

IN AN ARBITRATION UNDER THE
RULES OF PROCEDURE FOR ARBITRATION PROCEEDINGS OF THE

**International Centre for
Settlement of Investment Disputes**

Washington, D.C.

between

Azienda Elettrica Ticinese
(Claimant)

and

The Federal Republic of Germany
(Respondent)

ICSID Case No. ARB/23/47

**CLAIMANT'S REPLY ON THE MERITS &
COUNTER-MEMORIAL ON JURISDICTION**

16 January 2026

Tribunal:

Sir Christopher Greenwood GBE, CMG, KC
Mr. John Beechey CBE
Professor Campbell Alan McLachlan KC

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GLOSSARY

AET	Azienda Elettrica Ticinese
Arbitration Rules	ICSID Arbitration Rules as in force since 1 July 2022
BNetzA	<i>Bundesnetzagentur</i> , the German Federal Grid Authority
BNetzA List	A List determining the order in which the remaining coal-fired power plants are being shut down from 2020 onwards, published by the BNetzA
BR-Drs.	<i>Bundesrats-Drucksache</i> , Parliamentary printing matter of the Bundesrat (second house of the German Parliament)
BT-Drs.	<i>Bundestags-Drucksache</i> , Parliamentary printing matter of the Bundestag (first house of the German Parliament)
Claimant	Azienda Elettrica Ticinese
Coal Ban Law	Law to reduce and end coal-fired power generation, in German, <i>Gesetz zur Reduzierung und zur Beendigung der Kohleverstromung (Kohleverstromungsbeendigungsgesetz)</i> of 8 August 2020, published in Bundesgesetzblatt I 2020, Nr. 37, 13 August 2020, pp 1818 et seq.
Coal Commission	Commission on Growth, Structural Change and Employment, in German, the <i>Kommission "Wachstum, Strukturwandel und Beschäftigung"</i>
Consortium Agreement	Agreement signed by the Partner Companies to pursue the aim of building the Lünen Plant
ECT	Energy Charter Treaty, Lisbon, 17 December 1994, UNTS 2080, 95
ETS	Emission Trading System of the EU
EU	European Union
FET	Fair and Equitable Treatment
Germany	The Federal Republic of Germany
GG	<i>Grundgesetz</i> , Basic Law for the Federal Republic of Germany
ICSID	International Centre for Settlement of Investment Disputes
ICSID Convention	Convention on the Settlement of Investment Disputes between States and Nationals of Other States, Washington, D.C., 18 March 1965, 575 UNTS 159
Institution Rules	The ICSID Institution Rules as in force since 1 July 2022
Lünen plant	The Coal-Fired Power Plant in Lünen, Germany
MCPS	Most Constant Protection and Security
Partner Companies	The Municipal Utilities other than Claimant that own shares in TKL, see Annex for the current shareholder list
Partnership Agreement	2006 Agreement between the Partner Companies establishing TKL
Respondent	Federal Republic of Germany
TKL	Trianel Kohlekraftwerk Lünen GmbH & Co. KG
World Bank	International Bank for Reconstruction and Development

REPLY ON MERITS AND COUNTER-MEMORIAL ON JURISDICTION

A. INTRODUCTION

- 1 In accordance with the procedural calendar, Claimant respectfully submit its Reply on Merits and their Counter-Memorial on Jurisdiction.
- 2 This Reply is submitted together with
 - A second expert report by Mr Kiran P. Sequeira and Mr Stuart P. Dekker of Secretariat International ([Exhibit CER-0003](#), the “Second Secretariat Report”)
 - A second expert report by Dr Christoph Riechmann and Dr Jens Perner of Frontier Economics, ([Exhibit CER-0004](#), the “Second Frontier Report”)
 - An expert report by Dr Lutz Krahnefeld ([Exhibit CER-0005-DE/Exhibit CER-0005-EN](#), the “Krahnefeld Report”)
 - An expert report by Prof Henry Peter ([Exhibit CER-0006](#), the “Peter Report”)
 - A witness statement by Mr Marc Engbert ([Exhibit CWS-0001-DE/Exhibit CWS-0001-EN](#), the “WS Engbert”)
- 3 The Reply is structured as follows:
- 4 Section **B** comments on the facts part of the Counter-Memorial. It will correct and dispel Respondent’s attempt to reframe this as a political dispute about climate change. It is not. It is still only about the need to pay compensation for the planned shutdown of the Lünen plant which makes it impossible for Claimant to even amortise its investment. The only political element in there is Respondent’s blatant decision to sacrifice new and efficient coal-fired power plants – which it had initially wanted to reduce Germany’s CO₂-emissions in favour of lignite plants and lignite mining. The latter is of considerable political importance in Germany. And it is this

- political distortion of the investment framework which the Energy Charter Treaty was designed to protect against.
- 5 Section **C** rebuts Respondent's objection to jurisdiction. This is not a State-State dispute. It is not the Swiss State, or the Canton of Ticino which had invested in Lünen, but Claimant. It has its own legal personality, is "autonomous" of the State and the decision to invest in the Lünen plant was neither on instructions of the State nor of a governmental nature.
 - 6 Section **D** discusses Respondent's attempt to evade liability. It will explain that Respondent's attempt to justify its actions as an exercise of its police powers cannot succeed. The ECT does not recognise that concept as a justification or exemption from investment protection, and a fundamental change of the regulatory framework such as prohibiting coal-fired power plants (with permits) to burn coal does not fall under "police powers" anyway. Despite Respondent's desperate attempts at window-dressing, the Coal Ban Law remains a discriminatory and expropriatory action which is mainly determined by domestic political considerations, but not by climate protection concerns. Climate protection does not require shutting down Lünen without compensation.
 - 7 Section **E** discusses the various quantum-related issues and arguments raised by Respondent. It will *inter alia* explain why the damage calculation is methodologically sound, why Claimant did not fail to mitigate damages, and why Frontier Economic's market modelling is also correct.
 - 8 The Reply will conclude with a summary (**F.**) and Claimant's prayers for relief (**G.**)

B. FACTUAL BACKGROUND

- 9 In its **Memorial**, Claimant has set out a clear factual account of this dispute. AET had made a substantial, long-term and inherently commercial investment in the Lünen Plant, one of a number of young modern, high-efficiency hard coal-fired power plants ("**New Plants**") developed and operated in full compliance with German law. It further explained the detailed sequence of permits required for construction and operation; Germany's then-prevailing policy to regulate power-sector CO₂ emissions primarily through the EU Emissions Trading System ("**ETS**"); and how the Lünen Plant was built, commissioned and integrated into the German electricity market. The Memorial then described how the Coal Ban Law of 2020 abruptly and unexpectedly curtailed that operating life, depriving Lünen of the opportunity to earn the returns that a plant of its kind could reasonably anticipate, and thereby causing AET substantial loss.
- 10 With its **Counter-Memorial**, Respondent attempts to reframe the dispute as a case about the need of climate protection measures – something which Claimant had anticipated and in its Memorial explicitly denied.
- 11 In doing so, it comes up with a number of ingenious but ultimately and meritless arguments. It initially called into question even the basic fact of AET's investment, alleging that Claimant had not adequately substantiated when, how and in what amount its capital was contributed to the Lünen project. The fact that the Lünen Plant was up and operating, and that Claimant undisputedly is a partner of the company owning and operating the plant, played little role in Respondent's formalistic objections. Respondent has in the meantime withdrawn its premature argument when Claimant during document production drew its attention to the respective evidence on the record.
- 12 Respondent further tries to create a strawman debate by contending that AET never received any formal commitment from Germany concerning Lünen's operating lifetime. It portrays the investment as a unilateral commercial gamble on coal in an era of intensifying climate policy, driven exclusively by AET's own demand and price projections rather than by any representations, approvals or conduct of German authorities. Respondent supplements this with an extensive description of

international, EU and domestic climate-policy developments and scientific evidence, to present the Coal Ban Law as an allegedly necessary, general and non-discriminatory measure adopted in the public interest and within Germany's regulatory police powers. Why it was necessary to shut down the Lünen plant without compensation Respondent does not explain. **Finally**, it characterises AET's conduct after the adoption of the Coal Ban Law – including its approach to tenders, compensation mechanisms and potential technical options such as conversion to gas – as voluntary choices that either break the chain of causation or evidence a failure to mitigate any loss.

- 13 This part of the **Reply** will, firstly, respond to allegations concerning the investment in the Lünen Plant (I). Secondly, it will rebut the contention that Claimant should have expected a coal phase-out when investing in Germany. Neither the regulatory framework nor political announcements until 2018 gave so much as a hint that Germany might phase-out coal. That held up until well after the plant was commissioned. To the contrary: Germany's energy-related climate policy was built on two limbs: expansion of renewable energy and replacing old, inefficient coal plants with New Plants (II).
- 14 Thirdly, Claimant will dispel the allegation that it might have violated its obligation to exit the Lünen plant, will demonstrate that Respondent puts too much emphasis on the permitting procedure and will explain that the repayment of the loans to the banks does not deprive Claimant of its damage (III).
- 15 Fourthly, it will place Respondent's account of climate-policy evolution and scientific evidence in their proper perspective. The general and long-term nature of climate objectives must be distinguished from the specific and unforeseeable decision to legislate an accelerated coal phase-out affecting New Plants, such as Lünen. Policy forecasts did not mention this until after the plants commissioning. Neither the IPCC reports nor European law do require Germany to shut down New Plants without compensation (IV).
- 16 Fifthly, the Reply will explain how Respondent misrepresents the adoption, design and practical effect of the Coal Ban Law on the Lünen plant. Respondent will show

that Germany ignored the consequences on New Plants and for political reasons favoured lignite-fired power plants (V).

- 17 Finally, it will address AET's conduct after the adoption of the Coal Ban Law, demonstrating that its decisions were reasonable business responses to the situation created by Germany's measures. They cannot be invoked to relieve Respondent of its responsibility under the ECT (VI).

I. AET'S investment in the Lünen plant is now undisputed

- 18 Respondent devoted several pages of its Counter-Memorial to the allegation that Claimant "*did not meet its burden to substantiate its Investment*", as it supposedly "*did not submit any evidence to support whether, when or how*" AET's financial contribution in TKL was paid.¹
- 19 This attack was always misplaced, since the underlying contribution documentation had already been filed with Secretariat's First Expert Report. Claimant directed Respondent and the Tribunal to those materials during the document production². Faced with the evidence it had claimed would not exist, Respondent then abandoned its argument, expressly stating that

*"AET's additional explanations and the non-translated parts of Exhibits SD-12 through SD-19 have resolved this matter."*³

- 20 The Tribunal acknowledged this waiver and saw no requirement to decide on Respondent's request. Claimant will thus not dwell on this.

¹ Counter-Memorial, paras 30-40.

² Procedural Order No. 5 - Schedule B: Respondent's Document Production Requests, 2 August 2025, p. 19).

³ Procedural Order No. 5 - Schedule B: Respondent's Document Production Requests, 2 August 2025, p. 19.

II. Claimant did not have to expect a Coal Ban Law when investing into the Lünen plant

- 21 In its Memorial,⁴ Claimant demonstrated that Germany considered New Plants to be indispensable for a long time to come. On the one hand, Germany needed them to ensure its need for baseload capacity after the nuclear phase out. On the other hand, they played a crucial role in Germany's plans for meeting its emission reductions goals. That is why it called on investors to build New Plants. Germany emphasised that the ETS would be the only instrument to regulate CO2 emissions for New Plants.
- 22 Respondent cannot and does not refute this. Consequently, its contentions consist of mostly smoke and mirrors. It tries to conjure the impression that Claimant should have had to expect a coal ban law.
- 23 This is erroneous. Claimant did not have to expect at the time of its investment decision that Respondent would fundamentally alter its energy policy by adopting the Coal Ban Law.
- 24 Whether or not Germany had ever given a formal commitment for the Lünen Plants' lifetime is irrelevant (1). It also is irrelevant that Germany's regulatory objective was to limit climate change (2). There is a difference between an objective and the strategy used to achieve it. Respondent omits that its strategy was always based on two limbs: expanding renewable energy **and** replacing old plants with new and effective plants. And it was this very strategy which gave Claimant comfort (3). Respondent – unsuccessfully – contests that it always had assured that emissions reductions in the power plant sector should only be achieved by the ETS and market approaches. Even more, it fails to specify even a single communication, speech or published government policy which advocated a coal phase-out before Lünen was commissioned (4). Finally, the permits were a reasonable basis to invest (5). They confirmed Germany's consistent energy policy regarding the need for New Plants on which Claimant relied when making its investment (6).

⁴ Memorial, Section C.II.

1. Whether Germany ever gave a formal commitment to AET or not is irrelevant

25 Germany argues that Claimant cannot have had any legitimate expectations as Germany never gave a formal commitment that coal-fired power plants could operate until 2050. That is correct, but irrelevant.

26 Firstly, this objection is difficult to understand. It has been Germany's position in comparable cases, such as the Nuclear Phase-Out case, that its parliament is guaranteed full discretion in its decisions and, as a matter of fundamental constitutional law, cannot be bound by present or past governments. As Germany argued publicly in the first hearing of that case:

*"Indeed, it would have been impossible for Germany to conclude a binding agreement, [...] binding the legislature to enact or to refrain from enacting a certain law. Stabilization agreements are not permissible under constitutional law because Germany is a parliamentary democracy. The government cannot bind parliament – full-stop. Parliament cannot even bind a subsequent parliament other than in the area of treaty. The government in power cannot bind a future government. It's impossible because that would negate elections – and therefore the government doesn't do that."*⁵

27 Unless Germany suddenly changed its legal opinion, it anyway could not have given valid formal commitments.

28 Secondly, such formal commitments would be highly unusual in a highly regulated industry such as electricity production. How long a plant may operate is determined by its permit, and under the Federal Immission Control Law ("**FICL**" in German, the *Bundesimmissionsschutzgesetzes - BImSchG*) permits are not limited in time.

29 Thirdly, Claimant's case does not rest on alleged isolated formal commitments (e.g. an oral promise of a single government official during a fireside chat), but on a fundamental change of a policy which had been publicly pronounced and upheld by successive governments from the beginning of the century until 2018: that Germany

⁵ [Exhibit C-0128: Germany's opening statement in *Vattenfall AB et al. v. Germany*, ICSID Case No. ARB/12/12, 10 October 2016](https://www.youtube.com/watch?v=70O6Gs_XaDw), available on ICSID's Youtube channel at https://www.youtube.com/watch?v=70O6Gs_XaDw, starting at timecode 18:45.

needs and wants new coal-fired power plants, and that the only regulatory mechanism to control CO2 emissions would be the ETS.⁶

2. Germany's objective to limit climate change was no warning of a possible coal ban

30 Respondent alleges that in 2008 Claimant should have anticipated the Coal Ban Law of 2020. Yet, to support this erroneous assertion it merely purports that Claimant would have had "*to be aware of the regulatory objective to limit climate change*".⁷

31 Claimant does not dispute that Germany pursued the objective to limit climate change. In particular, it does not contest the European Union's and Germany's "*2.0°C objective*",⁸ nor the corresponding emission reduction targets at the time.

32 However, there is a clear distinction between setting an objective and the means by which it is to be achieved. Germany's international and domestic obligations only refer to CO2 reduction goals. How the CO2 reduction goals should be achieved, was left to individual States. And indeed, as explained,⁹ the replacement of old coal-fired power plants with new ones, such as the Lünen plant, was part of Germany's strategy to achieve its CO2 reduction goals (see below, Section B.II.3)

33 It does not follow from international and domestic climate change goals at the time that Germany would adopt a coal phase-out. The idea of a coal ban is not even mentioned once in these frameworks. Neither the United Nations Framework Convention on Climate Change ("**UNFCCC**")¹⁰ nor the Kyoto Protocol¹¹ mention to

⁶ See Memorial, Sections C.I – C.IV.

⁷ Counter-Memorial, headline II.A.3

⁸ Counter-Memorial, para. 58.

⁹ Memorial, Section C.II.2.

¹⁰ [Exhibit RL-0001 : United Nations Treaty Collection, Chapter XXVII, 7. United Nations Framework Convention on Climate Change, New York, 9 May 1992.](#)

¹¹ [Exhibit RL-0002 : Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997](#)

phase-out fossil fuel, or coal in particular. Even less do they state to shut down power plants without compensation through mandatory shutdowns. Instead, these two instruments mainly set climate targets and suggest market-orientated mechanisms to achieve them. Precisely the Kyoto Protocol emphasised market-based approaches, such as the Joint Implementation Mechanism,¹² the Clean Development Mechanism¹³ and the Emission Trading¹⁴ to reduce emissions cost effectively.

- 34 Also the other documents cited by Respondent do not indicate to reduce CO2 emissions through restrictions on particular economic activities, such as the operating of highly efficient power plants. Neither the earliest economic analysis of climate policy¹⁵, nor the reports of Germany's Advisory Council on Global Change of 1995¹⁶ and 1997¹⁷ suggest prohibitions on specific energy sources. They all

¹² [Exhibit RL-0002 : Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997](#), Article 6: The Joint Implementation Mechanism allowed developed countries, listed in Annex to earn emission reduction units by financing a project that reduces emissions in another Annex I country. These units could then be counted toward the investor country's own Kyoto target.

¹³ [Exhibit RL-0002 : Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997](#), Article 12: the Clean Development Mechanism allowed developed countries, listed in Annex I, to finance emission-reducing projects in non-Annex I countries to receive certified emission reductions which counted toward their own Kyoto commitments.

¹⁴ [Exhibit RL-0002 : Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997](#), Article 17: The Emission Trading Mechanism meant that countries with binding emissions targets (Annex I countries) could trade parts of their assigned emission budgets with each other to help meet their Kyoto commitments.

¹⁵ [Exhibit R-0021: W.D. Nordhaus, Can we control carbon dioxide?, in: IIASA Working Paper-75-63, June 1975.](#)

¹⁶ [Exhibit R-0020: German Advisory Council on Global Change, Scenario for the derivation of global CO2 reduction targets and implementation strategies - statement on the First Conference of the Parties to the Framework Convention on Climate Change in Berlin, 17 February 1995.](#)

¹⁷ [Exhibit R-0023 : German Advisory Council on Global Change, Targets for Climate Protection – A Study for the Third Conference of the Parties to the Framework of the Convention on Climate Change in Kyoto, 19 September 1997.](#)

framed emission reductions as a consequence of long-term targets implemented through cost-effective, flexible, and market-based mechanisms.

- 35 The coalition agreement from 2002¹⁸ and the EU Council documents of 1996¹⁹ and 2005²⁰ likewise emphasise to reduce emissions through coordination with industry, fiscal incentives, energy efficiency, innovation, and competitiveness. None of the documents recommend a banning of the firing of coal through mandatory and uncompensated shut downs of coal-fired power plants. Crucially, the European Council conclusions of March 2007 explicitly identified “*the central role of emission trading in the EU's long-term strategy for reducing greenhouse gas emissions*”.²¹ Before, it had linked the ETS to the Kyoto Protocol's Joint Implementation Mechanism and the Clean Development Mechanism to enhance its effectiveness.²² Overall, it promoted “*the huge possible global benefits of a sustainable use of fossil fuels*”²³
- 36 Hence, Respondent's cited documents merely indicate what is already said in the Memorial.²⁴ at the time of Claimant's investment decision and for years thereafter,

¹⁸ [Exhibit R-0025-GER / Exhibit R-0025-ENG : Coalition Agreement between SPD and Bündnis90/Die Grünen, *Renewal - Justice – Sustainability For an economically strong, social, and ecological Germany*, 16 October 2002 \(excerpts\)](#), p. 37.

¹⁹ [Exhibit R-0022: European Commission PRES/96/188, *1939th meeting of the Council of the European Union - Environment - Brussels*, 26 June 1996.](#)

²⁰ [Exhibit R-0026 : Council of the European Union, *European Council Presidency Conclusions of 22 and 23 March 2005 \(7619/1/05 REV 1\)*, 22 March 2005.](#)

²¹ [Exhibit R-0027: Council of the European Union, *European Council Presidency Conclusions of 8/9 March 2007 \(7224/1/07 REV 1\)*, 2 May 2007](#), para. 29 and Annex I, para. 8.

²² [Exhibit C-0129: Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms.](#)

²³ [Exhibit R-0027: Council of the European Union, *European Council Presidency Conclusions of 8/9 March 2007 \(7224/1/07 REV 1\)*, 2 May 2007](#), para. 10.

²⁴ Memorial, Section C.II.

climate action regulation took a market-based approach and nothing indicated that Respondent would fundamentally depart from this strategy.

37 Finally, it is also evidently contradictory that Respondent now asserts that Claimant would have had to anticipate the Coal Ban Law when making its investment decision. It was Respondent that granted all necessary environmental permits for the Lünen plant while emphasising in those permits the plant's significance for Germany's energy supply and climate protection.²⁵ This applies in particular to the 2013 (recast) Advance Decision, which confirmed this (see below, Section B.II.5).

3. Germany wanted to achieve CO₂-reductions by increasing renewable energy capacities and by modernising its fleet of coal-fired plants

38 Claimant in the Memorial had referred to a long, consistent line of policy statements by leading politicians of the Federal Government and the Federal States. They all expressed and confirmed the need for New Plants. Claimant has explained this in detail in its Memorial under Section C.II. and Section C.IV.

39 Respondent tries to dismiss this evidence with three sleight of hand-arguments.

40 Firstly, it argues that none of those speeches were made in meetings with Claimant. For the reasons set out above under Section B.II.1, this is irrelevant. Claimant does not rely on individual specific statements made towards it, but on a consistent policy upheld by successive governments on federal and State level, which was confirmed in the permits.

41 Secondly, it contends that the government did not seek to incentivise a large-scale fleet of coal-fired power plants, pointing to a statement that "*the horror scenario of 29 or 40 new coal-fired power plants has no basis.*"²⁶ Taking that sentence in its context, it merely shows that the Government was confident that the ETS would

²⁵ See Memorial, paras 140-144.

²⁶ Counter-Memorial, para. 70.

establish clear limits for the market to ensure that the emission reduction targets will be achieved:

*"But I am just as clear in saying that under the conditions of emissions trading there are clear limits to the generation of electricity from lignite and hard coal. This results from the progressive reduction of emission rights. The horror scenario of 29 or 40 new coal-fired power plants has no basis."*²⁷

42 Respondent's cited statement is thus irrelevant for this case, as Claimant never argued that it had relied on any such individual statement. It also disproves (see below) Germany's contention that the ETS was not relevant for its policy. Instead, the Government had relied on it with confidence.

43 Respondent, thirdly, asserts that the government would have never prioritised coal-fired power plants, but *"that the top priority was to increase renewable-energy capacities"*.²⁸

44 This is also misleading. Respondent does not contradict Claimant's argument that Germany wanted investments in renewable energy **and** New Plants for the following reasons:

45 Claimant had explained²⁹ that Germany intended to achieve its CO₂ reductions goals not only by the expansion of renewable energy, but also through a massive increase of energy efficiency. This dual strategy was established on a European level in 2007,³⁰ and was followed by Germany's Climate Agenda 2020. Respondent praised this strategy to be a *"historical decision on future climate policy"*³¹ and set

²⁷ [Exhibit C-0012-A-DE / Exhibit C-0012-A-EN: Minister of the Environment Sigmar Gabriel, Government policy statement, Bulletin of the German Federal Government Nr. 46-1 of 26 April 2007 \(extended excerpts\)](#) (extended excerpts), p. 9.

²⁸ Counter-Memorial, para. 62.

²⁹ Memorial, paras 70-77.

³⁰ [Exhibit R-0027: Council of the European Union, European Council Presidency Conclusions of 8/9 March 2007 \(7224/1/07 REV 1\), 2 May 2007](#), Annex I, para. 6.

³¹ [Exhibit C-0011-A-DE/Exhibit C-0011-A-EN: German Federal Ministry for the Environment, Climate Agenda 2020 Restructuring Industrial Society, 1 April 2007](#) (extended excerpts), p. 1.

out eight measures to significantly increase energy efficiency in its new Climate Agenda. The very first was the modernisation of its old, inefficient power plant fleet with the construction of New Plants, such as the Lünen plant, aiming at reducing emission reductions “by 30 million tons”.³² Respondent completely fails to address this.

- 46 Respondent's cited policy statements³³ do not invalidate, but precisely confirm the significance of New Plants in its dual energy strategy. Respondent only cites a section that indicate the importance of the expansion of renewables to achieve the emission reduction goals. However, none of the cited speeches³⁴ state that coal-fired power plants might need to be phased out. To the contrary: they consistently reiterate Germany's need for investment in renewables and New Plants.³⁵

³² [Exhibit C-0011: German Federal Ministry for the Environment, *Climate Agenda 2020 Restructuring Industrial Society*, 1 April 2007](#), p. 3.

³³ Counter-Memorial, para 61-63.

³⁴ Counter-Memorial, paras 61-63.

³⁵ See for instance:

[Exhibit R-0036 GER /Exhibit R-0036 ENG: Chancellor of the Federal Republic of Germany, *Speech at the International Conference for Renewable Energies in Bonn*, Federal Bulletin No. 55-1, 3 June 2004](#), p. 5:

“The efficient use of energy sources and the expansion of renewable energies are the dual strategy for a globally sustainable energy supply.”

[Exhibit C-0041-EN: Federal Minister for Economic Affairs and Technology, Dr Werner Müller, *Speech at the Saar Energy Conference*, Bulletin of the Federal Government No. 26-2 of 11 April 2002 \(extracts\)](#) p. 3:

“However, even in the longer term, renewable energies will not be able to achieve the same status as coal. Coal will continue to dominate electricity generation. Domestic lignite and domestic hard coal will therefore remain indispensable for the German energy mix.”

[Exhibit R-0032 GER /Exhibit R-0032 ENG : Chancellor of the Federal Republic of Germany Gerhard Schröder, *Speech at the Congress of the German Electricity Association*, Federal Bulletin No. 46-1, 6 June 2003](#), p. 11.

“In this context and in front of this audience, I would also like to talk about environmental arguments that do not speak against coal-fired power generation in Germany. Unlike in

47 The speech of then-Minister for the Environment, Mr. Sigmar Gabriel, on 26 April 2007 before the German Parliament perfectly illustrates this (cited by Respondent as Exhibit C-0012-A-EN). He stated that the replacement of the outdated, inefficient power plant fleet was a crucial part of Germany's strategy aiming at a massive reduction of CO2 emissions:

*"However, let's not fool ourselves: for the time being, we cannot do without coal for electric power generation. Until December 2012, three large lignite-fired power plants, six hard coal-fired power plants and seven gas-fired power plants with a total output of 12,000 megawatts will be built. By replacing our old and inefficient plants, we will make a massive contribution to climate protection. These new plants are much more efficient, resulting in up to 42 million tons of CO2 not being released into the atmosphere."*³⁶

previous decades, the progress you and the supplying industry have made in terms of efficiency and exhaust gas purification means that coal-fired power generation today has a much lower environmental impact than was the case just a few years ago."

[Exhibit R-0033-GER / Exhibit R-0033 ENG: Minister for Environment, Nature Conservation and Nuclear Safety Jürgen Trittin, Budget debate before the Bundestag, Federal Bulletin No. 72-4, 11 September 2003, p. 4](#)

"Today we have to decide what we want to invest in. Let me tell you: I am strongly in favour of investing in efficient technology and I am not in favour of keeping old plants running for as long as possible, as you suggest. That would be a fatal mistake, especially in view of the challenges facing the economy and the environment."

[Exhibit C-0013: Chancellor Dr Angela Merkel, Speech at the foundation stone ceremony for blocks D and E of the Westfalen power plant, Bulletin of the German Federal Government Nr. 86-1 of 29 August 2008 \[EN/DE\] \(excerpts\) p. 2-3:](#)

"If we aim at remaining self-sufficient regarding our energy supply as an industrial location, we need new, high performance power plants in Germany. This includes efficient and modern coal-fired power plants.

