third, a compensation period is foreseen for early shutdowns, but Germany's calculation takes an excessive period of time, as it expects compensation for 4 or 5 years, depending on the date on which the plant is closed, but gives no justification for this assumption. Based on the study conducted by the Öko-Institut, the compensation should be limited to 3 years⁽⁹⁴⁾. Each of these three assumptions taken separately would drastically reduce the compensation amount, while when taken together, they reduce the compensation from EUR 4,4 billion to a maximum of EUR 154 million for RWE and EUR 189 million for LEAG.
- (203) In its comments on the Public Consultation, Greenpeace added that there is no clear separation between compensation for power plant operations and mining activities, which is contrary to the State aid rules. The transparency of EU State aid includes not only the indication of the total amount of compensation paid, but also the publication and explanation of the underlying assumptions for determining the amount of compensation. The aid granted must not, in any event, compensate for uneconomic behaviour in the future as a result of an expected further increase in CO₂ prices. Additionally, emissions trading objectives must not be undermined. Further, there has not been a competitive tender, which breaches the principles under the CEEAG. In the context of the case-by-case examination required under point 432 CEEAG, the proportionality assessment of the measure (see recitals (199) and (204)) demonstrates that the measure is in any case excessive.
- (204) In its comments on the Opening Decision, ClientEarth submitted that the measure is not proportionate. It is unclear whether the compensations result from negotiations or a formula. ClientEarth submits, similarly to Greenpeace (see recital (203)), that certain parameters are problematic: the electricity and CO₂ prices were chosen arbitrarily; it was assumed that no fixed costs would be saved with the early closures and that the lignite operators are compensated for a period of 4 to 5 years after the units close, which is too long, for example the Öko-Institut recommends a maximum of 3 years⁽⁹⁵⁾. ClientEarth also pointed out that the calculation should also take into account (i) the deferred closure mechanism; and (ii) the fact that all coal plants named in Annex 2 of the closure law closing before 2025 will be spared potential investment costs for taking the necessary steps to comply with lower emission limit values, i.e. they will be spared from mandatory investments to assure that emissions are limited to the legally mandated level. In its view, the compensation should include variable parameters to eliminate the risk of overcompensation. Since the closure dates are so far in future (until 2038) and since the compensations are planned to be paid in 15 yearly instalments for each operator, the instalments and the global amount of aid can and should be adjusted to the actual expected forgone profits of the plants updated as market conditions evolve, with a capped amount. ClientEarth thus criticised the lack of an update mechanism.

⁽⁹⁴⁾ Öko-Institut, Assessment of the planned compensation payments for decommissioning German lignite power plants in the context of current developments, 29 June 2020, p. 30, available here: <https://www.oeko.de/publikationen/p-details/assessment-of-the-planned-compensation-payments-for-decommissioning-german-lignite-power-plants-in-the-context-of-current-developments>.

⁽⁹⁵⁾ <https://www.oeko.de/fileadmin/oekodoc/Einordnung-der-geplanten-Entschadigungszahlungen-fuer-deutsche-Braunkohlekraftwerke.pdf>.

- (205) ClientEarth claimed that there is no security of supply issue in Germany, as claimed by Germany in order to justify both the long timeline of the closure schedule and the existence of the deferred closure mechanism. Germany's energy market is in overcapacity and there are multiple security of supply measures in Germany to prevent any risk. Even if there were evidence of a security of supply issue and the need to adopt appropriate measures, this should be done in compliance with the Electricity Market Regulation (EU) 2019/943 of the European Parliament and of the Council ⁽⁹⁶⁾. Artificially delaying or postponing the closure of some of LEAG and RWE's units beyond their natural closure date (under a business-as-usual scenario, driven by market forces) to ensure they contribute to security of supply appears like a circumvention of the relevant rules.
- (206) Finally, ClientEarth submitted that there might be potential cumulation issues related to the measure. First, in 2016 for the *Sicherheitsbereitschaft*, there was no adaptation payment (*Anpassungsgeld* (the 'APG')) ⁽⁹⁷⁾. This adjustment payment is now paid directly to workers aged over 58, when they lose their job due to the coal phase-out. In the case of the *Sicherheitsbereitschaft*, the fixed staff costs were not deducted from the electricity market revenues because they were not considered short-term marginal costs. In effect, the companies were also granted payments for the cost of staff adjustments through the payments in the *Sicherheitsbereitschaft*. However, since the costs for personnel adjustments are now paid via the APG, they should not be included in the closure compensations for the operators. They represent about 29 % of the operators' costs ⁽⁹⁸⁾. Second, section 50 closure law stipulates that there should be a deferred closure mechanism (*Zeitlich gestreckte Stilllegung*), which is based on the model of the *Sicherheitsbereitschaft* pursuant to Section 13g Energy Industry Act (EnWG) ⁽⁹⁹⁾. For the deferred closure mechanism, the electricity market revenues are again reimbursed for the duration of that mechanism. This compensation is to be paid in addition to the early phase-out compensations, and it constitutes double compensation because the same contribution margins were already reimbursed as part of the quantification of the EUR 4,35 billion. The operators should thus not be compensated for the deferred closure mechanism in addition to the closure mechanism. In its comments to the Extension Decision, ClientEarth further submitted that the Commission has not examined any possible issue of cumulation with other aid measures such as capacity mechanisms etc.
- (207) In its comments on the Extension Decision, ClientEarth reiterated that an update mechanism would be necessary, especially in light of the calculations having already been revised once and in light of the global changes on the electricity market. A mechanism that allows compensations to be adjusted on the basis of actual forgone profits and closure costs would allow to avoid the risk of overcompensation. ClientEarth raised issues similar to the ones brought by GPE on the Extension Decision (see recitals (194) to (196)), and further pointed out all other relevant energy measures should be taken into account to avoid overcompensation, including the energy price cap and the fact that certain RWE's coal plants are currently profiting from the Substitute Powerplant Maintenance Act (*Ersatzkraftwerkebereithaltungsgesetz*). ClientEarth claimed that is impossible to determine whether there will be a claw-back mechanism to avoid overcompensation. It also referred to Decision SA.54537 ⁽¹⁰⁰⁾ and the general approach followed by the Commission regarding proportionality in that decision. Finally, ClientEarth questioned why two units' decommissioning (Neurath D and E) has been postponed by 2 years and stated that the Commission's analysis on this has not been sufficient, and it is not taken into account what could be its impact on the compensation calculation.

⁽⁹⁶⁾ Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (OJ L 158, 14.6.2019, p. 54).

⁽⁹⁷⁾ See Section 57 closure law.

⁽⁹⁸⁾ Öko-Institut (2017): Die deutsche Braunkohlenwirtschaft. Historische Entwicklungen, Ressourcen, Technik, wirtschaftliche Strukturen und Umweltauswirkungen. Studie im Auftrag von Agora Energiewende und der European Climate Foundation. <https://www.agora-energiewende.de/projekte/die-deutsche-braunkohlenwirtschaft/>, Table 8-3, p. 112.

⁽⁹⁹⁾ The compensation formula from the Annex to the EnWG largely correspond to the compensation formula of Annex 2 to the KVBG.

⁽¹⁰⁰⁾ Commission decision of 12 May 2020 in State Aid SA.54537 (2020/NN) – Netherlands – Prohibition of coal for the production of electricity in the Netherlands (OJ C 220, 3.7.2020, p. 1). In that Decision, the Commission carried out an assessment directly under Article 107(3)(c) TFEU. The compensation was based on forgone profits, and the figure was based on negotiations between the beneficiary and the Ministry, with assistance from independent experts. The Commission examined the assumptions underlying the calculation and found them to be reasonable.

- (208) In its comments following the Public Consultation, the EEB argued that alternative and more realistic assumptions should have been used in the counterfactual scenario, and in particular a more credible carbon price. In addition, the EEB reiterates Greenpeace's concerns that three key assumptions led to a systematic overvaluation of the compensation payments (see recital (204) above).
- (209) HEAL, in its comments to the Opening Decision, considered that the calculation of the compensation was not done in a transparent and accountable manner, and civil society was not involved. HEAL also considered that externalised health costs of coal power have not been factored into the calculation of the forgone profits nor the mine rehabilitation cost. The projected health costs from pollution should have been deducted from the forgone profits for the timeframe chosen so the externalised cost should have been internalised to achieve realistic pricing.
- (210) In comments to the Opening Decision, CAN noted that there is an issue of transparency in the compensation sums. The compensation sums are made up of lost profits, recultivation costs, and a legal disputes waiver, but it remains unclear which amount is paid for which item and whether the result is based on a formula. CAN considers that that the sums are not proportionate to the recultivation costs, particularly regarding LEAG ⁽¹⁰¹⁾.

4.3.6.5. German states

- (211) Sachsen submitted that in order to consider the proportionality of the compensation, all the economic disadvantages for undertakings, which are directly linked to the reduction of CO₂ emissions from the electricity generation from lignite, affected by the lignite phase-out should be taken into account, in particular the costs of the socially acceptable personnel adjustment.
- (212) North Rhine-Westphalia submitted that, in its principal decision of 23 March 2021 on the closure law's stipulations for the state's spatial planning, it emphasised the importance of the provisions of the closure law for land-use planning in the State. All opencast mines must meet the requirements for proper restoration within the meaning of the Federal Mining Act. There is no doubt as to the legality of the compensation contractually agreed between the Federal Government and RWE and which was approved by the German Bundestag as legislator, as a compensation for the additional costs necessarily incurred by the undertaking as a result of the statutory lignite phase-out by 2038 or by 2035. An adequate compensation for RWE is essential to the public interest of the State of North Rhine-Westphalia, as it is a prerequisite for good and forward-looking development in the Rheinisches Revier. It is important that the company will be able to fulfil its statutory obligations to restore the damages caused in the area.

4.3.7. *Avoidance of undue negative effects on competition and trade*

4.3.7.1. RWE

- (213) RWE submitted in its comments on the Opening Decision that the economic disadvantages for RWE are greater than the compensation payment granted and hence, the compensation does not cause any distortions of competition, but conversely leads, at least to a certain extent, to distortions of competition being offset to the detriment of RWE caused by the early lignite phase-out.

⁽¹⁰¹⁾ https://www.bet-energie.de/fileadmin/redaktion/PDF/Studien_und_Gutachten/Gutachten_Folgekosten/Gutachten_Folgekosten_Braunkohleausstieg_Abschlussbericht.pdf.

- (214) In its comments on the Extension Decision, RWE reiterated that the positive effects of the amended RWE measure largely outweigh the potential negative effects. The amended RWE measure will lead to a safe CO₂ reduction and will promote the transformation of the energy sector by creating secure investment conditions for new, climate-friendly technologies. It is precisely the contractual guarantee of the exit path that creates investment certainty for all market participants, since the stalled reduction of lignite-fired power plant capacity is not subject to the reservation of years of court proceedings that would have been expected if Germany had imposed a closure ban using only regulatory means. The frontloading of the phase-out to 2030 further increases these effects of the amended RWE measure. These positive effects are not counterbalanced by negative competitive effects that could result from the payment of compensation. The compensation is calculated in such a way as to compensate only part of the damage caused to RWE by the early lignite phase-out and thus, for RWE, the early lignite phase-out remains a loss-making business from an economic point of view. In addition, it is also already strengthening all of the competitors, as the supply shortage caused by the closures is having an effect on prices.

4.3.7.2. LEAG

- (215) In its comments on the Public Consultation, LEAG submitted that even if the Commission were to assume a distortion of competition as a result of the measure on the basis of the broad scope of this criterion, since in the market the operators would compete with other operators, as is indicated, for example, in recitals (110) to (113) of Opening, the measure would in any event not have any appreciable negative impact. As a result of the closure of the lignite-fired power plants, the operator's market position would even be reduced.
- (216) Moreover, in a hypothetical case, any advantages for LEAG would clearly be secondary in view of the overwhelming positive effects of the measure, especially as regards the reduction of CO₂ emissions. The phase-out of lignite-based electricity generation will facilitate the development of additional electricity generation capacity based on other technologies, especially renewable energies. Furthermore, the measure will have a positive impact on the environment and will provide predictability with regard to the earlier closure of lignite-fired power plants. Therefore, the measure does not alter trading conditions to an extent contrary to the common interest and thus the positive effects of the measure would in any event outweigh any negative effects on competition and trade.

4.3.7.3. Undertakings

- (217) GPE, in its comments to the Opening Decision, cites an analysis carried out by a third party on the alleged distortive effects of the measure. The first alleged risk of distortive effect is that RWE and LEAG will be able to penetrate or strengthen their positions on neighbouring markets to the detriment of their competitors, in particular if they invest in capital-intensive power generation plants for the use of renewable energies. The second concern is that the compensation causes a delay in the lignite phase-out, which would be market-driven and take place much earlier. In the comments to the Public Consultation, GPE added that the Commission should have assessed whether the measure induced any potentially negative effects on competition, and that analysis of the effect of the compensation payment should have been carried out not only on the market of electricity production from coal-fired power plants but also on neighbouring markets such as electricity produced from renewable energy sources.
- (218) Finally, in its comments to the Extension Decision, GPE submitted that the regular predetermined instalments of the compensation will directly reinforce RWE's market power and will be used in a distortive manner on the green electricity markets. GPE notes that market players normally have to overcome two major obstacles when investing in renewables: (i) finding suitable areas for the projects, and (ii) financing the installations. RWE (and LEAG) already enjoy the advantage of having easier access to areas for new wind and solar farms, i.e. by using land formerly designated for lignite mining. Furthermore, the yearly instalments provide RWE (and LEAG) with financial liquidity to invest.

- (219) The eight local companies submitted in their comments on the Opening Decision that granting the aid to lignite operators is against the basic principles of EU competition law, as these companies are in direct competition with RWE in terms of short-term electricity wholesale market. The payment of a non-competitively determined, flat rate and overestimated exclusive decommissioning premium violates Article 106 in conjunction with Article 102 TFEU for the following reasons: (i) it consolidates the position of the market-dominant power producer, RWE, with the aid of financial resources, in a situation where the market is narrowing in favour of RWE anyway; (ii) it creates structurally unequal competitive conditions in the market; it increases the possibility that RWE can exploit the strategic potential of its power plants in the initial sales market as compared to other competitors and expand its market leadership in the renewable energies field and therefore (iii) there is an increased risk that competitors will be crowded out. These companies claimed that a situation in which a Member State creates unequal competitive conditions that may encourage transfers and abuses of market power is considered to be a violation of the competition provisions of primary law according to the precedent of the Commission and the European Court of Justice ⁽¹⁰²⁾.
- (220) In their submission of 16 November 2022, the eight local companies claimed that the amended RWE measure supports RWE's dominance and green transition in a distortive way. They argue that the aim of the amended RWE measure is to maintain RWE's market power in the new green electricity market and that RWE's fuel switch is subsidised by the German state, while other producers have to compete for such transition. They refer in particular to RWE's plans to build hydrogen-ready gas-fired power plants with an approximate capacity of 3 GW in the site of the lignite-fired plants closing in 2030 and an alleged commitment by the German State to support the construction of such plants, even in case of tenders.
- (221) The arguments summarised in recital (220) were also brought forward by the two local companies in their comments on the Opening Decision. In their comments to the Public Consultation, they added that the measure will harm smaller RES electricity producers and will artificially inflate electricity prices. Finally, the companies considered that the positive effects of the compensation cannot be balanced out by the negative effects, due to the effects on competition and the alleged overcompensation (see comments in Section 4.3.6 above).

4.3.7.4. Associations/NGOs

- (222) DEBRIV submitted in its comments to the Public Consultation that there is no evidence of distortion of competition and trade as a result of the compensation. First, the measure gives rise to quantifiable environmental benefits, as the gradual closure of these plants over the relevant period will reduce CO₂ emissions. Second, the compensation paid to the lignite companies is merely compensation for lost profits and for additional damages and economic disadvantages, and thus it does not give the undertakings a competitive advantage.
- (223) Greenpeace submitted in its comments on the Opening Decision that the unproportionate amount of aid as described in recital (199), will lead to extensive market distortions.
- (224) ClientEarth submitted in its comments on the Opening Decision that the measure distorts competition and there are no significant environmental benefits to balance distortions of competition. In its view, the operators can cross-subsidise their other activities, notably energy production from cleaner energy sources. Additionally, the delay of the plants closure created by the closure law's schedule also inherently creates a competitive disadvantage for cleaner energy sources, which will enter the market with more difficulties, or slower than they would have, should the lignite plants have closed per normal business conditions and facing all their closure costs.

⁽¹⁰²⁾ For example, a state measure affecting the Greek energy market, by which the market dominant Greek (lignite) power producer, Dimosia Epicheirisi Ilektrismou AE (DEI), was granted exclusive mining rights and therefore advantages as compared to other producers, was seen as a clear violation of Article 106 in conjunction with Article 102 TFEU (or their predecessor provisions). See Judgment of the Court of Justice 17 July 2014, Case C-553/12 P, Margin No 41 – 'Dimosia Epicheirisi Ilektrismou AE/Commission', confirming the European Commission decision dated 5 February 2008, C (2008) 824 final.