[...]

Therefore, opposition to the construction of new power plants is not only counterproductive from an economic point of view, but also from an environmental and climate policy perspective".

³⁶ [Exhibit C-0012-A-DE / Exhibit C-0012-A-EN: Minister of the Environment Sigmar Gabriel, Government policy statement, Bulletin of the German Federal Government Nr. 46-1 of 26 April 2007 \(extended excerpts\), p. 9.](#)

48 In the same vein, the speech of then-Minister of Economic Affairs, Mr. Wolfgang Clement (cited by Respondent as Exhibit R-0034-ENG) explicitly refutes Respondent's assertion in the Counter-Memorial *"that the top priority was to increase renewable-energy capacities"*.³⁷ In a part which Respondent did not translate, he outlined:

*"However, this also means that we cannot play off energy sources against each other, on which we are all dependent. Anyone who says 'coal or renewables' only shows that they don't understand the issue. We need both - naturally on the basis of the most modern and of the latest and most innovative technology for power plants and renewables. The discussion about the security of the electricity supply this summer has shown how important a broad energy mix is."*³⁸

49 Hence, Respondent evidently omits that Germany considered modernising its power plant fleet as an important energy efficiency measure to reduce CO₂ emissions.

50 Yet, not only the "political speeches" express this consistent line of policy, but also Respondent's official energy programs.³⁹ Likewise, responses to parliamentary inquiries and reports in foreign media reaffirmed Germany's need for New Plant's. In its response to a parliamentary information request of the Green Party in 2008, Respondent reiterated that next to a massive expansion of the renewable energy, New Plants would be essential for a long time to come:

"The Federal Government is vigorously pursuing the intensive expansion of renewable energies. Nevertheless, electricity will still have to be generated largely from fossil fuels for a long time to come in order to guarantee security of supply; modern and highly efficient coal-fired power plants will play a central

³⁷ Counter-Memorial, para. 62.

³⁸ [Exhibit C-0006: Minister of Economic Affairs Wolfgang Clement, Speech Energy Conference of Bündnis 90/Die Grünen, Bulletin of the German Federal Government Nr. 80-3 of 29 September 2003 \[EN/DE\] \(excerpts\)](#), p. 4.

³⁹ See Memorial, paras 73-77.

role in this. This is particularly true in light of the decision to phase out nuclear energy.”⁴⁰

- 51 Moreover, the Government emphasised that New Plants would be consistent with Germany's ambitious climate goals because the ETS would safeguard the compliance with emission reduction targets in the power plant sector:

“The use of fossil fuels to generate electricity is not in conflict with an ambitious climate protection policy. Compliance with climate protection targets in the power plant sector is guaranteed by EU-wide emissions trading.”⁴¹

- 52 Finally, the industry paper *European Power Daily* reported in June 2008 that the leading coalition party of the then Federal Government at the time, the CDU,

“intended to further rely on coal-fired power production by replacing aging plants with new, more efficient coal facilities.”⁴²

- 53 Respondent completely failed to address this dual strategy in the Counter-Memorial. Instead, it only indicates the importance of renewable energy.⁴³ This is neither disputed by Claimant nor able to render New Plants less essential. No matter how much Respondent will emphasise that the increase of renewable capacity was important, it will not change the fact that it considered New Plants to be indispensable: for the energy supply **and** to achieve its emission reduction targets.

⁴⁰ [Exhibit C-0130-DE/Exhibit C-0130-EN: German Federal Government, Response to an enquire by the Green Party, Parliamentary Paper 16/9032 \(excerpts\), 5 May 2008](#), p. 2.

⁴¹ [Exhibit C-0130-DE/Exhibit C-0130-EN: German Federal Government, Response to an enquire by the Green Party, Parliamentary Paper 16/9032 \(excerpts\), 5 May 2008](#), p. 2.

⁴² [Exhibit C-0131: European Power Daily, 24 June 2008, vol. 10, issue 121](#), p. 3.

⁴³ See for instance: Counter-Memorial, paras 48 *et seqq.* 63-64, 93, 95, 97.

4. Germany proclaimed that CO2 emissions would only be regulated by the ETS

54 Claimant has explained in its Memorial⁴⁴ that Germany had persistently promised to take a mere market-based approach in the electricity production sector and had explicitly rejected any regulatory interferences to reduce emissions in the power plant sector. As the central instrument, the ETS should ensure that the emissions of power plants would be reduced in line with Germany's emission targets.

55 Respondent now purports that the German government had never "*guaranteed to limit its climate action to the ETS and market-based approaches*".⁴⁵ This is not convincing.

56 Respondent, firstly, repeats its argument that there was never a legislative or executive promise to Claimant. For the reasons set out above (see above **Section B.II.1**), that is irrelevant.

57 Respondent, secondly, disputes that the Government had promised to solely use the ETS to regulate CO2-emissions. It refers to three sources but is unable to mention even one that would indicate that Germany might decide to phase-out coal-fired power plants.

58 All of the quoted statements are only partially reproduced and thus misleading:

(a) Germany knew that New Plants would operate long after 2020

59 Respondent's assertion that its energy strategy at the time would not imply "*promises for the time after 2020*"⁴⁶ is misguided. To support this bold contention, it refers to the Climate Agenda 2020 (cited by Respondent as [Exhibit C-0011](#)).⁴⁷

⁴⁴ Memorial, Section C.II.4.

⁴⁵ Counter-Memorial, para. 73.

⁴⁶ Counter-Memorial, para. 69.

⁴⁷ Counter-Memorial, para. 69; [Exhibit C-0011: German Federal Ministry for the Environment, Climate Agenda 2020 Restructuring Industrial Society, 1 April 2007](#).

- 60 Yet, this Agenda from 2007 states that to achieve Germany's emission reduction goals, energy efficiency must be massively increased. For the Government this meant that its outdated power plant fleet should be replaced with the construction of New Plants as soon as possible.⁴⁸ The Government knew that investments in the energy sector are long-term investments, taking into consideration the average lifetime of a power plant of 40 years.⁴⁹ Nevertheless, it considered them to be crucial to achieve its climate change goals. Claimant extensively discussed this in the Memorial in Section C.II.
- 61 Therefore, Respondent's indication that the Government would have not expected that these plants will need to operate long after 2020 is not persuasive. At least no one outside of the Government could have expected that the Government would first advocate for the construction of power plants which it then after only a fraction of their lifetime would shut down without compensation.

(b) The use of regulatory law does not exclude the ETS

- 62 The second misleading source is a reference to a speech of the Minister for the Environment made on 26 April 2007 (submitted by Respondent as Exhibit C-0012-A-ENcorrected). According to Respondent, the Minister promoted the use of regulatory law to reduce the emissions of power plants. Respondent cited the Minister's following sentence: "*We will consistently use regulatory law for climate protection.*"⁵⁰

⁴⁸ [Exhibit C-0012-A-DE/Exhibit C-0012-A-EN: Minister of the Environment Sigmar Gabriel, Government policy statement, Bulletin of the German Federal Government Nr. 46-1 of 26 April 2007 \(extended excerpts\)](#), p. 9; [Exhibit C-0011: German Federal Ministry for the Environment, Climate Agenda 2020 Restructuring Industrial Society, 1 April 2007](#), p. 3.

⁴⁹ See Memorial, para. 88.

⁵⁰ Counter-Memorial, para. 71; [Exhibit C-0012-A-DE/Exhibit C-0012-A-ENcorrected : Minister of the Environment Sigmar Gabriel, Government policy statement, Bulletin of the German Federal Government No. 46-1 of 26 April 2007](#), p. 7.

- 63 Yet, only one sentence later, which is not cited by Respondent, the Minister put this into the context of “energy efficiency requirements for buildings.”⁵¹ He then continues to discuss subsidies for petrol cars.⁵² Thus, the Minister addressed two industry sectors completely different and not comparable to the power plant sector.
- 64 Only in the subsequent paragraph, the Minister discusses the energy industry. He stated that the key for a successful climate protection would rather be the ETS as a market-based instrument. This completely contradicts Respondent's allegation:

“The key to successful climate action lies in the energy industry. We use European emissions trading for this purpose. Emissions trading is a market-based instrument. It puts a price on the overuse of the environment. Until now, the profits from this overuse and destruction have been privatized, while the costs of remedying the consequences of storms, devastation and flooding have been socialized. Now the emission certificate has its price and is included in the economic calculation.”⁵³

(c) Chancellor Merkel did not voice concerns about the ETS, but wanted to expand it

- 65 The third misleading statement concerns the speech by Chancellor Merkel on 29 May 2008. Respondent's citation of Chancellor Merkel's statement reads: “*In the European Union, too, we are seeing that local and regional CO2 trading systems are reaching their limits.*”⁵⁴ This is again an incomplete and thus misleading quotation. Chancellor Merkel made this statement by comparing a regional

⁵¹ [Exhibit C-0012-A-DE/Exhibit C-0012-A-ENcorrected](#) : Minister of the Environment Sigmar Gabriel, *Government policy statement*, Bulletin of the German Federal Government No. 46-1 of 26 April 2007, p. 7.

⁵² [Exhibit C-0012-A-DE/Exhibit C-0012-A-ENcorrected](#) : Minister of the Environment Sigmar Gabriel, *Government policy statement*, Bulletin of the German Federal Government No. 46-1 of 26 April 2007, p. 7.

⁵³ Counter-Memorial, para. 72; [Exhibit R-0044 GER/Exhibit R-0044 ENG](#) : Chancellor of the Federal Republic of Germany Dr. Angela Merkel, *Speech at the International Transportation Forum*, Federal Bulletin No. 54-2, 29 May 2008 (excerpts), p. 12.

⁵⁴ Counter-Memorial, para. 72; [Exhibit R-0044 GER/Exhibit R-0044 ENG](#) : Chancellor of the Federal Republic of Germany Dr. Angela Merkel, *Speech at the International Transportation Forum*, Federal Bulletin No. 54-2, 29 May 2008 (excerpts), p. 12.

emission trade system to a global one. While admitting that a global system would be still far from being realistic, she concluded that in an ideal world a global trade system would be the most efficient one. This would be due to the fact that also climate change would be a global problem:

"Based on my current knowledge, CO2 emissions trading is the instrument that offers the best prospects for global application. However, this requires general reduction rates. These would not necessarily have to be broken down for each continent. A trading system could then be set up to enable global exchange. In what I consider to be an ideal step, the money used to purchase emission rights from less developed countries could be used to help these countries embark on a technologically efficient path.

I know I am dreaming a little here, because there is still a long way to go. We are also seeing in the European Union that local and regional CO2 trading systems are reaching their limits. If you try to combat a global problem with a local or regional instrument, you will reach a limit that is extremely difficult to overcome, at the latest when it comes to air travel. The same applies to shipping, of course."⁵⁵

- 66 Chancellor Merkel's observations of the limits of regional emission trading system are tied to cross border services, such as air travel and shipping. Her statement did not present a critique on the suitability of the ETS per se, but merely explains the restrictions of the sectoral scope. Notably, the EU legislator has already addressed these limits by incorporating air travel and maritime shipping into the ETS framework.⁵⁶
- 67 Nothing therein indicates, as erroneously concluded by Respondent, that the Federal Government left the door open for regulatory measures. Instead, Chancellor Merkel even reaffirmed – consistent with Claimant's argument – that the

⁵⁵ [Exhibit R-0044 GER/Exhibit R-0044 ENG : Chancellor of the Federal Republic of Germany Dr. Angela Merkel, Speech at the International Transportation Forum, Federal Bulletin No. 54-2, 29 May 2008](#) (excerpts), p. 12.

⁵⁶ [Exhibit C-0132: Directive \(EU\) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision \(EU\) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system.](#)

Federal Government considered market-based instruments to be much more suitable to reduce CO2 emissions than any regulatory interference:

*"In addition, there is a fundamental question that arises in the entire field of climate protection: Do we want to impose regulatory law on every sector? On cars, on airplanes, on railways, and so on? Or do we rely on market-based incentives and hope that individual market participants will behave reasonably?"*⁵⁷

*I do not believe that politics is predestined to set appropriate regulatory requirements for everything and everyone—from kettles and cars to airplanes and chemical plants. That's why I am more in favour of market-based instruments."*⁵⁷

- 68 Thus, Respondent's contention that the Government did not only follow a market-based approach to regulate emissions in the power plant sector completely disregards Germany's emission reduction strategy at the time. The Federal Government itself summarised this strategy in 2008 as it follows, explicitly rejecting any regulatory interventions on the grounds that

*"prescribing certain types of power plant can contradict such rational investment decisions and would therefore increase the risk of bad investments or, as formulated in the question, "stranded investments".*⁵⁸

(d) Summary

- 69 Germany's strategy to achieve its emission reduction targets did not only consist of the construction of New Plants. It also included the promise that it would not regulatorily interfere in the power plant market. The only instrument to govern CO2 emissions of power plants should be the ETS. However, only twelve years later, Germany fundamentally changed its position, suddenly tossed this long-standing principle aside, and adopted the Coal Ban Law.

⁵⁷ [Exhibit R-0044 GER/Exhibit R-0044 ENG](#) : Chancellor of the Federal Republic of Germany Dr. Angela Merkel, *Speech at the International Transportation Forum*, Federal Bulletin No. 54-2, 29 May 2008 (excerpts) p. 12.

⁵⁸ [Exhibit C-0130-DE/Exhibit C-0130-EN](#): German Federal Government, *Response to an enquire by the Green Party*, Parliamentary Paper 16/9032 (excerpts), 5 May 2008, p. 3.

5. The permits obtained were a reasonable basis to invest

- 70 Respondent purports that “*the 2008 Preliminary Permit cannot be a basis for any of Claimant’s claims.*”⁵⁹ This is evidently flawed. It was reasonable to invest on the basis of the Advance Decision and the First Partial Permit.
- 71 The Lünen plant was authorised in a staged permission procedure with one Advance Decision (*Vorbescheid*) and seven Partial Permits. The Seventh Partial Permit, granted in 2013, contained the very permission to operate the power plant.⁶⁰ For details, we refer to the Memorial and the expert report by Dr. Krahnefeld⁶¹.
- 72 The permits contain no clause referencing a potential coal ban, nor do they condition validity or continuation on future energy policy decisions. The Advance Decision’s findings address technical, environmental, and siting prerequisites and confirm a provisional positive overall assessment (*vorläufige positive Gesamtbeurteilung*) without any coal ban trigger or termination condition. The Seventh Partial Permit defines the plant’s “*operation of the coal-fired power plant for the use of hard coal of different qualities*” with operative conditions but no phase-out contingency.⁶²
- 73 The permits are not limited by fixed expiry dates. They include standard operational commencement requirements to ensure timely implementation but do not set a term limit for the permits themselves.
- 74 The permits also specified and individualised Germany’s stated energy policy in relation to the Lünen plant. This is especially apparent in, but not limited to, the 2008 and 2013 (recast) Advance Decision.⁶³

⁵⁹ Counter-Memorial, para. 79.

⁶⁰ See Memorial, para. 151.

⁶¹ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), Section D.II.

⁶² [Exhibit C-0086-DE/Exhibit C-0086-EN: District Government of Arnsberg, Seventh Partial Permit, 22 November 2013 \(excerpts\)](#) (excerpts), p. 5.

⁶³ See Memorial, paras 39-43, 140-144.

- 75 AET's management explicitly had asked its Board of Directors in April 2008 to approve the major part of the investment in light of the fact that the Advance Decision was expected to be granted one month later.⁶⁴ The Advance Decision clearly confirmed Germany's energy policy. As described above under Section B.I.3., in line with Germany's energy policy at the time, the competent authority stated that the construction of the Lünen plant was in overriding public interest, as it would contribute to securing Germany's energy supply after the nuclear phase out and to achieving its emission reduction goals.⁶⁵ Accordingly, only three days after the Advance Decision and the First Partial Permit were obtained in May 2008, TKL's shareholders were able to decide to commence the construction of the plant.⁶⁶
- 76 The 2013 (recast) Advance Decision explicitly confirmed this public interest in the light of then existing climate protection concerns. It expressly characterises modern fossil generation, including coal, as a bridging technology within the energy transition and affirms a compelling public interest. Its Section 7.10.3.1.1. on "Climate Protection Requirements" reads as follows:

"7.10.3.1.1 Climate Protection Requirements

Climate protection is in the public interest and, in accordance with Art. 20a GG (Grundgesetz [German Basic Law]), has constitutional status. Accordingly, climate protection must be taken into account for all public law decisions. The construction of plants for regenerative power generation is therefore of great importance and to be operated with high priority. In the same way, all other efforts to avoid CO₂ are required. Modern coal-fired power plants such as the Trianel project in Lünen with efficiencies of approx. 45%, emit significantly less CO₂ than old coal-fired power plants with efficiencies of around 33%. Displacing older inefficient coal power plants from the market thus reduces CO₂ by more than 20 %. According to the statements of the Federal Government, new gas and coal-fired power plants are indispensable as

⁶⁴ [Exhibit C-0082-IT/Exhibit C-0082-EN: AET, Minutes of the 281st Meeting of the Board of Directors, 9 April 2008 \(excerpts\)](#), p. 5.

⁶⁵ [Exhibit C-0033-DE/Exhibit C-0033-EN: District Government of Arnsberg, 2008 Advance Decision for the construction and operation of the Lünen hard coal-fired power plant \(Vorbescheid\) and First Partial Permit, 6 May 2008 \(excerpts\)](#), p. 167; and later: [Exhibit C-0030-DE/Exhibit C-0030-EN: District Government of Arnsberg, 2013 Advance Decision \(Vorbescheid\), 20 November 2013, \(excerpts\)](#), p. 289.

⁶⁶ See Memorial, para. 145.

*bridging technology in the context of the energy transition (cf. for example First Chamber Parliamentary Paper 17/6779, p. 6; First Chamber Parliamentary Paper 17/8674, p. 4). Accordingly, new highly efficient power plants are of overriding public interest in order to fulfil the objectives of section 1(1) Energy Industry Law to secure the supply of electricity to the general public while at the same time safeguarding the constitutional interest of climate protection.*⁶⁷

- 77 These findings constitute the authority's own reasoning (and not merely applicant submissions). They confirm that Claimant was correct in relying on the permits and did not have to anticipate an early coal ban.
- 78 The evaluation above as regards the 2013 Advance Decision has gained legal finality (*Rechtskraft*) and binds all German authorities, including the Government. It cannot be disputed in this arbitration.

6. Claimant relied on Respondent's consistent energy policy regarding the need for New Plants

- 79 Claimant demonstrated in detail that it had relied on Respondent's consistent energy strategy regarding the need for New Plants. Crucial for its decision was that its need for base-load capacities aligned with Germany's twofold strategy for New Plants to ensure its energy supply after the nuclear phase-out and to meet its emission reduction goals.⁶⁸ Claimant showed that TKL's feasibility study from 2006⁶⁹, the market analysis of Enervis from 2007⁷⁰ and its obtained environmental permits⁷¹ confirmed these findings.
- 80 Respondent tries to dismiss this evidence with three assertions. All of them fail to refute Claimant's holdings.

⁶⁷ [Exhibit C-0030-DE/Exhibit C-0030-EN: District Government of Arnsberg, 2013 Advance Decision \(Vorbescheid\), 20 November 2013, \(excerpts\)](#), p. 289.

⁶⁸ Memorial, paras 105-106.

⁶⁹ Memorial, paras 110-119.

⁷⁰ Memorial, paras 125-126.

⁷¹ Memorial, paras 140-145.

(a) Claimant did not merely rely on “hopes in the market”

81 Firstly, Respondent purports that Claimant's submitted documents would indicate that “*Claimant did not form any expectations at all regarding the German regulatory framework*”⁷² and only relied on “*hopes in the market.*”⁷³ This is surprising. Claimant would not consider trust in the German government's openly stated energy policy to be merely “hopes”.

82 Claimant was well aware of Germany's need to replace nuclear capacity which would be shut down in the coming years. This is well evidenced by the documents submitted to the Parliament of the Canton of Ticino to obtain its formal approval of Claimant's participation in the Lünen plant. As explained in the Memorial,⁷⁴ the Consortium Agreement of 8 May 2008 granted AET a temporary special termination right until the end of 2010. Due to political reasons, Claimant wanted to obtain a formal parliamentary approval for its investment in the Lünen plant. On 28 March 2008, Claimant hence submitted a respective message to the competent department of the Government - the Department of Finance and Economic Affairs - to enable them to prepare a message to put before the Parliament of the Canton of Ticino.⁷⁵ The request contained, among other things, a detailed assessment of the Lünen investment.⁷⁶ This assessment demonstrates that Claimant also tied its investment decision to Germany's twofold need for New Plants: Namely to ensure its energy supply and to achieve its emission reduction goals from the Kyoto Protocol:

“The presence of a significant hard coal industry and the possibility of water transport on rivers and canals makes Germany a favoured location for coal-fired power production. Now that the nuclear option has been abandoned, and the availability of gas is limited in any case (due to strategic dependence and

⁷² Counter-Memorial, para. 90.

⁷³ Counter-Memorial, sub-headline II.A.7.

⁷⁴ Memorial, para. 148.

⁷⁵ [Exhibit C-0082-IT/Exhibit C-0082-EN: AET, Minutes of the 281st Meeting of the Board of Directors, 9 April 2008 \(excerpts\)](#), p. 5.

⁷⁶ [Exhibit C-0133-IT/Exhibit C-0133-EN: AET, Message to the Department of Finance and Economic Affairs, 28 March 2008](#).

long-term global reserves), Germany can only achieve the twofold aim of covering its electricity needs and meeting the Kyoto Protocol targets by building new, efficient hard coal-fired power plants to replace the old, inefficient ones (lignite and coal-fired power plants).⁷⁷

- 83 The Department of Finance and Economic Affairs of the Canton of Ticino adopted this assessment in its Message No. 6091 of 9 July 2008⁷⁸ and on 23 February 2010 the it recommended the Parliament to grant its approval.⁷⁹
- 84 While Respondent considers this document to be “too vague”,⁸⁰ it plainly emphasises Germany’s twofold strategy for New Plants at the time: First, to ensure its energy supply **and**, second, to achieve its climate goals.⁸¹ In doing so, the

⁷⁷ [Exhibit C-0133-IT/Exhibit C-0133-EN: AET, Message to the Department of Finance and Economic Affairs, 28 March 2008](#), p. 11.

⁷⁸ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 10.

⁷⁹ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 23.

⁸⁰ Counter-Memorial, para. 92.

⁸¹ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 10:

“Now that the nuclear option has been abandoned, and the availability of gas is limited in any case (due to strategic dependence and long-term global reserves), Germany can only achieve the twofold aim of covering its electricity needs and meeting the Kyoto Protocol targets by building new, efficient coal-fired power plants to replace the old, inefficient ones (lignite and coal-fired power plants).” (emphasis added)

[Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 21:

“In Germany, hard-coal is a central element in the energy mix of the future. In order to ensure a secure, competitive and environmentally sustainable energy

Message No. 6091 explicitly referred to the climate targets in the Kyoto Protocol. Because Claimant presented these considerations to secure the formal parliamentary approval, they demonstrate that Claimant relied on that policy context, and not merely “*hopes in the market*.”⁸²

85 Apart from that, multiple additional documents record Claimant's reliance on Germany's energy strategy for New Plants.

86 In April 2008, AET prepared discussions with the Canton about the environmental impacts of the Lünen Plant, using an evaluation of TKL (referred to in the E-Mail as “*Presentation_Baukasten_Lünen*”).⁸³ This evaluation addressed Respondent's **Climate Agenda 2020**⁸⁴ to emphasise the Government's strategy to reduce emissions by massively increasing the energy efficiency. It clearly records, as already explained in the Memorial and above,⁸⁵ that Respondent planned to increase energy efficiency through eight measures, *inter alia*, by “*replacing the*

supply, the German) Federal Government centres its integrated energy and climate programme on the construction of highly efficient coal-fired power plants.” (emphasis added)

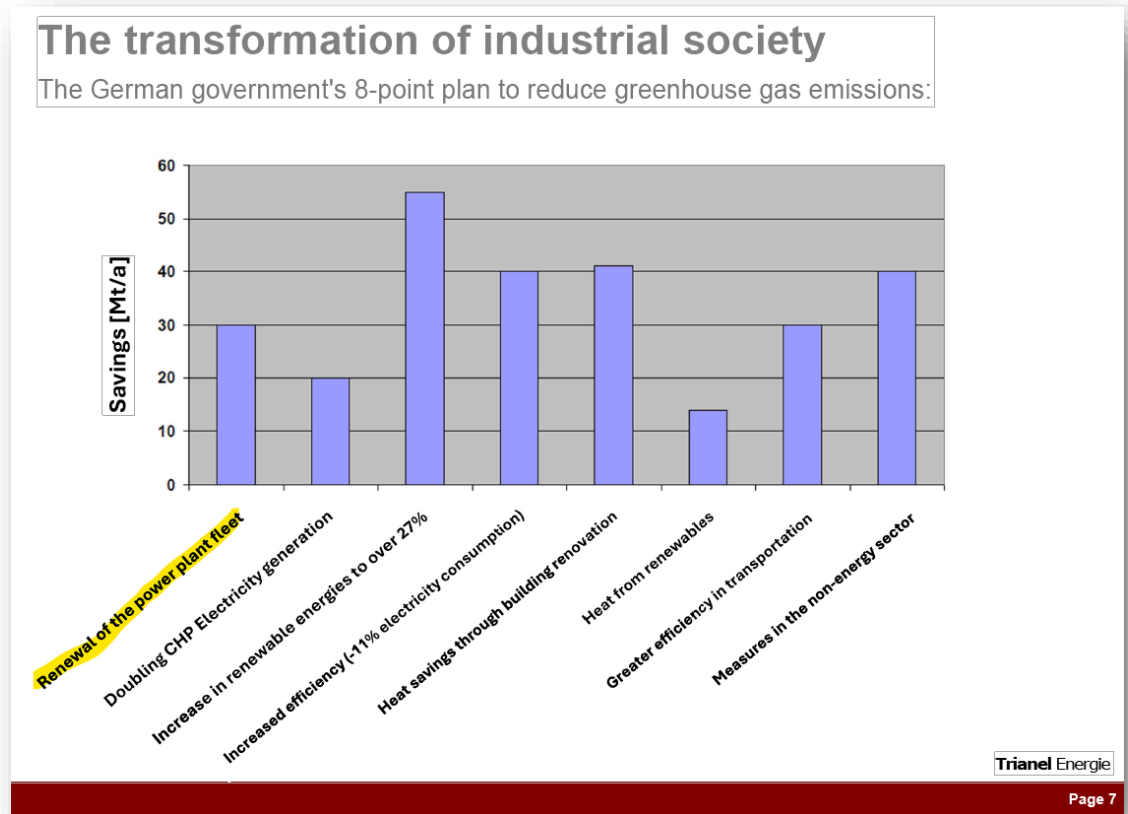
⁸² Counter-Memorial, headline II.A.7.

⁸³ [Exhibit C-0134-IT/Exhibit C-0134-EN: E-Mail from Mr. Ballerini to Mr. Brunett, Subject: documents for the topic SKW environment, 25 April 2008.](#)

⁸⁴ Albeit the document does not explicitly refer to the “Climate Agenda 2020” dated April 2007 of the Ministry of Environment, the reference is evident from the circumstances. It refers to a document of the Federal Ministry for the Environment (“BMU”) dated April 2007. Also, it contains exactly the same efficiency measures and exactly the same numbers of emission reduction potential as the “Climate Agenda 2020” of the Federal Ministry for the Environment, dated April 2007 ([Exhibit C-0011: German Federal Ministry for the Environment, Climate Agenda 2020 Restructuring Industrial Society, 1 April 2007](#)).