- (225) Furthermore, ClientEarth referred to the so-called 'climate ruling' of the German constitutional court of 24 March 2021 ⁽¹⁰³⁾, which casts doubts to whether Germany's objective of reducing GHG emissions is effectively pursued by the measure. Section 2(1) closure law states that the primary objective of the coal phase-out is to reduce GHG emissions in Germany. The constitutional court however ruled that with its current measures in place, amongst which the closure law, Germany is not fulfilling its obligation to reduce emissions and take effective measures to prevent climate change. Therefore, it could be said that the negative effects outweigh the positive effects, since the measure does not help to achieve the necessary climate targets of Germany. In reaction to this ruling, the German government suggested a national reduction target of 65 % by 2030, which would require a coal phase-out not by 2038 but by 2030.
- (226) ClientEarth claimed that additional measures to avoid distortions of competition should be put into place and referred as an example to the British Energy plc restructuring case ⁽¹⁰⁴⁾. Necessary measures should include a ban of cross-subsidising their different business activities (lignite generation, non-lignite generation, sales to the wholesale market, direct business supply etc.), to avoid misusing the closure aid to develop new activities.
- (227) ClientEarth further pointed out in its comments on the Extension Decision that that decision confirms the concern on the distortions on competition as RWE itself indicated that it would invest massively in the energy transition, more than EUR 50 billion gross globally in the expansion of its green core business, EUR 15 billion of which being earmarked for Germany (see recital (22) of the Extension Decision). If the compensation is actually used for the deployment of renewable energy production, the Commission has issued specific rules to consider the grant of aid for these activities and an assessment would have to be carried out in line with such rules. Such an assessment is not part of the Extension Decision.
- (228) The EEB commented following the Public Consultation that the granting of such high public funds to only two players would greatly distort the internal market and affect competition and trade at national and, given the dimension of RWE and LEAG, at the EU level. The EEB considered that RWE and LEAG will be helped to maintain their power and that competitors who made strategic decisions towards cleaner energy production will be pushed out of the market.

5. COMMENTS FROM GERMANY

- (229) Following the Opening Decision and the Extension Decision, the German authorities submitted comments that are summarised below in this section.

5.1. Existence of aid

- (230) Following the Opening Decision, the German authorities submitted in the comments of 1 April 2021 that the question of existence of aid can be left open as the measure is in any case proportionate. Therefore, Germany did not provide an assessment on whether an advantage is conferred on RWE and LEAG.
- (231) On 6 September 2021, when commenting on the third-party observations, the German authorities rejected as incorrect the view raised by some third parties that the agreed compensation confers on RWE and LEAG an advantage which is greater than the amount which they would have obtained in the event of a statutory closure with a subsequent judicial dispute. Such a view, it was stressed, overlooks the many advantages of the negotiated solution chosen for the lignite phase-out. Germany referred to the Coal Commission, which after long and intensive discussions, recommended, inter alia, that the phasing out of lignite-fired electricity generation should be settled by consensus. The German government followed this recommendation for a number of reasons:

⁽¹⁰³⁾ BVerfG, decision of the First Senate of March 24, 2021 – 1 BvR 2656/18 –, Rn. 1-270, at http://www.bverfg.de/e/rs20210324_1bvr265618.html.

⁽¹⁰⁴⁾ Commission's decision of 27 November 2002 in State Aid NN 101/2002 – United Kingdom Rescue aid to British Energy plc.

- (232) Social pacification: The negotiated solution was of great importance for the acceptance of the coal phase-out in Germany as a whole. Otherwise, without a consensus, the planned phase-out might have been frustrated by different actors, which would have made the social and political implementation and enforcement much more difficult.
- (233) Provides legal certainty and predictability: The negotiated solution provides timely legal certainty and predictability for all parties involved. Reducing German lignite-fired electricity generation is a major structural challenge, in particular, in the regions in central and eastern Germany, where operators of lignite power plants and mines play a prominent role as employers and economic factors. For the reduction of lignite electricity generation to go hand in hand with structural and social policies, a reliable decommissioning pathway is important.
- (234) Lignite as an overall system of power stations and open-cast mines: There is a direct operational link between power stations and open-cast mines in the case of lignite. Therefore, the closure of power plants and open-cast mining planning and logistics need to be closely coordinated. For example, residual hole management, the reclamation of opencast mining areas or overburden management are particularly challenging. The negotiated solution for the decommissioning of lignite-fired power plants takes due account of these challenges and ensures that the reduction of lignite-fired electricity generation is as efficient as possible for the system as a whole.
- (235) Individual rules can only be contractually possible: The agreement between Germany and the operators (i.e. the 2021 contract) is a public-law contract that regulates, in addition to the closure of the power plants, other rights and obligations of the contracting parties. The 2021 contract contains, among others, (i) a comprehensive legal remedy, (ii) rules to ensure compensation for the restoration of the opencast mines and (iii) the possibility of advancing the phase-out by 3 years without additional compensation. These regulations have a monetary value, and they would not have been feasible, or not feasible in the same way, with a legal solution.
- (236) Comprehensive legal remedy: In the 2021 contract, the operators declare a comprehensive waiver of legal remedies, both before national courts and before international arbitration tribunals. Even if the economic value of such a waiver is difficult to quantify, the waiver is of key political and economic significance, as Germany benefits from the legal certainty and does not have to fear any budgetary risks from possible legal action. In addition, the 2021 contract contains regulations on contract equivalence with regard to subsequent changes in the regulatory circumstances and reviews of the measure.
- (237) Securing compensation for restoration of opencast mines: The 2021 contract contains comprehensive provisions to secure the compensation amounts for the rehabilitation of the opencast mines. These provisions are different for RWE and LEAG, as the situation of the two companies is different, in view of the group structure and the safeguarding instruments implemented by the mining authorities. Therefore, in the case of RWE, the focus is on the group structure and safeguards are in place in case of significant changes in the group. In the case of LEAG, the compensation amount is paid to the special purpose vehicles, which already exist and are pledged in favour of the Länder of Brandenburg and Saxony, and the compensation amount is therefore transferred to a special fund.
- (238) Frontloading decommissioning option: The 2021 contract regulates an early option: In the 2030s, all power plants may be closed 3 years earlier than on the closure path, without compensation, provided that Germany requires this at the latest 5 years before the early closure date. The operators accept this without receiving any additional compensation. The option for early decommissioning is therefore included in the agreed compensation amounts. For the German government, this option has an additional benefit as it gives it further room for manoeuvre in the future for further CO₂ reduction and at the same time does not hamper with other policy objectives or areas, such as the security of supply, socioeconomic situation of the affected areas etc. Such an option without compensation could hardly have been regulated with legal certainty by law.

- (239) Reliable CO₂ reduction: The negotiated solution leads to the measure's objective of reducing CO₂ being reliably achieved. There is no reason to fear that the closure of the power plants will be challenged in national court by RWE or LEAG. There can therefore be no situation where the agreed closures would not be achieved or would be delayed and, as a result of which, excess CO₂ would be emitted.
- (240) In its comments on the Extension Decision, Germany maintained its initial view that the classification of the amended RWE measure as aid can be left open, as the present value of the compensation is lower than the estimated loss of profit.

5.2. Compatibility basis

- (241) Germany did not submit comments following the Public Consultation on the applicability and application of CEEAG in the present case, nor commented on the third-party observations that were submitted in that consultation.

5.3. Compatibility of aid

5.3.1. Incentive effect

- (242) Germany argues that the amended RWE measure does not put into question the incentive effect that the RWE measure had on RWE when closing the six units since 2020.
- (243) RWE has already closed six units in compliance with the lignite phase-out laid down in the closure law and in the 2021 contract. However, no compensation has been granted so far to RWE due to the suspensive clause in Article 10 of the closure law. RWE shut down those units only because it had agreed with Germany that these early shutdowns would be compensated. In other words, when closing the units, it was RWE's expectation that Germany would pay compensation as foreseen in the law. The expectation of RWE on receiving compensation was reinforced in particular by the conclusion of a legally binding public-law contract with Germany, i.e. the 2021 contract. In addition to the closure law, which came into force in August 2020, this contract stipulates that RWE is entitled to compensation for the early shutdowns of the power plants. RWE will also be motivated for the future closures due to the contractually agreed compensation. Therefore, the RWE measure, as initially envisaged and as amended, has an incentive effect on RWE.
- (244) Concerning point 427 CEEAG, the German authorities submitted that the acceleration of the lignite phase-out in the Rhenish lignite mining area neither constitutes an aid measure to increase security of supply under points 325 to 370 CEEAG nor a circumvention of these rules. The acceleration of the RWE lignite phase-out is not a measure to address long-term or short-term difficulties with regard to security of supply in the electricity sector. In the report of the German Federal Network Agency on the current status and development of the security of supply published at the beginning of 2023 (*Versorgungssicherheitsbericht Strom*), it is stated that a German coal phase-out by 2030 is possible without impacting market-side or grid-side security of supply.
- (245) Germany added that the clear focus of the amended RWE measure lies on the early and definite decommissioning of RWE's lignite-fired power plants. It is this definite closure of the power plants that is being compensated, and no capacity payment is granted. The postponement of the initially agreed decommissioning dates of Neurath D and Neurath E by 2 years does not contradict this assessment, as the compensation for RWE will not be paid for this extension, but for the early decommissioning of the power plants. Insofar as the saving of natural gas due to the longer operation of two units *de facto* helps ensure the security of supply in other sectors, this is not compensated. Also, the right of the German government to decide at a later stage whether to transfer certain RWE units into a reserve (see recital (278)) does not change the assessment of the amended RWE measure as a decommissioning measure.

5.3.2. *Breach of Union law*

- (246) In its comments submitted on 6 September 2021, Germany submitted that the measure does not breach the Polluter Pays Principle in view of the following:
- (247) The operators' obligations under mining law are not encroached upon and no expenses are saved (see also paragraph 7 of the 2021 contract). At the same time, companies have not 'caused' the additional costs that are caused by the early lignite phase-out. Such additional costs were therefore taken into account when determining the amounts of compensation.
- (248) The additional mining costs relate to additional costs in the opencast mines resulting from the early closure, such as the postponement of the establishment of provisions (interest rate effects) and additional expenditure due, for example, to the need for rescheduling. On the other hand, the additional opencast mining costs are not the costs of regular restoration of the opencast mining, which the companies would have had to bear anyway in a scenario without an agreed lignite phase-out.
- (249) The 2021 contract contains additional safeguards for the use of the opencast mines. In addition to the existing legal obligations of the operators, the contract includes individually developed safeguards for both operators, which reduce the risk that the companies will not fully bear the costs of the opencast mining operation and that substantial burdens on human health and the environment will be left behind.

5.3.3. *Appropriateness*

- (250) In its comments submitted on 6 September 2021, Germany stated that the measure is suitable for implementing the lignite phase-out in a cost-effective, predictable, socially acceptable and legally secure manner. Alternative and equally appropriate measures are not apparent. Germany pointed out that:
- (251) The phase-out of hard coal in other EU Member States (e.g. Netherlands or Spain) is not comparable to the German lignite phase-out. In those countries, all coal plants use hard coal, which can economically be sourced from the world market, and there are no opencast mines. However, in Germany's view, it is precisely the connection of power plants and opencast mines in a systemic unit which makes the phasing out of lignite particularly burdensome and complex, also due to the importance of regional economies and the challenge to link gradual and orderly phasing out with structural policies. In addition, coal as an energy source plays a smaller role in Spain and the Netherlands than in the German energy mix.
- (252) The agreed solution for lignite has many advantages, such as social pacification and legal certainty and predictability (see recital (232) above).

5.3.4. *Proportionality*

- (253) In its comments to the Opening Decision, Germany submitted that the forgone profits alone are already higher than the compensation amounts and therefore there is no overcompensation.
- (254) In its comments on the Extension Decision, Germany took note of the Commission's preliminary conclusion on the proportionality of the amended RWE measure.
- (255) Germany claims that the compensation to RWE is paid for various aspects including in particular for forgone profits and additional costs that RWE had and has to bear, as it agreed to close its power plants for climate protection reasons before reaching the end of their technical/economic lifespan. Otherwise, it would have been able to realise revenues by selling the electricity of the power plants in the market and the additional costs would not have occurred.

- (256) Germany submits that RWE's forgone profits already exceed and therefore justify the compensation to RWE. To demonstrate this, r2b energy consulting GmbH prepared for the German Ministry the revised calculation for the RWE power plants, in which the forgone profits were compared with the compensation that is paid to RWE, in order to show that there is no overcompensation (see recitals (63) to (75) for a description of this calculation).
- (257) The calculation shows that the NPV of the forgone profits of the years 2022 to 2025 (at around EUR 2,03 billion), calculated using electricity and CO₂ prices expected by the market in the years following the closure, is already higher than the NPV of the compensation to be paid to RWE (approximately EUR 1,72 billion). The inclusion of year 2026 adds additional EUR 131 million (in NPV 2022) to the forgone profits.
- (258) Germany also points out that the calculation was done in a conservative way, which understated profits that the closed units could have made in the counterfactual scenario. More specifically:
- (1) The calculation assumes that the market revenue cap for electricity generators, which at the time of the revised calculation has been legislated to last until 30 June 2023, is prolonged until 30 April 2024, reducing the forgone profit of the Frechen/Wachtberg plant. In the end, the German government decided not to prolong the application of the market revenue cap beyond 30 June 2023. Had this been factored in the revised calculation, the forgone profits of Frechen/Wachtberg plant would have been higher by EUR 181 million in NPV terms.
 - (2) The calculation assumes that the units Neurath D and E will be closed on 31 March 2025 and have forgone profits only as of that date, whereas in reality they could close a year earlier and thus have higher forgone profits, unless the German government separately decides to retain the units until 31 March 2025 (see recital (51)).
 - (3) The calculation does not take into account revenues from heat deliveries and the balancing market, further understating the forgone profits.
- (259) Germany also notes that the revised calculation is done in a way that holistically reflects the economics of lignite-fired electricity generation in which the mines are inseparable from the power plants. Thus, the revised calculation takes into account not just variable mining costs, but also fixed costs of the lignite mines, which are much higher than the variable mining costs when assessed per unit of electricity production. This drives total fuel costs per unit of production significantly higher and further decreases the forgone profits.
- (260) As regards the doubts raised in the Opening Decision, Germany argues that for RWE these doubts are not relevant anymore in view of the revised calculation (see recitals (63) to (75)), especially because the calculation removes the need for a comprehensive long-term modelling approach.
- (261) More specifically, Germany claims that the doubts raised in the Opening Decision as regards profits reaching far into the future (see recitals (123) to (132) of the Opening Decision) are with regard to the amended RWE measure not relevant anymore, because the revised calculation takes into account only forgone profits measured in a limited number of years not far away from the closure dates and because such forgone profits already exceed the compensation.
- (262) Germany also argues that the Commission's doubts regarding the investment costs (see recitals (126) and (127) of the Opening Decision) for upgrading the power plants to reach long lifespans are irrelevant with regard to the amended RWE measure due to the much shorter time period for which projected forgone profits are taken into account. As regards Niederaußem D, in the case of which the Commission expressed doubts whether the plant would be able to operate beyond 2020 due to compliance with the Industrial Emissions Directive (2010/75/EU) and related stricter standards for Large Combustion Plants concerning core power plant processes, Germany submits that this doubt is no longer relevant with regard to the amended RWE measure since no forgone profits are claimed for this particular unit in the revised calculation (see recital (65)).

- (263) Furthermore, in relation to the doubt expressed in recital (129) of the Opening Decision as to whether the discount rate of 7,5 % sufficiently takes into account the high risks and uncertainties linked to the long forecast horizon or whether additional correction mechanisms would have to be foreseen, Germany submits that the discount rate of 7,5 % is adequate. According to KPMG's study ⁽¹⁰⁵⁾, the WACC industry average is 5,2 % and the one used by RWE in its own calculations is 3,5 %. Germany argues that this doubt is not relevant anymore with regard to the amended RWE measure as the valuation timespan is short and that the value of the WACC, even if set lower or higher, does not change the outcome of the comparison between the forgone profits and the compensation. This is mainly due to the short timeframe of the claimed forgone profits, the net present value of which is not greatly influenced by changes in WACC, combined with the fact that the net present value of the annual compensation payments, which stretching for a longer period, is diminished also by the effects of inflation (expected at 2 % after 2025 according to the European Central Bank's target ⁽¹⁰⁶⁾).
- (264) As regards the doubt on the future fuel and CO₂ prices, which were outdated in the Commission's view (see recital (130) of the Opening Decision), Germany argues that also this issue is not relevant anymore with regard to the amended RWE measure as the forgone profits in the revised calculation regarding the amended RWE measure are based on the independently established market expectations at the time of the closure of the units (in the case of units already closed down) or on recent independently established market expectations regarding fuel and CO₂ prices (for the units closing after the time of the submission of the revised calculation).
- (265) In addition, the doubt expressed in recital (131) of the Opening Decision, in which the Commission points out that it had not received data for each of the units scheduled for closure, is dispelled in Germany's view with regard to the amended RWE measure as well, since the revised calculation contains data for each RWE unit scheduled for closure that has already closed or that is projected to have forgone profits in the nearby future until 2026 ⁽¹⁰⁷⁾.
- (266) Germany argues that the Commission's doubt regarding the lack of sensitivity analysis spelled out in recital (132) of the Opening Decision is also dispelled with regard to the amended RWE measure given that instead of a model of the electricity market with assumed parameters such as electricity, fuel and CO₂ prices submitted previously, the revised calculation of the forgone profits for the amended RWE measure uses actual market expectations established by independent sources and applies a widely established industry practice in which power plants hedge their operating margin with the use of financial products purchased on commodity exchanges (see recital (75)).
- (267) In Germany's view, the Commission's doubt regarding the alternative scenarios submitted by Germany in recital (134) of the Opening Decision is also dispelled with regard to the amended RWE measure. This is because based on the amended RWE measure the final closure of the RWE plants has been brought forward to 2030 from 2038. Hence, the frontloading decommissioning option (i.e. the option to bring the closure from 2038 to 2035) is not relevant anymore and has not been considered for the revised calculation of RWE's forgone profits (see recitals (63) to (75)).
- (268) Concerning RWE's additional mine rehabilitation costs (see recitals (136) to (138) of the Opening Decision), Germany points out that in the revised calculation only the forgone profits of RWE's power plants have been taken into account (see recitals (63) to (75)), without considering any additional mine rehabilitation costs for the calculation. Such additional mine rehabilitation costs were not included in the revised calculation as RWE's forgone profits already exceed the compensation amount to RWE and thus suffice to justify the compensation. Nevertheless, Germany emphasised that the additional mine rehabilitation costs in general would also be suitable to justify the compensation payments to RWE.

⁽¹⁰⁵⁾ KPMG: Cost of Capital Study 2019.

⁽¹⁰⁶⁾ Online: https://www.ecb.europa.eu/pub/projections/html/ecb.projections202309_ecbstaff~4eb3c5960e.en.html#:~:text=Overall%2c%20with%20medium-term%20inflation%2cthe%20third%20quarter%20of%202025.

⁽¹⁰⁷⁾ Germany did not provide specific long-term calculations for the seven units closing after 2027, since it considers that the existing data and the calculation concerning the units closing before 2027 is already sufficient to justify the amount of compensation under the amended RWE measure.

- (269) Germany points out that the revised calculation and the arguments brought forward only address the amended RWE measure and are specific to the situation of the amended RWE measure.
- (270) Finally, Germany points out that the situation of smaller lignite power plants is different due to their more varied ownership (approximately 45 different smaller lignite installations being operated in Germany), typically consisting of industrial users consuming their own electricity (and often also heat) production. In fact, some smaller installations that also produce heat in a CHP configuration had their retirement date set in another decarbonisation instrument (Kraft-Wärme Kopplungsgesetz, the law on combined heat and power generation).
- (271) In its comments to the third parties' comments on the Extension Decision, Germany submitted that the criticism of the methodology for calculating the forgone profits in the revised calculation is unconvincing. Germany has shown in its submissions that the NPV of RWE's forgone profits is measurably higher than the NPV of the compensation. The revised calculation shows that the amount of compensation is limited to the minimum necessary and that there is no overcompensation.
- (272) Further, Germany pointed out that the German government has not guaranteed RWE any State support for the expansion of hydrogen-ready gas-fired power plants at the sites of the closed lignite units. The German authorities agree that in the context of the German coal phase-out, the German government is drawing up various new measures to ensure the transition to climate-neutral electricity generation. However, this does not mean that RWE has been guaranteed any support. As Germany intends to award bonuses for such support through general and transparent tenders open to all market participants, RWE has no guarantee that it will obtain support under the new measures. Furthermore, Germany points out that such measures are not linked to the RWE measure or the amended RWE measure and the present procedure.

5.3.5. *Avoidance of undue effects on competition and trade*

- (273) In its comments submitted on 6 September 2021, Germany contests the submission by the third parties that the compensation benefits RWE and LEAG both vis-à-vis competitors in the German market and vis-à-vis competitors in the European market and argues that the measure does not distort or threaten to distort competition or affect trade between Member States.
- (274) In addition, Germany considers unfounded the allegation made by a third party of alleged infringement of Article 106(1) in conjunction with Article 102 TFEU described in recital (220). Such infringement presupposes the existence of a dominant position on the market by an undertaking to which a Member State grants special or exclusive rights. However, in the present case, it has already been established by the authorities in several merger decisions that RWE does not hold a dominant position on the relevant product and geographic market ⁽¹⁰⁸⁾.

5.3.6. *Deferred closure mechanism*

- (275) Germany argues that the deferred closure mechanism should be separated from the amended RWE measure, as they are different instruments, addressing different time periods and following a different logic. The compensation to RWE for the early closure is fixed in the closure law and the 2021 contract. It was calculated based on forgone profits incurred after the final closure of the specific unit. The period that a specific unit might be in the deferred closure mechanism (i.e. between the provisional and final closure dates) is not considered in the calculation of forgone profits.
- (276) On the other hand, the deferred closure remuneration is calculated based on a compensation formula for the relevant unit and only for the period in which the unit is in the deferred closure mechanism. Hence, this remuneration is irrelevant for the calculation of forgone profits for the compensation under the amended RWE measure and should not be taken into account in the proportionality assessment of the amended RWE measure.

⁽¹⁰⁸⁾ BKartA, Decision of 26.2.2019, ref. B8-28/19; EU Commission, Decision of 26.2.2019, M.8871 – RWE/E.ON Assets; See also EU Commission, Decision of 17.9.2019, M.8870 – E.ON/Innogy.

5.3.7. *New potential reserves*

- (277) Finally, as regards the other potential reserves (*Reserve*) mentioned in the amended RWE measure (see recitals (51) and (59)), Germany submits that these reserve options are not provided for in the amendment law nor in the amendment contract. If Germany wished to implement them, Germany and RWE would first have to define these options. At this stage, these reserve options have not yet been legally defined in detail. Since these reserves do not yet exist and since it is not yet certain whether the options will be activated in the future, Germany argues that these options are not relevant for the assessment of the amended RWE measure. If the German government were to decide in favour of a reserve, it would be a new measure. Depending on their design, Germany would notify such measures separately under EU State aid law.

6. ASSESSMENT OF THE NOTIFIED MEASURE

6.1. **Existence of aid**

- (278) Article 107(1) TFEU states that ‘any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, shall, in so far as it affects trade between Member States, be incompatible with the common market’.
- (279) The qualification of a measure as aid within the meaning of this provision therefore requires the following cumulative conditions to be met: (i) the measure must be imputable to the State and financed through State resources; (ii) it must confer an advantage on its recipient; (iii) that advantage must be selective; and (iv) the measure must distort or threaten to distort competition and affect trade between Member States.
- (280) The Commission has already in the Opening Decision, after analysing the RWE measure (see recitals (94) to (112) of the Opening Decision), preliminarily concluded that the RWE measure constitutes aid. In the Extension Decision, the Commission preliminarily concluded that the amended RWE measure also constitutes aid (see recitals (80) to (88) of the Extension Decision).

6.1.1. *Imputability and involvement of State resources*

- (281) In order for a measure to be found as being granted by a Member State or through State resources in any form whatsoever, it must (i) be given directly or indirectly through State resources and (ii) be imputable to the State.
- (282) In this case, the compensation will be paid out of the State budget to RWE in accordance with the provisions of the amendment law and the amendment contract (see recital (77)).
- (283) The Commission therefore concludes that the amended RWE measure is imputable to the State and implies the use of State resources within the meaning of Article 107(1) TFEU.

6.1.2. *Existence of advantage*

- (284) An advantage, within the meaning of Article 107(1) TFEU, is any economic benefit, which an undertaking could not have obtained under normal market conditions, that is to say in the absence of State intervention ⁽¹⁰⁹⁾. Article 107(1) TFEU also requires that a measure, in order to be defined as State aid, is selective in the sense that it favours ‘*certain undertakings or the production of certain goods*’.
- (285) The Commission considers that the measure confers to RWE an advantage, which it would have not obtained under normal market conditions, as it will receive a financial compensation of EUR 2,6 billion, which it would have not received absent the measure.

⁽¹⁰⁹⁾ Judgment of the Court of Justice of 11 July 1996, SFEI and Others, C-39/94, ECLI:EU:C:1996:285, paragraph 60; Judgment of the Court of Justice of 29 April 1999, *Spain v Commission*, C-342/96, ECLI:EU:C:1999:210, paragraph 41.

- (286) Several third parties submitted that the measure grants an advantage (recitals (104) to (107)). RWE, as the beneficiary, pointed out that the compensation falls short of the total damage incurred by RWE and that therefore there is no advantage granted to RWE (recitals (92) to (97)). RWE had calculated its total damage caused by the early closure to EUR 8,7 billion, consisting of EUR 5,5 billion of lost profits and EUR 3,2 billion of additional costs (recital (177)). Further, RWE pointed out that the notified measure is a compensation for damages as the closure law violates RWE's right to property, and thus there is no economic advantage conferred to RWE. This view was supported also by certain third parties (recital (108)).
- (287) The German authorities submitted that the agreed compensation does not confer an advantage on RWE which is greater than the amount that RWE would have obtained in the event of a statutory closure with a subsequent judicial dispute (see recital (231) to (241)).

6.1.2.1. Compensation under applicable national law

- (288) Third parties submitted that the early lignite phase-out constitutes an interference with RWE's property rights under Article 14(1) GG and that it does not constitute an expropriation under Article 14(3) GG. However, third parties disagreed as to whether a compensation should be granted for such interference (recitals (93), (100), (103), (105), (106)). Certain third parties submitted that RWE would be able to protect its property rights in constitutional court proceedings (see recitals (108) and (110)).
- (289) In order to determine whether the notified measure confers an advantage to RWE, the Commission needs to assess what is the minimum level of compensation Germany would be required to grant to RWE under national law in case Germany had merely mandated the closure without entering into a contract with the affected operators. If the notified measure goes beyond this minimum required compensation, the notified measure grants an advantage to the affected operators and is thus State aid, if other criteria are cumulatively fulfilled.

6.1.2.1.1. Scope of property protection under Article 14 GG

6.1.2.1.1.1. The measure falls under public law

- (290) An important difference exists between constitutional compensation (*Entschädigung*) under Article 14 GG and damages compensation (*Schadensersatz*) for example in the civil law legal regime.
- (291) The principles of damage compensation in civil law, which are not applicable in the current case, and compensation for infringement of the individual property rights under GG and public law are two different legal instruments and follow a different logic. The compensation for damages in the civil law context (for example in the sense of §§ 249 (1) ff. BGB⁽¹¹⁰⁾) means that the injured party must be positioned so as it would be if the damaging event had not occurred⁽¹¹¹⁾. This means that the damage itself is the difference between the state of the asset without a damaging event (hypothetical situation) and the actual situation, i.e. asset's actual state (real condition)⁽¹¹²⁾.

⁽¹¹⁰⁾ § 249(1) BGB: „A person who is liable in damages is to restore the position that would exist if the circumstance obliging them to pay damages had not occurred.“

⁽¹¹¹⁾ Original title: Schomerus/Franßen: Klimaschutz und die rechtliche Zulässigkeit der Stilllegung von Braun- und Steinkohlekraftwerken. 13.12.2018, online: http://fox.leuphana.de/portal/files/13307575/wbs_gutachten_bf.pdf, p 308.

⁽¹¹²⁾ Oetker, Section 249, in *MünchKomm BGB* (9th ed. 2022).

- (292) Such a level of compensation is however not required in a situation where the State provides content and limits provisions in a public law context. The constitutional compensation means appropriate compensation for the direct damages caused by the intervention in the property resulting in financial loss. It is based on the right that has been encroached and is intended to compensate for that encroachment appropriately ⁽¹¹³⁾, but does not aim at a full, global restitution.

6.1.2.1.1.2. Scope of application of Art. 14 GG

- (293) According to legal literature, there are two types of interference with the right to property that is protected under Article 14 GG. First, the expropriation under Article 14(3) GG, and second, the content and limits provision on property under Article 14(1) second sentence GG ⁽¹¹⁴⁾. A situation cannot be both at the same time, it is either an expropriation or a content and limits provision ⁽¹¹⁵⁾. The Commission agrees with the third parties that the early lignite phase-out does not amount to expropriation under Article 14(3) GG (see recital (289)). This is so because the operators will not lose the ownership of the installations and the surrounding infrastructure, which is a precondition for expropriation. Expropriation consists of two components: on the one hand, the deprivation of a property position and, on the other hand, the appropriation of goods ⁽¹¹⁶⁾. The German Constitutional Court (the 'German Court') has ruled that the restrictions on the use and disposal of ownership rights cannot, as such, constitute expropriation. ⁽¹¹⁷⁾ Therefore, in the present case, where the measure does not transfer any rights, but only limits the possible use of the property, the Commission considers that an early lignite phase-out in a counterfactual scenario where Germany had merely mandated the closure without entering into a contract with the affected operators, could constitute an interference with the operator's property rights as a content and limits provision under Article 14(1) second sentence GG, but does not fall under Article 14(3) GG.

- (294) The Commission understands that the content and limits provisions are in principle to be accepted by the property owner without a compensation as a result of the social ties of property ⁽¹¹⁸⁾. The content and limits provisions must comply with the principles of proportionality and equality. However, in special cases of content and limits provisions, where principles of proportionality and equality are not being followed, the situation might require the granting of a compensation. In particular, a content and limits provision may, by way of exception, oblige compensation in cases of particular hardship (*besonderer Härtefall*). Particular hardship situations are 'special' cases of hardship where in an individual case, the application of the law leads to a situation excessively harsh, unreasonable or highly unfair, i.e. individual cases which lead to an unreasonable burden (*unzumutbare Belastung*), even when taking into account the purpose of the law ⁽¹¹⁹⁾. In such exceptional circumstances, in order to meet the requirements under the proportionality principle and to compensate the exceptional burden (*Sonderopfer*) of the property owner, exceptional compensation arrangements may be required. It is possible that a provision, which is proportionate in itself, leads to exceptional burden in atypical cases, but that the legislature also considers the property-restricting measure to be necessary in the public interest in these cases. In this respect, compensation may then be required to compensate for the disproportionality or non-equality of the measure to the property owner ⁽¹²⁰⁾.

⁽¹¹³⁾ Original title: Schomerus/Franßen: Klimaschutz und die rechtliche Zulässigkeit der Stilllegung von Braun- und Steinkohlekraftwerken. 13.12.2018, online: http://fox.leuphana.de/portal/files/13307575/wbs_gutachten_bf.pdf, p 308.

⁽¹¹⁴⁾ Von Prof. Dr Lege, "Art. 14 GG für Fortgeschrittene 45 Fragen zum Eigentum, die Sie nicht überall finden. Unter besonderer Berücksichtigung des Baurechts", online: https://www.zjs-online.com/dat/artikel/2012_1_517.pdf.

⁽¹¹⁵⁾ BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 77-81.

⁽¹¹⁶⁾ Original title: Schomerus/Franßen: Klimaschutz und die rechtliche Zulässigkeit der Stilllegung von Braun- und Steinkohlekraftwerken. online: http://fox.leuphana.de/portal/files/13307575/wbs_gutachten_bf.pdf, p 122.

⁽¹¹⁷⁾ Vgl. BVerfG, Beschl. v. 16.2.2000 – 1 BvR 242/91 und 315/99, BVerfGE 102, 1, 16, juris, Rn. 43.

⁽¹¹⁸⁾ BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 72.

⁽¹¹⁹⁾ BVerwG 5 C 11.18, Beschl. v. 20.5.2021, Rn 69-70.

⁽¹²⁰⁾ BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 104-106.

- (295) Insofar as a content and limits provisions shortens existing legal positions, the question arises to what extent the aspect of protection of legitimate expectations must be taken into account in the context of the proportionality test, and to what extent, transitional arrangements and hardship clauses (*Härteklauseln*) ⁽¹²¹⁾ are exceptionally necessary. The German Court has found that the legislature is in principle not precluded from enforcing measures restricting ownership even in cases of particular hardship (*Härtefälle*), if the legislature avoids disproportionate or unequal burdens on the owner by means of compensatory precautions and takes due account of legitimate expectations. Therefore, for reasons of the protection of legitimate expectations, transitional arrangements and hardship clauses may be necessary. Whether and to what extent transitional arrangements and hardship clauses are necessary depends on a balancing of the severity of the interference of the content and limits provision introduced by the measure with the rights protected by Article 14(1) GG and the importance of the general interest pursued by the content and limits provision ⁽¹²²⁾. It is worth noting in this regard that the German Court has found that the public policy objective of environmental protection can outweigh the private owner's interest in not being restricted in the use of the property ⁽¹²³⁾.
- (296) A content and limits provision requiring compensation occurs only in cases where a property position is particularly intensively interfered with. The decisive factor for the requirement to compensate is whether the content and limits provision is unreasonable for the owner of property in terms of its severity, intensity and duration and imposes an exceptional burden (*Sonderopfer*) on the owner. ⁽¹²⁴⁾ Whether such an exceptional burden is imposed, must be assessed in view of whether or to what extent a potentially disproportionate burden (*unverhältnismäßige Belastung*) could be averted by other means, such as transitional arrangements and hardship clauses (*Übergangsregelungen und Härteklauseln*).
- (297) Only in as far as a content and limits provision imposes an exceptional burden, a right for compensation based on the infringement of constitutional rights may arise. In such a case, appropriate compensation has to be proportionate to the direct damages caused by the intervention in the property resulting in financial loss in as far as it exceeds a reasonable level that can be justified in view of diverging legitimate interests. Any such potential compensation should however not aim at a full, global restitution (see recital (293)).

6.1.2.1.1.3. Commission's considerations

- (298) RWE argued that the early lignite phase-out leads to an exceptional burden for RWE when combined with its obligations in relation to the EU ETS (recital (95)), while LEAG claimed that the additional costs are property damages that do not lead to a loss of rights or substance, but represent an exceptional burden, e.g. through a reduction in value (recital (101)). Other third parties submitted that the long transition periods, the possibility to convert to another generation fuel and the fact that many of the lignite-fired units that are scheduled for closure have been amortised lead to the conclusion that there is no such case of exceptional burden (recitals (105) and (106)). Germany did not comment on the matter of exceptional burden. The closure law does not give any indications on whether Germany considers the lignite phase-out to constitute an exceptional burden on the affected operators requiring a compensation.

⁽¹²¹⁾ In exceptional cases, hardship clauses allow to deviate from a regulation or agreement in order to avoid unfair consequences for those affected in such exceptional, individual cases.

⁽¹²²⁾ BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 98-103.

⁽¹²³⁾ See BVerfGE 102, 1 (18) and BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 88-91.

⁽¹²⁴⁾ BeckOK Grundgesetz, Epping/Hillgruber 55. Edition, Stand: 15.5.2023, GG Art. 14 [Eigentum, Erbrecht und Enteignung], Rn 104-106.