⁸⁵ Reply, para. 46.

power plant fleet with more efficient power plants” in order to save “30 million tons” of CO₂.⁸⁶ The following figure from the evaluation also reflects this:⁸⁷



⁸⁷ Therefore, the evaluation outlined that the “[t]he renewal of the power plant fleet is an important aspect of the German climate agenda”⁸⁸ and recorded that the Government has “called for the construction of new, highly efficient power plants.”⁸⁹

⁸⁶ [Exhibit C-0135-DE/Exhibit C-0135-EN: TKL, Evaluation of TKL about the environmental impacts of the Lünen plant \(excerpts\)](#), p. 6.

⁸⁷ [Exhibit C-0135-DE/Exhibit C-0135-EN: TKL, Evaluation of TKL about the environmental impacts of the Lünen plant \(excerpts\)](#), p. 7.

⁸⁸ [Exhibit C-0135-DE/Exhibit C-0135-EN: TKL, Evaluation of TKL about the environmental impacts of the Lünen plant \(excerpts\)](#), p. 14.

⁸⁹ [Exhibit C-0135-DE/Exhibit C-0135-EN: TKL, Evaluation of TKL about the environmental impacts of the Lünen plant \(excerpts\)](#), p. 14.

Hence, the evaluation concluded that “[n]ow is the right time to invest in new coal-fired power plants in Lünen.”⁹⁰

- 88 Furthermore, AET had commissioned PÖYRY to assess the environmental compatibility and economic viability of the participation in the Lünen Plant in 2008.⁹¹ One focus of the report should be to update “*the environmental policy discussions regarding coal-fired power plants in Germany*”.⁹² By analysing the position of the Federal Government, PÖYRY confirmed the Government’s position according to which the ETS is the central instrument to ensure that New Plants do not contradict Germany’s emission reduction targets.⁹³ Moreover, they found that “*alongside gas, hard coal is the only energy source that can bridge the supply gap resulting from the nuclear phase-out*”:⁹⁴

⁹⁰ [Exhibit C-0135-DE/Exhibit C-0135-EN: TKL, Evaluation of TKL about the environmental impacts of the Lünen plant \(excerpts\)](#), p. 17.

⁹¹ [Exhibit C-0136-DE/ Exhibit C-0136-EN: Second Opinion of PÖYRY for AET, Hard Coal-Fired Power Plant Project of TKL in Lünen, Germany, 30 May 2008 \(excerpts\) EN](#) p. 4.

⁹² [Exhibit C-0136-DE/Exhibit C-0136-EN: Second Opinion of PÖYRY for AET, Hard Coal-Fired Power Plant Project of TKL in Lünen, Germany, 30 May 2008 \(excerpts\) EN](#), p. 5.

⁹³ [Exhibit C-0136-DE/Exhibit C-0136-EN: Second Opinion of PÖYRY for AET, Hard Coal-Fired Power Plant Project of TKL in Lünen, Germany, 30 May 2008 \(excerpts\) EN](#), p. 38.

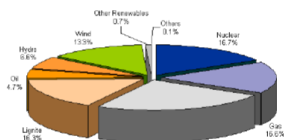
⁹⁴ [Exhibit C-0136-DE/Exhibit C-0136-EN: Second Opinion of PÖYRY for AET, Hard Coal-Fired Power Plant Project of TKL in Lünen, Germany, 30 May 2008 \(excerpts\) EN](#), p. 36.

The impending supply gap in Germany

Alongside gas, hard coal is the only energy source that can bridge the supply gap resulting from the nuclear phase-out

Current electricity generation portfolio

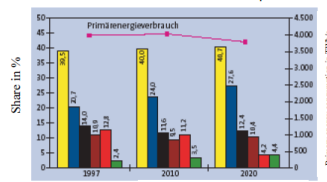
A quarter of the electricity produced in Germany today is generated from hard coal.



Source: ILEX Report

The role of hard coal

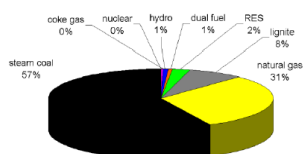
Hard coal will remain one of the most important energy sources in the future



Source: STEAG

Planned project investments

The high proportion of coal-fired power plants in the planned project portfolio (57%) shows that investors are convinced of the potential of this technology



Source: Pöyry Energy Consulting

Greenpeace scenario for 2020

Even in Greenpeace's Energy Concept 2020, which calls for an immediate phase-out of nuclear power and the maximum expansion of renewable energies, hard coal accounts for 22%



Source: Greenpeace



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Second Opinion AET: Trianel hard coal-fired power plant – Final Report

- 89 In Claimant's evaluations in 2009⁹⁵ and the presentation for a workshop between Claimant and TKL in 2010,⁹⁶ it becomes likewise evident that it tied the investment rationale to Germany's energy policy.
- 90 In its internal presentation from November 2009, Claimant addressed Germany's dual strategy to reduce emissions:

"German energy policy aims to reduce greenhouse gases by:

- *replacing old coal-fired power plants (some dating back to the 1930s) with highly efficient technologies such as the one to be installed in Lunen.*

⁹⁵ [Exhibit C-0137-IT/Exhibit C-0137-EN: Presentation of AET, Participation of AET in a company for the construction, 27 November 2009 \(excerpts\).](#)

⁹⁶ [Exhibit C-0138-DE/Exhibit C-0138-EN: Presentation of TKL, Workshop AET - Trianel, 21 May 2010 \(excerpts\).](#)

- *expanding the production capacity of renewable energy sources.*⁹⁷

91 And the presentation for a workshop between Claimant and TKL shows that the participants were well aware of the **Meseberg Resolutions from August 2007**.⁹⁸ This refers to Germany's *Key Elements of an Integrated Energy and Climate Programme* from 23. August 2007.⁹⁹ Claimant has discussed this Resolution in detail in the Memorial, outlining that a key element of Germany's strategy of increase the energy efficiency was the construction of New Plants to replace its polluting and outdated power plant fleet.¹⁰⁰ This is equally outlined in the Power-Point-Presentation:

"The official political framework is based on the Meseberg resolutions (August 2007). These stipulate a reduction in CO2 emissions of at least 37 percent nationwide by 2020 compared with 1990 levels. This is linked to the replacement of power plants throughout Germany.

[...]

*In a state-specific measure package in North Rhine-Westphalia, new, highly efficient power plants are to gradually replace old plants, enabling North Rhine-Westphalia alone to save 30 million tons of CO2 by 2020 based on 2005 levels.*¹⁰¹

92 Even more, also these internal documents demonstrates that the Federal Government has not only called for the expansion of renewable energy, as indicated by Respondent. It explicitly records that "*at the federal level and in North Rhine-*

⁹⁷ [Exhibit C-0137-IT/Exhibit C-0137-EN: Presentation of AET, Participation of AET in a company for the construction, 27 November 2009 \(excerpts\)](#), p. 47.

⁹⁸ [Exhibit C-0138-DE/Exhibit C-0138-EN: Presentation of TKL, Workshop AET - Trianel, 21 May 2010 \(excerpts\)](#), p. 73.

⁹⁹ Germany's *Key Elements of an Integrated Energy and Climate Programme* are also known as the "Meseberg Resolutions", since the Federal Government convened in Meseberg to adopt these resolutions.

¹⁰⁰ Memorial, para. 77.

¹⁰¹ [Exhibit C-0138-DE/Exhibit C-0138-EN: Presentation of TKL, Workshop AET - Trianel, 21 May 2010 \(excerpts\)](#), p. 73.

*Westphalia, the CDU, SPD, and FDP are calling on the industry to invest in new fossil fuel-fired power plants”.*¹⁰²

- 93 Hence, Respondent's portrayal of “hopes in the market” is incompatible with the documents presented to and endorsed by the Ticino Parliament as well as with Claimant's persistent internal assessment of Germany's twofold need for New Plants.

(b) Respondent's own projections confirmed the need for New Plants

- 94 Secondly, Respondent contends that Claimant would have only relied on incorrect “*economic projections*”.¹⁰³ In particular, it purports that Enervis' conclusions of an energy supply shortage after the nuclear phase-out were wrong and “*unable to foresee how renewable energy would develop in Germany*”.¹⁰⁴ Hindsight would be a wonderful tool, but in real life never works out.

- 95 These bold allegations also completely contradict Respondent's own assumptions at the time. As extensively discussed in **Section C.II.1 of the Memorial**, it was Respondent itself that assumed after the nuclear phase-out that it would not be able to cover its baseload capacity needs solely with renewable energy. Therefore, it consistently emphasised the significance of constructing New Plants. For instance, in its 2005 National Climate Protection Program the Ministry concluded:

*“With a 20 per cent share of renewable energies in 2020, around 80 per cent of electricity will still have to be generated from fossil fuels such as lignite, hard coal and natural gas. In order for the energy industry to contribute to climate protection, particularly efficient power plant technologies must therefore be developed.”*¹⁰⁵

¹⁰² [Exhibit C-0138-DE/Exhibit C-0138-EN: Presentation of TKL, Workshop AET - Trianel, 21 May 2010 \(excerpts\)](#), p. 78.

¹⁰³ Counter-Memorial, para. 103.

¹⁰⁴ Counter-Memorial, para. 93.

¹⁰⁵ [Exhibit C-0046-DE/Exhibit C-0046-EN: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, National Climate Protection Programme 2005 \(Nationales Klimaschutzprogramm 2005\), 13 July 2005 \(excerpts\)](#), p. 48.

- 96 Even more, Respondent's assertion also contradicts the permits it had granted to Claimant:

"Modern coal-fired power plants are used according to the German Merit Order (deployment priority for electricity generation according to generation costs) directly behind the lignite power plants and clearly in front of the gas power plants for power generation. Due to their flexibility, they will be increasingly demanded now and in the future when wind and solar power can only make a small contribution to electricity generation due to weather conditions. This means that modern coal-fired power plants with large capacities will be indispensable for the foreseeable future. Due to their greater flexibility, new modern power plants will better meet the requirements of the market than old plants, also in view of the nuclear power plant capacities to be shut down by 2022."¹⁰⁶ (emphasis added)

- 97 Finally, Respondent's allegation also contradicts the findings of its own Ethics Committee in 2011. Commissioned by the Federal Government to examine the supply of energy in light of the nuclear phase-out, it concluded as regards the need for New Plants:

"Modern, highly efficient coal-fired power plants offer a significant efficiency gain compared to old power plants, which are still connected to the grid with an efficiency of only around 30 per cent. Replacing them is a necessity in terms of climate policy and energy economics. This path must be pursued with the utmost determination. The gas and coal-fired power plants currently under construction or authorised under planning law should be connected to the grid."¹⁰⁷

- 98 Thus, Respondent's own assumptions and forecasts confirmed the need for New plants.

¹⁰⁶ [Exhibit C-0030-DE/Exhibit C-0030-EN: District Government of Arnberg, 2013 Advance Decision \(Vorbescheid\), 20 November 2013, \(excerpts\)](#), p. 289; see also: [Exhibit C-0033-DE/Exhibit C-0033-EN: District Government of Arnberg, 2008 Advance Decision for the construction and operation of the Lünen hard coal-fired power plant \(Vorbescheid\) and First Partial Permit, 6 May 2008 \(excerpts\)](#), p. 167.

¹⁰⁷ [Exhibit C-0139-DE/Exhibit C-0139-EN: Ethics Committee, Germany's energy transition – A joint effort for the future, 30 May 2011](#), p. 35.

(c) Concerns about the ETS prices confirm Claimant's reliance on the ETS

- 99 Thirdly, by reference to Claimant's submitted evidence,¹⁰⁸ Respondent asserts that Claimant already "*had concerns about hard-coal*"¹⁰⁹ and "*had hoped on a more lenient development of climate-action regulation*"¹¹⁰ to cover its "*exceptional baseload capacities needs*."¹¹¹
- 100 While Respondent's assertion regarding the Canton needs for baseload capacity is completely vague and unsubstantiated, these contentions also fail to refute that Claimant relied on Respondent's persistently emphasised need for New Plants. Respondent refers to ETS price projections in Claimant's internal discussions. Such internal discussions about the business risks of an investment do not mean at all that Claimant had to foresee the Coal Ban Law. Taking the costs of ETS into consideration confirms the relevance of the ETS and thus supports Claimant's argument. It demonstrates that Claimant conducted a thorough analysis of the advantages and the risks of the investment.

7. Summary

- 101 Hence, Claimant based its final investment decision on the valid permits and Germany's energy policy of needing New Plants. The latter is not only confirmed by the permits themselves, but also by multiple internal evaluations and even Respondent's own assessment. Respondent's assertion that Claimant would have

¹⁰⁸ Counter-Memorial, paras. 98-102; [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#); [Exhibit C-0066-IT/Exhibit C-0066-EN: AET, Message No. 6/06 to the Board of Directors, AET's participation in "Trianel Power - Projektentwicklungsgesellschaft Kohlekraftwerk mbH & Co. KG", for the construction of a coal-fired power plant in Germany, 23 March 2006 \(excerpts\)](#); [Exhibit C-0082-IT/Exhibit C-0082-EN: AET, Minutes of the 281st Meeting of the Board of Directors, 9 April 2008 \(excerpts\)](#).

¹⁰⁹ Counter-Memorial, para. 100.

¹¹⁰ Counter-Memorial, para. 98.

¹¹¹ Counter-Memorial, para. 103.

only relied on “hopes in the market” is thus completely beyond the facts of the present dispute. Unlike today, Germany considered New Plants to be part of the solution to combat climate change. Claimant knew this and based its investment decision on that. Contrary to Respondent’s allegation Claimant had not just “*hoped on a more lenient development of climate-action regulation*”¹¹². Claimant had relied on that Germany would comply with the policy it had advocated.

III. The operation of the Lünen plant

102 Due to its lack of relevant facts to object to the claim, Respondent conjures up a number of “smoke bombs” trying to confound and confuse the Tribunal: that a Swiss referendum obliged Claimant to exit the Lünen plant,¹¹³ that the Lünen plant until the Coal Ban Law did not have a final and binding operations permit,¹¹⁴ and that before the shutdown, the banks will have been repaid their loans.¹¹⁵

103 There is no substance behind those issues: Claimant acted in accordance with its obligation to sell its participation in Lünen, but developments such as the establishment of the Coal Commission and the coal ban made this an impossible task (1). TKL as operator of the Lünen plant had a legal entitlement to a final and binding permit (2) and the repayment of the banks instead of the equity investors does not dilute but rather strengthens Claimant’s case (3).

1. Claimant acted in accordance with its obligation to exit the Lünen plant by 2035

104 In the Counter-Memorial, Germany alleges Claimant would have “*concealed*”¹¹⁶ the fact that, following a public vote in Ticino, under Swiss law Claimant must exit the

¹¹² Counter-Memorial, para. 98.

¹¹³ Counter-Memorial, Section II.B.1.

¹¹⁴ Counter-Memorial, Section II.B.2.

¹¹⁵ Counter-Memorial, Section II.B.3.

¹¹⁶ Counter-Memorial, para. 620; see also paras 104-105, 107, 109, 111, 113-118.

Lünen plant no later than by 2035.¹¹⁷ Claimant would be forced to divest its participation in the Lünen plant even if such a sale of shares would result in financial loss.¹¹⁸

105 These allegations are as irrelevant as they are incorrect. Claimant does not dispute that there exists an obligation to divest its shares in the Lünen plant by 2035. With the Coal Ban Law, Germany has made it as difficult as possible to comply with that obligation since it has destroyed the value of the shares in TKL.

106 Germany's allegation is also misplaced. There is no requirement to sell shares before 2035 "even with losses". When the Grand Council of Ticino amended the LAET, thereby implementing the outcome of the public vote, it explicitly included the statement that AET must divest its shares before the end of 2035 only insofar as such divestment does not entail financial loss:

*"Participations already acquired by the company contrary to para. 4 of Art. 2 of this Act shall be disposed of as soon as possible, provided they do not generate financial losses. In any event, such participations must be disposed of by the end of the year 2035 at the latest."*¹¹⁹

107 This notion has been repeatedly confirmed in the following years, for example in a November 2024 Majority Report of Ticino's Environment, Territory and Energy Commission:

"On 5 June 2011, in a popular vote, the people of Ticino approved the amendment to the law establishing Azienda Elettrica Ticinese, requiring AET not to acquire any further participations in coal- or nuclear-fired power plants, and to divest from existing ones by 2035. This decision reflects a clear desire to move towards cleaner and more sustainable energies. However, the

¹¹⁷ Counter-Memorial, paras 9, 105-118.

¹¹⁸ Counter-Memorial, paras 9, 107, 554, 620.

¹¹⁹ [Exhibit R-0055 ITA /Exhibit R-0055 ENG : Amendment of the Law establishing the AET of 25 June 1958 in Official Bulletin of Laws and Executive Acts 32/2011, 12 July 2011](#), p. 431 (emphasis added).

transitional article of the law stipulates that the divestment must take place 'as soon as possible on condition that it does not generate financial losses.'"¹²⁰

108 The report also stated that such a fiscal-neutral sale would be very unlikely:

*"In fact, AET is bound [REDACTED]. These agreements limit the possibility of an early exit without heavy financial penalties. AET has nevertheless expressed its willingness to divest the shareholding as soon as economic and contractual conditions allow, but the Council of State warns that early divestment before 2035 is not only unlikely, but would lead to significant losses."*¹²¹

109 Hence, although the obligation has been in effect since 1 August 2011, when the amended LAET came into force, AET's decision to proceed with a sale remained subject to considerations of economic viability.

110 AET has diligently tried to comply with this obligation. Answering questions asked at the 25 January 2011 meeting of Ticino's Special Energy Commission, Claimant explained that a short-term sale of shares would be not economically viable at the time.

"The value of AET's stake in the Lunen power plant is determined by multiple factors, the main ones undoubtedly being the timing and the possible obligation to sell the participation.

Market conditions vary constantly: depending on supply and demand, the market is characterized by periods in which demand exceeds supply

¹²⁰ [Exhibit R-0061 ITA/Exhibit R-0061 ENG](#) : Majority Report of the Environment, Territory and Energy Commission 7943R1 on the motion of 20 January 2020 tabled by Simona Arigoni Zürcher and co-signatories (taken up by Matteo Pronzini) for MPS-POP-Indipendenti, "Coal-fired power station in Lünen: it's time to put an end to AET's participation! Fossil energy must be abandoned as soon as possible and investments must be thought of and considered only from an eco-sustainable perspective!", 21 November 2024, p. 1 (emphasis added).

¹²¹ [Exhibit R-0061 ITA/Exhibit R-0061 ENG](#) : Majority Report of the Environment, Territory and Energy Commission 7943R1 on the motion of 20 January 2020 tabled by Simona Arigoni Zürcher and co-signatories (taken up by Matteo Pronzini) for MPS-POP-Indipendenti, "Coal-fired power station in Lünen: it's time to put an end to AET's participation! Fossil energy must be abandoned as soon as possible and investments must be thought of and considered only from an eco-sustainable perspective!", 21 November 2024, p. 1-2 (emphasis added).

(production shortage) and therefore market prices tend to rise, or, conversely, market prices tend to fall due to overcapacity.

In periods such as the current one, characterized by temporary overcapacity and therefore low prices, we generally see, on the one hand, the decommissioning of old, inefficient plants and, on the other, a slowdown in investment in new power plants. This means that if AET were forced to sell its stake in the short term, as required by the popular initiative, not only would it be difficult to recover the entire amount invested, but it would also likely be forced to pay the buyer."¹²²

- 111 Claimant noted that the economic conditions for a sale could improve from 2014 onwards,¹²³ simultaneously stressing that calculations for a project of this magnitude must be evaluated over a long period of time.¹²⁴
- 112 The construction of the Lünen plant was completed only in December 2013.¹²⁵ A spur-of-the-moment search for potential buyers of a still unfinished power plant, as Germany implies should have taken place already in August 2011,¹²⁶ would have been wholly unreasonable from an economic perspective.
- 113 Nonetheless, Claimant did not waste time. Already in 2011, AET and other shareholders created a dedicated and coordinated working group for the sale of

¹²² [Exhibit C-0140-IT/Exhibit C-0140-EN: AET, Answers to questions raised during the Special Energy Commission meeting on 25 January 2011, 1 February 2011](#), p. 6.

¹²³ [Exhibit C-0140-IT/Exhibit C-0140-EN: AET, Answers to questions raised during the Special Energy Commission meeting on 25 January 2011, 1 February 2011](#), pp. 6-77; [Exhibit C-0141: AET, Promemoria - AET stake in TKL, status of sale negotiations, 29 January 2014](#) p. 2.

¹²⁴ [Exhibit C-0140-IT/Exhibit C-0140-EN: AET, Answers to questions raised during the Special Energy Commission meeting on 25 January 2011, 1 February 2011](#), p. 7.

¹²⁵ [Exhibit C-0085-DE/Exhibit C-0085-EN: TKL, Power plant: The project process, available at <https://www.trianel-luenen.de/kraftwerk/projektverlauf> \(last accessed on 24 July 2024\)](#).

¹²⁶ See Counter-Memorial, para. 111, where Respondent imposes the obligation to begin searching for buyers for the unfinished Lünen plant.

participation in the Lünen plant.¹²⁷ The intention behind the creation of this body was to increase transaction efficiency and

“to avoid acting and offering shares of the plant in the market in an uncoordinated manner, creating competition among the various bidding shareholders and thus avoiding a loss of value.”¹²⁸

- 114 Once the operation of the plant had been authorised in December 2013, also the working group resumed its coordinated sales process.¹²⁹ In line with its obligation to divest participation in the Lünen plant, AET would also continue to independently monitor the market with respect to economic sensitivities and potential buyers.¹³⁰
- 115 In 2018, RWE AG (“**RWE**”) showed an interest in purchasing shares in TKL and in another power plant as part of a package-deal. Representatives of TKL and RWE met in February and March 2018 to discuss the cornerstones of a potential transaction and exchange preliminary price indications.¹³¹ In April 2018, RWE confirmed its interest in continuing talks, noting that the initial discrepancy between both sides’ expected purchase price for the transaction could be overcome during negotiations.¹³²
- 116 To coordinate the overall topic of divesting participation in the Lünen plant, the shareholders of TKL set up a steering committee that would convene approximately

¹²⁷ [Exhibit C-0141: AET, Promemoria - AET stake in TKL, status of sale negotiations, 29 January 2014](#), p. 1.

¹²⁸ [Exhibit C-0141: AET, Promemoria - AET stake in TKL, status of sale negotiations, 29 January 2014](#), p. 1.

¹²⁹ [Exhibit C-0141: AET, Promemoria - AET stake in TKL, status of sale negotiations, 29 January 2014](#), p. 2.

¹³⁰ [Exhibit C-0141: AET, Promemoria - AET stake in TKL, status of sale negotiations, 29 January 2014](#), p. 2.

¹³¹ [Exhibit C-0142-DE/Exhibit C-0142-EN: TKL, Documentation of Negotiations with RWE, 7 June 2018 \(excerpt redacted\)](#), p. 1.

¹³² [Exhibit C-0142-DE/Exhibit C-0142-EN: TKL, Documentation of Negotiations with RWE, 7 June 2018 \(excerpt redacted\)](#), p. 1.

- every four weeks.¹³³ All issues concerning the sale of participation in TKL would henceforth be labelled with the internal nickname “**Project Mozart**” for further reference.¹³⁴ In June 2018, members of the steering committee were informed about two parties interested in purchasing shares in TKL – the Czech companies Energetický a průmyslový holding, a.s. (“**EPH**”) and Seven Energy Group (“**Seven Energy**”). Discussions with them, however, were unsuccessful due to vastly different price expectations.
- 117 Of all the negotiations within Project Mozart, the discussions with RWE were the most advanced. In 2018, however, Respondent changed the legal framework for a sale with the establishment of the Coal Commission in June 2018. Despite the fact that the Coal Commission had not yet proposed any specific shutdown path, the anticipation of restrictive State measures began sowing doubt in potential buyers. Around the same time, environmentalists’ protests surrounding an RWE-operated lignite mine in the Hambach Forest area in North Rhine-Westphalia dominated the public discourse.¹³⁵
- 118 RWE initially declared that under these circumstances, only an acquisition of a minority stake in TKL would remain a possibility.¹³⁶ On 18 October 2018, RWE informed TKL that there would be no further purchase offer made, also not for a minority share.¹³⁷ TKL informed the members of the steering committee of RWE’s reasoning by e-mail of 21 October 2018:

¹³³ [Exhibit C-0143-DE/Exhibit C-0143-EN: TKL, Minutes of the first meeting of the Steering Committee Project Mozart, 1 June 2018 \(redacted\)](#), p. 1.

¹³⁴ See [Exhibit C-0143-DE/Exhibit C-0143-EN: TKL, Minutes of the first meeting of the Steering Committee Project Mozart, 1 June 2018 \(redacted\)](#), document header.

¹³⁵ [Exhibit C-0144-DE/Exhibit C-0144-EN: E-Mail from Mr. Becker to the members of the Steering Committee, Subject: Latest information in preparation for the meeting of the steering committee on the Mozart project, 30 September 2018 \(redacted\)](#).

¹³⁶ [Exhibit C-0144-DE/Exhibit C-0144-EN: E-Mail from Mr. Becker to the members of the Steering Committee, Subject: Latest information in preparation for the meeting of the steering committee on the Mozart project, 30 September 2018 \(redacted\)](#).

¹³⁷ [Exhibit C-0145-DE/Exhibit C-0145-EN: E-Mail from Mr. Becker to the members of the Steering Committee, Subject: Mozart transaction project, 21 October 2018 \(redacted\)](#).

*"This is mainly due to the current political climate, including the problems surrounding the Hambach Forest. It would not be possible to justify the acquisition of a coal-fired power plant to investors and the capital market at this time. RWE has therefore also broken off advanced negotiations on the acquisition of further coal-fired power plants."*¹³⁸

- 119 On 26 October 2018, the steering committee decided that there were no grounds for further negotiations. Project Mozart was suspended, with the possibility of revival at a later date, should the circumstances require.¹³⁹ Since then, no further inquiries by potential buyers have taken place.

2. Respondent overstates the relevance of the Permitting Procedure

- 120 Respondent tries to diminish the relevance of the permits by overstating the relevance of the permitting procedure.¹⁴⁰ It is correct, but irrelevant that the Lünen plant lacked a final and binding operating permit until 2020. TKL was entitled to the permits (a). Therefore it is irrelevant that the Advance Decision and the operating permits became binding after the Coal Ban Law came into force (b). The delay is rather significant as the 2013 (recast) Advance Decision confirmed the public interest in the plant (c). While the 2013 Permits did not immunise the Lünen plant from further regulating tightening, this would not have allowed a coal ban (d).

(a) The timing of the 2013 Permits is irrelevant since TKL was entitled to the Permit

- 121 It is irrelevant that the Lünen plant received its 2013 Advance Decision (recast) and its operating permits after its construction and commissioning. Respondent's contrary allegations¹⁴¹ disregard the legal nature of the Advance Decision **under**

¹³⁸ [Exhibit C-0145-DE/Exhibit C-0145-EN: E-Mail from Mr. Becker to the members of the Steering Committee, Subject: Mozart transaction project, 21 October 2018 \(redacted\)](#).

¹³⁹ [Exhibit C-0146-DE/Exhibit C-0146-EN: TKL, Minutes of the sixth meeting of the Steering Committee Project Mozart, 30 October 2018 \(redacted\)](#), p. 2.

¹⁴⁰ See Counter-Memorial, Section II.B.2.

¹⁴¹ Counter-Memorial, para. 120.

Section 9 FICL and the **legal entitlement** (*Rechtsanspruch*) to a permit under the German immissions-control law.

(aa) The Permits under the FICL are bound decisions

122 The approval of large combustion plants under the FICL is a **bound decision**:¹⁴²

- Sections 4, 6 FICL provide that the authority **must** grant an immissions-control permit if the statutory conditions are met (no harmful environmental impacts, precaution with Best Available Technology, compliance with other public-law provisions, etc.).
- The operator therefore has a **legal entitlement** to the permit. The authority has **no general political discretion** to deny or later withdraw it simply because energy-policy preferences change.