- (299) As mentioned in recital (295), interventions that do not expropriate but only limit the exercise of property rights can in principle be proportionate also without any compensation awarded to the property owner whose property rights are affected by the intervention of the State. However, the Commission understands that, under the German law, this does not preclude specific exceptional circumstances in which compensation may be warranted following limitations of the exercise of property rights. This is for instance the case when the limitation of the exercise of the property rights is particularly intrusive and results in exceptional burden (*Sonderopfer*) on the owner. While the measures are taken in the general interest, significant negative effects may be borne by certain property owners only, which may be disproportionate. In these cases, general legal principles of German law require the State to include in the measure from the outset a compensation mechanism in order to ensure the proportionality of the measure⁽¹²⁵⁾. However, for compensation measures, the Commission understands from the German law that before financial compensation can be considered, other means of compensation should be considered first, such as transitional arrangements.
- (300) When analysing the lignite phase-out's compatibility with Article 14 GG, the following structure should be followed: first, one needs to assess whether the content and limits provision is proportionate. Second, if that was not the case, it may lead to a particular hardship (*besonderer Härtefall*) and an exceptional burden (*Sonderopfer*) on the property owner. Third, in case of an exceptional burden, monetary compensation is only a last resort measure after other mitigants, such as transitional measures, have been put in place.
- (301) As has been described in recital (296), the German Court has ruled that the public objective of environmental protection outweighs the private interest to not be restricted in the use of property. The closure of RWE's lignite installations has an environmental objective as it will lead to a reduction of CO₂ emissions (recital (18)), meaning that a mandated lignite closure can be justified by public policy interest.
- (302) Under the proportionality assessment, it should also be assessed whether there are legitimate expectations of the operator that need to be balanced against the public interest for environmental protection. On that note, the Commission finds that it is evident from relevant German case law, that no person is shielded from legal changes affecting an existing investment.
- (303) The Commission recalls that, as described in recital (104) of the Opening Decision, the German Court has discussed in its 2009 judgment⁽¹²⁶⁾ whether a person would be shielded from legal changes in case of an existing investment and discussed the scope of the protection of legitimate expectation in case of changes to the legal framework. The parties in that case were in dispute as to whether the later applicable stricter requirements for the welfare of laying hens were also directly applicable to the applicant's plant, which had received its operational permit before the stricter requirements had come into force and had expected that its investments would pay off after 15 to 20 years of operation. The German Court dismissed the appeal and concluded that there is no right under the German law to be shielded from legal changes until the investment costs have been amortised and the installations have been written-off. Furthermore, the German Court pointed out that a sufficient transitional period helps to cement this principle. The circumstances around the welfare of laying hens were already discussed during the time when the applicant had received its initial permit. According to the German Court, the applicant could not have continued to rely on the continued existence of the standard of the animal welfare requirements that applied at the time when the permit was granted. Thus, the industry should have been able to predict and expect a change of law.

⁽¹²⁵⁾ Referred to in German law as the principle of 'ausgleichspflichtige Inhalts- und Schrankenbestimmung'.

⁽¹²⁶⁾ BVerwG NVwZ, Urteil vom 30.4.2009 – 7 C 14.08, S. 1443. This is also stated in the decommissioning study: as there is no right of such protection, the affected operators cannot rely on special protection of existing and legitimate expectations to avoid (further) requirements for the reduction of greenhouse gas emissions in order to protect the global climate.

- (304) In the present case, the circumstances surrounding the lignite operators are similar. The operators have made their investments in the lignite installations to be closed down before the legal framework for the lignite phase-out was made concrete. However, as is evident from the 2009 judgment of the German Court described in recital (304), the operators cannot rely on the continued existence of the *status quo*, i.e. cannot expect to be protected from legal changes until their investment would have been fully amortised. Further, it is evident from the public realm that before the start of the Coal Commission the lignite operators should have been aware of Germany's energy policy entailing that coal and lignite would be replaced by less polluting fuels or renewable energy. Although the Coal Commission started its activities in 2018, there were international climate protection commitments taken on by Germany already earlier. For example, Germany adopted its first national climate policy target as early as 1995 and decided in a concrete manner in 2007 to reduce GHG emissions by at least 40 % by the year 2020 (compared to 1990) (see recitals (17) to (18)). In 2016, the German Climate Action Plan adopted the concept of GHG neutrality by 2050 ⁽¹²⁷⁾. To sum up, given that there is no right under German law to be shielded from legal changes – not even until investment costs have been amortised – it is plausible that a lignite power plant operator could not have a legitimate expectation on the protection of their investment, that would override the public interest.
- (305) Concerning RWE's argument that the early lignite phase-out leads to an exceptional burden for RWE when combined with its obligations in relation to the EU ETS (recital (95)), the Commission notes that the EU ETS is affecting many sectors and polluters and not only RWE or lignite operators. The Commission understands the German case law in a manner that the question whether a measure restricting property poses an exceptional burden is examined within the context of that particular measure. Therefore, the Commission considers that the EU ETS cannot be taken into consideration for the question whether a policy measure that is specific to lignite causes an exceptional burden.
- (306) Furthermore, the Commission understands the German case law in manner that it is necessary to consider, before a financial compensation would be required under national law, whether a disproportionate exceptional burden cannot be averted by other means, such as transitional arrangements. For example, RWE remains the owner of the land and of the existing infrastructure and thus RWE has the possibility to use these assets for electricity production based on other fuels or for other purposes. Additionally, as described in recital (302), in the present case, most of RWE's lignite-fired units are given a transitional period before their closure, and only Niederaußem D was mandated to close immediately, by year-end 2020.

6.1.2.1.2. The findings of relevant German studies

- (307) The Commission further notes that there are publicly available studies, summarised in recitals (309) to (312), which do not exclude that an early lignite phase-out without a financial compensation is possible. The Commission has specifically analysed two studies, which are in line with the views of the German Court and the legal literature described in recitals (291) to (299). The Commission has taken these studies into account for the following reasons. First, both are relatively recent, from 2018. Second, they are both written by scientific parties. The research facility of the German Bundestag, which prepared the first study presented in recital (309), carries out scientific research to support the members of the German Parliament even though its reports do not mean to represent the views of the German Bundestag, of its bodies or its administration. As regards the second study presented in recitals (310) to (312), it was commissioned by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection ('BMUV') from Prof. Dr Thomas Schomerus, a legal scholar and expert in public law, and attorney-at-law Gregor Franßen.

⁽¹²⁷⁾ Online: https://epub.wupperinst.org/frontdoor/deliver/index/docId/7265/file/7265_Phasing_Out_Coal.pdf, p. 40.

6.1.2.1.2.1. Description of the findings

- (308) In 2018, the research facility of the German Bundestag carried out a study to examine the constitutional requirements for the statutory decommissioning of coal-fired power plants ('the German Bundestag study') ⁽¹²⁸⁾. The German Bundestag study found that the closure of coal-fired power plants does not constitute an expropriation under Article 14(3) GG and that the closure would be a content and limits provision under Article 14(1) GG. In the German Bundestag study, the research facility concluded that a compensation would have to be provided only for those individual installations, which, despite the transitional and exceptional arrangements, are faced with an exceptional burden (*Sonderopfer*). The German Bundestag study further considered that in case of older units that have already fully amortised, decommissioning without a compensation can be possible.
- (309) Further, the study '*Climate protection and the legal possibilities of decommissioning lignite and hard-coal fired power plants*' ⁽¹²⁹⁾ (the 'decommissioning study'), commissioned by BMUV, equally found that regulations on the decommissioning of coal-fired power units do not constitute an expropriation pursuant to Article 14(3) GG. Further, according to the decommissioning study, these are provisions on the content and limits pursuant to Article 14(1) GG, and in line with Article 14(2) GG, the legislature's freedom of action includes also the power to completely abolish previously existing legal positions protected by the property rights, provided this is justified by corresponding weighted public interest considerations.
- (310) The decommissioning study found that content and limit provisions are constitutional and do not create an unreasonable economic burden. Namely, regulations on the decommissioning of coal or lignite-fired power plants for reasons of climate protection are constitutional as they are appropriate, necessary, and proportionate. In particular, it noted that the serious reasons of general public interest, namely the need for climate protection and to achieve carbon neutrality, outweigh the specific economic burden put on the affected operators. Thus, the affected operators have to bear the loss of the possibility of future earnings on the invested capital by continuing to operate the installations. Additionally, the decommissioning study pointed out that the GG does not require a full amortisation of the invested capital for a legally justified lignite phase-out. However, the design of the closure law should take reasonably into account the economic interests of the affected parties. The decommissioning study further pointed out that not only monetary compensation, but also transitional measures, such as transitional period, are a form of a compensation measure itself and can remedy the intervention into the activities of the affected operators. On the amortisation timeline, the decommissioning study brought several examples. For example, some of the literature suggested that amortisation can be achieved in 20 years ⁽¹³⁰⁾. Furthermore, referring to calculations by the German Environmental Agency (Umweltbundesamt), initial investments in coal or lignite-fired power plants are expected to be amortised after about 15 to 20 years; after 25 years at the latest, the investment of the assets may not only have been amortised, but will have yielded a return equivalent to the return on government bonds ⁽¹³¹⁾. Units which were already well over 25 years old in 2017 can be expected to have already been amortised ⁽¹³²⁾. According to the decommissioning study and the sources cited, the average amortisation time for a lignite unit would thus be around 25 years ⁽¹³³⁾. The decommissioning study concluded that

⁽¹²⁸⁾ Stilllegung von Kraftwerken, Ausarbeitung, Wissenschaftliche Dienste, Deutscher Bundestag (WD 3 – 3000 – 360/18). Online: <https://www.bundestag.de/resource/blob/579426/79b26fd54662407f696a224c9aa1955a/WD-3-360-18-pdf-data.pdf>.

⁽¹²⁹⁾ Original title: Schomerus/Franßen: Klimaschutz und die rechtliche Zulässigkeit der Stilllegung von Braun- und Steinkohlekraftwerken. 13.12.2018, online: http://fox.leuphana.de/portal/files/13307575/wbs_gutachten_bf.pdf.

⁽¹³⁰⁾ The decommissioning study, pg 157, footnote 408: Siehe etwa Buttermann/Baten, Wirtschaftlichkeit des Neubaus von Braunkohlekraftwerken, Tabelle 1 (Kapitalbindungsdauer), ET 2013, S. 46 (47); Deutsches Institut für Wirtschaftsforschung, Die Zukunft der Braunkohle in Deutschland im Rahmen der Energiewende, 2012, S. 18; und erneut bestätigt hinsichtlich der bilanziellen Abschreibung in: Deutsches Wirtschaftsinstitut, Braunkohleausstieg – Gestaltungsoptionen im Rahmen der Energiewende, 2014; Umweltbundesamt, Klimaschutz und Versorgungssicherheit – Entwicklung einer nachhaltigen Stromversorgung, Climate Change 13/2009, S. 8; so auch Däuper/Michaels, EnWZ 2017, S. 211 (217); Ziehm, ZNER 2017, 7 (10).

⁽¹³¹⁾ The decommissioning study, pg 158, footnote 409: So Ziehm, ZNER 2017, 7 (10), unter Berufung auf Umweltbundesamt, Klimaschutz und Versorgungssicherheit – Entwicklung einer nachhaltigen Stromversorgung, Climate Change 13/2009, S. 23.

⁽¹³²⁾ The decommissioning study, pg 158, footnote 412: BET Büro für Energiewirtschaft und technische Planung GmbH, Kurzstudie „Amortisationszeiten bestehender Kohlekraftwerke“ vom 3.11.2017, S. 16.

⁽¹³³⁾ The decommissioning study, pp. 157–158.

insofar as the investments made in coal or lignite-fired power plants have fully amortised, a coal closure law would not require compensation. However, it concluded that in order to be on the safe side, even for the amortised plants, a transitional period of 1 to 2 years should be granted to allow the operators to adapt.

- (311) In addition, the decommissioning study also considered the question whether a mandated coal closure interferes with legitimate expectations, in case plants were not fully amortised. The study considers that there is no special protection of property rights in terms of investments made after 2010. In 2010, the Federal Government had considered to eventually limit fossil power generation to a role of providing balancing and reserve capacity in a flexible power plant park. Hence, from that point in time, there is only a limited need for protection for legitimate expectations and trust in this regard. ⁽¹³⁴⁾ It any case, it could not be reasonably considered after that date that such installations would simply continue to operate in an unlimited manner in the future.

6.1.2.1.3. Commission's considerations and conclusion on compensation under applicable national law

- (312) In light of the above, the Commission considers the following:
- (313) It is possible under the German law to restrict the use of property for reasons of public policy and mandate the closure date. This follows from the social ties or social duties of property. Environmental concerns are a valid reason, which apply in the case of lignite, a heavily polluting fuel for electricity generation. Therefore, in principle, the German law does not necessarily require a compensation in this case.
- (314) While it is true that legitimate expectations of the owner of the property that investments are not frustrated may weigh against the public interest, the Commission considers that even before the start of the Coal Commission in 2018, the policy direction had become more concrete on setting climate targets and disfavoured heavily polluting fossil fuels, while favouring electricity generation from renewable energy sources. Even though this may have been a gradual process, the Commission concurs with the cited literature that the protection of legitimate expectations had become limited much earlier than 2018. The Commission notes that the decommissioning study considers 2010 as a particularly relevant date in this regard.
- (315) It further appears that the interest of the owners that might be protected does in any case not exceed the relevant period of amortisation of the investment. In case of the amortised units, as has been confirmed by Germany, 14 out of 16 of RWE's lignite units would have fully depreciated by the time of their closure (see recital (55)), as such installations have been operating for approximately 50 to 60 years, and 28 years in case of Niederaußem K. These years of operation are well above the average of 25 years for amortisation described in the decommissioning study in recital (310) (see Table 4 and recital (54)).
- (316) Furthermore, the Commission understands that, under German law, if a compensation would be mandatory, transitional arrangements should be given priority over financial compensation. All but one of these fully amortised plants have had transitional periods starting from the entry into force of the closure law (see Table 3). Therefore, for these plants, the Commission understands that under German law a financial compensation would not have been required.

⁽¹³⁴⁾ The decommissioning study, pp. 201–203.

- (317) At the same time, 2 out of 16 lignite units may not have fully amortised by the time of their closure, as they have been operating for less than 25 years. This concerns namely Neurath F (BoA 2) and Neurath G (BoA 3) (opening date both 2012). However, in light of the above, RWE should have known by the time of the opening of the said installations that the potential life-span of these installations may be limited and the operator might not be able to fully amortise these units (see recital (312)). Counting from October 2022, a transitional period of 7.5 years has been established for these two units. Therefore, for these two units, which may have not yet be fully amortised, the Commission considers it plausible that the transitional period *per se* is a sufficient form of compensation and that no additional financial compensation is warranted. And even if that was not the case, according to Germany, the total carrying value of these two installations as of 31 March 2030 would amount to EUR 570 million (see recital (57)).
- (318) In sum, the Commission considers that it can be excluded that under the German law financial compensation would have been required for a mandated closure within the timelines specified by Germany. While the unit Niederaußem D did not receive a transitional period of 1 year before closure, the Commission notes that in the notification Germany does not include it in the calculations for showing the foregone profits and that it has been operating beyond the required average time to reach amortisation.
- (319) Therefore, the Commission concludes that no compensation would have been required under the applicable national legal framework in the hypothetical scenario that no contract between the State and the operator would have been agreed. Therefore, the amounts agreed provide an advantage to RWE that it would not have received under normal market conditions, meaning in mandated closure without compensation.
- (320) Even if one was to assume that in the absence of the notified measure, the German national courts were to award some compensation to RWE, such compensation would likely be limited to the two plants that would not be fully amortised by 2030 (i.e. for Neurath F (BoA 2) and Neurath G (BoA 3)). In any event, any such hypothetic compensation that might be awarded following lengthy and uncertain legal procedures would not reach EUR 2,6 billion (see recitals (55) and (56)). Therefore, even if a right to compensation were to exist (*quod non*), the Commission considers that in any event, the compensation under the notified measure goes beyond what might be mandated under national law. Furthermore, the notified measure does not require RWE to engage in lengthy legal procedures with uncertain outcome that it would have to pursue otherwise.
- (321) In this regard, the Commission points out that the notified measure, EUR 2,6 billion in nominal terms, is given as one single amount in the closure law as well as in the amendment contract and is not broken down or allocated to the closure of individual units. Hence individual plants are inseparable for the purposes of aid qualification, their closure was planned at the same time and foreseeable, with the same purpose of compensating RWE for the lignite phase-out and the circumstances of RWE as an undertaking being unchanged. Therefore, the Commission derives that even if only part of the compensation amount might have been mandatory as financial compensation under German law, the measure cannot be artificially separated into multiple steps, thus the entire notified amount has to qualify as aid.
- (322) The Commission thus considers that even if there was an obligation under national law for financial compensation, any such potential compensation would be lower than the notified amount of EUR 2,6 billion. The notified amount has been calculated using as a basis the foregone profits of those individual units with the earlier closure dates in the closure plan for RWE, i.e. from 2021 until 2025. The foregone profits used in the calculations are calculated from the respective closure date until 2026. This calculation does not take into account any compensation that may have been given in the form of transition periods since 2020 when the early closures were fixed in the law. It does not take into account that the respective units are likely to have amortised by the closure date, either.
- (323) In view of the above, the Commission concludes that RWE would not be entitled to a financial compensation under applicable national law or, in any event, the amount of financial compensation that it might have been entitled to under applicable national law would not be equal or higher than the notified measure in the amount of EUR 2.6 billion. Therefore, RWE is expected to receive under the notified measure a compensation that goes beyond what is mandated under GG. Thus, RWE will receive an advantage which it would not receive under normal market conditions.