123 Within this system, an Advance Decision is not a loose political signal but a codified instrument:¹⁴³

- The operator may request that the authority **decides in advance on individual permitting requirements** (*einzelne Genehmigungsvoraussetzungen*).
- An Advance Decision is an administrative act (*Verwaltungsakt*) **with binding effect**: for the issues it decides, the authority is bound in subsequent decisions (including on the full permit or modifications), **unless** there is a material change in law or facts.

¹⁴² See also: [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), paras 45-46.

¹⁴³ See also: [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), paras 92-96.

124 In other words, an Advance Decision is a **binding advance ruling** that certain approval criteria are fulfilled. It concretises the operator's legal entitlement on those points.

(bb) The 2013 Permits show that the Lünen plant fulfilled the contested statutory conditions

125 The 2011 judgment of the Higher Administrative Court of North-Rhine Westfalia (“**NRW**”) (*Oberverwaltungsgericht Nord-Rhein Westfalen – OVG NRW*) had, however, raised specific questions – above all FFH-compatibility – that Respondent now exploits rhetorically.

126 The 2013 Advance Decision is the outcome of this corrective process:

- The competent authority re-examined, *inter alia*, the FFH situation and the balancing of public interests.
- It then issued a new Advance Decision confirming that, in the plant's realised configuration at the chosen site, the **statutory approval requirements are fulfilled** for those points, including that the project is FFH-compatible and – should a conflict arise – justified by overriding public interests.

127 Legally, this has two consequences:

- For the issues decided in the Advance Decision, the authority is **precluded from later denying or withdrawing** approval on the same grounds, absent a material change in law or facts.
- The Advance Decision therefore **stabilised the Lünen plant's legal position**: it confirms that the operator's statutory entitlement under the FICL existed and has been positively recognised.

128 The Lünen plant was then also issued the Seventh Partial Permit which allowed the operation of the plant.¹⁴⁴

(cc) Timing (post-construction) does not diminish the Advance Decision's effect for expectations and value

129 Respondent's focus on the fact that construction began in 2008 and finished before the Advance Decision was issued, misses the core point:

- Under German law, the legal entitlement to a permit does not arise from the date of the investor's internal decision, but from the **fulfilment of the statutory criteria**.
- An Advance Decision issued after commissioning is therefore not "too late"; it is a **formal confirmation**, in the light of updated facts and judicial guidance, that those criteria are satisfied and that the authority is bound accordingly.

130 The Advance Decision was first issued in 2008 and formed not only the basis for the investment decision, but also the basis for the subsequent Partial Permits 1-5 which were used for the construction of the plant. It was annulled in 2011 (because the authority had only reviewed the environmental impact of the project on its own but not in combination with other current power plant projects) and, after a new FFH-review, recast in in 2013. The 2013 Decision confirms the 2008 Decision and even updates the public interest in the light of climate protection concerns (see above, Section B.II.5.).

(b) It is irrelevant that the Advance Decision did not became final and binding before 2020

131 Respondent emphasises that the 2013 Advance Decision remained subject to administrative challenge by the environmental organisation German Federation for the Environment and Nature Conservation (*Bund für Umwelt und Naturschutz*

¹⁴⁴ [Exhibit C-0086-DE/Exhibit C-0086-EN: District Government of Arnsberg, Seventh Partial Permit, 22 November 2013 \(excerpts\)](#).

Deutschland - BUND) until 2023, and references the fact that the original Advance Decision and First Partial Permit were annulled by the Higher Administrative Court of NRW in 2011 (8 D 58/08.AK). From this, Respondent infers that the Lünen plant never possessed a secure, final authorisation before 2020.¹⁴⁵

- 132 This argument overlooks the critical distinction between a curable procedural defect (which the 2011 judgment identified) and a substantive ban on the project. More fundamentally, it ignores the uninterrupted chain of partial permits and the decisive regulatory actions taken in 2013 to remedy the FFH-assessment shortfall identified by the court. There is a relevant difference between standard litigation (where the authority defends its permits) and sovereign intervention with regard to the permits (see below, Section B.III.b.cc. and dd.).

(aa) The Partial Permits 2-5 remained valid and enforceable and the construction proceeded lawfully throughout

- 133 As documented in the expert opinion of Dr. Krahnefeld, the challenge and later annulment of 2008 original Advance Decision did not affect construction of the plant.¹⁴⁶
- 134 The Higher Administrative Court of NRW with its judgement of 1 December 2011 annulled only the original Advance Decision and the First Partial Permit of 6 May 2008 for lack of a nature protection assessment. At the time of the judgment, however, works authorised under the First Partial Permit had already been completed.
- 135 The judgment did not affect the Partial Permits 2-5, which TKL had obtained for subsequent construction phases (October 2008 through October 2010) and which were never challenged in court.

¹⁴⁵ Counter-Memorial, para. 121.

¹⁴⁶ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), Section D.III.

136 Each of these Partial Permits was a separate immissions-control approval under Section 8 FICL issued with an order of immediate enforceability (*sofortige Vollziehung*).

137 As a consequence, the construction of the Lünen plant continued uninterrupted and fully lawfully on the basis of unchallenged Partial Permits 2-5. At no point did the Higher Administrative Court of NRW judgment halt the project.

(bb) In 2013: prompt regulatory cure; re-issuance of the Advance Decision and First Partial Permit; granting of the operating permit

138 Rather than leaving the FFH deficiency unresolved, the District Government Arnsberg (*Bezirksregierung Arnsberg - BZR*) took swift corrective action in 2013. According to Dr. Krahnefeld's expert opinion:¹⁴⁷

- On 20 November 2013, the District Government issued a new Advance Decision (corrected for the FFH deficiency identified by the Higher Administrative Court of NRW).
- On 21 November 2013, the District Government issued a new First Partial Permit (53-Ar-0040/13/0101.1-T1 neu).
- On 22 November 2013, District Government granted the Seventh Partial Permit authorising operation of the coal-fired unit for 1,705 MWth (750 MWe net), with an unlimited duration and order of immediate enforceability.

(cc) This sequence confirms an affirmative State commitment

139 The 2011 Higher Administrative Court of NRW's judgment and the subsequent 2013 re-issuance of the Advance Decision and the First Partial Permit do not support Respondent's "no final permit" narrative. Instead, they demonstrate the opposite:

¹⁴⁷ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), paras 18-19, 121-122.

- 140 Firstly, the Higher Administrative Court of NRW's judgment identified a curable procedural defect, not a substantive incompatibility of the Lünen plant with law. The court did **not** hold that a modern coal plant at Lünen was inherently impermissible. It held that the Advance Decision had been issued without a sufficient FFH assessment.¹⁴⁸ The District Government Arnsberg cured this defect through the 2013 Advance Decision, issued after proper review.
- 141 Secondly, construction was never interrupted. The project proceeded lawfully throughout. Partial Permits 2-5 remained valid, unchallenged, and immediately enforceable. The fact that the District Government continued issuing these permits after the first legal challenge of the environmental organisation German Federation for the Environment and Nature Conservation, and then promptly regularised the Advance Decision and the First Partial Permit in 2013, demonstrates continuous administrative support for the project. This is the opposite of a State signalling uncertainty about a project's legality.
- 142 Thirdly, the 2013 Advance Decision is the crowning confirmation of the Lünen Plant's approval.
- 143 By re-issuing the Advance Decision after the guidance of the Higher Administrative Court of NRW and after rechecking the FFH position, the District Government issued a new binding Advance Decision (Section 9 FICL) that all critical approval conditions – including FFH and public interest – are satisfied. This is not a precarious or conditional authorisation. It is an explicit, legally binding recognition that the Lünen plant met and meets the statutory requirements.
- 144 Fourthly, for a project to require re-issuance of permits after a court judgment is normal, not a sign of weakness. Administrative law regularly produces scenarios where a defect identified in court is cured through administrative action, and the project then proceeds on a corrected legal basis. The fact that this happened to the

¹⁴⁸ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 109.

Lünen plant is evidence of the system working correctly, not evidence of the Lünen plant's legal jeopardy.

(dd) Hypothetical judicial risk is qualitatively different from sovereign regulatory breach

145 Respondent's argument¹⁴⁹ that Claimant bore the risk that the Higher Administrative Court could have annulled also the new Advance Decision is not only hypothetical and speculation. It also conflates two distinct categories of risk:

- Ordinary administrative-law risk: the possibility that a permit will be reviewed by an independent court and modified. This risk, while real, is mitigated when the permit-issuing authority defends the permit vigorously and when the State has demonstrated (as Respondent did through re-issuance in 2013) that it stands behind the approval.
- Sovereign regulatory breach: the deliberate, politically-motivated frustration of an entire category of permits (all coal plants) by the legislative power, without regard to individual plant legality or justification, and without compensation to affected investors. This is what the ECT is designed to prevent.

146 A ten-year administrative dispute over FFH assessment – ultimately resolved through the authority's re-issuance of the permit – is qualitatively and quantitatively different from a legislative phase-out enacted in 2020 that made all coal-fired power generation illegal within years, regardless of plant-specific compliance.

(c) Respondent confirms the overriding public interest in the plant

147 Respondent argues, in effect, that the public-interest finding should be ignored because it appeared in the context of FFH-compatibility analysis.¹⁵⁰ Nevertheless, Respondent confirmed the public interest in the Advance Decisions. It explicitly acknowledged that the construction and operation of the Lünen plant was in the

¹⁴⁹ Counter-Memorial, Section II.A.6.a.

¹⁵⁰ Counter-Memorial, Section II.A.6.b.

overriding public interest.¹⁵¹ It made the determination twice – once in the 2008 version¹⁵² and once in the 2013 (recast) version.¹⁵³ The 2013 determination now has become final a binding on Germany. It is thus now impermissible for Respondent to argue that what it officially stated should be disregarded because it was stated in a particular section of the document. This logic would enable any State to hollow out its own permits by declaring their key provisions to be "mere dicta".

148 Moreover, because the public-interest finding is part of a binding Advance Decision, Respondent's attempt to downgrade it to mere *obiter* is doubly unavailing.¹⁵⁴ Under Section 9 FICL, the authority's advance determination on the public-interest question is binding in any subsequent approval decision unless law or facts materially change. The Coal Ban Law did not represent a material change in underlying facts; it was a political choice.

¹⁵¹ See Memorial, Section C.I.4.

¹⁵² [Exhibit C-0033-DE/Exhibit C-0033-EN: District Government of Arnsberg, 2008 Advance Decision for the construction and operation of the Lünen hard coal-fired power plant \(Vorbescheid\) and First Partial Permit, 6 May 2008 \(excerpts\)](#), p. 167:

"[...] In addition, there also exists a special public interest in the implementation of the administrative act. Specifically, this results from the fact that the construction of the hard coal-fired power plant

- contributes to the long-term security of the power supply

- it is to be expected that significantly more inefficient power plants will be replaced and therefore, in relation to the same amount of electricity, valuable resources will be conserved and the emission of environmentally harmful gases reduced, and

- the construction of the power plant will have a positive long-term impact on the local labour and training market as well as on the economy."

¹⁵³ [Exhibit C-0030-DE/Exhibit C-0030-EN: District Government of Arnsberg, 2013 Advance Decision \(Vorbescheid\), 20 November 2013, \(excerpts\)](#), p. 289:

"[N]ew highly efficient power plants are of overriding public interest in order to fulfil the objectives of Section 1 (1) Energy Industry Law to secure the supply of electricity to the general public while at the same time safeguarding the constitutional interest of climate protection."

¹⁵⁴ Counter-Memorial, para. 82.

149 What makes the 2013 Advance Decision particularly significant is that the District Government re-issued it in full knowledge of climate-change concerns and Germany's energy-transition policies. By 2013:

- The ETS was fully operational and binding German operators.
- Germany had committed to renewable-energy expansion targets.
- The Fukushima accident (2011) had triggered the nuclear phase-out decision with the subsequent need to replace nuclear capacity.
- Climate debates were prominent in German political discourse.

150 Yet, in 2013, the District Government Arnsberg – the competent environmental agency – deemed the Lünen plant worthy of re-approval and, in the Advance Decision, explicitly identified New Plants as a "bridging technology" in the energy transition¹⁵⁵. This was not a State unwittingly permitting a coal plant in ignorance of climate concerns. It was the Respondent, with full awareness of its climate policy, affirmatively reconfirming coal generation as part of its near-term energy mix.

(d) Being subject to future regulation did not extend to a coal ban

151 Respondent contends that the 2013 permit could not have rendered the Lünen plant immune from future regulation. It points to potential tightening of the respective immission control regulations (e.g. the Technical Instructions on Air Quality Control (*TA Luft*) or the Technical Instructions on Noise Abatement (*TA Lärm*)).¹⁵⁶

152 That is correct, but beside the point. This case is not about implementing gradually-tightening environmental standards. When the same State that issues the permits for the coal plant then legislates a coal phase-out a mere seven years later, without grandfathering modern plants or providing compensation, it is not implementing.

¹⁵⁵ See above: Reply, paragraph 76, and [Exhibit C-0030-DE/Exhibit C-0030-EN: District Government of Arnsberg, 2013 Advance Decision \(Vorbescheid\), 20 November 2013, \(excerpts\)](#), p. 289.

¹⁵⁶ Counter-Memorial, para. 125.

This is confirmed by the legal opinion of Dr. Krahnefeld.¹⁵⁷ It is reversing a prior, deliberate, post-judicial policy choice – and doing so in a manner that violates fair and equitable treatment and constitutes expropriation.

3. Domestic investors lose their investments like Claimant

153 Respondent contends that domestic “debt investors received and will receive
hundreds of millions”.¹⁵⁸

154 That is misguided.

155 The domestic investors are the domestic co-shareholders of Claimant. They suffer the same fate as Claimant and will not get any return on their investment, nor repayment of their equity. Unlike Claimant, however, they have no remedies. They cannot rely on the ECT and, as municipal utilities, cannot even file a constitutional complaint.

156 Respondent confounds the domestic banks, who are not protected investors under the ECT, with Claimant as an equity investor. However, Claimant's damages model values only Claimant's 15.84 % equity participation. It does not seek to recover any loss suffered by the banks, nor does it attempt to recoup interest the banks have already collected. There is therefore no risk of over-compensation or double counting at the level of the project.

157 Conversely, to deny or reduce compensation to Claimant on the basis that banks have earned “hundreds of millions” of interest would under-compensate Claimant and leave Claimant worse off than in the but-for world. In that world, banks would have been repaid until 2033 and Claimant in the years thereafter would have earned a return consistent with the risk profile it accepted when financing was closed.

¹⁵⁷ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 143.

¹⁵⁸ Counter-Memorial, sub-headline II.B.3.

158 In any large power project, high leverage and back-loaded amortisation are standard features of non-recourse project finance; they do not convert a sovereign phase-out measure into a purely “self-inflicted” loss. The fact that the Lünen plant was financed with approximately [REDACTED] debt out of EUR 1.4 billion total capex simply reflects the usual bankability model for merchant coal plants at the time. The International Energy Agency confirms that “*it is not unusual for debt to account for most of the funding, typically 80% of investment capital*”.¹⁵⁹ [REDACTED]
[REDACTED]
[REDACTED]

159 The legal question is not whether amortisation is “late” in some abstract sense. Decisive is instead that the Coal Ban Law accelerates the end of the plant’s economically viable life compared to the but-for scenario that the same capital structure would have produced. Respondent’s own experts accept that, absent the Coal Ban Law, the plant would have continued to operate well beyond 2031 and generated positive equity cash flows, i.e. amortisation would have been achieved on the actual financing terms.¹⁶⁰

IV. Neither climate change itself nor Germany’s climate policy foreshadowed the Coal Ban Law

160 Claimant outlined in the Memorial that even after Claimant’s investment decision and until 2016, Respondent consistently reaffirmed the ETS as the primary, market-based instrument for the power plant sector. Moreover, Germany’s energy policy endorsed the construction and operation of New Plants as “indispensable” bridging technologies until 2050. Successive instruments such as the Energy Concept

¹⁵⁹ [Exhibit C-0147: IEA Clean Coal Centre, *International Finance for coal-fired power plants*, April 2017](#), p. 15.

¹⁶⁰ [Exhibit RER: Aurora, expert report](#), para. 170.

2010,¹⁶¹ the Action Program Climate Protection 2020 of 2014,¹⁶² and the Climate Action Plan 2050 of 2016¹⁶³ demonstrate this.¹⁶⁴

161 In the Counter Memorial, Respondent fails to refute these facts. Instead, it refers to various scientific publications and international and domestic climate regulation that would indicate that the Coal Ban Law was the factual and scientific culmination of decades of climate knowledge.¹⁶⁵ Respondent tries to justify its coal ban law by pointing to what it calls “unchallenged regulations” between 2014 and 2020 (section C of the Counter-Memorial) and to *ex post*-developments (i.e. after 2020, see Section F of the Counter-Memorial).

1. Respondent's “regulations” did not require shutting down the Lünen plant without compensation

162 All of this is – for the Tribunal's decision – irrelevant. The shutdown of the Lünen plant without compensation is not a necessary consequence of those “documents”.

163 It is, firstly, noteworthy that Respondent starts with the AR5, the IPCC Synthesis Report for 2014. That report was published not only years **after** the 2008 investment decision, but also **after** the putting into operation of the Lünen plant.

164 Secondly, the IPCC Reports, which Respondent summarises at great length, are also no “hard law” or specific recommendations. On its website, the IPCC explains its role as follows:

¹⁶¹ [Exhibit C-0089-DE/Exhibit C-0089-EN: Ministry of Economic Affairs and Technology, Energy Concept for an environmentally friendly, reliable and affordable energy supply, 28 September 2010 \(excerpts\).](#)

¹⁶² [Exhibit C-0093-DE/Exhibit C-0093-EN: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Action Program Climate Protection 2020, 3 December 2014 \(excerpts\).](#)

¹⁶³ [Exhibit C-0094-EN: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Climate Action Plan, November 2016.](#)

¹⁶⁴ As outlined in Memorial, Section C.IV.

¹⁶⁵ Counter Memorial, paras. 133-162.

“Thus the IPCC offers policymakers a snapshot of what the scientific community understands about climate change rather than promoting a particular view. It does not do its own research, conduct climate measurements or produce its own climate models.

IPCC reports are policy-relevant without being policy-prescriptive. The IPCC may set out options for policymakers to choose from in pursuit of goals decided by policymakers, but it does not tell governments what to do.”¹⁶⁶ (emphasis added).

- 165 Similarly, neither the Paris Agreement nor European climate law prescribe specific regulatory measures, let alone a coal phase out. The text of the Paris Agreement does not even mention the word “coal” in its text. The Paris Agreement sets global emission targets, but leaves it up to each party to determine what to do to reach those targets. A March 2024 Guidance Document of the “Initiative for Climate Action Transparency” explains:

*Ensuring that the NDCs are clear, fair, ambitious, and compliant with the Paris Agreement involves careful consideration of unique national circumstances and equity. The definition of “fair” and “ambitious” takes into account economic, social, and environmental factors, balancing the need for significant climate action with development priorities. For instance, in the context of a developing nation, efforts are made to balance economic growth with the imperative to reduce emissions, ensuring that actions are equitable.*¹⁶⁷

- 166 A worldwide review of countries with power plants shows that while different countries have different phase-out dates, there are also several countries with coal-fired power plants which do not prescribe a phase-out.¹⁶⁸

- 167 Not even EU law prescribes specific policy choices. Regulation (EU) 2021/1119 (“**European Climate Law**”) writes the 2050 climate neutrality objective and the at

¹⁶⁶ [Exhibit C-0148: IPCC Website, Frequently Asked Questions](#), p. 2-3.

¹⁶⁷ [Exhibit C-0149: ICAT, Guidance Document of NDC Reporting, May 2024](#), p. 39.

¹⁶⁸ See [Exhibit C-0150: Global Energy Monitor, Planning the end of coal-fired power: Phaseout targets and NDCs, 2025](#).

least 55% net emission reduction target for 2030 into binding Union law, making these targets legally binding on the EU and its Member States collectively.¹⁶⁹

168 The Regulation establishes a framework to assess both Union level and national measures. It requires that EU policies are consistent with the climate neutrality pathway, and mandates the European Commission to review Member States' actions. Thereby, it creates justiciable obligations of conduct and result, even if formulated at a high level of abstraction.

169 However, EU law does not prescribe a uniform national energy mix. Article 194(2) TFEU acknowledges Member States' right to determine their energy mix. Also the European Climate Law confirms in its preamble that climate targets are to be met "in a technology neutral way,"¹⁷⁰ subject to compliance with Union law.

170 The European Climate Law and 2030 framework therefore oblige Member States to achieve specified emission reduction and energy objectives and to maintain coherent, progressively ambitious policies, while leaving them discretion as to whether to use measures such as coal phase out, nuclear deployment, renewables expansion, or other instruments, provided their chosen mix is compatible with EU targets and legislation.

171 Even the Federal Climate Action Law (*Bundes-Klimaschutzgesetz*) merely prescribes reduction targets and a predetermined pathway for "*gradually reduc[ing]*"¹⁷¹ emissions each year, but does not specify how to achieve those goals.

¹⁶⁹ [Exhibit C-0151: Regulation \(EU\) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations \(EC\) No 401/2009 and \(EU\) 2018/1999 \('European Climate Law'\)](#).

¹⁷⁰ [Exhibit C-0151: Regulation \(EU\) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations \(EC\) No 401/2009 and \(EU\) 2018/1999 \('European Climate Law'\)](#)), Preamble para. 34; see also: [Exhibit C-0152: Press Release 897/25 of the Council of the EU, 2040 Climate target: Council agrees its position on a 90% emissions reduction, 5 November 2025](#), p. 2.

¹⁷¹ [Exhibit R-0095: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Translation of the 2019 Federal Climate Action Act \(Bundes-](#)

172 None of these instruments contemplate a mandatory shut down of New Plants before amortisation. Neither do they suggest to replace market-based ETS price signals with regulatory instruments for a single technology, nor specific mechanics that the Coal Ban Law ultimately adopted.

2. Post-coal ban developments do not justify phasing out coal without compensation

173 Respondent dedicates nearly 20 pages¹⁷² to a broad narrative on global climate new scientific developments, economic studies, and policy targets dated **after** the adoption of its measure in 2020. Yet, none of these documents establish a necessity to shut down New Plants, let alone without compensation, as envisaged by the Coal Ban Law.

174 Firstly, Respondent cites statements in the IPCC AR6 of 2022 that fossil fuels must be phased out.¹⁷³ However, like its predecessors, the IPCC report does not prescribe national coal-exit schedules or uncompensated shutdowns (see above, para. 163). Neither does it mandate specific national timelines, nor the closure of individual power plants, nor the choice between tenders, negotiated exits, or minimum CO2 prices. Neither does the IPCC require the exclusion of compensation. Germany's invocation of scientific urgency cannot cure the deficiencies in the Coal Ban Law's design. The end does not justify the means.

175 Secondly, Respondent's extensive references to economic-damage assessments,¹⁷⁴ extreme-weather loss data,¹⁷⁵ or studies commissioned by German ministries in 2022–2023 do not support the assertion that the scientific or factual landscape before or after 2020 required, suggested, or even anticipated the

[Klimaschutzgesetz\) of 12 December 2019 as in Federal Law Gazette I p. 2513, 12 December 2019.](#)

¹⁷² Counter Memorial, pp. 83-100.

¹⁷³ Counter Memorial, para. 285; paras. 298-300.

¹⁷⁴ Counter-Memorial, Section II.F.

¹⁷⁵ Counter-Memorial, paras. 292; 305, 309, 315, and 317.

Coal Ban Law. These studies catalogue the impacts of climate change, not the structure of electricity-market regulation or the appropriate design to phase out fossil fuels.

176 Thirdly, also Professor Schellnhuber's expert report is based on global pathways and hypothetical national carbon budgets. It does not include any factual regulatory instruction, target, or commitment by Germany that investors could have identified at the time.

177 Fourthly, Respondent's reliance on evidence from 2022–2025 and "necessity as of today" standard is incompatible with its policy at the time of the investment, and on the regulatory and factual environment existing then. If the necessity to phase-out coal were as existential as claimed, Germany would have not decided to shut down the more polluting lignite plants later than New Plants. Until the Coal Ban Law, it had been its policy to replace old plants with New Plants, not vice versa. Moreover, the Coal Ban Law simultaneously provides multi-billion-euro compensation to lignite operators, undermining any claim that uncompensated closure of hard-coal plants was "necessary". This confirms that the measure was a **policy choice**, not an objective necessity.

3. Professor Schellnhuber's assertions on Lünen's CO₂ emissions are artificial and misleading

178 Finally, Professor Schellnhuber's assertions on Lünen's CO₂ emissions are misconceived. Professor Schellnhuber's analysis concludes that,

*"[...] the CO₂ emitted by the Lünen Plant alone in Claimant's but-for scenario from 2020 onwards would account for more than 2% of Germany's entire national CO₂ budget deducted from the UN IPCC budgets as of 2020."*¹⁷⁶

179 Firstly, Respondent's cited statement could be read as indicating that the Lünen plant would amount to 2 % of the annual CO₂ budget of 2020. This is wrong. The 2 % refer to the entire emission budget between 2020 and 2053.

¹⁷⁶ Counter Memorial, para. 339.

- 180 Secondly, Professor Schellnhuber's calculation is not refer to Germany's actual CO2 emissions, but to an abstract, hypothetical national CO2 budget from 2020 onward. This is neither Germany's historical emissions, nor an EU-allocated ETS or ESR budgets, or a legally binding figure.
- 181 Respondent reaches its inflated figure only by replacing real emissions data with a hypothetical remaining national carbon budget derived from an exceptionally restrictive downscaling of global IPCC carbon-budget estimates. It depends entirely on how one chooses to downscale a global IPCC budget to national level. However, the IPCC itself emphasises that global carbon budgets cannot be directly and uniquely allocated to individual countries because any such national apportionment depends on the specific choice of equity principles, methodologies, and assumptions, and the IPCC does not provide or recommend national budgets.¹⁷⁷
- 182 The 2% claim therefore is nothing more than hortatory advocacy. It does not demonstrate any climate-related necessity linked to the Lünen Plant. It merely reflects methodological choices designed to produce a disproportionately small national budget from which even modest emissions appear outsized.

4. Summary

- 183 Respondent assembles a wide range of scientific materials documenting the seriousness of climate change. Yet, none of these factual sources support Respondent's portrayal of the Coal Ban Law as the foreseeable, factual, or scientifically indicated outcome of Germany's climate-policy trajectory. The science development Respondent invokes is irrelevant for the Tribunal's analysis of Respondent's breaches of the ECT. They also do not prescribe the specific regulatory measure Respondent adopted in 2020. Respondent's factual narrative therefore does not demonstrate that climate science or climate policy made the Coal Ban Law predictable, to be expected, or even is a necessity of today.

¹⁷⁷ [Exhibit R-0121: UN IPCC, *Climate Change 2023: Synthesis Report*, 20 March 2023.](#)

V. Germany misrepresents the background and content of the Coal Ban Law

- 184 In its Memorial¹⁷⁸, Claimant had explained that the Shutdown Path of the Coal Ban Law favoured lignite-fired power plants, that this led to increased (not decreased) emissions and was heavily criticised, and that regional interests (in lignite plants and mining) apparently outweighed climate considerations. Claimant also showed that the Coal Ban Law failed to provide compensation, that this was heavily criticised in the legislative procedure and that Respondent was aware of that critique, but did not care.
- 185 As shown above, neither science nor international or European law required Germany to adopt specific policy measures. Respondent was thus not obliged to adopt the Coal Ban Law as enacted. In particular, it was not obliged to enact a Shutdown Path which will shut down one of Germany's most efficient coal-fired power plant years before more polluting lignite-fired power plants and without compensation although older, more polluting hard coal-fired power plants receive compensation.
- 186 In its Counter-Memorial, Germany now tries to hide behind the Coal Ban Law as being based on "non-binding recommendations of independent stakeholders". This does not absolve it from liability for the result. It also fails to explain why it did not follow those recommendations (1). It also fails to address why, contrary to its prior decade-long policy of saving CO₂ by replacing old plants with new plants, it shuts down a new plant like Lünen well before its amortisation (2). As to why Germany did not offer compensation, it apparently wants to avoid precedents, and considered it too difficult to calculate compensation (3) That is not really credible as it granted compensation to lignite but not hard coal plants. Its attempt to portray them as different merely proves that the whole process was politically slanted towards lignite mining. Hard coal was sacrificed on the altar of a political compromise (4). That is exactly what investment protection is meant to remedy. Respondent's view is that the "2020 Act is constitutional" is completely irrelevant. It also thought so with regard

¹⁷⁸ Memorial, Section C.VI.2-7.

to the Nuclear Phase Out, and had to learn that its own assessments were erroneous (5). The same applies to the ECHR-judgement (6).

1. Respondent cannot hide behind the recommendations of the Coal Commission

187 Respondent's reliance on the Coal Commission as democratic legitimisation for the Coal Ban Law is misplaced.¹⁷⁹ Even a democratic legitimisation is no shield of immunity. Moreover, the Coal Commission's composition and mandate were structurally flawed in ways that directly implicate the fairness of the resulting legislation.

188 Firstly, the Coal Commission's stakeholder representation was skewed toward political and regional interests rather than investor protection. While Respondent emphasises the "*diverse list of stakeholders*"¹⁸⁰, the process systematically excluded investors like Claimant who had made long-term investments based on Germany's previous policy framework. Only three members were from the Energy Sector – even less than from Lignite Coal Mining Regions or from Environmental and public health organisations.¹⁸¹ Their interests clearly played a minority role in the deliberations. Press articles evidence that political pressure from the Federal States involved in lignite mining led to an extension of the Coal Commissions deliberations.¹⁸²

189 Secondly, the Coal Commission's mandate focused on domestic political acceptability, not on honouring Germany's international treaty obligations under the ECT. Respondent confirms¹⁸³ that the Commissions meetings were primarily

¹⁷⁹ Counter Memorial, Section II.D.1.

¹⁸⁰ Counter Memorial, para. 544.

¹⁸¹ See Counter Memorial, para. 183.

¹⁸² [Exhibit C-0153-DE/Exhibit C-0153-EN: Frankfurter Allgemeine Zeitung, Eastern federal states demand more money for coal phase out, 22 November 2018.](#)

¹⁸³ Counter Memorial, paras. 215-216.

concerned with the social consequences of the shutdown of lignite mining, not with shutting down inefficient plants first and protecting modern efficient plants.

190 Thirdly, the Coal Commission's recommendations were non-binding political compromises, not scientifically-determined necessities. Respondent fails to appreciate that the 2038 phase-out date was a political bargaining outcome, not an environmental imperative. The Paris Agreement's 1.5°C target does not mandate Germany's specific approach of forcing hard-coal plants into tenders while granting lignite plants negotiated phase-out agreements. The Commission's work product therefore cannot insulate the Coal Ban Law from ECT scrutiny.

191 Finally, Germany cannot hide behind the Coal Commission because it did not implement crucial parts of its recommendations. Among others, the Coal Commission recommended:

- linear reduction for each type of coal-fired power plant (i.e. lignite and hard coal);¹⁸⁴
- compensation for forced shutdowns;¹⁸⁵ and
- no degression of the tender caps for hard coal-fired power plants which are less than 25 years old at the time of shutdown.¹⁸⁶

192 As Claimant already set out in detail in the **Memorial**, Germany disregarded these recommendations in its Coal Ban Law because Germany

- accelerated the decommissioning of hard coal-fired power plants while closing down lignite-fired power plants for the most part only shortly before relevant milestone years.¹⁸⁷ As a consequence lignite plants do not only get compensation but also profit from the earlier shutdown of the hard coal-plants,

¹⁸⁴ [Exhibit C-0014: Final Report of the Coal Commission, January 2019](#), pp. 63, 64.

¹⁸⁵ [Exhibit C-0014: Final Report of the Coal Commission, January 2019](#), pp. 62, 64.

¹⁸⁶ [Exhibit C-0014: Final Report of the Coal Commission, January 2019](#), p. 64.

¹⁸⁷ Memorial, paras 184-191.

- did not offer compensation for forced shutdowns of hard coal-fired power plants after 2027,¹⁸⁸ and
- decreased the tender caps also for “young” hard coal-fired power plants.¹⁸⁹

193 Providing for Shutdown Orders without compensation was not opting for the “*milder means*”¹⁹⁰ but betting that operators would quietly absorb the losses for Respondent’s actions. The Federal Government even commissioned a legal opinion confirming that under domestic law, remedies would be unlikely to succeed (see below, Section B.V.5).¹⁹¹

2. The Shutdown Path contradicts Germany’s prior policy to prefer New Plants

194 In its Memorial, Claimant had explained that the “*Coal Ban Law establishes a Shutdown Path forcing hard coal-fired plants to shut down years earlier than the more polluting lignite-fired power plants.*”¹⁹²

195 Respondent writes a lot about the Coal Ban Law, but does not dispute this fact. As regards the tenders, it contends that the purpose was to reduce as much CO2 as quickly as possible.¹⁹³ However, that is not the case.

196 As already explained in Claimant’s Memorial, in case of oversubscription of a tender, successful bids will be selected by determining the lowest price in relation to the average CO2 emissions over the last three years.¹⁹⁴ This assessment however fails put these emissions into perspective to the energy generated (i.e. no

¹⁸⁸ Memorial, paras 215, 227-233.

¹⁸⁹ Memorial, paras 232.

¹⁹⁰ Counter-Memorial, para. 193.

¹⁹¹ [Exhibit R-0006-GER/Exhibit R-0006-ENG: Bodo Pieroth and Bernd Hartmann, Constitutional Matters of the Coal Phase-Out Law, 21 December 2020.](#)

¹⁹² Memorial, paras 182-202.

¹⁹³ Counter-Memorial, para. 201.

¹⁹⁴ Memorial, paras 268-270.

CO2/MWh-criterion) and, thereby, contrary to its proclaimed aim, leads to shutting down rather new, efficient power plants than old polluting power plants. The reason for that is that more effective plants under the German merit order system operate more often and thus produce more CO2. The tender mechanism selected thus does not reduce as much CO2 emissions as quickly as possible but rather leads to more emissions.

197 This can be explained based on the following scenario: Assume that there are two power plants, each with a capacity of 1,000 MW and each bidding 160,000 EUR/MW, i.e. a total of EUR 160 million, to shut down the respective plant in an oversubscribed tender. One of the plants is a new, highly efficient power plants which, on average over the past three years, generated 5,000 GWh per year and emitted 4 million tons of CO2 per year (= 0.8 tons of CO2 per MWh generated). The other plant is an old plant which, on average over the past three years, generated 2,500 GWh per year and emitted 2.5 million tons of CO2 (= 1 ton of CO2 per MWh generated).

198 That newer, more efficient plants produce more electricity (measured in MWh) than older plants with the same installed capacity (measured in MW) is also recognised by Respondent in its Counter Memorial.¹⁹⁵ The reason for this is that more efficient plants have lower variable operating costs, meaning that under the merit order system applicable in the German electricity market, they are dispatched more often: they produce more electricity. As a consequence of the higher electricity production, they also have higher total CO2 emissions per MW of installed capacity as an older plant, even if they have lower CO2 emissions per MWh of electricity generated.

199 Respondent openly admits that:

"In fact, the formula favoured the Lünen Plant because it calculates CO2 emissions per MW capacity (not: MWh production). The Lünen Plant has more total CO2 emissions per MW capacity (not: MWh production) than older plants

¹⁹⁵ Counter-Memorial, para. 201.

because plants such as the Lünen Plant are before older plants on the merit-order and therefore produces more MWh per MW capacity.”¹⁹⁶

200 In the above scenario, this would mean that the New Plant's bid would be rated as offering 20 EUR per ton of CO₂ (= EUR 160 million for 4 million tons of CO₂) while the old plant's bid would be rated as offering 20 EUR per ton of CO₂ (EUR 160 million for 2.5 tons of CO₂). Consequently, the bid would be awarded to the new plant. This would mean that as of the shutdown date, 5,000 GWh of electricity production per year would need to be covered by older, less efficient plants, which would have higher CO₂ emissions for each MWh of electricity generated. Consequently, the tender mechanism leads to more CO₂ being emitted in future years.

3. Germany's explanations why the Coal Ban Law does not offer compensation are embarrassing for Europe's biggest economy

201 In the Memorial, Claimant explained that the Shutdown Path led to higher emissions,¹⁹⁷ that political considerations outweighed climate considerations,¹⁹⁸ that no compensation was offered¹⁹⁹ and that Respondent was heavily criticised for that in the legislative procedure.²⁰⁰

202 Respondent does not dispute that. It hardly even responds to that, but instead prefers to superficially repeat the content of the Coal Ban Law. What is of relevance, however, is that Respondent admits it considered and rejected the idea to compensate new plants like Lünen because

- compensation would have put the whole tender model at risk

¹⁹⁶ Counter-Memorial, para. 201.

¹⁹⁷ Memorial, Section C.VI.2.b.

¹⁹⁸ Memorial, Section C.VI.2.c.

¹⁹⁹ Memorial, Section C.VI.4.

²⁰⁰ Memorial, Section C.VI.5.

- the government only wanted to pay compensation for closures before 2030 (i.e. irrespective of whether compensation would be due or not);
- it considered that a shutdown in the 2030s gave abundant time for producers (for whatever);
- it did not know how to calculate compensation and wanted to avoid unnecessary public spending²⁰¹,
- it did not want to set a precedent.

203 Firstly, the consideration that “*a compensation for hard-coal power plants that would produce into the 2030s might have put the entire auction model for the 2020s at risk* [...]”²⁰² is irrelevant. The tender is concerned with a voluntary early shutdown against financial compensation, but not with compensation for the forced later shutdown. Respondent cannot justify its failure to provide compensation with an unrelated further mechanism.

204 In addition, it is not even sufficiently explained. Mr. Wellershoff merely asserts that, if these plants were to receive compensation, they would not bid in the tenders and this might have affected the bidding strategy of the other market participants. Considering that Respondent's tender mechanism design was in itself not conducive to its emission reduction objectives²⁰³, it is difficult to see how giving appropriate treatment to new, more efficient and less polluting plants could have jeopardised Respondent's climate protection objectives. Newly constructed less polluting plants would rightly be the last ones to close, instead of older more polluting or even lignite plants, as in the current scenario. They would be the ones available to bridge the any security of supply gap that could happen along the way – as it had been the policy behind incentivising their construction in the first place²⁰⁴.

²⁰¹ This confirms what Claimant argued in the Memorial in paras. 251 *et seq.*

²⁰² [Exhibit Wellershoff WS: Witness Statement of Mr. Jan-Kristof Wellershoff](#) para. 37.

²⁰³ See above paras 193-198.

²⁰⁴ See Memorial paras. 45-97

205 Secondly, it is not credible that the Government would not have known how to calculate compensation. It has managed to do so with compensation for lignite coal plants.. In Annex 4 to the Coal Ban Law²⁰⁵, Germany sets the formula for calculating compensation for lignite plants as follows:

$$E_{Til} = \left[P_t \times OE_t + (PMV_i + PG_i + PSD_i + PW_i) \times Infl_{it} - (1 - FMV_i) \times \left(\frac{BK_i}{\Pi_i} + RHB_i \right) \times Infl_{2025t} \right. \\ \left. - (1 - FMV_i \times FMVB_i) \times \left(\frac{C_i}{\Pi_i} \times EUA_{t-1} \right) - (KWFIX_i + TBFIX_i) \times Infl_{2025t} \right] \\ \times (PN_i - SVK_i \times Q_i) \times BH_{i,t} \times FA_i$$

206 This formula was only entered into the law in 2025. It cannot be transferred one to one to hard coal plants, since hard coal plants do not operate lignite mining but buy their coal on the world market. However, Germany would not have needed to provide a detailed compensation formula when enacting the Law. It could have enacted a general regulation and then taken its time to do it properly. That is also what the Federal Ministry of Justice advised when sending comments on the draft Coal Ban Law.²⁰⁶

207 Thirdly, Mr. Wellershoff statements that “*there was no clear option how to calculate such compensation for some plants and where to cut-off*” and that “*the Federal Government had a duty in these circumstances to avoid unnecessary public spending*”²⁰⁷ are simply incoherent with the measure ultimately approved by Respondent. Policy documents and parliamentary records produced during the legislative and administrative process of the Coal Ban Law reveal that “a clear

²⁰⁵ [Exhibit C-0154-DE/Exhibit C-0154-EN: Law amending the Energy Industry Law and amending the Coal Ban Law, Federal Law Gazette 2025 I No. 283 of 27 November 2025 \(excerpts\).](#)

²⁰⁶ [Exhibit C-0155-DE/Exhibit C-0155-EN: Email correspondence between the Federal Ministry of Justice and the Federal Ministry for Economic Affairs and Technology, Subject: Draft of the Coal Ban Law, 11 November 2019 - 3 December 2019 \(excerpts\), p. 2481 \(adobe p. 2\).](#)

²⁰⁷ [Exhibit Wellershoff WS: Witness Statement of Mr. Jan-Kristof Wellershoff](#), para 40.

option how to calculate such compensation"²⁰⁸ was not systematically examined. Respondent has neither sufficiently analysed balanced alternatives, nor reached out to the hard-coal sector to negotiate acceptable compensation and shutdown options. Also fulfilling its obligations under the ECT cannot be considered an "unnecessary" public spending".

208 In short, it becomes clear that the Government considered it a political and legal hassle to review whether and how much compensation should be paid. It preferred to base its decisions on speculations and politically acceptable assumptions. It knew that New Plants might not be fully amortised when shutting down,²⁰⁹ but decided not to act on that. It clearly put its wager on deteriorating market conditions, and that in 2030 blame could be put on those conditions and not on its decision not to compensate plants.

209 Lastly, Germany's allegation that the Coal Ban Law would only grant compensation for closures before 2030 is also evidently false.²¹⁰

210 It is already incorrect that Germany portrays the year 2030 as the cut-off point for compensation for hard coal-fired power plants. That is not true. The cut-off point for hard coal-fired power plants is already in 2026/2027 which is the last year for which compensation is granted to hard-coal fired power plants under the shutdown tenders.

211 What is also wrong, is that lignite-fired power plants shutdown in 2030 or later would not receive compensation. Annex 4 to the Coal Ban Law contains the formula to determine the lost profits from lignite-based electricity generation for LEAG, one of the two major operators of lignite-fired power plants (reproduced above). According to Annex 4, this formula is to be used for up to five years from the shutdown date in

²⁰⁸ [Exhibit Wellershoff WS: Witness Statement of Mr. Jan-Kristof Wellershoff](#), para 40.

²⁰⁹ Memorial, para. 253.

²¹⁰ Counter Memorial, para. 211; [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 38.

Annex 2 to the Coal Ban Law, latest for the year 2042.²¹¹ This provision only makes sense, if lignite-fired power plants are also compensated for shutdowns after 2030.

4. Respondent favoured lignite for purely political reasons

- 212 In the Memorial, Claimant explained that the Shutdown Path favours lignite-fired power plants.²¹²
- 213 Respondent does not dispute that. It contends, however, that lignite plants and hard-coal plants would not be comparable. It points to the close connection between lignite mining and lignite power plants, that lignite mining pits and lignite plants have the same operator, and that the political dimension of the lignite phase-out was much greater than of the hard-coal phase-out.
- 214 Yet Respondent's argument that "*lignite and hard-coal are two different industries*"²¹³ is a *post-hoc* rationalisation for blatant discrimination. This artificial distinction - and the five arguments submitted in support of it - collapse under scrutiny:
- 215 With its first argument,²¹⁴ Respondent tries to distract the Tribunal by focussing on upstream fuel market organisation. It considers both types of power plants to be different as hard coal is organised on the world market, while lignite is mined near the plants in open pit mining.
- 216 However, it offers no legal standard showing that upstream market structure, rather than the regulated function (power generation), governs "like circumstances". Both lignite and hard-coal plants serve identical functions in electricity generation, compete in the same wholesale power markets, and were subject to the same

²¹¹ [Exhibit C-0154-DE/Exhibit C-0154-EN: Law amending the Energy Industry Law and amending the Coal Ban Law, Federal Law Gazette 2025 I No. 283 of 27 November 2025 \(excerpts\).](#)

²¹² Memorial, paras 184-191.

²¹³ Counter-Memorial, para. 448.

²¹⁴ Counter-Memorial, para. 214.

- emissions trading system. They are also both phased out under the same Coal Ban Law.
- 217 A document produced by Germany proves that the comparable situation of hard-coal and lignite plants was one of the main objections voiced in the legislative procedure. An internal memorandum of the Federal Chancellery of February 2020 shows that four State ministers complained in writing about the discrimination of hard-coal fired power plants as a “stopgap” for lignite power plants, and about the lack of compensation for their closure.²¹⁵ The Chancellery internally explained this “stopgap function” of hard coal because environmentalist would have demanded a gradual reduction path.²¹⁶ This explanation is the opposite of reason and reflects Germany’s approach at the time. As shown in the Memorial,²¹⁷ the “stopgap function” of New Plants, which need to shut down before the more polluting lignite power plants, leads to additional emissions and is thus contrary to any request of environmentalists.
- 218 Respondent’s second argument is that “the mining perspective” would justify differential treatment.²¹⁸ It is based on the assumption that because lignite phase-out entails mine closures, the State could deny compensation to hard-coal power plant operators. However, that does not follow. The convergence of power generation phase out with mining closure does not negate comparability at the level of the regulated activity, i.e. electricity generation. The Coal Ban Law regulates both sets of power plant operators. The fact that lignite measures affect mines as well, speaks to the scope of measures, not to whether generators performing the same function are in like circumstances for compensation.
- 219 Respondent’s submissions rather confirm that political factors played a decisive role in deciding to treat lignite coal different from hard coal. Not only were both chairs of

²¹⁵ [Exhibit C-0156-DE/Exhibit C-0156-EN: Federal Chancellery, Internal Memorandum on the Letter of four Federal States' Energy Ministers, 21 February 2020.](#)

²¹⁶ [Exhibit C-0156-DE/Exhibit C-0156-EN: Federal Chancellery, Internal Memorandum on the Letter of four Federal States' Energy Ministers, 21 February 2020.](#)

²¹⁷ Memorial, paras 192-198.

²¹⁸ Counter-Memorial, para. 215.

the Commission former Minister-Presidents of Federal States with lignite mining areas²¹⁹ and the Commission had more representatives from the mining regions than from the power producers. Respondent also explains in detail the political relevance of lignite and that it was a main focus of its work. But social policy considerations do not alter the fact that both lignite and hard coal power plant operators are engaged in the same regulated activity - producing electricity from burning coal - and were compelled to exit. Structural support for mining regions may be a legitimate policy goal. It does not justify depriving efficient hard coal power plant operators of compensation for the same State mandated loss of generating rights and value.

220 Respondent's third argument is that the hard-coal mining industry for years obtained subsidies, while the lignite industry obtained subsidies only in the context of the Coal Ban Law.²²⁰

221 This argument is false. Lignite mining has not yet been phased-out different to the hard-coal mining. Contrary to Respondent's contentions, the lignite mining industry has received state aid long before the Coal Ban Law in 2020. After reunification, the Federal Government and the Eastern Federal States set up a rolling series of administrative agreements (*Verwaltungsabkommen* - VA) to clean up former German Democratic Republic lignite mines, implemented by Lausitz and Centre German Mining and Administration Company ("*Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH*").²²¹ Public funding started in 1991/1992 and had totalled about EUR 12 billion by December 2023. The current administrative agreement (so called administrative agreement VII - 2023–2027) adds EUR 1.44 billion (75% Federal / 25% Länder).²²² Additionally, since 2015/2016: already before the Coal Exit and the compensation agreements with

²¹⁹ Counter-Memorial, para. 183.

²²⁰ Counter-Memorial, para. 219.

²²¹ [Exhibit C-0157-EN Exhibit C-0157-EN: German Environment Agency, *Data and Facts on Lignite and Hard Coal: Status and Perspectives, 2021*](#), para. 57.

²²² [Exhibit C-0158-DE/Exhibit C-0158-EN: Federal Ministry of Finance, *Announcement on lignite, 8 December 2022*](#), section 2.

- RWE and LEAG, Germany created in 2015/2016 the lignite “security reserve” (*Sicherheitsbereitschaft*).²²³ Eight lignite units (~2.7 GW) were paid to go into stand-by and then be shut after four years. The payment scheme totalling about EUR 1.6 billion was approved by the European Commission in May 2016 under state aid rules.²²⁴
- 222 Respondent also tries to compare what is not comparable. It provides no evidence linking past hard-coal mining subsidies to Claimant's power plant or to the Coal Ban Law's specific impacts on production value. Such evidence also cannot exist. While lignite coal mines and lignite power plants were typically operated by the same or at least related companies, hard-coal mining and hard-coal power plants were operated by different companies. Subsidies which the hard-coal mining operators were granted (to make their product competitive) did not profit the hard-coal plant operators which, as Respondent rightly points out, could obtain their coal also on the world market. In particular, the historic subsidisation of mining does not compensate Claimant's distinct investment in a modern, efficient hard coal power plant nor the contemporaneous taking of generating value through the Coal Ban Law.
- 223 Respondent's fourth argument²²⁵ is not very convincing to explain a lack of compensation provision. Respondent considers that a negotiated shutdown model would not have been feasible or possible for the hard-coal power plant sector.
- 224 However, Respondent has not submitted any evidence that it even would have tried to do so. This argument is as unconvincing as the argument that they would not know how to calculate compensation. As shown above, Germany pretty well know how to calculate compensation for lignite mining power plants. It should have been able to come up with a formula for hard-coal plants.

²²³ [Exhibit C-0159-DE/Exhibit C-0159-EN: Federal Network Agency, Lignite decommissioning \(machine translation of website; last assessed 14 January 2026\)](#).

²²⁴ [Exhibit C-0160: European Commission, State Aid SA.42536 Germany Closure of German lignite coal plant, C\(2016\) 3124, 27 May 2016](#), para 15.

²²⁵ Counter-Memorial, para. 220.

- 225 Respondent's fifth argument is that the practicalities and risks of a lignite phase-out would require a negotiated, compensated exit.²²⁶ Lignite's high fixed mining costs and mine-plant interdependence would risk a "domino effect" of sudden closures if driven solely by ETS prices; therefore, a negotiated, compensated phase-out for lignite was the "only viable option,".
- 226 That does not explain why lignite plants are compensated, but hard-coal plants are not. Managing lignite specific operational risks does not negate the comparability of generators for compensation purposes when the State compels exit in both sectors. Risk mitigation for lignite could be addressed while providing compensation to hard coal generators for their compelled exit.
- 227 However, Respondent chose a tender regime for hard coal that, as the Memorial explains, leaves efficient hard coal plants like Lünen uncompensated while imposing a steeper shutdown path than lignite – causing hard coal plants to "suffer twice."²²⁷ The different risk profiles may justify process differences, but they do not justify denying compensation to similarly regulated generators

5. Respondent's self-assessment of the Coal Ban Law's alleged constitutionality is irrelevant

- 228 Respondent contends the Coal Ban Law was (i) subject to a rigorous constitutional assessment and (ii) would be proportionate under German constitutional law.
- 229 For the first argument it relies on a legal opinion it itself commissioned after the law had entered into force. For the second argument, it relies by analogy on the Federal Constitutional Court's 24 March 2021 climate judgment, arguing that the judgment's recognition of intergenerational rights and the necessity of climate action "confirms" that hard-coal "Coal-Firing Stops" are proportionate.
- 230 Both arguments are misguided.

²²⁶ Counter-Memorial, para. 221.

²²⁷ Memorial, para. 225.

231 Respondent's assertion of a 'thorough' constitutional assessment²²⁸ is nothing but smoke and mirrors. The Pieroth/Hartmann Report, which is not even submitted as an expert report, is evidently a *post-hoc* justification of a finished work product.²²⁹ It dates as of 21 December 2020, while the Coal Ban Law was enacted on 8 August 2020. They write that their opinion

*"is based on short expert opinions that we provided to the Economic Affairs Ministry before the draft legislation was presented to the Bundestag and during the legislative process, always reserving the right to conduct a final analysis. These short expert opinions are dated 30 November 2018, 26 July 2019, 12 November 2019, and 2 March 2020."*²³⁰

232 Germany did not submit those short expert opinions. However, that would also have been unnecessary, irrespective of their content, as both the provisional reports and the final report are immaterial to the Tribunal's mandate under the ECT. An alleged domestic constitutionality does not determine compliance with the ECT. This should be undisputed. In addition, Respondent relies on an expert opinion which it itself had commissioned after the Coal Ban Law had already been passed. It has not offered this report as expert evidence, and could not do so because both authors clearly have pre-determined views. Germany also erred in the past, for example with the constitutionality of the Nuclear Phase-Out, and had to be told so by its own Constitutional Court.

233 The 24 March 2021 climate judgment cannot be repurposed to excuse the Coal Ban Law's discriminatory and uncompensated deprivation of Claimant's generation value. That judgment concerns the State's obligations to take climate action; it does not address how compensation must be handled when specific investments are compelled to exit. Respondent cites it to assert general proportionality in the abstract, but offers no analysis applying German constitutional principles to the distinct treatment afforded to hard-coal generators versus lignite under the Coal

²²⁸ Counter-Memorial, para. 224.

²²⁹ [Exhibit R-0006-GER/Exhibit R-0006-ENG: Bodo Pieroth and Bernd Hartmann, Constitutional Matters of the Coal Phase-Out Law, 21 December 2020.](#)

²³⁰ [Exhibit R-0006-GER/Exhibit R-0006-ENG: Bodo Pieroth and Bernd Hartmann, Constitutional Matters of the Coal Phase-Out Law, 21 December 2020](#), p. 12.

Ban Law – an asymmetry that Respondent elsewhere defends on social/structural grounds rather than on strict proportionality of measures across like regulated.

234 Both the Hartmann/Pieroth report and the Court judgement may serve as political justification in domestic German matters, but have no relevance for this Tribunal.

6. The ECHR judgement is irrelevant

235 The ECHR's dismissal of a human-rights petition by STEAG GmbH neither binds this Tribunal nor 'confirms' the Coal Ban Law's compatibility with the ECT. Strasbourg's holdings on 'possessions' and social-policy justification under the Convention has no *res judicata* effect: it addresses different rights, different standards, and a different applicant. They do not answer whether Germany's Coal Ban Law unlawfully and discriminatorily impaired Claimant's ECT-protected investment or effected an uncompensated expropriation. The Tribunal should therefore give no determinative weight to the ECHR's findings.

7. Summary

236 The Coal Ban Law is no gleaming shield behind which Respondent can hide. It rather is the incriminating evidence. Respondent failed to take into account the effect of the Coal Ban Law on Claimant and its investment.²³¹ Although the legislator enjoys a certain margin of appreciation in pursuing public policy objectives, this discretion is neither absolute nor unreviewable.²³² It presupposes a reasoned assessment of available alternatives and a proportionate balance between public interests and the rights of affected parties. In the present case, the legislator's rejection of less restrictive and equally effective alternatives was not based on evidence, nor was it proportionate to the stated objective of the policy or taking the rights of affected parties into reasonable consideration.

²³¹ Memorial, paras 492-493 and Memorial, Section C.VI .

²³² See more under **Section D.VI** below.