6.1.2.2. The German nuclear phase-out cannot be used as an analogy

- (324) Third parties pointed out that the German nuclear phase-out can be used as an analogy in the present case, and thus the lignite operators should be provided additional protection under the GG (see recitals (93), (182) to (183)).
- (325) The Commission does not agree to this view of the third parties and is of the opinion that the nuclear phase-out cannot be used as a direct analogy to the lignite phase-out for the following reasons. First, the Commission notes that in the nuclear phase-out, there was a legal promise by the State, allocated by law to the producers that they will have a defined time to continue producing certain amounts of energy ('*Reststrommengen*'). According to the German Court in its 2016 judgment ⁽¹³⁵⁾, the breach of that guarantee led to the entitlement for compensation due to the expectations which had been created by having the guarantee of additional production foreseen in a law. However, in the present case, there is no such guarantee; lignite power plants do not have such legitimate expectations as there has been no law with the guarantee to continue production of specified amount of energy from lignite. Therefore, the circumstances of the two cases differ and the nuclear phase-out cannot be used as an analogy in the present case.
- (326) Second, in the nuclear phase-out, the German Court had stated ⁽¹³⁶⁾ that there was a lack of a compensation scheme for investments which were devalued by the cancellation of the additional residual electricity quantities, i.e. of the *Reststrommengen*. Furthermore, there was no specific amount of compensation specified in that law. Differently, in the present case, the relevant legal basis (i.e. the closure law) includes a specific compensation amount and there is a detailed compensation measure in place to compensate the producers for the lignite phase-out, to which the operators have given their agreement in the 2021 contract and the amendment contract (see recitals (33) and (60)). Thus, the two cases do not have comparable circumstances.
- (327) Therefore, the Commission considers that the German nuclear phase-out and lignite phase-out are not comparable, as the factual backgrounds of the two situations are different.

6.1.3. Selectivity

- (328) The notified measure is granted to and benefits only RWE and thus the advantage to RWE is selective in its nature.

6.1.4. Impact on competition and on trade between Member States

- (329) In accordance with settled case law ⁽¹³⁷⁾, for a measure to impact competition and trade it is sufficient that the recipient of the aid competes with other undertakings on markets open to competition.
- (330) In view of the fact that the German electricity market is part of a liberalised market which is connected and coupled with the bidding areas of neighbouring countries, the operators of the lignite-fired power plants are in direct competition with other power generators.
- (331) In addition, the phase-out of lignite-fired electricity generation means that the electricity that would have been produced by these installations will now have to be produced by other generators, which is likely to affect the merit order and hence the electricity wholesale price.
- (332) Therefore, the notified measure impacts competition and trade between Member States.

⁽¹³⁵⁾ BVerfG, Judgment of the First Senate of 6 December 2016 – 1 BvR 2821/11 –, paragraphs 1–407.

⁽¹³⁶⁾ BVerfG, Order of the First Senate of 29 September 2020 – 1 BvR 1550/19 –, paragraphs 1–86.

⁽¹³⁷⁾ Judgment of the Court of First Instance of 30 April 1998, *Het Vlaamse Gewest v Commission*, T-214/95, ECLI:EU:T:1998:77.

6.1.5. *Conclusion regarding existence of State aid*

- (333) In light of the above in this section 6.1, the amended RWE measure confers a selective advantage to RWE, which derives from State budget and is imputable to the State, and it impacts competition and trade between Member States. Therefore, the notified measure constitutes State aid within the meaning of Article 107(1) TFEU.

6.2. **Lawfulness of the aid**

- (334) The Commission notes that the closure law (Article 10), the 2021 contract (paragraph 25(1)) and the amendment law (Article 3) contain a suspensive clause, according to which the amended RWE measure may only be applied if and to the extent that approval under State aid law has been granted by the Commission (see recital (37)). In addition, Germany confirmed that no payments have been made to RWE (see recital (37)).
- (335) The Commission therefore considers that by notifying the amended RWE measure before its implementation, the German authorities have respected the notification and standstill obligation laid down in Article 108(3) TFEU.

6.3. **Compatibility of the aid**

6.3.1. *Legal basis for the assessment*

- (336) Article 107(3)(c) TFEU provides that the Commission may declare compatible aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest. Therefore, compatible aid under that provision of the Treaty must contribute to the development of certain economic activity⁽¹³⁸⁾. Furthermore, the aid should not distort competition in a way contrary to the common interest.
- (337) On 27 January 2022, the Commission adopted the CEEAG. According to point 466 CEEAG, the Commission will apply the CEEAG to assess the compatibility of all notifiable aid for climate, environmental protection and energy awarded or intended to be awarded from 27 January 2022.
- (338) According to the Court's case-law, aid must be considered to be granted at the time that the right to receive it is conferred on the beneficiary under the applicable national rules. In order to determine when aid must be considered to be granted, all the conditions laid down by national law for obtaining the aid in question must be taken into account⁽¹³⁹⁾.
- (339) The Commission considers that the aid to RWE has not been granted yet in view of the suspensive clause included in the national legal basis of the notified measure (recital (37)). Specifically, the closure law (Article 10), the 2021 contract (paragraph 25(1)) and the amendment law (Article 3) contain a suspensive clause, according to which the notified measure may only be applied if and to the extent that approval under State aid law has been granted by the Commission, and for the amendment contract the original suspensive clause of the 2021 contract remains valid. Therefore, RWE's legal right to obtain the compensation, in line with the closure law and the contract (both initial and as amended) is subject to the Commission's State aid approval. In addition, Germany confirmed that no payments have been made to RWE (recital (37)).

⁽¹³⁸⁾ Judgment of 22 September 2020, *Austria v Commission*, C-594/18 P, ECLI:EU:C:2020:742, paragraphs 20 and 24.

⁽¹³⁹⁾ Judgment of 21 March 2013, *Magdeburger Mühlenwerke GmbH v Finanzamt Magdeburg*, C-129/12, ECLI:EU:C:2013:200, paragraphs 40-41.

- (340) Furthermore, the Commission notes that the notification by a Member State of a proposed State aid measure does not give rise to a definitively established legal situation, which requires the Commission to rule on its compatibility by applying the rules in force at the date on which that notification took place. On the contrary, the Commission is required to apply the rules in force at the time of its decision, even if the notification of the measure took place under a different legal framework ⁽¹⁴⁰⁾.
- (341) The Court has ruled that, where the legal rules under which a Member State notified proposed aid change before the Commission takes its decision, the Commission must, with a view to giving its decision, as it is obliged to do, on the basis of the new rules, ask the third parties to express their views on the compatibility of that aid with those rules ⁽¹⁴¹⁾. In line with the Court's case-law, the Commission carried out the Public Consultation inviting third parties to submit comments on the applicability and application of the CEEAG in the present case (see recital (5)).
- (342) In view of recitals (338) to (342), the Commission considers that the CEEAG are applicable in the present case, and the Commission has assessed the compatibility of the amended RWE measure based on the general compatibility provisions of the CEEAG (section 3 CEEAG), where applicable, and the specific compatibility criteria for aid for the early closure of profitable coal activities (section 4.12.1 CEEAG), which covers also lignite. Section 4.12.1 CEEAG sets out the rules that the Commission will apply when assessing the compatibility criteria of incentive effect, necessity, appropriateness, proportionality and avoidance of undue negative effects on competition and trade; for the remaining compatibility criteria, Chapter 3 CEEAG applies (point 421 CEEAG).
- (343) RWE considers that the CEEAG are not applicable in the present case because the compensation does not constitute State aid and because the RWE measure was already implemented in 2020 when the closure path for RWE began (see recitals (111) to (113)). Several third parties pointed out that the relevant events for the applicability of the CEEAG are the entry into force of the closure law and the signing of the 2021 contract and since events predate the entry into force of the CEEAG, the applicability of the CEEAG for the notified measure would be excluded (see recitals (120) and (121) and (124) to (127)).
- (344) A third party however pointed out that the elements of the compensation fit under the CEEAG, as the notified measure concerns the closure of profitable coal activities and the operators are not undertakings in difficulty within the meaning of the Commission Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty ⁽¹⁴²⁾. The third party considers that, therefore, section 4.12.1 CEEAG is applicable (see recital (124)).
- (345) In this regard, the Commission notes that the amended RWE measure was taken by Germany in order to accelerate the closure of RWE's profitable lignite activities and to compensate the affected undertaking. Hence, in line with point 425 CEEAG, the amended RWE measure falls under Section 4.12.1 CEEAG. In addition, contrary to the allegations of some third parties (see recital (197)), the Commission notes that section 4.12.1 CEEAG allows for compensation of forgone profits in cases of mandated early closure of profitable coal activities and does not limit the aid intensity.
- (346) Finally, a third party referred to the Council Decision of 10 December 2010 on the closure of uncompetitive coal mines ⁽¹⁴³⁾, wherein the legal basis used was Article 107(3)(e) TFEU (see recital (119)). The Commission notes that the Council Decision concerns uncompetitive coal mines and applies to certain coal categories (see Article 1(a) of the Council Decision), whereas in the present case the notified measure concerns profitable lignite power plants. In addition, Article 107(3)(e) TFEU requires the Commission to make a proposal to the Council, which however does not exist in the present case. Therefore, the Commission considers that the Council Decision is not an appropriate legal basis.

⁽¹⁴⁰⁾ Judgment of the Court of 11 December 2008, *Commission v Freistaat Sachsen*, C-334/07 P, ECLI:EU:C:2008:709, paragraphs 51-53.

⁽¹⁴¹⁾ Judgment of the Court of 11 December 2008, *Commission v Freistaat Sachsen*, C-334/07 P, ECLI:EU:C:2008:709, paragraph 56.

⁽¹⁴²⁾ 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).

⁽¹⁴³⁾ Council Decision 2010/787/EU.

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

6.3.2.1. Identification of the economic activity which is being facilitated by the measure, its positive effects for society at large and, where applicable, its relevance for specific policies of the Union.

- (347) In line with points 23 to 25 CEEAG, Member States must identify the economic activities that will be facilitated as a result of the aid and describe if and how the aid will contribute to the achievement of Union policies and targets.
- (348) The Commission recognised in point 426 CEEAG that measures for the early closure of profitable coal activities can facilitate the development of certain economic activities or areas also by creating space for the development of other power generation activities in line with the Green Deal in order to offset the reduction in the power generation capacity caused by the early closure.
- (349) The Commission notes that the notified measure aims at encouraging RWE to change its economic behaviour by closing down its lignite-fired power plants earlier than their profitability would suggest, which leads to a reduction in the electricity generation capacity. Assuming that electricity demand remains the same or increases, this will create a generation gap ⁽¹⁴⁴⁾. The Commission thus considers that as the notified measure concerns the phase-out of lignite activities that would have otherwise operated profitably in the market, the economic activity that is being facilitated is the generation of electricity from alternative sources.
- (350) A firm end-date will anchor the expectations of other actors that a switch to climate neutrality is tangible and possible, and they can thus start investing in climate neutral technologies, which in turn will lead to an outcome where the grid will move away from the old coal and lignite-fired generation. In a counterfactual scenario, in which the notified measure would not have been taken, this economic development would not take place to the same extent. The notified measure therefore facilitates the development of the economic activity of electricity generated from alternative sources such as renewables ⁽¹⁴⁵⁾. The Commission agrees with RWE's argumentation that the notified measure promotes the development of not only the economic activity of RES generation, but the energy economic sector as a whole, as all market participants need reliability about the lignite phase-out path for their future investment decisions (recitals (128) to (131)).
- (351) Moreover, in a situation in which RWE's lignite-fired units would have been required to close without compensation, this would have led to legal uncertainties regarding a possible compensation. The predictability and legal certainty introduced by the notified measure, therefore, helps facilitate the economic activity of lignite-fired electricity generation.
- (352) Therefore, the Commission considers that the amended RWE measure contributes to the development of an economic activity, as required by Article 107(3)(c) TFEU and in line with points 24 and 426 CEEAG.

⁽¹⁴⁴⁾ A study conducted for the German Energy Agency dena finds that electricity consumption is expected to increase at least by 8 % between 2015 and 2040 taking in its most conservative scenario (dena-Leitstudie. Integrierte Energiewende. Impulse für die Gestaltung des Energiesystems bis 2050, p. 195 f.). Also, projections by the German transmission system operators foresee increased electricity demand going forward. They project the net electricity demand to increase from 513,1 TWh in 2016 to 581,6 TWh in 2035 in their most conservative scenario (Szenariorahmen zum Netzentwicklungsplan Strom 2035, Version 2021. Entwurf der Übertragungsnetzbetreiber, p. 54).

⁽¹⁴⁵⁾ See also German hard coal phase-out decision, recital 101.

- (353) Furthermore, the Commission notes that the development of the economic activity of electricity generated from alternative sources such as renewables will induce positive effects in terms of environmental gains. In the Communication on the Sustainable Europe Investment Plan, which is part of the European Green Deal, the Commission has recognised that the closure of coal-fired power installations is an area that is crucial to achieve the transformation to a climate-neutral economy ⁽¹⁴⁶⁾. With the gradual closure of RWE's lignite-fired power plants, the notified measure will gradually reduce the negative effects of electricity generation on climate or the environment and will facilitate the development of electricity generation based on renewable energy sources, increasing thereby the sustainability of the electricity generation sector.
- (354) Indeed, the Commission notes that, by facilitating the development of the economic activity of electricity generation from alternative sources, the notified measure will contribute to reducing CO₂ emissions in Germany. In light of the EU's objective to reduce its GHG emissions progressively over time to achieve the transformation towards a climate-neutral economy ⁽¹⁴⁷⁾ and in view of the Paris Agreement ⁽¹⁴⁸⁾, Germany envisages to become climate neutral by 2045. As described in recital (16), Germany has also set intermediary targets, notably for the energy sector, which will have to reduce from approximately 257 million tonnes CO₂ in 2022 ⁽¹⁴⁹⁾ to 108 million tonnes CO₂ eq. by 2030.
- (355) More specifically, the gradual phase-out of lignite-fired power generation is a critical policy measure for Germany to achieve CO₂ neutrality. Germany estimated that RWE's lignite installations affected by the phase-out accounted for approximately 67 million tonnes CO₂ emissions in 2018 and approximately 52 million tonnes CO₂ emissions in 2019 (recital (18)). The notified measure aims at achieving CO₂ emission reductions by replacing the lignite-fired electricity generation with alternative sources of electricity generation. It thus contributes to Union climate policy and is expected to contribute to climate change mitigation. In that respect, the closure law foresees regular reviews (scheduled for 2026, 2029, 2032) to assess the contribution of the notified measure towards Germany's (and the Union's) climate goals.
- (356) Therefore, the Commission considers that the Member State has described how the notified measure contributes to the achievement of objectives of Union climate policy, environmental policy and energy policy, in line with point 25 CEEAG.
- (357) Finally, some third parties submitted that as the compensation is directed at and meant to compensate for the closure of the power plants, it cannot be considered as support to facilitate the development of an economic activity. Instead, the economic activity whose development is facilitated with the notified measure is the shift from coal electricity production to renewables (see recital (134) and (135)). A third party also submitted that the German government failed to identify the economic activities that will be facilitated as a result of the aid and how does the notified measure support such activities (see recital (136)). The Commission does not agree to the view expressed by those third parties. As explained in recitals (349) to (357) above, the notified measure will facilitate the economic activity of lignite-fired electricity generation thanks to the predictability and legal certainty that it brings, but it will also facilitate the generation of electricity from alternative sources as the early closure of RWE's unit will create a power generation gap that benefits such production.

6.3.2.2. Incentive effect

- (358) According to point 427 CEEAG, the measure needs to trigger a change in the economic behaviour of the operators that close down their coal activities earlier than the end of their economic lifetime. To determine whether this is the case, the Commission will compare the factual scenario (i.e. the effects of the notified measure) with a counterfactual scenario (i.e. the absence of the notified measure).

⁽¹⁴⁶⁾ Communication from the Commission of 14 January 2020: Sustainable Europe Investment Plan. European Green Deal Investment Plan.

⁽¹⁴⁷⁾ As confirmed at the European Council meeting of 12 December 2019. Conclusions, EUCO 29/19.

⁽¹⁴⁸⁾ https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

⁽¹⁴⁹⁾ <https://www.umweltbundesamt.de/daten/umweltindikatoren/indikator-emission-von-treibhausgasen#die-wichtigsten-fakten>.

- (359) The Commission considers that the notified measure has an incentive effect, as it induces RWE to close its plants earlier than otherwise expected under market conditions and thus changes RWE's behaviour, which it would not have changed without the notified measure. Germany carried out an assessment on the expected profitability of RWE's lignite-fired power plants. According to the revised calculation, the plants are profitable and their forgone profits surpass the amount of compensation (see recitals (64) to (65)). Even if Germany admits that there is a certain level of uncertainty in the projections and third parties bring forward alternative profitability scenarios, in a counterfactual scenario, i.e. in the absence of the notified measure, RWE would likely have kept operating the plants. According to the calculations submitted by Germany, in a counterfactual scenario, RWE's plants would have continued to make profit and absent of the notified measure, RWE would have not had the incentive to phase out its lignite plants. Given that in the factual scenario, the notified measure specifies the phase-out for RWE's profitable installations in exchange for a financial consideration, together with the legal certainty and predictability and the other advantages that the notified measure brings (see recital (232)), there is a clear incentive effect on RWE.
- (360) The Commission also considers that the fact that RWE had already closed six units⁽¹⁵⁰⁾ before Germany submitted the amended RWE measure to the Commission in December 2022 does not put into question RWE's incentive effect to close those units. This is because RWE, when closing these six units, acted in the expectation that Germany would pay the compensation foreseen in the closure law (which was adopted on 8 August 2020, before any of the plant closures, see recital (30)), and in the 2021 contract, having received from Germany as many guarantees as to the grant of the aid as could legitimately be obtained from it. Also Germany submitted that the RWE measure, both as initially envisaged and as amended, has an incentive effect on RWE (see recital (244)).
- (361) Furthermore, according to point 427 CEEAG, the measure should not lead to a circumvention of the rules applicable to measures for security of supply. In this regard, the Commission notes that the notified measure is not aimed to address long- or short-term security of supply issues resulting from a market or regulatory failure, which was also confirmed by the German authorities (see recitals (245) to (246)), but it is aimed to phase-out lignite-fired power plants in order to significantly reduce greenhouse gas emissions in the electricity sector, which in turn will lead to Germany achieving its climate targets for 2030 and 2045 (see recital (21)). Further, the compensation to be granted to RWE under the notified measure does not constitute a remuneration for available capacity, but it is a compensation for RWE's forgone profits due to the mandated early closure of its lignite-fired units. Therefore, the notified measure does not lead to a circumvention of the rules applicable to measures for security of supply, in line with point 427 CEEAG.
- (362) Therefore, it can be concluded that the amended RWE measure has an incentive effect, as required by point 427 CEEAG, as it induces the beneficiary to change its behaviour by closing down its lignite-fired power plants earlier than otherwise foreseen and in a more orderly and predictable manner, which the beneficiary would not carry out without the aid or would carry out in a restricted or different manner.