VI. Claimant's conduct regarding the Lünen plant was prudent and reasonable

- 237 In its Counter-Memorial, Respondent contends that Claimant, together with its 28 municipal utility partners, acted unreasonably after the Coal Ban Law was enacted. It alleges that *"Claimant's losses, if any, were caused by Claimant's conduct after the 2020 Act"*.²³³
- 238 It raises three specific points: firstly, that "(t)he Lünen Plant could have but did not participate in the auctions"; secondly, that "Claimant could have but did not defend its legal position towards the banks", and lastly that "Claimant can but does not convert the Lünen Plant into a gas power plant".²³⁴
- 239 All three contentions are beside the point. Claimant is not the controlling shareholder of Lünen: it cannot instruct TKL that the Lünen plant should participate in the tenders, or how what TKL should do in relation to the banks, or that the Lünen plant should be converted into a gas-fired power plant.
- 240 In addition, Respondent's contentions are incorrect. As Claimant already explained in its Memorial, participating in the shutdown tenders would have increased its own damage by EUR [REDACTED].²³⁵ That the Moorburg and Westfalen Plants took part in the tender has no relevance for the Lünen plant – both were uniquely distinct cases (1) As regards the legal position towards the bank, there was not that much to defend for Claimant and its partners. Termination of the loans by the banks, whether ultimately considered lawful or not, would still have created the risk of a [REDACTED] with much larger damages (2). Lastly, also a gas conversion of the Lünen Plant could not have been reasonably expected. Respondent overlooks the significant risks and uncertainties that come with such a conversion. It omits to mention that it is well aware of these obstacles, but does not intend to include gas conversions of New Plants in its energy strategy (3).

²³³ See Counter-Memorial, paras 241 *et seqq.*

²³⁴ Counter-Memorial, para. 241.

²³⁵ Memorial, para. 230.

1. Not participating in the shutdown tenders was commercially reasonable

241 In its Memorial,²³⁶ Claimant explained why it would have been unreasonable for the Lünen plant to participate in the shutdown tenders. While it could have obtained a maximum compensation of EUR [REDACTED] for voluntarily shutting down 10 years before the shutdown under the Coal Ban Law, this would have increased Claimant's damages by EUR [REDACTED].²³⁷

242 Respondent does not dispute any of this. It does not dispute that any sums obtained in the tender would not compensate Claimant for the lost future income until the otherwise final shutdown in 2031, let alone for the lost income until the end of the planned 40-year lifetime. What Respondent does is to frame a tender participation as the "*initial step*"²³⁸ a prudent operator must take, and refer to two other coal-fired power plants, Westfalen and Moorburg (A+B), which participated successfully in the shutdown tender²³⁹.

243 That is erroneous. Comparing the Lünen Plant, owned by multiple partners, with two power plants owned by large utilities which have a whole portfolio of power plants, is misguided.

(a) Participating in the tenders is not a damage mitigation tool

244 Contrary to what Respondent suggests, participating in the tender is not a damage mitigation tool.

245 The legal and commercial consequence of a successful bid was not continued operation with reduced harm, but a binding pathway to market exit: operators lose the ability to sell electricity on the market and transition into a reserve readiness regime before a final and permanent cessation. In other words, tender participation is **not a mitigation tool** in the ordinary sense; it is a decision to accelerate and

²³⁶ Memorial, para. 230.

²³⁷ Memorial, paras 227-233.

²³⁸ Counter-Memorial, para. 243.

²³⁹ Counter-Memorial, paras 244-245.

- formalise closure in exchange for compensation. The operator obtains certainty in exchange for early closure.
- 246 A reasonable operator is not obliged to “mitigate” by choosing an accelerated shutdown unless the compensation is predictably adequate relative to the operator’s own asset economics, financing structure, contractual constraints, and strategic plans.
- 247 For an asset like Lünen, owned and operated by a consortium of nearly 30 partners, bidding into a shutdown tender is not a trivial “mitigation” act. It can collide with:
- project financing / covenant structures,
 - long-term supply/hedge or offtake positions,
 - shareholder arrangements in a municipal-utility consortium,
 - decommissioning and remediation cost profiles,
 - and the risk that the offered compensation is below the asset’s internally assessed going-concern value.
- 248 Claimant has shown in the Memorial that at that time participating in the tender would have very likely increased, not decreased damages.²⁴⁰ In contrast, Germany has not shown that (i) Lünen was free of the constraints shown above, (ii) a bid would likely have been accepted at an adequate level, and (iii) the net effect would have reduced loss without introducing disproportionate risks.
- 249 As Respondent in particular knows quite well, the construction costs for the Lünen plant were financed to a large extent via bank loans, [REDACTED]. Respondent, which writes a lot about the financing in its Counter-Memorial, has not explained how an early shutdown should have been compatible with those financing agreements. As explained, the shutdown would have increased losses for them. Claimant was obliged to exit the Lünen plant earlier than 2035 only and insofar as this would not incur or increase losses.²⁴¹

²⁴⁰ Memorial, paras 347-348; 619-623.

²⁴¹ See above, Section B.III.1.

(b) Lünen is not comparable with Moorburg and Westfalen

- 250 Respondent points the Tribunal to two other coal-fired power plants, Moorburg and Westfalen, both of which had participated successfully in the tender. Both were owned and operated by different companies, Moorburg by Vattenfall, and Westfalen by RWE. Respondent complains that Claimant did not explain why Lünen did not participate but Westfalen and Moorburg could.²⁴² That shows that Respondent apparently did not read paragraphs 273 and 274 of the Memorial.
- 251 Respondent bears the burden on proving a possible mitigation and cannot shift it by pointing to other companies' strategic choices. Its submission is effectively: "others exited; therefore Claimant should have exited too." That is not the legal test. The burden is on Germany to prove or at least substantiate (a) the specific mitigation step was reasonably possible for the Lünen plant (and not only to Claimant as one of 29 shareholders), and (b) it would have been a reasonable business decision to do so.
- 252 Pointing to RWE and Vattenfall does not discharge that burden.
- 253 Claimant is not privy to the business considerations of Vattenfall and RWE. It cannot know which business considerations led those two companies to decide to participate in the tenders. All it does know is publicly available information. This information points at substantial differences:
- 254 **Moorburg** was a politically highly disputed dual-block coal-fired power plant. Vattenfall even started an ICSID arbitration against Germany when permits were delayed and burdened with ancillary conditions.²⁴³ The plant's economics were burdened with problems during constructions (faulty steel) and further problems surrounding its water use permit. Ultimately, the courts prohibited the use of cooling

²⁴² See Counter-Memorial, para. 245.

²⁴³ See [Exhibit CLA-0149: Vattenfall AB et al v. Germany \(I\), ICSID Case No. ARB/09/6, Award, 11 March 2011](#). That case, in which the parties were represented by the same counsels as today, was ultimately withdrawn when the parties settled before the administrative courts.

water from the river, requiring it to use a hybrid cooling tower which further reduced the efficiency (and economics) of the power plant.²⁴⁴

- 255 In its press release after the shutdown bid was awarded, Vattenfall representatives emphasised that Vattenfall for strategic reasons had anyway planned to shut down the plant:

"We welcome this decision. It provides clarity and will enable us to phase out Moorburg earlier than previously planned. Although the plant, which started operations in 2015, is one of the most modern in Germany, an early closure is in line both with the German state's plan to reduce emissions from coal-fired electricity production, and Vattenfall's strategy to make fossil-free living possible within one generation," says Anna Borg, President and CEO, Vattenfall.

*"Against the background of the German coal phase-out law, we have been looking at several alternatives for Moorburg, including change of fuel and divestment of the plant. Now we will progress with the planning for the early closure of the plant, which includes supporting our employees to find new jobs or in a responsible way agree on other options," says Tuomo Hatakka, Vattenfall's Country Representative in Germany.*²⁴⁵

- 256 **Westfalen** was also a dual-block coal-fired power plant. Problems during construction (in particular with faulty steel) led to only one of the two blocks being permanently commissioned, with estimated costs of nearly EUR 3 billion for both blocks²⁴⁶. RWE submitted bids for the one operational Westfalen block and another coal-fired power plant and emphasised that the shutdown was in line with RWE's strategic goal to become carbon-neutral by 2040.²⁴⁷

²⁴⁴ [Exhibit CLA-0150: European Court of Justice, *European Commission v. Federal Republic of Germany*, Judgement C-142/16, ECLI:EU:C:2017:301, 26 April 2017](#), see para. 73.

²⁴⁵ [Exhibit C-0161: Press Release of Vattenfall, *Vattenfall to be compensated in German coal auction for Moorburg power plant*, 1 December 2020](#).

²⁴⁶ [Exhibit C-0162-DE/Exhibit C-0162-EN: Neue Westfälische, *Defects at Hamm power plant RWE faced with billions in losses*, 22 September 2014](#), p. 2.

²⁴⁷ [Exhibit C-0163: Press Release of RWE, *The end of an era: RWE hard-coal power stations in Hamm and Ibbenbüren to be completely decommissioned*, 8 July 2021](#).

257 There is no evidence that either Moorburg or Westfalen were financed by project financing. Lünen, in contrast, is a plant owned by 29 partners and heavily financed by bank loans. A premature shutdown would have required consensus of all partners, and of the banks. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(c) Summary

258 Respondent's mitigation objection is not thought through. Not only is it undisputed that an earlier shutdown following a successful tender (if any) would have **increased** damages. Respondent also tried to avoid substantiation of its objection by merely pointing to RWE and Vattenfall – ignoring the publicly available information on the strategic goals of those companies.

2. The 2023 amendment of the Loan Agreement was commercially sound

259 Claimant explained in its Memorial that the Coal Ban Law destroyed the value of Claimant's investment.²⁴⁸ Part of the damage is its share of EUR [REDACTED] of the then outstanding debt which will need to be paid back.

260 In the Counter-Memorial, Respondent contends that Claimant only became liable for repayment of debts due to the 2023 amendment of the Loan Agreements. With this amendment Claimant would have "*conceded voluntarily and unnecessarily all defenses that it would have had towards the banks*". Respondent also alleges that "*(t)he contracts before 2023 included significant uncertainty*"²⁴⁹ and that Claimant did not negotiate prudently.

261 This is unwarranted. It is already based on a wrong premise. Claimant, which is one of 29 shareholders, did not negotiate separately with the banks. The negotiations

²⁴⁸ Memorial, Section C.VII.

²⁴⁹ Counter-Memorial, Section E.2.b.

were led by TKL, Lünen's operating company, which is the lender and primary debtor, centrally for all shareholders.²⁵⁰ The shareholders merely needed to agree to the outcome of the negotiations. This is not only a formality. Respondent does not even try to explain why Claimant – and with it all the other partners – should have agreed to an allegedly detrimental business decision. That would defy common sense.

262 Respondent's arguments are based on limited data and a set of unproven assumptions. During document production, Claimant produced 179 documents relating to the bank negotiations.²⁵¹ It expects Respondent to withdraw its objections, as Respondent has done with its objection relating to the investment (see above, Section B.I.)

263 In the following, Claimant will nevertheless give the Tribunal a brief overview. The amendment itself was a direct consequence of the Coal Ban Law.²⁵² The banks were legitimately concerned that their loan would not be repaid in full, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] In contrast to what Respondent suggests, the agreement ultimately reached did not only benefit the banks, but also the shareholders by reducing existing and future risk. The shareholder committee recommended them to accept the amendment, and 27 out of 29 shareholders complied with that recommendation (c.).

²⁵⁰ [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 3.

²⁵¹ [Exhibit C-0164: Claimant's Document Production Requests 24-26](#).

²⁵² [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), paras 12, 19.

(a) The Coal Ban Law caused the Banks to put pressure on the shareholders to secure repayment of their loans

264 As the Tribunal will recall, the financing of the power plant was heavily leveraged with over [REDACTED] external financing. [REDACTED]

265 When the government in January 2020 introduced a draft bill of the Coal Ban Law into parliament, the banks understandably became concerned about the repayment of their loans.²⁵⁵ A shutdown before repayment seemed very likely.

266 In early 2020, the financing banks reached out to TKL in order to inquire about an update on the consequences of the upcoming Coal Ban Law.²⁵⁶ [REDACTED]

267 TKL and its shareholders then created a working group to deal with the risks arising out of the Coal Ban Law for the financing agreements and gave it the codename "Projekt Apollo".

²⁵³ Memorial, paras. 128 and 129.

²⁵⁴ [REDACTED]

²⁵⁵ [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 6.

²⁵⁶ [REDACTED]

²⁵⁷ [REDACTED].

268 From 2020 until the amendment of the Loan Agreement in 2023, there were ongoing discussions between TKL and the financing banks, in particular regarding the granting of two waivers under the Loan Agreement, [REDACTED]

[REDACTED]

[REDACTED] (“**Waivers**”).²⁶⁰ Waivers of contractual provisions had been regularly granted in the past, but any deviation from the contractual requirements without waiver would constitute a ground for termination.

269 On 12 February 2021, the banking consortium (presented by [REDACTED]) informed TKL that the waiver requests would be unacceptable. Without waivers, TKL would be in breach of the loan agreement. [REDACTED] further stated that

„The current situation is exacerbated by the uncertainties surrounding the Coal Ban Law, which has now come into force. From the lenders' point of view, a plan must be developed immediately to ensure the full repayment of the loan, especially in light of the possible consequences of this law. We refer to our conference calls on this subject, most recently on 21 January 2021.”²⁶¹

270 In a report to the shareholders committee, TKL shared that the banks had refused the waiver requests and had set up a steering committee to discuss various topics. The steering committee was composed of representatives of the banks and of the shareholders.²⁶² In one of the first sessions, the parties discussed the waiver requests and the coal ban.

271 The discussions continued in 2022. They came to a head in January 2023, when the financing banks informed TKL that the participating banks would partially

258 [REDACTED]

259 [REDACTED]

260 [Exhibit C-0170-DE/Exhibit C-0170-EN: TKL, Shareholders' Committee, Report from the Apollo Project, 26 February 2021 \(excerpt redacted\)](#), slide 19.

261 [Exhibit C-0171-DE/Exhibit C-0171-EN: IKB Deutsche Industriebank, Letter to TKL \(Reservation of Rights\), 12 February 2021](#), p. 2.

262 [Exhibit C-0170-DE/Exhibit C-0170-EN: TKL, Shareholders' Committee, Report from the Apollo Project, 26 February 2021 \(excerpt redacted\)](#), slide 23.

terminate the Loan Agreement by end of January 2023 if no amicable solution would be found.²⁶³

272 While indeed creating a serious risk for termination of the Loan Agreement, it became obvious that the [REDACTED] waiver issue was rather used as a pretext by the financing banks while the actual risk for the banks was created by the Coal Ban Law.²⁶⁴ The financing banks feared that in the event of the Lünen plant being shut down due to a decommissioning order under the Coal Ban Law, the loan could not yet be repaid in full and the banks could default on the remaining loans.²⁶⁵ This was reaffirmed in February 2023, when TKL informed its shareholders about a meeting with the banks on 25 January 2023 and explained that during the conversation, it became clear that insufficient insurance coverage was only a pretext and that the real reason was the possible early shutdown under the Coal Ban Law.²⁶⁶

²⁶³ [Exhibit C-0172-DE/Exhibit C-0172-EN: TKL, Information letter to shareholders on potential partial termination of the loan agreement, 10 February 2023 \(redacted\)](#), p. 1; [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 11.

²⁶⁴ See [Exhibit C-0173-DE/Exhibit C-0173-EN: TKL, Letter to the Steering Committee TKL-Bank Consortium, 26 January 2023](#); [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 12.

²⁶⁵ [Exhibit C-0173-DE/Exhibit C-0173-EN: TKL, Letter to the Steering Committee TKL-Bank Consortium, 26 January 2023](#) p. 2.

²⁶⁶ [Exhibit C-0172-DE/Exhibit C-0172-EN: TKL, Information letter to shareholders on potential partial termination of the loan agreement, 10 February 2023 \(redacted\)](#), p. 1; see also [Exhibit C-0174-DE/Exhibit C-0174-EN: TKL, Information event on bank negotiations, 22 February 2023](#), slide 2: „However, it became apparent that the real problem for the banks is not [REDACTED], but the impending coal ban before the end of the loan term -> According to the Coal Ban Law, the potential shutdown date is 1 April 2032 vs. the end of the loan term on [REDACTED].“; see also [Exhibit C-0175-EN: TKL, Extraordinary Shareholders' Meeting, 16 May 2023 \(redacted\)](#), slide 2; [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), paras 13-14.

(b) TKL and its shareholders were aware of the legal risks for the banks and themselves

273 Respondent emphasises that the loan agreements – before the amendment – included significant uncertainty. Respondent now *post hoc* argues that AET under the loan agreement would not be liable for the debts of TKL and that its thus all Claimant's fault.

274 That is erroneous and based on a misunderstanding. Respondent tries to put itself *post hoc* into the shoes of TKL/AET, but confuses the existence of abstract legal risks with the business consequences if those risks realise. It is the latter which companies have to take into account when exercising their business judgement before making a decision.

275 TKL and its shareholders were early on aware that the legal situation imposed risks for both the banks and the shareholders. In March 2020, TKL instructed an external law firm ([REDACTED]) to assess the effects of the Coal Ban Law on the financing agreements of TKL.²⁶⁷ In their assessment, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

267 [REDACTED]
[REDACTED] [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 15.

268 [REDACTED]
[REDACTED] [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 7.

269 [REDACTED]
[REDACTED]

276

277

As explained above, the banking consortium had informed TKL in January 2023 that a draft resolution for the termination of the loans existed. In a memorandum of 8 February 2023, the lawyers from █████ considered that █████

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TKL informed its shareholders two days later about the legal risks. █████

279

270

271 See also [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), paras 7, 16-17.

272

273 [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), paras 16-17.

274 Counter-Memorial, para. 257.

([REDACTED]
[REDACTED]
[REDACTED]

(c) The amendment to the loan agreements was a balanced compromise

280 Contrary to Respondent's speculation, Claimant – and the other shareholders – did not simply waive all defences. As Claimant's witness and Managing Director of TKL, Mr Marc Engbert, explains in his witness statement, the amicable settlement reached was a balanced compromise that would make it more difficult for the banks to terminate the Loan Agreement.²⁷⁷

281 After nearly two years of negotiations, TKL on 22 February 2023 invited its shareholders to an online information event. The presentation in detail recounted the chronological development of the discussions since the banks' announcement of a possible termination as well as the advantages and disadvantages of TKL's counter-offer. [REDACTED]
[REDACTED]

282 In the following months, several shareholders meeting took place. In the 83rd extraordinary shareholders meeting of 16 May 2023, TKL

- recounted the problem arising out of the bank's announcement to be ready to terminate the loan agreement,
- explained the suggested solution,
- explained possible alternative scenarios and their consequences, [REDACTED];

275 [REDACTED]
276 [REDACTED]
[REDACTED]
[REDACTED]

277 [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), Section E, in particular paras 20-21.

- gave a legal assessment of the banks arguments;
- concluded that the suggested solution – [REDACTED] – would mitigate damages by approx. EUR [REDACTED].²⁷⁸

283 The shareholders agreed to authorise TKL to enter into negotiations with the banks.²⁷⁹

284 The proposed amendment was ultimately agreed to at the 84th shareholder meeting on 19 September 2023. The presentation for the shareholder

- described the amendments to the loan agreements
- explained the advantages for the shareholders
- and suggest to accept them.²⁸⁰

285 The shareholders, with only one vote against, accepted the proposal.²⁸¹ Ultimately, 27 out of 29 shareholders signed the amendments.

(d) Summary

286 As shown above, the amendment of the loan agreement was not an unnecessary, unwarranted, imprudent and rash decision of Claimant as a single shareholder of TKL. Rather, it was the nearly unanimous decision of TKL's shareholders after more than two years of discussions, detailed legal advice and consideration of the

²⁷⁸ [Exhibit C-0175-DE/Exhibit C-0175-EN: TKL, Extraordinary Shareholders' Meeting, 16 May 2023 \(redacted\)](#).

²⁷⁹ [Exhibit C-0179-DE/Exhibit C-0179-EN: TKL, Protocol of the extraordinary shareholder's meeting of TKL on 16 May 2023, 25 May 2023 \(redacted\)](#), p. 12.

²⁸⁰ [Exhibit C-0180-DE/Exhibit C-0180-EN: TKL, Protocol of the 84th shareholders meeting of TKL, 2 October 2023 \(excerpt redacted\)](#), pp. 5-8.; [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 21.

²⁸¹ [Exhibit C-0180-DE/Exhibit C-0180-EN: TKL, Protocol of the 84th shareholders meeting of TKL, 2 October 2023 \(excerpt redacted\)](#), p. 6; [Exhibit CWS-0001-DE/Exhibit CWS-0001-EN: Witness statement of Mr Marc Engbert](#), para. 21.

business risks arising out of long and convoluted lawsuits. The amendment did not only profit the banks but also the shareholders as it removed existing termination grounds for the future. It thus was a prudent and commercial decision taken after serious negotiations.

3. Investing into a conversion could not have been reasonably expected

287 In its Memorial, without prejudice to the burden of proof, Claimant and its experts explained that a conversion of the Lünen plant to a biomass- or gas-fired power plant following its forced shutdown in 2031 would not be an option a reasonable investor would pursue. Among others, they showed that even without accounting for various serious risks (regulatory, permitting, and specific market risks), a gas conversion would at best be marginally profitable and a biomass conversion not profitable at all.²⁸²

288 Respondent's response in its Counter-Memorial does not dispute Claimant's finding with regard to a **biomass conversion**. This issue is thus undisputed.

289 As regards the **gas conversion**, Respondent's response is – once again – overly simplistic. It focuses on the marginally profitable conversion without addressing any of the risks identified by Claimant. Instead, it claims – based on unsupported and outdated assumptions of its experts – that the conversion would be even more profitable. In addition, it proposes two further conversion options, which – according to its own experts – would require a total investment of up to almost EUR 1 billion without presenting any evidence on the profitability of such enormous investments. Finally, against its better knowledge, it portrays two letters sent by merely one of Claimant's co-shareholders as showing that conversion would be a viable option for the Lünen plant.

290 None of these contentions has any merit:

²⁸² Memorial, Section F.IV.2; [Exhibit CER-0001: First Secretariat Report](#), paras 6.21 *et seq.*; [Exhibit CER-0002: First Frontier Report](#), paras 200 *et seq.*

- First, contrary to Respondent's suggestions, a refined, more detailed economic assessment of the conversion which also takes into account the risks identified by Claimant in its Memorial show that a conversion would be clearly unprofitable.
- Second, Claimant will show that Respondent was not only fully aware of the unprofitability of a gas conversion but ignored or even rejected attempts to resolve this problem.

291 In detail:

(a) A refined assessment confirms the unviability of a gas conversion

(aa) Respondent's proposed refinements to Frontier's investment cost and efficiency estimates must be rejected

292 In their First report, Claimant's expert Frontier modelled the operation of the Lünen plants following a conversion to gas by replacing the coal burners with gas burners, assuming investment costs for this conversion of EUR [REDACTED]²⁸³ and an efficiency of the converted plant of [REDACTED]%²⁸⁴.

293 Respondent's expert Prognos contends that conversion costs would be lower (EUR [REDACTED])²⁸⁵ and the efficiency of the converted plant higher ([REDACTED]%)²⁸⁶. This is misguided.

294 First, Prognos' conversion cost estimate remains wholly unsubstantiated and is too low. They try to create the impression of greater accuracy of their cost estimate by simply presenting a list with certain cost items. However, investment costs are subject to considerable uncertainty. These uncertainties include a broad array of aspects, such as technical, regulatory and permitting assumptions, which cannot

²⁸³ [Exhibit CER-0002: First Frontier Report](#), para. 216.

²⁸⁴ [Exhibit CER-0002: First Frontier Report](#), para. 216; Exhibit FE-0040.

²⁸⁵ [Exhibit RER: Prognos expert report](#), paras 64-65.

²⁸⁶ [Exhibit RER: Prognos expert report](#), paras 57-58.

- be forecast with precision beforehand.²⁸⁷ TKL's estimate explicitly reflects this reality and should be understood as conservative.²⁸⁸ Prognos' listing of costs does not reduce the significant uncertainties with such an investment.
- 295 Moreover, real life examples of burner conversions show that Frontier's cost estimate is actually low since conversion of similarly scaled plants in the US and France had investment costs of EUR [REDACTED] when scaled to Lünen's size.²⁸⁹ This clearly demonstrates that the true cost of a burner conversion lies within a wide and uncertain range and that Prognos's assumptions are overly optimistic and inconsistent with real world experience.
- 296 Second, Prognos' efficiency assumption is unreliable and too high. Its [REDACTED]% net efficiency value is simply based on a 1993 textbook and it is not even clear whether this book addresses the conversion of a coal plant or the construction of a new purpose-built gas plant.²⁹⁰ This makes Prognos' estimate wholly unreliable.
- 297 Moreover, relevant international benchmarks show that boiler conversions frequently reduce, rather than increase, the overall efficiency. According to these examples a burner conversion typically results in a "5% heat-rate penalty". Because heat rate is inversely related to efficiency, this implies a decrease in efficiency, not an increase. Applying this penalty to Prognos's [REDACTED]% yields roughly [REDACTED]%, below Frontier's [REDACTED]% assumption.²⁹¹ This confirms that Prognos's figure is an optimistic upper bound, not a credible central estimate.
- 298 As the net efficiency of a converted Lünen plant cannot be known with confidence before full engineering design, applying optimist values is inappropriate. Outcomes depend on plant-specific integration choices, equipment selections, and operational

²⁸⁷ [Exhibit CER-0004: Second Frontier Report](#), section 7.3.2.

²⁸⁸ [Exhibit CER-0004: Second Frontier Report](#), para. 366.

²⁸⁹ [Exhibit CER-0004: Second Frontier Report](#), para. 349.

²⁹⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 370.

²⁹¹ [Exhibit CER-0004: Second Frontier Report](#), para. 371.

constraints which is why any precise figure of efficiency cannot be determined with confidence.²⁹²

299 Hence, Prognos' assumptions on the investment costs and efficiency are overly optimistic and thus not reliable. Conversely, Frontier's values, which are based on plant-specific estimates, constitute reliable and conservative estimates.

(bb) A correct economic assessment, which also incorporates the various risks, confirms the unviability of the conversion

300 In its Counter-Memorial, Respondent places a strong focus on the alleged economic viability of the conversion while ignoring the substantial risks associated with such an investment.

301 In the following, Claimant therefore presents a more detailed description of these risks as well as a refined assessment of the economic viability of the conversion.

302 First, as already set out in its Memorial, what is at issue here, is a potential new investment in a fossil-fuelled power plant, not now but in 2031. Such a conversion faces serious **regulatory risks and uncertainties** negatively affecting the operation and lifetime of such plants.

303 In particular Germany's recent regulatory history shows that long-standing regulatory frameworks can be overturned when climate-policy priorities shift, as was the case with the Coal Ban Law. Given Germany's climate reduction targets, it cannot be ruled out that Germany's climate change policy may evolve, effecting that it would be impossible to complete a conversion or that gas-fired power plants must shut down before their amortisation and without any compensation.²⁹³ Investors relied once on Germany's promises, were burned and would now be shy.

304 Further risks and uncertainties arise from the fact that also Germany's energy strategy for the role of gas-fired power plants has remained unclear. The previous

²⁹² [Exhibit CER-0004: Second Frontier Report](#), para. 369-372.

²⁹³ See also [Exhibit CER-0001: First Secretariat Report](#), para. 6.34.

Government announced in 2023 a new Power Station Strategy, promoting the construction of new, modern, hydrogen-compatible gas-fired power plants to ensure the energy supply in light of the Coal Ban Law. Such incentives for new purpose-built gas-fired power plants could negatively impact the economics of a converted Lünen plant as they would have a higher efficiency than a converted Lünen plant and, based on the merit order, would therefore be dispatched before the Lünen plant. This risk applies irrespective also applies under Prognos' conversion option 2 (topping with a gas turbine) since also this would – according to Prognos – only result in an efficiency of 52.5% while purpose-built gas plants achieve approximately 58% efficiency.²⁹⁴ The planned addition of up to 12 GW of such capacity could thus significantly reduce the operating hours of the converted plant.