6.3.2.3. No breach of any relevant provision of Union law

- (363) According to point 33 CEEAG, if the supported activity, or the aid measure or the conditions attached to it, including its financing method when it forms an integral part of the measure, entail a non-severable violation of relevant Union law, the aid cannot be declared compatible with the internal market.
- (364) In the present case, the Commission has assessed in particular whether the notified measure contravenes the Polluter Pays Principle under Article 191(2) TFEU, according to which, 'Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay'. In point 19(58) CEEAG, the Polluter Pays Principle has been defined as follows: 'the costs of measures to deal with pollution should be borne by the polluter who causes the pollution'.

⁽¹⁵⁰⁾ First unit (Niederaußem D) in December 2020, i.e. following the adoption of the closure law in August 2020, three units (Neurath B, Niederaußem C, Weisweiler E) by end-2021 and two other units in 2022 (Neurath A, Frechen/Wachtberg), see Table 2.

- (365) The Commission concurs with Germany, which submitted (see recital (247)) that the Polluter Pays Principle is respected because the costs to be compensated for are caused by the early closure and are not caused by the operators. In other words, the compensation would not cover costs that the operators would have to bear anyway in a scenario without the early lignite phase-out.
- (366) Hence, the notified measure does not violate Article 191(2) TFEU, nor the principle described in point 19(58) CEEAG.
- (367) A third party submitted that the activities of the operators breach secondary legislation of the Union law, for instance concerning the Commission's implementing rules 2018/1135 on IED reporting, or rules concerning water fees and damage costs (see recital (151)). The Commission considers that these allegations are not related to the case at hand for the same reasons as indicated in recital (360).
- (368) Therefore, the Commission concludes that the amended RWE measure does not contravene any relevant provision or general principles of Union law and is in line with point 33 CEEAG.

6.3.3. *Negative condition: the aid measure must not unduly affect trading conditions to an extent contrary to the common interest*

6.3.3.1. Minimisation of distortions of competition and trade

- (369) The notified measure affects mainly the electricity market in Germany, where several suppliers are in competition with each other. It might also affect the electricity markets in neighbouring countries, in view of the cross-border interconnections.

6.3.3.1.1. Necessity of the aid

- (370) Based on point 428 CEEAG, the Commission considers that there is a need for a measure if the Member State can demonstrate that the measure is targeted towards a situation where it can bring about a material improvement that the market alone cannot deliver. For instance, by enabling the phase-out of power generation capacity based on coal and thereby contributing to the development of the economic activity of power generation from alternative sources, which would not occur to the same extent without the measure. In this context, the Commission may also consider whether the market itself would have achieved a similar CO₂ emissions reduction without the measure or whether the measure contributes significantly to ensure legal certainty and predictability that would not have been there in the absence of the measure, thereby facilitating the green transition.
- (371) The Commission considers that as RWE's relevant units are profitable (see recitals (64) and (65)), they do not have an incentive to exit the market, at least not to the extent and within the timeline foreseen by the notified measure, and thus the market alone cannot deliver the intended objectives of the notified measure. As described in recital (21), the main objective of the notified measure is to achieve climate neutrality by 2045 and fulfil the interim targets of 2030, by allowing more RES development in the electricity generation market. A gradual lignite phase-out will create a need for additional power generation units and capacity, as the lignite phase-out will decrease the existing capacity of the German power generation, i.e., decrease the supply while the demand remains the same. This in turn will enable new RES to penetrate the market and will allow Germany to decrease CO₂ emissions and achieve climate neutrality by 2045. Germany submits that irrespective of the RES penetration, the emission reductions associated with the lignite phase-out are needed to achieve Germany's climate targets (see recital (21)). Furthermore, the notified measure provides legal certainty and a reliable decommissioning pathway, which would not have been there in the absence of the notified measure and which is essential in the regions affected by the lignite phase-out.
- (372) Therefore, the Commission considers that the notified measure is targeted towards a situation where it can bring about a material improvement that the market alone cannot deliver in due time. Furthermore, the Commission notes that the phase-out of power generation capacity based on lignite contributes to the development of the economic activity of power generation from RES, which would not occur to the same extent without the notified measure (see recitals (350) to (351)).

- (373) In view of the above, the Commission concludes that the notified measure is necessary to achieve its objective and facilitates the green transition, in line with point 428 CEEAG.

6.3.3.1.2. Appropriateness

- (374) Point 429 CEEAG requires that the Member State demonstrates that the measure is an appropriate policy instrument to achieve the intended objective, i.e. there must not be a less distortive policy and aid instrument capable of achieving the same results. For instance, if the measure is well targeted to contribute to the development of electricity generation from alternative sources, whilst mitigating the impact on the electricity market functioning and employment, and to ensure predictability of the closure, while contributing to the CO₂ emission reduction targets.
- (375) The German authorities chose to phase-out lignite through a negotiated solution, following the recommendation of the Coal Commission (see recitals (24) and (232)). The members of the Coal Commission represented a broad cross-section of societal, political and economic actors and proposed the auctions as the most appropriate way forward.
- (376) As described in recitals (25) to (28), before deciding for the notified measure, Germany assessed various policy alternatives. The German authorities considered three alternative policy scenarios: (i) reliance on the existing EU ETS and the targets for renewable energy, (ii) a national minimum price for CO₂ for sectors already covered by the EU ETS, (iii) regulatory closure without a compensation. In Germany's view, the notified measure is appropriate in terms of a policy instrument for implementing the German lignite phase-out in a cost-effective, predictable, socially acceptable and legally secure manner.
- (377) The Commission takes note of Germany's explanation that those other policy options were not retained because they would not have allowed reaching the development of the economic activity of electricity generation from alternative sources targets in a similarly targeted way and it would not have been possible to determine a gradual closure path upfront, which would have had a negative impact on the security of supply and the employees in the sector. The Commission considers that as the main target of the German authorities is to decrease CO₂ emissions to achieve climate neutrality and as lignite-fired power plants generate considerable emissions (for example, in 2021, lignite-fired power plants emitted 110 million tonnes of CO₂, see recital (17)), Germany's conclusion that climate neutrality could be achieved only if lignite-powered energy sector is specifically targeted, is reasonable.
- (378) In addition, the Commission notes that ordering a regulatory closure as of 2020 would have been a stronger intervention into the property rights of RWE (see section 6.1.2.1 on the principles of property rights' interventions under the GG), which, in all likelihood, would remove the business base of the consensual lignite phase-out agreed between the German government and the operators with the 2021 contract, which includes a comprehensive waiver from legal remedies (see recital (232)), and could thus jeopardise achieving the climate targets for 2030 and 2045. Therefore, the Commission finds a gradual closure over a longer period of time reasonable.
- (379) The Commission further finds that a non-refundable grant is the most appropriate aid instrument to achieve the intended objective in comparison, for example, to a loan or a guarantee. Only a grant serves the purpose of compensating RWE for the profits that it would have obtained in the absence of early closure.
- (380) Third parties claimed that the compensation and its calculation is not appropriate as many lignite-fired power plants would have closed in any case, i.e. without compensation, driven by market forces (recitals (170), (171), (174)). The Commission refers in this regard to the revised calculation submitted by Germany, which demonstrates that eight out of the nine RWE units, for which data has been submitted per plant, are estimated to have forgone profits in the period between 2021 and 2026, and that the NPV of these forgone profits exceeds the NPV of the agreed compensation to RWE (recitals (64) to (65)).

- (381) Some third parties referred to the Polish case concerning support for closure of coal mines ⁽¹⁵¹⁾ (see recitals (170) and (174)). The Commission notes that that aid was approved under the 2010 Council Decision, which applies to cases of closure of uncompetitive coal mines. However, the present case is different, as the notified measure aims to compensate for RWE's forgone profits related to the operation of power plants (see also recital (430)). Therefore, in the present case, the Polish case for the support for closure of uncompetitive coal mines cannot be used as an analogy.
- (382) Third parties also pointed out that Spain has chosen a different measure to phase-out coal-fired power generation (recital (172)). The Commission notes in this regard that it is not obliged to undertake an abstract consideration of all the alternative measures which might be envisaged, since, although the Member State concerned must set out in detail the reasons which led to the adoption of the aid measure at issue, it is not required, in addition, to demonstrate positively that no other conceivable measure, hypothetical in nature, would make it possible to achieve the objective pursued more effectively ⁽¹⁵²⁾.
- (383) Moreover, the Commission notes that the circumstances of the Spanish and the German coal phase-out are different. First, it should be noted that Member States have a large margin of discretion to decide on their energy and climate policy. The Court confirmed the Member State's right to decide on its electricity mix in line with Article 194 TFEU ⁽¹⁵³⁾. Hence, the Commission will only express concerns with the chosen measure in the context of a State aid procedure if it is evident that there is a less distortive policy and aid instrument that would attain the same results as the measure the Member State has notified. In the present case, none of the Member States mentioned by the third parties are comparable to Germany, notably because lignite-fired power generation did not play such a major role in their energy mix. Further, Germany has demonstrated that other forms, such as a carbon price floor, excise duties or tighter emission intensity limits would have led to less targeted results or would not have allowed the government to steer the lignite phase-out in the same manner, leading notably to social pacification, providing legal certainty and predictability, taking into account the links between lignite-fired power plants and mines and ensuring that the reduction of lignite-fired electricity generation is as efficient as possible for the system as a whole (see recitals (25) to (29) and (232)). Therefore, the analogies used by third parties cannot be transferred to the notified measure.
- (384) Finally, the Commission notes that notified measure is not only implemented by law but also laid down in a contract in which the operators have waived their legal rights to contest the compensation. This provides certainty to the State that the closure law would not be challenged by the operators, which the closure law alone could not have achieved.
- (385) In conclusion, the Commission finds that the notified measure is well targeted to achieve the development of electricity generation from alternative sources, whilst mitigating the impact on security of supply, as well as the predictability of the closures, while at the same time contributing to the German national emission reduction targets. Therefore, the notified measure is in line with point 429 CEEAG and is an appropriate instrument to contribute to the development of certain economic activities.

6.3.3.1.3. Proportionality

- (386) Point 430 CEEAG requires that the aid must in principle be granted through a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria. This requirement does not apply where the Member State demonstrates that a bidding process is unlikely to be competitive for objective reasons. This can, for example, be the case where the number of potential participants is limited, provided this is not due to discriminatory eligibility criteria.

⁽¹⁵¹⁾ Commission decision in State Aid SA.100533 (2021/NN) – Poland – Amendments to the closure plan in the Polish coal mining (OJ C 231, 30.6.2023, p. 8).

⁽¹⁵²⁾ Judgment of the Court of 21 December 2022, *Breuninger v Commission*, T-260/21, ECLI:EU:T:2022:833, paragraph 63.

⁽¹⁵³⁾ Judgment of the Court of Justice 22 September 2020, *Austria v Commission*, C-594/18 P, ECLI:EU:C:2020:742, paragraph 80.

- (387) Germany submits that a bidding process should not be required in the present case. First, the Commission recalls recital (14) of the Opening Decision and recital (16) of the German hard coal phase-out decision, according to which lignite plants are inextricably linked to the mining facilities, which requires a more systemic approach. In contrast to the German hard coal power plants, which source the coal from the world market outside Germany, lignite power plants have their mines close-by. Lignite is not a globally traded commodity as its relatively low calorific value renders transport of large volumes over long distances uneconomical. This is also the case for the German lignite mines and plants, where the entire process is set up such that the plants in the region use the lignite that is sourced in the same region. Germany has shown that lignite mining requires long spatial planning horizons and lead time for planning changes. Therefore, the plant closing schedule is also informed by technical and planning considerations, which would make an auction with uncertain results difficult to implement. Such spatial planning considerations do not exist for the German hard coal plants (see recital (32)). Moreover, in the Rhenish mining area, which feeds all lignite plants in that area, RWE is the only operator of mines and larger plants, so that those power plants in that area could not be put into a bidding process (see recital (32)). Hence, the Commission agrees with the German authorities that a competitive bidding process cannot be required in the present case and the lignite phase-out demands a more systemic approach.
- (388) Certain third parties do not agree with this view and have submitted that in order to create competition in the tenders, small lignite installations and the larger ones could have been tendered together (see recital (198)).
- (389) The Commission notes that the situation of smaller lignite power plants is different due to their more varied owners (approximately 45 different smaller lignite installations being operated in Germany), typically consisting of industrial users consuming their own electricity (and often also heat) production. In fact, some smaller installations that also produce heat in a CHP configuration had their retirement date set in another decarbonisation instrument (*Kraft-Wärme-Kopplungsgesetz*, the law on combined heat and power generation) (see recital (271)). Moreover, due to their size, the possible closure of smaller lignite installations does not have the same repercussions for the nearby mines as is the case with large lignite power plants⁽¹⁵⁴⁾. Conversely, however, if the lignite mines (belonging to the same owners as the large lignite power plants) did not have a clear phase-out trajectory, as foreseen in the notified measure, the smaller lignite installations dependent on the mines could struggle with fuel availability. Thus, the two groups (small and large plants) would not be able to participate in the same auctions on equal ground.
- (390) As a competitive bidding process is absent in this case, the Commission will assess the proportionality on a case-by-case basis to verify that the compensation is limited to the minimum necessary, in line with point 432 CEEAG. In this context, the Commission will analyse in detail the assumptions used by the Member State to determine the forgone profits and additional costs on the basis of which the compensation for the early closure was calculated, by comparing the expected profitability in the factual and counterfactual scenarios. The counterfactual scenario should be based on duly justified assumptions, realistic market developments and reflect the projected revenues and costs of each entity in question, whilst taking into account possible direct functional links between entities.
- (391) The Commission notes that, following the adoption of the Opening Decision, Germany submitted a revised calculation of the forgone profits for the RWE plants (see recitals (63) to (75)) that are scheduled for closure in line with the closure law and the amendment law⁽¹⁵⁵⁾.
- (392) More specifically, for the six units already closed, the assumptions used in the revised calculation (e.g. concerning electricity and CO₂ prices and inflation) are based on market expectations and information that were available immediately before the respective closure dates of those units⁽¹⁵⁶⁾. The Commission considers this approach reasonable, as it was that amount of profits that RWE could expect to forgo when it closed those units.

⁽¹⁵⁴⁾ As described in recital (26) of the German hard coal phase-out decision, Germany has expected that all the bids for small lignite will be only in amount of 0,9 GW together. In comparison, several individual plants of RWE (such as Niederaußem K, Neurath F (BoA 2), Neurath G (BoA 3)) have the same capacity or even more each.

⁽¹⁵⁵⁾ Germany did not provide specific long-term calculations for the seven units closing after 2027 since the existing data and the calculation concerning the units closing before 2027 are already sufficient to justify the amount of compensation under the amended RWE measure.

⁽¹⁵⁶⁾ This is deemed to be true also for the Frechen/Wachtberg unit closing in December 2022 in the case of which, due to the practical aspects of the timing of the 23 December 2022 submission, the market expectations were taken from a two-week period occurring 2 months before the actual closure.

- (393) For the three units scheduled for closure in January and March 2025, the revised calculation is based on the most up to date information available at the time of submission of the revised calculation. The Commission considers this approach reasonable and in line with the Court's case-law. ⁽¹⁵⁷⁾
- (394) Regarding the question of the relevance of the key assumptions (CO₂ and electricity prices) used for these three units in the revised calculation and market developments occurring since the submission of the revised calculation and since the adoption of the Extension Decision, the Commission considers Germany's arguments that a further update of these assumptions is not necessary to be reasonable and justified (see recital (75)). It is in fact standard industry practice for lignite operators to use futures products offered by exchanges to financially hedge their margins in the period ahead in a stable and predictable manner and avoid exposure to large price fluctuations occurring in the spot market.
- (395) The Commission notes that the typical hedging horizon used by operators of lignite plants is 3 years and corresponds to the liquidity breadth of the German electricity market ⁽¹⁵⁸⁾. Thus, in a counterfactual scenario, it would have been possible for the three units to enter the market between 21 October 2022 and 4 November 2022 (when the data from the market for these plants were extracted for the purpose of calculating the forgone profits) and gradually sell their planned electricity production for at least part of the period after the closure in the factual scenario and buy a corresponding volume of emission allowances. RWE has agreed that forward selling of electricity production is a general business practice (see recital (179)b)). Germany has argued that this is therefore a plausible behaviour in the counterfactual.
- (396) The Commission considers that since the transaction would have occurred in 2022, it is plausible that RWE would at that point have been able to sell electricity to be delivered up to the end of 2025. The three units are scheduled to close in January and March 2025. The Commission therefore regards it as a plausible counterfactual scenario to calculate forgone profits for these three units for the rest of 2025. Germany claims forgone profits for these units also for the year 2026, amounting to EUR 131 million or 6 % of the total forgone profits in NPV terms (the three units are the only ones for which forgone profits are claimed for 2026, see recital (258)). The Commission notes that even without the forgone profits of the three units for the year 2026, the remainder of the forgone profits (EUR 2,0 billion in NPV terms) is still higher than the compensation amount (EUR 1,7 billion in NPV terms). Thus, such a conservative approach would not fundamentally alter the result that the present value of the compensation amount is below that of the forgone profits.
- (397) Following the Opening Decision, third parties raised concerns that certain key parameters of the compensation were unrealistic or inappropriate (see recitals (190), (197), (203) and (205)). The Commission considers that the revised calculation addresses these concerns. Specifically, see recitals (393) to (396) and (410) to (411) on the assumptions about electricity and CO₂ prices; recitals (397), (403), (405) and (412) on the length of the period for which forgone profits are calculated; recitals (399) to (400) on the absence of the update mechanism and recital (406) on the inclusion and treatment of fixed costs. Several third parties were critical of the transparency of the measure, namely the process of designing the measure, such as the calculations for the compensation and the uncertainty regarding the specific activity to which the compensation pertains (see recitals (193), (197), (203), (204) and (205)). The Commission considers that the revised calculation addresses these concerns as it demonstrates that the forgone profits of a certain group of plants alone suffice to justify the compensation amount (see recital (403)).

⁽¹⁵⁷⁾ Judgment of the Court of 26 October 2016, *DEI v Commission*, C-590/14 P, ECLI:EU:C:2016:797, paragraph 49; see also Judgment of the Court of 29 April 2021 in C-847/19 P – *Achemos Grupė and Achema v Commission*, ECLI:EU:C:2021:343, paragraph 43; and Judgment of the Court of Justice of 4 March 2021 in C-362/19 P – *Commission v Fútbol Club Barcelona*, ECLI:EU:C:2021:169, paragraphs 62–64.

⁽¹⁵⁸⁾ See for instance BloombergNEF: Mapping Power Sector Hedges in Europe, 13 August 2019, online: <https://about.bnef.com/>.

- (398) Furthermore, according to point 433 CEEAG, where the closure of the coal activities occurs more than 3 years after the compensation has been awarded, the Member State must introduce a mechanism to update the calculation of the compensation based on the most recent assumptions, unless it can demonstrate why the use of such a mechanism is not justified due to exceptional circumstances in the case at hand.
- (399) As described in recital (76), Germany has submitted why an update mechanism is not necessary in the present case, as the closure of the plants will happen close in time. The Commission agrees with Germany. The Commission notes that as regards the RWE units that have already closed, the assumptions used are as close to the actual closure of the plants as possible. Concerning the units that are scheduled to shut down in the future, the closure of the three units that are taken into account in the revised calculation is scheduled by 31 March 2025, i.e. in less than 3 years from today and from the point of time from which the assumptions presented to the Commission were extracted (i.e. October/November 2022), while no forgone profits are estimated for the plants that are scheduled to close after that date. The Commission also recalls that the granting moment of the amended RWE measure is the notification of the Commission's decision (see recital (78)), which also occurs less than 3 years before the scheduled closure of the last of the three units. Therefore, and also in view of the arguments presented in recital (396) regarding the main assumptions, the Commission considers that an update mechanism is not necessary for the amended RWE measure.
- (400) The Commission's assessment of the revised calculation of the envisaged compensation under the amended RWE measure, considering the doubts raised in the Opening Decision, is as follows:

6.3.3.1.3.1. Forgone profits reach far into the future

- (401) The revised calculation for the amended RWE measure estimates the forgone profits of RWE's lignite power plants subject to an early closure at EUR 2,2 billion in 2022 terms, compared to the NPV of the agreed compensation of EUR 1,7 billion. Therefore, the NPV of the compensation is lower than the estimated forgone profits.
- (402) The Commission notes that Germany's revised calculation shows that eight out of 16 RWE units on the phase-out schedule are estimated to have forgone profits in the period between 2021 and 2026. While this is a significantly shorter timeframe than was the case with the data submitted before the Opening Decision and marks a step towards more prudent and reasonable assessment, the Commission notes that for reasons stated in recitals (396) and (397) it will not consider Germany's claims of forgone profits for the year 2026. Germany did not provide calculations for the seven units closing after 2026, as in their view, the calculation concerning the units closing before that date is already sufficient to justify the amount of compensation under the amended RWE measure.
- (403) The Commission notes that as regards the already closed units of the power plants, their forgone profits depend, to a significant extent, on market expectations of future electricity and CO₂ prices at the time of their respective closure. Thus, not all RWE units that have already been closed have forgone profits (see recital (66)).
- (404) The Commission notes that, contrary to the data submitted before the Opening Decision, the revised calculation takes into account only a limited time period of less than 3 years for the estimation of forgone profits in a conservative counterfactual, which is earlier than the units' scheduled closure dates. This significantly reduces the uncertainty surrounding the projections, especially for input parameters that have high impact on the forgone profits such as CO₂ and electricity prices or the assumed lifespan of the units. The shorter the time horizon is, the lower the chances are of unexpected or disruptive events or changes in the assumed trends occurring. This contributes considerably to addressing the doubts expressed in recitals (123) to (132) of the Opening Decision, in which the Commission argued that the submitted calculations reached far into the future and were uncertain.

- (405) On the cost side, the revised calculation includes not only fixed costs of the power plants, but also fixed mining costs. The Commission notes that this appears to be in line with industry practice, since the lignite mines and plants are normally considered part of one inseparable economic system (see recitals (67) and (259)). The calculations submitted before the Opening Decision included only variable mining costs, which tended to understate generation costs and overstate the forgone profits. Differently, in the revised calculation, the total mining costs (fixed plus variable) are included, which the Commission deems more realistic and reasonable. The Commission also finds the stability of the mining costs per unit of production to be a reasonable assumption given the short timeframe of the counterfactual scenario.
- (406) As regards the duration of the operation of the power plants absent the closure law and the related doubts expressed in recitals (124) to (125) of the Opening Decision, the Commission notes that the revised calculation no longer assumes operational lifetimes up to 70 years. This is due to the much shorter timeframe of the forgone profits used in the revised calculation. Additionally, based on the revised calculation, no plant for which forgone profits are claimed is scheduled to close more than 3 years after the last year for which profits are claimed in the counterfactual scenario; and indeed seven out of eight units for which forgone profits are claimed are scheduled to run just 2 years longer than profits are claimed in the counterfactual scenario (recital (65)). Thus, the small difference in the factual and counterfactual scenarios in the revised calculation allows the Commission to consider the doubts expressed in recitals (124) to (125) of the Opening Decision to be addressed, as claimed by Germany (section 5.3.4).
- (407) Furthermore, concerning the doubt about the necessary investments for the plants' sustained long-term operation (see recitals (126) to (127) of the Opening Decision), the Commission notes that the much shorter timeframe of the projected forgone profits used in the revised calculation sufficiently addresses the doubt, as claimed by Germany (recital (263)). With regard to Niederaußem D, in the case of which the Commission specifically expressed a doubt whether the plant would be able to operate beyond 2020 due to compliance with the Industrial Emissions Directive (2010/75/EU) and related stricter standards for Large Combustion Plants, the Commission notes that Germany no longer estimates forgone profits for this plant in the revised calculation (recital (263)).
- (408) The Commission had previously raised doubts about the uncertainties surrounding future projections (recital (129) of the Opening Decision). The Commission now notes that the revised calculation uses verifiable and independent market based data, which were available either immediately before the closure date (for the closed units) or at the time of the submission of the revised calculation (for the still operating units) (recital (67)). The revised calculation also takes into account only a limited time period for the estimation of forgone profits, which significantly reduces uncertainties surrounding future projections. In addition, the discount rate (WACC of 7,5 %) applied for the purpose of discounting both the forgone profits and the compensation appears to be plausible given the shortened timeframe of the forgone profits (see recital (264)). The Commission thus concludes that its doubt regarding the uncertainties surrounding future projections have been dispelled.
- (409) Regarding the doubt about fuel and CO₂ prices (see recital (130) of the Opening Decision), the Commission points out that Germany's revised calculation takes into account updated and market-based expectations for CO₂, fuel and electricity prices⁽¹⁵⁹⁾. This aspect plays an important role in evaluating the profitability of the power plants in question, since electricity prices influence the revenues from the sale of electricity and CO₂ prices influence the most important and uncertain component of the lignite plants' operating cost. Specifically, for the units that have already closed at the time of submission of the revised calculation, the revised calculation uses average quotes of futures products on the EEX exchange from a two-week period immediately before the respective closure dates, while for the units closing after the submission of the revised calculation, the calculation uses average quotes registered between 21 October 2022 and 4 November 2022.

⁽¹⁵⁹⁾ Fuel prices (hard coal and gas) influence electricity price expectations since coal- and gas-fired power plants typically act as the main price setters in the market. Therefore, electricity price futures implicitly contain within them predictions about the development of fuel prices.

- (410) The Commission also notes that the much shorter period for which forgone profits are taken into account reduces the uncertainty surrounding the projected CO₂ and electricity prices. This timeframe stretches over only few years into the future, as opposed to the calculations submitted by Germany before the Opening Decision, which in some cases went up to 2061. The shortened timeframe enabled market based and recent price development expectations to be used in the revised calculation. The organised German electricity market with a transparent price discovery process based on competitive bids offers the possibility to secure hedging contracts for electricity, for instance through the EEX trading platform, which is used by RWE to financially hedge its electricity sales via purchases of the same range of products as those that were used to calculate the forgone profits in the counterfactual ⁽¹⁶⁰⁾. Using these real and verifiable market price data as the basis for the counterfactual scenario for the calculation of forgone profits significantly strengthens the robustness of the revised calculation as it corresponds to standard hedging behaviour of RWE over a plausible time horizon.
- (411) The use of more recent price assumptions and shorter time frames for the calculation of forgone profits displayed in the revised calculation is also in line with point 433 CEEAG, which requires an update mechanism if compensation for coal plant closures is awarded more than 3 years before the closure actually takes place. In the particular case of RWE units, the Commission finds its initial doubt regarding the adequateness of projected fuel and CO₂ prices to be dispelled even when considering a more conservative approach than what point 433 CEEAG would require. Not only is the aid awarded less than 3 years before the actual closure of all eight units for which Germany claims forgone profits and its proportionality assessed against assumptions that are no more than 3 years old from the point of view of the closure. More than that, the estimated forgone profits that suffice to exceed the compensation amount in NPV terms do not extend beyond 3 years from the time of the closure of the eight units and also do not extend beyond a typical hedging horizon of those units (from the point at which the assumptions about key parameters were taken).
- (412) With regard to the doubt expressed in recital (131) of the Opening Decision, in which the Commission points out that it had not received data for each of the units scheduled for closure, the Commission points out that the revised calculation contains data for each of the nine RWE units scheduled for closure until 31 March 2025. The Commission notes Germany's argument that this suffices to justify the compensation amount (recital (266)) and considers its doubt regarding this matter to be dispelled.
- (413) As for the doubt expressed in recital (132) of the Opening Decision about the lack of sensitivity analysis with regard to CO₂ and electricity prices, the Commission notes that the revised calculation uses in the counterfactual scenario real and verifiable market price data and simulates standard hedging behaviour of lignite power plant operators over a realistic time horizon. This contrasts with the data submitted before the Opening Decision, where non-market based assumptions stretching over a long term horizon were used. Furthermore, in the case of the units that have already closed, the most up to date projections available before the closure were used for the calculation of their forgone profits, which in the Commission's view renders the need for sensitivity analysis obsolete. This also holds for the three units that are yet to close and for which Germany also claims forgone profits. For those units, the Commission considers that the arguments given in recitals (395) and (396) demonstrate the realistic possibility in the counterfactual to lock in their operating margins at the time of the submission of the revised calculation, based on common market behaviour by RWE.
- (414) The Commission considers that the fact that the systemic effect of power plant closures on the German electricity market is taken into account in the form of a discount on electricity prices in the counterfactual scenario (compared to the actual market expectations in the factual scenario), contributes to the robustness of the revised calculation. In the counterfactual scenario, electricity prices are lower compared to the actual scenario because more lignite units are in operation in the former case and more demand can be met with relatively cheaper generation capacities. Concretely, electricity prices in the counterfactual scenario are lower by 1,7 % in 2023 and by 3,2 % in 2026 than in the factual scenario (see recital (74)). This means that the forgone profits calculated in the counterfactual scenario of the RWE units are lower than what they would have been without taking this effect into consideration. Thus, the calculation results in more conservative estimates of the forgone profits.

⁽¹⁶⁰⁾ See for instance BloombergNEF (2019): Mapping Power Sector Hedges in Europe. 13 August 2019, online: <https://about.bnef.com/>.

- (415) Finally, the Commission notes that other parameters of the revised calculation are designed in a way that makes the estimate of the forgone profits more conservative than the calculations submitted before the Opening Decision. Specifically, the revised calculation does not include revenues from the heat generation and the electricity balancing market, which understates the forgone profits. Furthermore, the calculation assumes that the market revenue cap for electricity generators, which at the time of the updated submission had been approved to last only until 30 June 2023, would be prolonged until 30 April 2024, reducing thereby the forgone profit of Frechen/Wachtberg plant. In the end, the German government decided not to prolong the application of the market revenue cap beyond 30 June 2023 ⁽¹⁶¹⁾. Had this been factored in the revised calculation, the forgone profits of Frechen/Wachtberg plant would have been higher by EUR 181 million in NPV terms. Additionally, the calculation assumes that units Neurath D and E will be closed on 31 March 2025 and forgone profits are included only as of that date, whereas they could close at the end of March 2024 and thus have higher forgone profits in the remaining months of 2024 and in 2025 (recital (259)).
- (416) As regards third party's assertions regarding the unexplained length of the period over which the forgone profits were calculated in the revised calculation (see recital (194)), the Commission notes that the period does not stretch beyond what Germany considered necessary in order to demonstrate that the forgone profits exceed the compensation. Regarding the market revenue cap applied in Germany between 1 December 2022 and 30 June 2023 on the basis of Council Regulation (EU) 2022/1854 ⁽¹⁶²⁾, the legal situation in Germany is reflected in the calculations; the cap itself is not subject of this procedure. In any case, the third-party argument is irrelevant because the three RWE units, which allegedly receive more favourable treatment under the market revenue cap, are not included in the revised calculation of RWE's forgone profits submitted by Germany since they only close after or at the end of 2030 and thus have no impact on the revised calculation.
- (417) As regards to third party's argument that RWE's lignite plants are currently profiting from the Substitute Powerplant Maintenance Act (recital (208)), the Commission notes that the lignite units covered by the said law ⁽¹⁶³⁾ are different units to those covered by the amended RWE measure. Hence, there is no overlap in the lignite units supported by notified measure and the Substitute Powerplant Maintenance Act.
- (418) Finally, regarding a third party's argument that the calculation of RWE's forgone profits should also take into account the potential State support for the expansion of hydrogen-ready gas-fired power plants at the sites of the closed lignite units (recital (193)), the Commission is satisfied with Germany's explanations in this regard that any separate new measures for the transformation to climate-neutral power generation would allocate the support through general and transparent tenders open to all undertakings and that such new measures would not provide any guarantee of support for RWE (see recital (273)). Further, if such new support were to be granted to RWE, it would concern different eligible costs, i.e. costs related to the construction of a new plant.

6.3.3.1.3.2. Deferred closure mechanism and reserve mechanism

- (419) As described in Table 3, one RWE installation will be brought to the deferred closure mechanism and will receive compensation for the period it stays in the mechanism (2029 to 2033), following which it will be permanently shut down. Germany has submitted that the deferred closure mechanism is compensated independently and does not affect the compensation under the notified measure (recital (35)).

⁽¹⁶¹⁾ Online: https://www.bmwk.de/Redaktion/DE/Downloads/F/faq-abschoepfung-von-zufallsgewinnen.pdf?__blob=publicationFile&v=4.

⁽¹⁶²⁾ Council Regulation (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices (OJ L 2611, 7.10.2022, p. 1).

⁽¹⁶³⁾ See in Table 1 in Commission decision of 30 September 2022 in SA.103662 Temporary lignite power supply reserve to save gas (OJ C 439, 18.11.2022, p. 1).

(420) As expressed in recital (133) of the Opening Decision, the Commission preliminarily found that the compensation amounts of the deferred closure mechanism are inextricably linked to the closure compensation. The Commission had doubts whether the deferred closure mechanism constituted a separate measure, which needs not to be taken into account while assessing proportionality.

(421) In recitals (120) to (123) of the Extension Decision, the Commission further analysed submissions made by Germany and concluded at that stage that there seems to be no overlap in the calculation of the two instruments.

(422) The Commission remains of this opinion and concludes that there is no overlap. Considering the explanations provided by Germany and RWE (see recitals (276) and (179)), the Commission is of the view that the payments concerning the deferred closure mechanism are not relevant, as the revised calculation for the compensation for early closure under the notified measure does not include the plant (Niederaußem G or H) which would be transferred to the deferred closure mechanism. Further, the remuneration for the deferred closure mechanism should not be taken into account in the proportionality assessment of the amended RWE measure, as the two are separate instruments:

- (a) First, the notified measure compensates for the forgone profits caused by the mandated early closure of RWE's lignite installations, while the deferred closure mechanism compensates operators for the installations which have been put into stand-by mode. In case of RWE, this will mean one installation – Niederaußem G or H, which will be transferred to the deferred closure mechanism on 31 December 2029 and will be fully closed on 31 December 2033.
- (b) Second, the notified measure and the deferred closure mechanism address different time periods. The notified measure concerns final closure as of 31 December 2033 onwards, while the deferred closure mechanism concerns the time period spent in the deferred closure mechanism, i.e. from 31 December 2029 to 31 December 2033. This is the case of Niederaußem G or H, which is the only unit of RWE being moved to the deferred closure mechanism. With Niederaußem G or H, the entry into the deferred closure mechanism is as of 31 December 2029, whereas the final closure is as of 31 December 2033. This means that there is no overlap in terms of timing between the notified measure and the entry into the deferred closure mechanism of Niederaußem G or H. Further, Niederaußem G or H is not included in the revised calculation (see recital (66)).
- (c) Third, the notified measure and the deferred closure mechanism are following a different logic and the remuneration is calculated in a different manner. For the notified measure, the remuneration is calculated based on various input data and forgone profit predictions, i.e. it is a forward looking remuneration looking only at years after the closure, whereas the deferred closure mechanism is calculated based on forgone profits in a formula which is checking the profitability of three previous years, i.e. it is retrospective in its nature, looking only at the years prior to the entry to the deferred closure mechanism. Further, the forgone profits calculation does not include the compensation for the deferred closure mechanism. Therefore, there is no overlap in the costs/profits covered by these two instruments.
- (d) Fourth, the provision in the closure law (paragraph 45), according to which the first payment of the compensation takes place at the end of the year in which a lignite installation is shut down permanently for the first time or transferred to the deferred closure mechanism concerns the time of the payment of the compensation and not the notified measure as such. Thus, the notified measure and the deferred closure mechanism are not inextricably linked to each other and the notified measure's payment is not preconditioned to the deferred closure mechanism and vice versa.