305 Second, in addition to these regulatory risks, there are important **permitting risks**. As Claimant's expert Dr. Krahnefeld confirms, contrary to Prognos' assumption,²⁹⁵ the Lünen plant could not continue operations as a converted plant under its existing permits. It needs new or substantially changed permits.

306 This would require repeating essential and burdensome parts of or even the entire permitting procedure.²⁹⁶ Depending on the type of permit needed, this could take up to 18 months and is demanding.²⁹⁷ It requires to obtain complex reports, such as an entire new immission forecast, a new environmental impact assessment (*Umweltverträglichkeitsprüfung*), and a new preliminary assessment under the Habitats directive. In particular the latter safeguards that the requirements of the Federal Nature Conservation Law (*Bundesnaturschutzgesetz*). These requirements were complied with but were the cause of the 16 years of legal proceedings for the first permits. Despite the potentially lower air pollutant impacts of gas-fired power

²⁹⁴ [Exhibit RER: Prognos expert report](#), para. 60.

²⁹⁵ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), Section D.V.2

²⁹⁶ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#) paras 151-152.

²⁹⁷ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 179.

plants this assessment is required since measuring techniques, emission or immission limits, or circumstances may have changed (e.g. other projects might have been approved in the surrounding area).²⁹⁸ Therefore, the fact that these thresholds have been met in the past provides no guarantee that they will also be met now.

307 Moreover, the permitting procedure is subject to public scrutiny, allowing residents and environmental organisations to raise objections or initiate legal proceedings, such as it had already happened when obtaining the coal permits. Such actions can delay the project considerably and may require costly amendments of the conversion.²⁹⁹ Likewise, the permitting process itself can also be administratively demanding and often demands extensive documentation and close coordination with multiple authorities. These factors create substantial uncertainty for both the timeline and overall feasibility of the conversion project. Respondent completely fails to address this.

308 Third, a conversion to gas would expose Claimant to substantially higher **geopolitical and thus market risks** compared to coal. Natural gas supply is far more vulnerable to international disruptions, as Germany depends almost entirely on imports delivered through politically sensitive pipelines or complex LNG supply chains. Unlike coal – which is traded globally, sourced from a broad range of suppliers, and easily rerouted – gas supply has historically been concentrated among a few countries and is tied to infrastructure that can be affected by political tensions, sanctions, or physical sabotage. Russia's war of aggression against Ukraine illustrates this. In fact, it is Respondent that asserts that it is not able to publish its due evaluation report pursuant to Article 54(2) Coal Ban Law, *inter alia*, because of Germany's (former) heavy dependency on Russian gas.³⁰⁰ This

²⁹⁸ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), paras 169-172.

²⁹⁹ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), paras 174-178.

³⁰⁰ [Exhibit C-0118-DE/Exhibit C-0118-EN: Interim Report to Section 54\(2\) of the Coal Ban Law, August 2022](#), pp. 2-3.

structural vulnerability further undermines the reasonableness of converting a coal plant into a gas-fired facility in the current policy and geopolitical environment.

309 Fourth, in their first reports, in light of such risks, Frontier and Secretariat did not consider it necessary to further refine their assessments despite the marginal profitability of the converted plant. In their assessment, no reasonable investor would invest in such a conversion.

310 As Respondent appears to consider only the bare economic profitability of a hypothetically successful conversion relevant, Secretariat and Frontier have now prepared a more detailed economic assessment. This includes an accounting for the aforementioned risks as well as other refinements to the calculation. In particular, while for reasons of simplicity Frontier had initially used flat annual gas prices, in reality, gas prices fluctuate throughout the year. Moreover, the prior assessment had not fully reflected the costs for gas network charges and levies. These updated calculations show that a conversion would clearly **not be economically viable**.³⁰¹

(b) Respondent is fully aware of the non-viability of the conversion and rejected requests to resolve this problem

311 Contrary to what Respondent is indicating, Claimant did not refuse “*to consider any conversion into a gas power plant*”.³⁰² This bold assertion evidently contradicts that TKL and Claimant consistently analysed the chances, risks and obstacles of a gas conversion of the Lünen Plant after the Coal Ban Law was adopted. They even involved the Government. Yet, Respondent refused to provide any help to tackle or even remove these obstacles.

312 In detail:

³⁰¹ [Exhibit CER-0004: Second Frontier Report](#), paras 373-379; [Exhibit CER-0003: Second Secretariat Report](#), paras 6.14-6.19.

³⁰² Counter-Memorial, para. 639.

(aa) TKL directly approached Respondent concerning the conversion of the Lünen plant but was rejected

- 313 Already in 2020, TKL's shareholder discussed the option of a gas conversion of the Lünen Plant. Yet, they concluded that without political support, a conversion is not feasible. The reason for that was as simple as it is significant. In line with Claimant's experts, they found that despite the technical feasibility of a conversion, the main obstacle was that, due to the lower efficiency of a converted plant, it would not be able to compete with purpose-built gas-fired power plants.
- 314 Accordingly, in 2021, TKL focused on lobbying for support from the Federal Government. To this end, TKL either contacted itself the Federal Government or held discussion with it via the Association of Municipal Enterprises (*Verband Kommunalen Unternehmen*). However, the negotiations with the Ministry of Economic Affairs were inconclusive. The Ministry rejected to provide any support.
- 315 After these unsuccessful attempts, TKL decided to co-found a project group to reevaluate conversion options. Members were, *inter alia*, the Ministry of Economic Affairs of the Federal State of North Rhine-Westphalia ("**MEA NRW**"), the University of Duisburg, and Steinmüller Engineering ("**Steinmüller**"). In spring 2023, the group commissioned Steinmüller with a feasibility study with respect to a gas conversion of the Lünen Plant. Frontier's conclusion in its first expert report were based on this study.³⁰³
- 316 As outlined by Frontier, the study indicated that a conversion was in principle possible. Therefore, TKL and Claimant decided to initiate new discussion with the Federal Government to evaluate the option. With support of Mr. Iven³⁰⁴ from MEA NRW, the study was introduced into the governmental discussions regarding the development of its Power Station Strategy. Moreover, Mr. Iven forwarded the study

³⁰³ [Exhibit CER-0002: First Frontier Report](#), para. 213.

³⁰⁴ Head of Division for Energy Technology, Energy Storage, Heating Infrastructure at the time.

to the Federal Ministry for Economic Affairs with an offer for bilateral discussions with TKL.³⁰⁵ The Federal Ministry never replied.

317 Yet, the main obstacles of a gas conversion remained the same as in 2020. Apart from a converted Plant's lack of competitiveness, the uncertain design of Germany's (still) pending Power Station Strategy, and the lack of any support, reflected the main reasons for TKL not to decide on a conversion.³⁰⁶ Therefore, TKL drafted a position paper in May 2023, summarising these main obstacles, which was again unsuccessfully introduced to the governmental discussions about the Power Plant Station Strategy via the MEA NRW.³⁰⁷

318 Also in 2024, TKL continued to evaluate the option of a gas conversion. The assessment particularly focused on the chances and risks of a conversion in an energy only market and in a capacity market. In contrast to an energy only market, in a capacity market power plant operators are not only paid for the electricity they produce, but also for keeping generation capacity available to ensure system reliability.³⁰⁸ Nevertheless, TKL found - in line with other operators³⁰⁹ and contrary to what Respondent indicates - again that the entire assessment was complicated by the fact that there was (and still is) no clear indication of how the Government precisely intended to design its Power Station Strategy and even less a capacity market. Hence, TKL concluded that without any clear statement of the Federal Government regarding its future energy concept, a conversion is not possible.

³⁰⁵ [Exhibit C-0181-DE/Exhibit C-0181-EN: Email from Mr Iven to the Federal Ministry for Economic Affairs, Subject: gas conversion study TKL - final report, 2 June 2023](#)

³⁰⁶ FE-0037.

³⁰⁷ [Exhibit C-0182-DE/Exhibit C-0182-EN: TKL, Argumentation Paper, 22 May 2023.](#)

³⁰⁸ The purpose of a capacity market is to complement an energy-only market by guaranteeing that sufficient reliable capacity remains in place especially during periods when renewable output is low.

³⁰⁹ [Exhibit R-0119-GER/Exhibit R-0119-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of May 2024.](#)

(bb) Respondent misrepresents two letters received from one of Claimant's co-shareholders

319 That is also why Respondent's assertion³¹⁰ that the letters of 22 May 2024 and 26 August 2024³¹¹ would contradict Claimant's argument that a gas conversion could not be reasonably expected, is evidently misconceived. Respondent's citations are completely taken out of its context. Apart from the fact that neither TKL nor Claimant drafted these letters,³¹² both letters merely demonstrate that Respondent was well aware of the obstacles of a gas conversion for New Plants, but rejected any help.

320 Both letters clearly state under which requirements a gas conversion would be economically viable and called upon the Government to provide support. The letter of 22 May 2024 particularly suggested the participation of converted New Plants in a respective capacity market. The letter of 26 August 2024 substantiated this and highlighted the advantages of such a conversion, compared to the by Respondent apparently favoured option of merely converting existing gas-fired power plants into CCGT's. Yet, it also criticised the Government's for being too "*imprecise*" and for excluding "*young hard coal plants from the scope*" of its strategy.

321 Yet, this situation has not changed so far. As described above, the specific design of a future capacity market is still unclear. Claimant's expert Mr. Krahnefeld explains that, precisely because of these uncertainties, he is not currently aware of any new gas and steam power plants that have already been approved and are also being implemented. Even for these projects, the financing conditions are still too uncertain at present due to the legal uncertainties surrounding the capacity market when it comes to generating revenue.³¹³ An internal report from Respondent reveals that

³¹⁰ Counter-Memorial, paras 275-276.

³¹¹ [Exhibit R-0119-GER/Exhibit R-0119-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of May 2024](#); [Exhibit R-0120-GER/Exhibit R-0120-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of August 2024](#).

³¹² Authors are STEAG, Grosskraftwerk Mannheim AG, ONYX Power GmbH and Trianel. Apart from the latter, they do not hold shares in TKL.

³¹³ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), Section D.V.7.

also the Ministry of Economic Affairs is not aware of such a conversion.³¹⁴ Germany's contention that banks would finance the conversion of New Plants into gas-fired power plants³¹⁵ is therefore completely without factual basis and explicitly disputed and unproven.

(cc) Documents provided by Respondent clearly show that Respondent is against gas conversions of plants like Lünen

322 Even more, it becomes evident from Respondent's produced documents in the document production phase that gas conversions of New Plants are not wanted by the Federal Government:

- In 2021, the Ministry of Economic Affairs recommended to no longer convert coal-fired plants into gas-fired power plants by the end of the 2020s but to switch directly to hydrogen power plants.

*"For example, by the end of the 2020s, we should no longer be converting to natural gas, but should switch directly to H2 in order to save costs and avoid the decommissioning phase during the conversion."*³¹⁶

Thus, this clearly records that even if Claimant would convert the Lünen plant into a gas-fired power plant, it is more than unsure how long such plan could operate before it has to be converted again into a hydrogen power plant. Hence, in fact, Respondent wants Claimant to convert into a plant and using a fuel, it already knows that it does no longer want in a few years. This is ridiculous.

³¹⁴ [Exhibit C-0183-DE/Exhibit C-0183-EN: Federal Ministry for Economic Affairs and Technology, Preparation of Meeting on Plant Modernisation, 17 May 2021.](#)

³¹⁵ Counter-Memorial, para. 643.

³¹⁶ [Exhibit C-0184-DE/Exhibit C-0184-EN: Internal E-Mail Correspondence of the Federal Ministry for Economic Affairs, Subject: Current status of coal phase-out and implementation evaluation, 13 December 2021](#), p. 96.

- Also the internal report of the Ministry of the Ministry of Economic Affairs from 2024 regarding the evaluation report pursuant to Article 54(2) Coal Ban Law indicates that the Government does not want conversions of existing hard coal-fired power plants, but their replacement with constructions of new CCGT and hydrogen capable power plants:

“Specifically, tenders are planned in particular for gas-fired power plants that can be converted to hydrogen and will have to switch to hydrogen in the 2030s. These tenders are also available for new coal replacement projects. The Power Station Strategy thus offers prospects for technological advancement at existing coal sites and further secures the phase-out of coal.”³¹⁷

- Even more, in an internal report of 8 October 2024, the Federal Government rejected any gas conversion of New Plants due to, *inter alia*, European state aid law concerns. The document explicitly refers to the letter of Claimant's co-shareholder of 26 August 2024,³¹⁸ and concludes with the recommendation to deny the requests from that letter. Respondent's assertion that this letter would indicate that Claimant's argument that a gas conversion could not be reasonably expected would be contradictory,³¹⁹ is therefore nothing short of grotesque. The report states:

“In a letter dated August 26, the four operators mentioned above requested that you also allow low-threshold retrofits of modern hard coal-fired power plants in the KWS [...].

They express concern that the requirement for “comprehensive” modernization could exclude the cost-effective conversion of a young hard coal-fired power plant in the modernization tenders. According to the operators, converting a modern hard coal-fired power plant to

³¹⁷ [Exhibit C-0185-DE/Exhibit C-0185-EN: Letter from the Ministry for Economic Affairs and Climate Protection to German Parliament Committees, Report on the review of the reduction and termination of coal-fired power generation in accordance with Section 54 Coal Ban Law, 3 June 2024](#) (excerpts), p. 2.

³¹⁸ [Exhibit R-0120-GER/Exhibit R-0120-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of August 2024.](#)

³¹⁹ Counter-Memorial, para. 274.

gas (and later H2) would be "5-10 times cheaper" than building a new gas-fired power plant.

[...]

From a technical point of view, we do not recommend further separate consideration of hard coal-fired plants for the following reasons:

[...]

The additional inclusion of hard coal-fired plants is also difficult to justify under state aid law. [...]"³²⁰

- 323 These statements clearly signal that gas conversions of New Plants would not benefit from regulatory support or long-term policy stability. Hence, it is Respondent that does not want these conversions and acts contradictory when now alleging that Claimant should have done it.

(dd) Conclusion

- 324 Hence, the Federal Government was from the outset involved in TKL's discussion about a gas conversion and its significant obstacles. Yet, Respondent has refused to provide any support and apparently prefers other options to ensure its energy supply and achieve its emission reduction targets. Claimant has to accept this. However, Germany's lack of any help and its decision to not include gas conversion of New Plants in its energy strategy completely contradicts its allegation according to which it could have been reasonably expected by Claimant to convert the Lünen Plant.

VII. Summary Facts

- 325 The record establishes that Respondent's defences are unfounded. Claimant did not have to expect a coal ban when investing into the Lünen plant. Respondent cannot point to a single official statement advocating a coal ban or phase-out before

³²⁰ [Exhibit C-0186-DE/Exhibit C-0186-EN: Federal Ministry for Economic Affairs, Internal memorandum on the participation of hard coal-fired power plants, 8 October 2024.](#)

the Lünen plant was commissioned, let alone before Claimant decided to invest. The record uncontroversially established that Respondent for years advocated the construction of new and efficient coal-fired plants as a means to reach its climate protection goals. Even the permits issued confirm that. Claimant thus did not only rely on “hopes” in the market, but rather on Germany’s long-standing and well-known climate change strategy.

326 The record also shows that the complaints about Claimant’s behaviour regarding the operation of the plant are unfounded. Claimant did not “conceal” its duty to sell its share in the plant – it just has no relevance for the case. Claimant’s obligation to sell its share is limited by the obligation not to cause losses, and the Coal Ban Law makes such a sale in any case nearly impossible. Respondent also overstates the relevance of the permitting procedure and the court proceedings. Under German law, investors have a legal entitlement to permits if the project fulfils all legal requirements. The hypothetical legal risk of losing in the administrative proceedings, is qualitatively different from the political risk which realised in this case. The permitting authority, which was Respondent in the court proceedings, also vigorously defended the permits in all the proceedings. The permits are now final and binding and bind thus also Respondent.

327 Respondent also cannot hide behind international climate science, EU law or even constitutional law. None of them required a coal ban, let alone uncompensated, but left that to the political decision of states. It was Germany’s political decision to favour lignite power plants and to not compensate hard coal power plants. Respondent knew that plants such as Lünen would not be amortized, but considered it too difficult and complex to investigate and determine appropriate compensation – while it was able to do so for lignite coal plants.

328 Lastly, the record shows that Claimant’s post-ban conduct is beyond reproach. Respondent has pointed to three separate topics which, however, are not Claimant’s responsibility, but that of TKL: the shutdown tenders, the renegotiation of the loan agreement and the conversion to gas. Claimant did not only show that participating in the shutdown tenders would have increased damages. It also explained that the New Plants which participated – Westfalen and Moorburg – were owned by different companies which had reasons of their own not comparable to

TKL and Lünen. With regard to the bank negotiations, Claimant explained that the 2023 amendment was a sound business compromise reached after months of negotiations and which averted [REDACTED] with higher damages for the shareholders. Contrary to what Respondent stated, Claimant also did not refuse to consider (!) a conversion of the Lünen Plant to gas. Claimant and its fellow shareholders started considering that early on. They even included the Federal Government into these discussions. Yet, it is just clear that without state support such a conversion does not make commercial sense. And the Government refused to provide any help. Given that new permits would be needed, it is far from being a viable mitigation option.

329 After Respondent's statement of defence, for which it needed a year, the record still stands: this not a case about climate change, but about a domestic political measure warped by political considerations. The Coal Ban Law was a surprise which could not have been anticipated. Its content is the result of domestic political considerations unrelated to climate protection, and Respondent refused to even examine the issue of compensation for New Plants in detail, fearing it would jeopardize its fragile but important domestic compromise.

C. GERMANY'S OBJECTION TO JURISDICTION IS WITHOUT MERIT

I. Introduction

- 330 Germany's objection to the jurisdiction of the Arbitral Tribunal is unfounded. Germany asks the Arbitral Tribunal to disregard Claimant's legal personality and to pierce its corporate veil.
- 331 In doing so, Respondent suggests to the Tribunal to apply the *Broches Test*. While Claimant agrees that the *Broches Test* is the correct legal standard, Respondent incorrectly frames it as a "knock-out test" and wants to put the burden of disproving the Test on Claimant.
- 332 That is an objection which has been unsuccessfully raised in several ECT arbitrations.³²¹
- 333 It also fails in this case. Claimant is a company organised in accordance with the law applicable in the Swiss Federation. That it has been created by the Canton of Ticino does not change that it has a separate legal personality. It is thus both an Investor under Article 1(7) ECT and a national of another Contracting State under Article 25(2)(b) ICSID Convention. While the *Broches Test* allows for exceptions in

³²¹ see e.g. [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic](#), ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999, paras 15-27; [Exhibit CLA-0068: Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain](#), ICSID Case No. ARB/14/1, Award, 16 May 2018, paras 145-177, in particular paras 170-177; [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic](#), ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019, paras 355-404, in particular para. 404; [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen](#), ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017, paras 29-47; [Exhibit CLA-0154: Flughafen Zürich A.G. and Gestion e Ingeneria IDC S.A. v. Bolivarian Republic of Venezuela](#), ICSID Case No. ARB/10/19, Award, 18 November 2013 (excerpt), paras 259-275, 279-286; [Exhibit CLA-0051: Stadtwerke München GmbH and others v. Kingdom of Spain](#), ICSID Case No. ARB/15/1, Award, 2 December 2019, paras 133-134.

case of State-owned enterprises, the standard it imposes is very high (see below II).

334 Respondent has failed to prove that the exceptions of the *Broches Test* apply in the present case, and in any event it could not have done so. Public ownership as such is insufficient to make a company part of the State. Claimant undisputedly did not exercise governmental functions when investing in Germany. Even Germany does not claim that, and Claimant agrees. Claimant also did not act as an agent of Switzerland when investing in TKL. The decision to invest was not made on the instructions or under the control of its owner, the Canton of Ticino, let alone the Swiss State (see below III).

II. The Broches Test sets very high standards which Respondent has to prove

335 Contrary to what Respondent insinuates, State-owned enterprises do not need to prove that they are suitable claimants in an ECT/ICSID claim. As a general rule, they can rely both on the ECT and the ICSID Convention **(1)**.

336 The *Broches Test* creates exceptions to that rule. Whether any exceptions are fulfilled needs to be proven by the party relying on them: In this case, Respondent **(2.)**.

1. As a general rule, State-owned enterprises can file ECT claims with ICSID

(a) State-owned enterprises can be an “Investor” under Article 1(7) ECT.

337 Under Article 1(7) ECT, State-owned enterprises are “Investors” of a Contracting Party. The ECT merely requires that a “*company or other organisation*” is organised in accordance with the law applicable in that Contracting Party. The ECT does not look at all at who owns the company – except in Article 17 ECT (which plays no role here). The Tribunal in *Yukos v. Russia* noted that

“On its face, Article 1(7)(a)(ii) of the ECT contains no requirement other than that the claimant company be duly organized in accordance with the law

applicable in a Contracting Party. The Tribunal agrees with Professor Crawford that in order to qualify as a protected Investor under Article 1(7) of the ECT, a company is merely required to be organized under the laws of a Contracting Party. As Professor Crawford rightly points out:

The Treaty imposes no further requirements with respect to shareholding, management, siège social or location of its business activities (. . .). Companies incorporated in Contracting Parties are embraced by the definition, regardless of the nationality of shareholders, the origin of investment capital or the nationality of directors or management.”³²²

338 In other ECT cases, tribunals thus have explicitly acknowledged that State-owned enterprises fall under the definition of “Investor” in Article 1(7) ECT. One of several examples is the case of *Stadtwerke München v. Spain*, which is comparable to the present case in that it involved an entity fully owned by a German municipality. In that case, the tribunal highlighted that

“[w]hile it is common ground between the Parties that SWM is a company controlled and fully owned by the Council of the City of Munich, this does not result in assimilating SWM to the Republic of Germany. All this entails is that SWM is a State-owned entity because the sole shareholder is the State. The Tribunal observes that the ECT does not provide that companies owned by States are to be treated differently from companies owned by private individuals and entities. SWM falls squarely within the definition of “Investor ...with respect to Contracting Party” since it was organized in accordance with the law of a Contracting Party, that is, in accordance with the law of Germany. As a G.m.b.H., SWM is clearly a “company” as that term is understood in Germany. Even if that were not the case, the fact that SWM is an organization is sufficient to bring it within the ECT’s definition of an “Investor.”³²³

³²² [Exhibit CLA-0155: Yukos Universal Limited \(Isle of Man\) v. The Russian Federation, PCA Case No. AA 227, Interim Award on Jurisdiction and Admissibility, 30 November 2009](#), para. 411 (emphasis added); [Exhibit CLA-0156: Hulley Enterprises Limited \(Cyprus\) v. The Russian Federation, PCA Case No. AA 226, Interim Award on Jurisdiction and Admissibility, 30 November 2009](#), para. 411 (emphasis added); [Exhibit CLA-0157: Veteran Petroleum Limited \(Cyprus\) v. Russia, PCA Case No. AA 228, Interim Award on Jurisdiction and Admissibility, 30 November 2009](#), para. 411 (emphasis added).

³²³ [Exhibit CLA-0051: Stadtwerke München GmbH and others v. Kingdom of Spain, ICSID Case No. ARB/15/1, Award, 2 December 2019](#), para. 134.

339 Other investment tribunals even qualified State government agencies as investors for the purpose of Article 1(7) of the ECT:

*"The Tribunal agrees that ECT Article 1(7) does not preclude a government agency from being an Investor."*³²⁴

340 Hence, state-owned and state-controlled companies are covered by the definition of "investor".

(b) State-owned enterprises can be a "national of another Contracting State" under Article 25(2)(b) ICSID Convention

341 It is generally accepted that the ICSID Convention's scope of protection as a *general rule* encompasses not only privately-owned, but also State-owned enterprises ("SOE"). The Tribunal in *CSOB v. Slovakia* highlighted this when it held that,

*"the term "juridical persons" as employed in Article 25 and, hence, the concept of "national," was not intended to be limited to privately-owned companies, but to embrace also wholly or partially government-owned companies. This interpretation has found general acceptance."*³²⁵

342 In other words,

*"the question whether a company qualifies as a "national of another Contracting State" within the meaning of Article 25(1) does not depend upon whether or not the company is partially or wholly owned by the government."*³²⁶

³²⁴ [Exhibit CLA-0158: State Enterprise Energorynok \(Ukraine\) v. Republic of Moldova, SCC Case No. V\(2012/175\), Final Award, 29 January 2015](#), para. 79.

³²⁵ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#) para 16; see also [Exhibit CLA-0159: S. Konrad, 'Protection of Investments Owned by States' in M. Bungenberg et al \(eds\), International Investment Law \(2015 C.H.Beck et al.\)](#), para. 19; [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), paras 374-375.

³²⁶ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para 16.

343 Contrary to what Germany insinuates, State-owned enterprises are not merely exceptionally allowed to appear as claimants in investor-State disputes governed by the ICSID Convention, but it was even intended for them to do so as a general rule. Mr Aron Broches himself, one of the founding fathers of the ICSID Convention and *spiritus rector* of the test Respondent seeks to employ, explained the rationale behind this notion as follows:

*“The broad purpose of the Convention is the promotion of private foreign investment and the first preambular clause of the Convention uses the term private international investment. On the other hand, it was recognized in the discussions leading up to the formulation of the Convention that in today's world the classical distinction between private and public investment, based on the source of the capital, is no longer meaningful, if not outdated. There are many companies which combine capital from private and governmental sources and corporations all of whose shares are owned by the government, but who are practically indistinguishable from the completely privately owned enterprise both in their legal characteristics and in their activities.”*³²⁷

344 Consistent with this, tribunals have approached wholly or partially State-owned claimants through a presumption of eligibility.³²⁸

2. The Broches Test is an exception

345 Mr. Broches built upon his aforementioned considerations and presented an, as he explained it “universally accepted”³²⁹ functional test that operates as a narrow exception to the understanding that SOEs generally qualify as “nationals of another

³²⁷ [Exhibit RL-0009: Aron Broches, *The Convention on the Settlement of Investment Disputes Between States and Nationals of Other States*, Recueil des Cours, Collected Courses of the Hague Academy of International Law, 1972, II, pp. 354-355 \(emphasis added\).](#)

³²⁸ See e.g. [Exhibit CLA-0153: *Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen*](#), ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017, paras 39, 44; [Exhibit CLA-0154: *Flughafen Zürich A.G. and Gestion e Ingeneria IDC S.A. v. Bolivarian Republic of Venezuela*](#), ICSID Case No. ARB/10/19, Award, 18 November 2013 (excerpt), para. 275, which speaks of an “entitlement” to invoke the jurisdiction of the Centre – Respondent relies on both authorities in its Counter-Memorial.

³²⁹ see [Exhibit CLA-0006: Schill et al \(eds.\), *Schreuer's Commentary on the ICSID Convention*, Vol. I Third Ed. Cambridge University Press, 2022](#), Article 25, paras 577-588.

Contracting State” for purposes of Article 25(1) of the ICSID Convention. According to the *Broches Test*, an SOE holds investor status unless it is shown that, in respect of the challenged measures, it acted either (i) as an agent for the government, or (ii) in the discharge of an essentially governmental function:

*It would seem, therefore, that for purposes of the Convention a mixed economy company or government-owned corporation should not be disqualified as a "national of another Contracting State" unless it is acting as an agent for the government or is discharging an essentially governmental function.*³³⁰

346 The *Broches Test* therefore does not aim to exclude SOEs from a tribunal's jurisdiction *per se*, but intends to ensure that – if an entity is in substance a State – it is not treated as an Investor.