- (423) Further, the Commission is of the opinion that the deferred closure mechanism and the notified measure are two separate measures also in light of the criteria laid down in the case law. The Court has ruled that it cannot be excluded that several consecutive measures of State intervention must, for the purposes of Article 107(1) TFEU, be regarded as a single intervention. That could be the case, in particular where consecutive interventions, having regard to their chronology, their purpose and the circumstances of the firm at the time of those interventions, are so closely linked to each other that they are inseparable from one another ⁽¹⁶⁴⁾. In the present case, the two measures are separated into two different time periods (see recital (423)(b)). They serve a different purpose, as the deferred closure mechanism is serving the market in emergency situations and is compensating the operators for keeping the units in stand-by mode, whereas the notified measure compensates for the forgone profits not received because of the early lignite phase-out but does not mandate the operators to continue producing electricity under certain conditions. Further, the two measures have two different legal bases: the deferred closure mechanism is regulated under Article 50 of the closure law, whereas the compensation amount and the details in its management are regulated under Article 44 of the closure law and the 2021 contract and their amendment. Finally, the deferred closure mechanism is managed by system operators and transmission system operators, which is not the case with the notified measure. Due to these reasons, the measures are not closely linked to each other and therefore are not inseparable from one another. Thus, the deferred closure mechanism and the notified measure cannot be regarded as one measure also in light of the relevant case law.
- (424) Finally, as regards the argument brought forward by a third party concerning a potential impact on RWE's forgone profits of the transfer of three units (Niederaußem K, Neurath F and Neurath G) into a reserve until 31 December 2033 (recital (196)), the Commission notes that these units are not relevant for the assessment of the amended RWE measure. This is because these units are scheduled to close in 2030 and Germany did not provide specific long-term calculations for the seven units closing after 2027, since the existing data in the revised calculation concerning the units closing before 2027 is already sufficient to justify the amount of compensation under the amended RWE measure. The Commission also takes note of Germany's explanation that these potential new reserves are not provided for in the amendment law nor in the amendment contract, but they will need to be legally defined in the future if Germany decides to introduce such reserves (recital (278)).
- (425) In conclusion, the Commission is of the opinion that the remuneration received by RWE for the installation transferred to the deferred closure mechanism and the potential reserve mechanism are not relevant for the assessment of the proportionality of the amended RWE measure.

6.3.3.1.3.3. Alternative scenarios submitted by Germany

- (426) The alternative scenarios that Germany had submitted before the Opening Decision (see recitals (50), (54) and (134) of the Opening Decision) are not relevant for the assessment of the amended RWE measure, as the closure of the RWE plants has in any case been brought forward to 2030 and the frontloading decommissioning option was not considered for the revised calculation of RWE's forgone profits.

6.3.3.1.3.4. Additional mine rehabilitation costs

- (427) In line with point 425 CEEAG, the compensation for early closure of profitable coal activities 'may also cover additional costs incurred by the undertakings, for instance relating to additional social and environmental costs, if these costs are directly caused by the early closure of the profitable activities. Additional costs cannot include costs where they would have also occurred in the counterfactual scenario'.
- (428) In the context of the amended RWE measure, Germany submitted the revised calculation only of forgone profits – and more specifically, of the forgone profits of the RWE units closing by 31 March 2025 – and this calculation shows that the NPV of the forgone profits of these units is higher than the NPV of the compensation (recitals (64) and (65)). The revised calculation includes no additional costs for mine rehabilitation (recital (269)).

⁽¹⁶⁴⁾ Judgment of 4 June 2015, *Commission v MOL*, C-15/14 P, ECLI:EU:C:2015:362, paragraph 97.

- (429) Therefore, as no additional costs for mine rehabilitation are included in the revised calculation and the forgone profits for the power plants suffice to justify the compensation to RWE, it is not necessary to quantify and assess any additional mine rehabilitation costs that RWE may incur from the accelerated closure.

6.3.3.1.3.5. Conclusion on proportionality

- (430) Therefore, the Commission concludes that the amended RWE measure is proportionate.

6.3.3.1.4. Cumulation

- (431) The Commission notes that Germany will ensure compliance with the cumulation rules in order to exclude overcompensation, in line with points 56 and 57 CEEAG (recital (83)).
- (432) Certain third parties submitted that the measure together with other German measures, such as the APG, deferred closure mechanism, capacity mechanisms etc. might lead to overcompensation, as the same eligible costs might be cumulated (see recitals (196) and (206)). The Commission does not agree to this view. The eligible costs of the notified measure concern the forgone profits, whereas for example, the deferred closure mechanism is a separate measure concerning different eligible costs, as concluded by the Commission in section 6.3.3.1.3.2. That is also the case for other capacity mechanisms or for example APG, which do not concern the forgone profits of RWE due to the early closure of the lignite-powered power plants. Point 56 CEEAG refers to cumulation for the same eligible costs. Hence, the Commission is of the opinion that there is no cumulation concerning the notified measure in terms of points 56 and 57 CEEAG.

6.3.3.1.5. Transparency

- (433) The Commission notes that Germany has confirmed that it will ensure compliance with the transparency requirements laid down in points 58, 59 and 61 CEEAG (see recital (84)).

6.3.3.2. Avoidance of undue negative effects on competition and trade

- (434) According to point 434 CEEAG, the Member State must identify and quantify the expected environmental benefits of the measure, where possible in terms of aid per tonne of CO₂ equivalent emissions avoided. Furthermore, the Commission will consider it positively if measures include a voluntary cancellation of CO₂ emission allowances at national level.
- (435) According to point 435 CEEAG, it is important to ensure that the measure is structured in a way that limits to the minimum any distortion of competition in the market. In the absence of a competitive bidding process, the Commission will assess the aid's effects on competition and trade based on the design of the measure and its effect on the relevant market.
- (436) First, as described in recital (18), Germany has estimated that the notified measure will lead to at least a gross amount of 51 million tonnes of saved CO₂ emissions. Hence, Germany has identified and quantified the expected environmental benefits of the notified measure in terms of aid per tonne of CO₂ equivalent emissions avoided. Second, the Commission also welcomes that the closure law introduces the cancellation of CO₂ emission allowances at national level on an annual basis, as described in recital (19). The closure law foresees the cancellation of CO₂ emission allowances amounting to the additional emission reductions caused by the closure of lignite-fired power installations taking the intervention of the Market Stability Reserve into account. When determining the number of CO₂ allowances that will be deleted, Germany would factor in replacement technologies. Therefore, the Commission is of the opinion that the requirement under point 434 CEEAG is fulfilled.

- (437) In relation to point 435 CEEAG, the Commission points out that the existence of a competitive bidding process to assure minimum distortions to competition and trade should be the preferred option when designing a measure. However, as described in recital (32), the German authorities have brought forward valid arguments, why a competitive bidding process should not be applicable in the present case and the Commission has agreed to such view (recitals (388) et seq.). Therefore, the Commission accepts exceptionally the absence of a competitive bidding process in the present case. In the absence of a competitive bidding process, the Commission will assess the aid's effects on competition and trade based on the design of the measure and its effect on the relevant market.
- (438) The Commission notes, as underlined in recital (333), that the notified measure has an effect on the competition in the electricity market. Namely, it will affect competition in Germany and in neighbouring areas, and it is likely to affect the merit order and hence the electricity wholesale price.
- (439) However, the Commission is of the opinion that the design of the notified measure avoids undue negative effects on competition and trade. First, the notified measure is limited in time, especially in view of the accelerated phase-out by 2030. Second, the notified measure is proportionate and stays below the estimated forgone profits of RWE, i.e. the revised calculation for the amended RWE measure estimates the forgone profits of RWE's lignite power plants subject to an early closure at EUR 2,2 billion in 2022 terms, compared to the NPV of the agreed compensation of EUR 1,7 billion. Therefore, the NPV of the compensation is lower than the estimated forgone profits (see recital (64)) and is thus not liable to improve the financial position of the beneficiary. The Commission notes that these two design aspects of the notified measure mitigate the risk of undue negative effects on competition and trade.
- (440) Third parties have expressed concerns on the avoidance of undue negative effects on competition and trade (see recitals (224) to (229)). They claim that with the help of the notified measure, lignite operators will be able to penetrate or strengthen their positions on neighbouring markets, such as electricity produced from renewable energy sources to the detriment of their competitors. For example, if the lignite operators invest in capital-intensive power generation plants for the use of RES, this would lead to strong distortions of competition. Some third parties further submitted that the compensation breaches Article 106 in conjunction with Article 102 TFEU, as it consolidates the alleged position of RWE as market-dominant power producer, in a situation where the market is narrowing in favour of RWE anyway (see recital (220)).
- (441) Germany contests the submission by the third parties that the compensation benefits RWE in the European market and that the notified measure is contrary to Article 106 in conjunction with Article 102 TFEU (see recital (274)). Germany submitted that the notified measure does not distort or threaten to distort competition or affect trade between Member States, as RWE does not hold a dominant market position (see recital (274)).
- (442) The Commission does not agree to these views of the third parties. Namely, first, the Commission has assessed the counterfactual scenario and found it to be plausible, meaning that the lignite plants would have continued to run until later than the foreseen closure date and therefore, the profits would have accrued to RWE. Hence, as RWE is not better off in the factual scenario in comparison to the counterfactual scenario, there thus cannot be an undue advantage that would allow RWE to penetrate neighbouring markets or increase its market position. Second, the lignite phase-out will reduce capacity in the market and will allow other parties, including the RES producers, to penetrate the market or strengthen their position in it. Therefore, RWE is not receiving a competitive advantage in comparison to its competitors due to the amended RWE measure. Third, considering that RWE is being compensated for its forgone profits, which it would have made in the absence of the lignite phase-out, RWE would have had the opportunity to make new investments also absent the notified measure. Therefore, the notified measure will not strengthen RWE's position on the relevant market. Lastly, any assessment under Articles 102 and 106 TFEU is not subject to this decision, as this formal investigation concerns Article 107 TFEU. The Commission further points out that as Germany has confirmed, RWE does not have any guarantee about a subsequent investment aid because of the closure of its power plants. Such aid, if granted, will be a separate measure awarded through competitive tenders (see recital (273)).

- (443) A third party had submitted that the measure will advantage RWE unreasonably and to avoid this, additional commitments should be put in place as was done in the British Energy plc restructuring case (the 'BE case') ⁽¹⁶⁵⁾ (see recital (227)). The Commission does not agree to this view. The BE case was assessed under the Commission Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (the 'R&R Guidelines') ⁽¹⁶⁶⁾, which address a situation where an undertaking in difficulty is in need of rescue or restructuring aid. As the beneficiary of such cases is not able to remain in the market without State's intervention, additional measures to avoid further distortions of competition may be necessary under R&R Guidelines. RWE in contrast is not an undertaking in difficulty (see recital (456)) and the notified measure is not addressing a rescue or restructuring situation but rather an early closure of a profitable business. Therefore, the BE case cannot be used as an analogy in the present case.
- (444) Further, a third party referred to the so-called 'climate ruling' of the German constitutional court of 24 March 2021, according to which a phase-out in 2038 is too late to fulfil Germany's climate targets and hence the measure does not fulfil its objective. Therefore, according to this third party, it could be said that the negative effects outweigh the positive effects, since the measure does not help to achieve the necessary climate targets of Germany (see recital (226)). The Commission notes that the decommissioning of RWE's installations has been brought forward to 2030 and compensation is claimed only for units that close by 2025 at the latest. Therefore, the argument made by the third party is not relevant.
- (445) In conclusion, the Commission is of the view that the requirements under point 435 CEEAG are fulfilled, and the notified measure is designed in a manner that it avoids undue negative effects on competition and trade.

6.3.4. *Weighing the positive effects of the aid against the negative effects on competition and trade*

- (446) As described in points 71 and 72 CEEAG, the Commission will balance the identified negative effects on competition and trading conditions of the aid measure with the positive effects of the planned aid on the supported economic activities, including its contribution to environmental protection and objectives of energy policy and, more particularly, to transition towards environmentally-sustainable activities and to the achievement of the legally binding targets under the European Climate Law and the Union's 2030 targets for energy and climate. In that balancing exercise, the Commission will pay particular attention to Article 3 of Regulation (EU) 2020/852 of the European Parliament and of the Council ⁽¹⁶⁷⁾, including the 'do no significant harm' principle, or other comparable methodologies.
- (447) The negative effects of the measure on competition and trade must be sufficiently limited, so that the overall balance of the measure is positive. According to point 73 CEEAG, the Commission will consider an aid measure compatible with the internal market only where the positive effects outweigh the negative effects.
- (448) The Court has clarified that in order to assess whether a measure adversely affects trading conditions to an extent contrary to the common interest, the Commission must weigh up the positive effect of the planned aid for the development of the activities that the aid is intended to support and the negative effects that the aid may have on the internal market ⁽¹⁶⁸⁾.

⁽¹⁶⁵⁾ Commission's decision of 27 November 2002 in State Aid NN 101/2002 – United Kingdom Rescue aid to British Energy plc.

⁽¹⁶⁶⁾ 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).

⁽¹⁶⁷⁾ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (OJ L 198, 22.6.2020, p. 13).

⁽¹⁶⁸⁾ Judgment of 22 September 2020, *Austria v Commission*, ECLI:EU:C:2020:742, paragraph 101.

- (449) On the negative side of the balance, as described in recital (439), the notified measure will affect competition in Germany and the neighbouring areas and change the merit order. However, as described in section 6.3.3.2, the amended RWE measure is designed so that undue negative effects on competition and trade are avoided. In particular, the amended RWE measure does enable the beneficiary to strengthen its market position or penetrate new markets in a way that would not have been possible in the counterfactual.
- (450) On the positive side of the balance, the Commission notes that the phase-out of lignite-fired power generation will facilitate the development of additional electricity capacity based on other technologies, namely RES, and will allow Germany to achieve its climate neutrality target on schedule, i.e. interim target by 2030 and final target by 2045 (see section 6.3.2). Moreover, the aid will induce positive effects in terms of environmental gains, such as the significant decrease in CO₂ emissions amounting to millions of tonnes of CO₂ per year, which could represent approximately 40 % of the CO₂ emissions in Germany (recitals (16) and (17)). These reductions would not happen in the same timeframe without the notified measure, as RWE would not have the incentive to terminate the operations of its profitable lignite installations. In addition, the notified measure brings predictability as regards the closure of lignite-fired plants, which will assure security of supply and will give assurance to lignite operators in terms of employment and other societal effects.
- (451) Further, the German authorities have designed the notified measure in such a way as to minimise the potential distortion of competition arising from the notified measure, as described in recital (440). The positive effects of the notified measure will therefore support the transition towards environmentally-sustainable activities and will help to achieve the legally binding targets under the European Climate Law and the Union's 2030 targets for energy and climate by facilitating the development of electricity generated from alternative energy sources, such as RES.
- (452) Furthermore, the notified measure is in line with the 'do not significant harm' principle, as the notified measure is not supporting the carrying out of economic activities that would do significant harm to any environmental objective, such as increase the greenhouse gas emissions. On the contrary, the objective of the notified measure is to reduce the greenhouse gas emissions and to facilitate the development of electricity generated from alternative energy sources, such as RES.
- (453) Therefore, the positive effects of the notified measure outweigh the temporary effects on competition in Germany and the neighbouring areas, as the notified measure will allow to achieve greater greenhouse emissions reductions and is designed in a manner that it limits competition distortions, as it is limited in time, especially in view of the accelerated phase-out by 2030, and is proportionate and stays below the estimated forgone profits of RWE (see recital (440)). On balance, the notified measure is in line with the objectives of Article 107(3)(c) TFEU as it facilitates the development of economic activity of electricity generated from alternative sources, where such aid does not adversely affect competition to an extent contrary to the common interest.
- (454) In conclusion, the Commission is of the view that the requirements under points 71 to 73 CEEAG are fulfilled. The Commission thus considers that the positive effects of the notified measure outweigh its potential negative effects on competition and trade.

6.3.5. *Companies in difficulty and under recovery order*

- (455) The Commission notes that Germany has confirmed that RWE is not an undertaking in difficulty and that it is not subject to an outstanding recovery order (recitals (81) and (82)). Therefore, the amended RWE measure complies with points 14 and 15 CEEAG. ⁽¹⁶⁹⁾

⁽¹⁶⁹⁾ This also implies that a comparison to the British Energy plc restructuring case, as suggested by a third party, cannot be made.

6.3.6. *Conclusion on the compatibility of the aid*

- (456) In conclusion, the Commission finds the amended RWE measure compatible with the internal market, as it facilitates the development of an economic activity and it does not unduly affect trading conditions to an extent contrary to the common interest. Further, the positive effects of the aid outweigh the negative effects on competition and trade. Therefore, the amended RWE measure is compatible with section 4.12.1 CEEAG and Article 107(3)(c) TFEU.

7. CONCLUSION

- (457) The amended RWE measure is compatible with the internal market on the basis of Article 107(3)(c) TFEU, in the light of the relevant provisions of the CEEAG.

HAS ADOPTED THIS DECISION:

Article 1

The State aid measure which the Federal Republic of Germany is planning to implement for RWE, amounting to EUR 2,6 billion, is compatible with the internal market within the meaning of Article 107(3), point (c) of the Treaty on the Functioning of the European Union.

The implementation of the State aid, amounting to EUR 2,6 billion, is accordingly authorised.

Article 2

This Decision is addressed to the Federal Republic of Germany.

Done at Brussels, 11 December 2023.

For the Commission
Margrethe VESTAGER
Executive Vice-President