347 Mr Broches did not explain his test in detail. He noted that this was a mere expression of “a common understanding”, and that the drafters made “no attempt [...] to reduce this common understanding to a legal definition, which would have been a difficult task.”³³¹

348 In view of a missing definition of the two limbs of the *Broches Test*, commentators and tribunals have sought guidance from the ILC Articles on State Responsibility, which they considered to be a “mirror image” of the test.³³² The first limb was seen to correspond to Article 8 of the Draft Articles, while the second limb to correspond

³³⁰ [Exhibit RL-0009: Aron Broches, *The Convention on the Settlement of Investment Disputes Between States and Nationals of Other States*, Recueil des Cours, Collected Courses of the Hague Academy of International Law, 1972, II, p. 355 \(emphasis added\).](#)

³³¹ [Exhibit CLA-0160: R. Mohtashami and F. El-Hosseny, *State-Owned Enterprises as Claimants before ICSID: Is the Broches Test on the Ebb*, BCDR International Arbitration Review, 2016 pp. 371–388, p. 377;](#) [Exhibit RL-0009: Aron Broches, *The Convention on the Settlement of Investment Disputes Between States and Nationals of Other States*, Recueil des Cours, Collected Courses of the Hague Academy of International Law, 1972, II, p. 355.](#)

³³² [Exhibit CLA-0161: C. Kovács, *Attribution in International Investment Law*, International Arbitration Law Library, Volume 45, pp. 267-288, p. 270;](#) [Exhibit CLA-0153: *Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen*, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017, para. 34.](#)

with Article 5 of the Draft Articles.³³³ This conflation of jurisdictional questions with issues of State responsibility for internationally wrongful acts is not uncontroversial.³³⁴ However, as will be shown below, the Tribunal need not decide this academically interesting question.

349 Respondent in the present case only invokes attribution under Article 8 of the ILC Articles, not considerations of governmental authority under Article 5. Throughout the proceedings, Respondent maintained that

*“The relevant ground of attribution of AET’s alleged Investment to Switzerland is not Article 5 ILC Articles, but Article 8 ILC Articles (see Counter-Memorial, ¶¶ 348-358). That is, Ticino’s control over AET’s investment decision is at issue.”*³³⁵

350 The following discussion will thus limit itself to the first limb of the Broches Test, relating to Article 8 of the ILC Articles.

(a) Acting as agent for the government

351 Mr Broches did not elaborate on what specifically makes a State-owned enterprise an “agent” for the government. Neither did Respondent when it simply equated the *Broches Test* with the ILC Articles, without explaining either of the standards.

³³³ [Exhibit CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45](#), pp. 267-288, p. 270.

³³⁴ See e.g. [Exhibit CLA-0162: Certain Iranian Assets \(Islamic Republic of Iran v. United States of America\)](#), Judgment, I.C.J. Reports 2023, p. 51, para. 53, noting that the criteria of attribution and State responsibility have “little relevance” for the characterisation of an entity’s acts as commercial or governmental under the *Broches Test* when establishing jurisdiction under the ICSID Convention, because these were two different questions; see also [Exhibit CLA-0163: J.E. Vinuales, Attribution of Conduct to States in Investment Arbitration](#), ICSID Reports Volume 20 (2022) pp. 13-95, paras 18, 39-43; [Exhibit CLA-0164: M.S. McNeill and D. Purisch, ‘L’état, C’est Moi: State-Owned Enterprises as Claimants in Investment Arbitration’ in G Banerji and P Nair, et al. \(eds\), International Arbitration and the Rule of Law: Essays in Honour of Fali Nariman, 2021](#), pp. 153-170, p. 157.

³³⁵ Procedural Order No. 5, Schedule B: Respondent’s Document Production Requests, p. 27.

352 In applying the *Broches Test*, Tribunals and commentators agree that a structural test is insufficient. Whether the State owns the enterprise partially or completely, and whether there are mechanisms of supervision, is not relevant. Rather, tribunals have reviewed whether the *specific activity* at issue was governmental or commercial in nature in a *fact-specific context*. This is best illustrated by the following decisions, all of which were submitted by Respondent:

353 In the first case to adopt and apply the *Broches Test*, *CSOB v. Slovak Republic*, the tribunal held that State ownership or control would not by itself disqualify a State-owned enterprise to appear as claimant in ICSID proceedings.³³⁶

354 Slovakia had alleged that CSOB “*served as agent or representative of the State [...] and that, moreover, the instant dispute arises out of the functions CSOB performed in that capacity.*”³³⁷ The tribunal reviewed both assertions together, noting that

*“in determining whether CSOB, in discharging these functions, exercised governmental functions, the focus must be on the nature of these activities and not their purpose. While it cannot be doubted that in performing the above-mentioned activities, CSOB was promoting the governmental policies or purposes of the State, the activities themselves were essentially commercial rather than governmental in nature.”*³³⁸

355 The tribunal accepted that although CSOB had historically acted on behalf of the State and implemented State policies, the focus of the *Broches Test* must lie in the nature of the State-owned entity’s activities, and not their purpose.³³⁹ The mere fact

³³⁶ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para 18.

³³⁷ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para 19.

³³⁸ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para 20 (emphasis added).

³³⁹ [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para. 20.

that a State-owned enterprise takes advantage of State policies, with or without governmental cooperation, would not disqualify it as claimant under the *Broches Test*. The sole relevant question would be whether or not the relevant acts themselves are governmental or private in nature.³⁴⁰

356 The tribunal found that CSOB's restructuring and consolidation operations did not "*differ in their nature from measures a private bank might take*"³⁴¹ and thus constituted commercial banking measures, not governmental acts.³⁴² On that basis, the tribunal concluded that CSOB was not acting as an agent of the Czech Republic in relation to the dispute and therefore qualified as a "*national of another Contracting State*" under Article 25(1) of the ICSID Convention.³⁴³

357 In *Beijing Urban Construction Group (BUCG) v. Yemen*, respondent raised a similar objection, asserting that the Chinese State-owned enterprise BUCG acted as an agent of the Chinese government and exercised governmental functions.³⁴⁴ BUCG argued that its investment – the construction of an airport terminal – resulted from a competitive international tender and was purely commercial, unrelated to any direction or control of the State in relation to the airport project.³⁴⁵ The tribunal

³⁴⁰ [Exhibit CLA-0151: *Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic*, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), paras 23-24.

³⁴¹ [Exhibit CLA-0151: *Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic*, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para. 25.

³⁴² [Exhibit CLA-0151: *Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic*, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), paras 20-23.

³⁴³ [Exhibit CLA-0151: *Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic*, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), paras 24-27.

³⁴⁴ [Exhibit CLA-0153: *Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen*, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), para. 29.

³⁴⁵ [Exhibit CLA-0153: *Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen*, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), para. 30; see also [Exhibit](#)

dismissed Yemen's objection. It agreed with the decision in *CSOB v. Slovakia*, that the *Broches Test* requires "a context-specific analysis".³⁴⁶

358 The tribunal deemed it **irrelevant** that BUCG was "subject to the overall direction of a Board that was the 'representative of the state interests and the operation decision making organ'".³⁴⁷ Also the circumstances that the Chinese State was to authorise operation and management as well as supervise and inspect the airport project would be insufficient to meet the "State agent" threshold set out by the *Broches Test*.³⁴⁸ Since BUCG acted as a commercial contractor when investing into the airport project (i.e. not as an agent bound by directives or instructions of the State),³⁴⁹ the tribunal dismissed respondent's objection.³⁵⁰

359 Also the tribunal in *Cyprus Popular Bank v. Greece* applied the *Broches Test* as a standard that "authoritatively" addresses the question of State-owned enterprises filing claims before ICSID.³⁵¹ The tribunal rejected respondent's "State agency" allegation, noting that claimant was not "acting on behalf and for the account" of Greece.³⁵² The tribunal further emphasised that the existence of authorisation

[CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45, p. 270.](#)

³⁴⁶ [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), para. 35.

³⁴⁷ [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), paras 37, 39, 41.

³⁴⁸ [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), paras 37, 39, 41.

³⁴⁹ [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), paras 37-44.

³⁵⁰ see [Exhibit CLA-0153: Beijing Urban Construction Group Co. Ltd. v. Republic of Yemen, ICSID Case No. ARB/14/30, Decision on Jurisdiction, 31 May 2017](#), para. 47.

³⁵¹ [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic, ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019](#), para. 374.

³⁵² [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic, ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019](#), para. 382.

processes by controlling shareholders, regardless if public or private, has no bearing on the assessment of jurisdiction *ratione personae* under the *Broches Test*:

"In private corporations with a controlling shareholder, it is frequent that important decisions are approved not only by the internal corporate organs, but that additionally the consent of the controlling shareholder is obtained, in accordance with its constitutional or other applicable requirements. This is what happened in this case. [...]"

*The fact that Laiki's management sought ratification from its controlling shareholder, does not affect its character by reference to the Broches Test: Laiki did not assume essential government functions, nor was it converted into an agent of the Cypriot State merely because of the approval processes that were required to be followed."*³⁵³

360 As reflected by the cited case law, when reviewing the nature of State-owned entity activity against the criteria of the *Broches Test*, arbitral tribunals distinguish the technical nature of an activity on the one hand from the motivation behind it on the other. A State-owned entity might have regulatory powers in one area, but act as a commercial player in others.³⁵⁴ A banking transaction, for instance, remains a measure of commercial character even when it is driven by State policies³⁵⁵ because the act itself does not require (nor does it constitute) an exercise of prerogatives of public authority unavailable to private actors.³⁵⁶

³⁵³ [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic, ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019](#), para. 387; see also paras 387-388.

³⁵⁴ [Exhibit CLA-0159: S. Konrad, 'Protection of Investments Owned by States' in M. Bungenberg et al \(eds\), International Investment Law \(2015 C.H.Beck et al.\)](#), para. 27.

³⁵⁵ See [Exhibit CLA-0151: Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB974, Decision of the Tribunal on Objections to Jurisdiction, 24 May 1999](#), para 21; [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic, ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019](#), para. 381.

³⁵⁶ [Exhibit CLA-0152: Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic, ICSID Case No. ARB/14/16, Decision on Jurisdiction and Liability, 8 January 2019](#), para. 387; see also paras 380-382.

361 Accordingly, because State-owned entities' generally make and manage foreign investments through ordinary commercial operations, tribunals will only rarely find that they fall outside the *Broches Test*.³⁵⁷

362 A State-owned entity thus acts as an agent for the government when it operates on behalf of the State in the fact-specific context, regardless of potential policy considerations or supervisory mechanisms. This is the case when a company acts under the instructions or directions of the State in relation to a specific act.³⁵⁸

(b) Attribution under ILC Article 8

363 Respondent argues that Article 8 of the ILC Articles requires effective control over a specific act³⁵⁹ and, with reference to the ICJ decisions in the *Nicaragua* and *Bosnian Genocide* cases, maintains that “*the same test must apply*” to investor claimants.³⁶⁰

364 The required degree of control under this test is very high. In its *Nicaragua* case, the ICJ held that a general situation of dependence or control, financial contributions, planning of operations, and other support provided to armed contras were insufficient to assume that the United States had exercised “*such a degree of control in all fields as to justify*” attribution of the contras' conduct to the State through the effective control doctrine.³⁶¹

³⁵⁷ [Exhibit CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45](#), pp. 267-288, p. 270-271.

³⁵⁸ [Exhibit CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45](#), pp. 267-288, p. 270.

³⁵⁹ Counter-Memorial, paras 353-357.

³⁶⁰ Counter-Memorial, paras 354-355.

³⁶¹ [Exhibit RL-0014: Military and Paramilitary Activities in and against Nicaragua \(Nicaragua v. United States of America\)](#), International Court of Justice, Judgment – Merits, 27 June 1986, paras 109, 115; see also [Exhibit CLA-0165: J. Crawford, The International Law Commission's Articles on State Responsibility – Introduction, Text and Commentaries, 2002](#), p. 110-111.

365 Specifically with regard to State-owned enterprises, the ILC's Commentary highlights the general separateness of corporate entities and the State. Establishing an entity by special law and exercising ownership rights does not lead to attribution of the entity's acts under the ILC Articles:

*"In discussing this issue it is necessary to recall that international law acknowledges the general separateness of corporate entities at the national level, except in those cases where the "corporate veil" is a mere device or a vehicle for fraud or evasion. The fact that the State initially establishes a corporate entity, whether by a special law or otherwise, is not a sufficient basis for the attribution to the State of the subsequent conduct of that entity. Since corporate entities, although owned by and in that sense subject to the control of the State, are considered to be separate, prima facie their conduct in carrying out their activities is not attributable to the State unless they are exercising elements of governmental authority within the meaning of article 5."*³⁶²

366 Conversely,

*"where there was evidence that the corporation was exercising public powers, or that the State was using its ownership interest in or control of a corporation specifically in order to achieve a particular result, the conduct in question has been attributed to the State."*³⁶³

367 Commentators echo ICSID jurisprudence in that the relevant factor in applying Article 8 of the ILC Articles is whether the State exercised public powers over the specific act in question:

"for the purposes of the effective control test under ILC Article 8 the mere congruence of the State Enterprise's activities with the State's policies is insufficient to attribute the conduct of the State Enterprise to the State. Instead, the test concerns the actual use of corporate or public law control by the State to enforce public policy or exercise sovereign powers in relation to the act in question. Hence, the fact that the State owns or controls the entity in question

³⁶² [Exhibit CLA-0165: J. Crawford, *The International Law Commission's Articles on State Responsibility – Introduction, Text and Commentaries*, 2002, p. 112-113.](#)

³⁶³ [Exhibit CLA-0165: J. Crawford, *The International Law Commission's Articles on State Responsibility – Introduction, Text and Commentaries*, 2002, p. 110-111.](#)

*is a relevant predicate for the analysis of the attribution of claims, but it is not in itself relevant in determining that analysis.*³⁶⁴

368 The “effective control” test is thus a stringent test, which is not satisfied by the mere existence of State ownership, general supervisory frameworks, or broad policy objectives. Instead, it requires proof that a State organ exercised control in relation to the precise act under review. Put differently,

*“the application of the Broches Test in a manner analogous to that of the attribution rules in the ILC Articles requires establishing, with respect to the foreign investment of the mixed company or State Enterprise, that (1) the home State had delegated and actually used its sovereign powers in the territory of the host State or (2) the home State had used its corporate control over a State Enterprise in order to enforce its sovereign policy in the territory of a host State.”*³⁶⁵

(c) In sum, the legal standard is a functional test

369 In light of the above, the relevant factor in determining whether a State-owned enterprise can exceptionally lose standing before an ICSID tribunal is **completely disconnected from its structure or policies**. Instead, tribunals must conduct a **functional** exercise and examine the **nature of the specific act** in question.

III. Respondent failed to establish an exception under the Broches Tests

370 Claimant bears the burden to establish jurisdiction generally. However, Respondent incorrectly attempts to reverse the burden of proof when it alleges that Claimant must “disprove” the two “knock-out” criteria of the *Broches Test*.³⁶⁶

³⁶⁴ [Exhibit CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45](#), pp. 267-288, p. 270 (emphasis added; paragraphs added to improve legibility).

³⁶⁵ [Exhibit CLA-0161: C. Kovács, Attribution in International Investment Law, International Arbitration Law Library, Volume 45](#), pp. 267-288, p. 274.

³⁶⁶ Counter-Memorial, para. 346.

371 This inversion finds no support in the authorities Respondent cites and should be rejected. Tribunals have consistently required the *objecting* State to substantiate its preliminary objections.³⁶⁷ This is no different in the present case.

372 Respondent's task was to prove that AET acted as an agent for Swiss State or at least under its effective control, specifically over Claimant's investment decision. Respondent in vain relies on five separate factual issues:

- 1) an allegedly required parliamentary authorisation process of Claimant's decision to invest in TKL and the Grand Council's respective approval of the investment;³⁶⁸
- 2) supposed control of the State over the exit from the investment;³⁶⁹
- 3) a purportedly State-driven corporate strategy;³⁷⁰
- 4) that the investment decision would have been motivated by State interests;³⁷¹ and
- 5) profit remittance to the State.³⁷²

373 Upon scrutiny, all of these points turn out to be nothing but smoke and mirrors. Despite the clear framing, they do not amount to control over the decision to invest in TKL. Likewise, Respondent failed to establish that Claimant acted as a State agent or exercised essentially governmental functions in respect of the investment.

374 In rebutting Respondent's misplaced arguments on jurisdiction, Claimant relies on the Expert Legal Opinion of Professor Henry Peter, emeritus Professor at the

³⁶⁷ [Exhibit CLA-0166: F. Sourgens et al., 'Burden of Proof in Investor-State Arbitration', in F. Sourgens et al., *Evidence in International Investment Arbitration*, Kluwer Law International, 2018 paras 2.53-2.55.](#)

³⁶⁸ Counter-Memorial, paras 359-363.

³⁶⁹ Counter-Memorial, para. 364.

³⁷⁰ Counter-Memorial, paras 365-368.

³⁷¹ Counter-Memorial, paras 369-375.

³⁷² Counter-Memorial, para. 376.

Faculty of Law of the University of Geneva and a recognised authority in Swiss corporate and commercial legal matters. Claimant endorses Professor Peter's analysis in its entirety and will, where appropriate, include specific references to his findings.

1. The parliamentary approval is no evidence of “State control” over the investment

(a) Under Swiss law, Claimant operates completely independently from the State

375 Already a review of the legal framework that Claimant operates within exposes Respondent's allegations as unfounded. AET operates autonomously from the Canton of Ticino and possesses its own legal personality under Swiss law.

376 This is evident from Article 1 of the Law establishing Azienda Elettrica Ticinese (“LAET”).³⁷³

*“A cantonal entity, independent from the state administration, with its own legal personality and headquarters in Bellinzona, is established under the name “Azienda elettrica ticinese”. The state guarantees its commitments.”*³⁷⁴

377 Article 2b LAET expressly provides that Claimant is managed according to commercial criteria:

*“Taking into account the canton's energy requirements, the AET is managed according to commercial criteria.”*³⁷⁵

³⁷³ The LAET has been subject matter of subsequent amendments. Given that the factual circumstances of the case occurred prior to the enactment of the amended LAET of 10 May 2016, this Reply refers only to the provisions of the LAET of 1958 that was in effect at the relevant time (unless explicitly stated otherwise).

³⁷⁴ **Exhibit HP-0002-ENG:** Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Article 1.

³⁷⁵ **Exhibit HP-0002-ENG:** Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Article 2b; Peter ER, para. 34.

378 Moreover, the company's institutional framework ensures the independence of decision-making bodies from organs of the State. The structure of AET's management mirrors that of a private law company limited by shares.³⁷⁶ Articles 7 and 7a of the LAET govern the composition and appointment of the AET Board of Directors. It is important to note that, although appointed by the Canton, Members of the State Council, the Grand Council, and other government(-affiliated) officials are barred from sitting in the Board of Directors.³⁷⁷ Moreover, they must also be selected in view of their studies, skills and experience, not for political reasons.³⁷⁸ Members of the AET Executive Board are not nominated by the State, but by the independent members of the AET BoD to which – in accordance with AET's internal management and organisation rules³⁷⁹ – the Executive Board also reports.³⁸⁰

379 Article 9 of the LAET sets the general principle pursuant to which the Board has to oversee the management of AET and exercise general supervision over the company's affairs. The Board, in particular,

“d) approves budgets and grants loans within the limits of its powers;

e) proposes to higher authorities any commitments exceeding its powers;

f) proposes draft agreements concerning the construction of facilities and equity participations;

g) approves contracts on purchase and sale of energy, insofar as these are not delegated to other bodies;

³⁷⁶ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 67.

³⁷⁷ **Exhibit HP-0002-ENG**: Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Article 7; [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 39.

³⁷⁸ **Exhibit HP-0002-ENG**: Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Article 7a; [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 39.

³⁷⁹ see **Exhibit HP-0013-ENG**: AET's Management and organisation rules, 9 July 2008, Article 1.

³⁸⁰ **Exhibit HP-0002-ENG**: Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Articles 9 lit. c), 13; [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 42-46.

*h) decides on the management report, annual accounts and balance sheet, for the attention of the Ticino Government and the Ticino Parliament;*³⁸¹

380 Claimant's expert on Swiss law, Professor Henry Peter, notes that

"This independence and autonomy is the result of a careful choice made by the Parliament of the Canton Ticino when the decision was taken in 1958 to set up AET. [...]

*This choice is also evidenced by the provisions of the LAET governing AET's internal bodies, their appointment and their duties."*³⁸²

381 As will be shown in the following, the LAET's provision on State supervision does not alter the company's independence in decision-making.

(b) Article 5(4) of the LAET does not reflect control over the investment.

382 Respondent bases its claim of alleged attribution by way of the LAET's supervision procedure on a misinterpretation of Article 5(4) of the LAET and frames the submission of the investment decision to the Grand Council as evidence that "*Claimant's Investment ... was made under State control.*"³⁸³

383 This mischaracterises the nature and significance of the parliamentary approval. It is not a proactive control (i.e. before a decision is taken) such as required by Article 8 ILC Articles. Firstly, the "approval" by the Grand Council is a merely political declaration for extraordinary matters outside the ordinary business. Secondly, AET was not obliged to ask for approval, and thirdly, even Germany admits that the investment decision as such was taken by AET.

³⁸¹ **Exhibit HP-0002-ENG:** Law establishing the "Azienda Elettrica Ticinese" ("LAET"), 25 June 1958, Article 9.

³⁸² [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 48, 50.

³⁸³ Counter-Memorial, para. 358.

(aa) Article 5(4) LAET establishes mere political supervision for certain matters over AET

384 Firstly, Article 5 LAET establishes merely a political supervision over certain extraordinary activities of AET.

“Art. 5 – Supervision

(1) The company is subject to State supervision.

(2) The management report, accounts and auditors' report are submitted to the Ticino Parliament for ratification each year.

(3) Every two years, AET submits a report on its planned activities to the Ticino Parliament for discussion, which also includes an assessment of the deriving financial commitments.

(4) The company's commitments exceeding ordinary administration and normal energy trading, and in particular those relating to new plants, equity participations, major renovations, or even commercial commitments, insofar as they require the taking out of loans exceeding normal operating requirements or the granting of significant long-term guarantees, are subject to the approval of the Ticino Parliament.”³⁸⁴

385 In fact, as noted by Professor Peter, Article 5 of the LAET was designed so that “the Ticino State would not be involved in the management of AET’s business, nor in the decisions that AET would take (or not take) in relation thereto.”³⁸⁵

386 Accordingly, Article 5(4) of the LAET does not impose an automatic authorisation obligation for investments like Claimant’s participation in TKL.³⁸⁶ Both AET and the State itself, in persona of the Ticino Government and the parliamentary Special Energy Commission expressly recognised that AET “willingly” sought political approval “even if the legal need for this is debatable”.³⁸⁷ As expressly stated by the

³⁸⁴ **Exhibit HP-0002-ENG:** Law establishing the “Azienda Elettrica Ticinese” (“LAET”), 25 June 1958, Article 5.

³⁸⁵ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 58.

³⁸⁶ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 61, 62, 100.

³⁸⁷ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of](#)

Commission, the Grand Council's role was merely that of a "*political oversight body*" that would endorse an investment "*financed by AET with its own resources and supplied by its own profits*".³⁸⁸

387 Already in 2005, the legal advisor to the Grand Council, Prof. Michele Albertini, prepared a legal opinion on the "*Autonomy of public law entities and parliamentary oversight - With particular reference to the Ticino electricity company*".³⁸⁹ In it, he assessed that the question whether a specific activity of AET necessitates authorisation by the Grand Council is essentially a political one. Article 5(4) of the LAET does not require approval for every financial commitment, but at the same time does not define a specific threshold above which parliamentary approval would be legally required.³⁹⁰

388 The State Council of Ticino echoed this interpretation in its message to the Grand Council of 9 July 2008:

"[T]he threshold above which AET is obliged to have its investments approved by the Grand Council cannot be defined in exact quantitative terms. The notions of "Normal business requirements" and, to an even greater extent, "ordinary" trade have both changed in quantitative and qualitative terms since the time when this legal article was drafted. Today it is normal for AET, which

[*Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany*, 9 July 2008](#), p. 3; [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, *Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL* 23 February 2010](#), p. 1.

³⁸⁸ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, *Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL* 23 February 2010](#), p. 1.

³⁸⁹ **Exhibit HP-0004-ENG:** Legal opinion requested by and submitted to the Ticino Parliament, "Autonomy of public law entities and parliamentary oversight - With particular reference to the Ticino electricity company", published in *Rivista di diritto amministrativo e tributario ticinese* RDAT II – 2005, p. 429; see [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, *Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany*, 9 July 2008](#), p. 3.

³⁹⁰ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 62.

has an annual turnover of half a billion, to enter into contracts worth tens of millions of francs: these buy and sell contracts often carry greater risks, e.g. regarding the very unstable price trend in this sector, than investments of a similar magnitude.

Applying a threshold that is too high to require the approval of the Grand Council may appear to be an attempt to evade supervision; while applying a threshold that is too low, given the decision-making deadlines and the confidentiality clauses commonly demanded by the partners, leads to operational paralysis of the company to all intents and purposes, with the attendant risks of serious repercussions for its value, for the State as the owner and for the prices paid by Ticino's consumers.

The choice is therefore always a matter of weighing the odds: in some situations when short deadlines and/or confidentiality clauses are present, it is clearly in the company's interest to apply a high threshold.”³⁹¹

389 Germany's reading of Article 5(4) of the LAET thus wrongly assumes that every commitment relating to a “new installation” or “participation” lies within control of the State.³⁹²

390 The model on which AET has been set up has been summarised by the Ticino Government in a message dated 24 June 2014 ³⁹³ when the Government considered amending the LAET. In this message, the cantonal government itself stated that “*In the context of general supervision, the decision-making power of the Ticino Government is indeed severely limited, if not non-existent*”³⁹⁴, confirming the high degree of autonomy granted to AET.³⁹⁵

³⁹¹ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 3.

³⁹² Counter-Memorial, paras 358-360.

³⁹³ **Exhibit HP-0016-ENG**: Message 6953, New Law on Azienda Elettrica Ticinese, 24 June 2014, pp. 15-16.

³⁹⁴ **Exhibit HP-0016-ENG**: Message 6953, New Law on Azienda Elettrica Ticinese, 24 June 2014, p 16.

³⁹⁵ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 53.

391 Professor Peter, Claimant's expert witness, evaluated the content of the message as follows:

"[A]nything to do with the management of AET is to be dealt with at AET's level ("livello aziendale"), and more precisely, with regard to strategic issues, by the AET BoD and, with regard to operational issues, by the AET Executive Board, and

*anything of a political nature is to be dealt with at the Ticino political level ("livello politico"), and more precisely by the Ticino Parliament ("legislativo")."*³⁹⁶

392 Correspondingly,

"- subject to very limited exceptions, AET was to be – and has been – managed by AET's own bodies (its BoD and Executive Board), with no involvement of the Ticino State;

*- the Ticino State's role was limited to the supervision of AET's activities in accordance with Article 5 LAET."*³⁹⁷

393 Building on his detailed examination of AET's legal and functional features, Professor Peter ultimately stresses that

"In the performance of the duties attributed to it by the law and considering the scope for which AET has been established, AET and its management benefits from a broad autonomy and independence in respect of the State.

The State is not entitled to give binding instructions to AET.

*The State supervisory rights over AET's activities, save for matters of an extraordinary nature or magnitude, do not impact on AET's management decision-making-process."*³⁹⁸

394 This conclusion is fundamentally at odds with, and effectively disposes of, Respondent's jurisdictional objection.

³⁹⁶ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 52.

³⁹⁷ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 52.

³⁹⁸ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 68-70.

(bb) Claimant sought the approval voluntarily

395 In any event, contrary to Germany's allegations, Claimant voluntarily sought parliamentary approval of acquiring shares in TKL. In accordance with the aforementioned legal framework, all parties involved in the process - the cantonal government, the cantonal parliament, and AET - confirmed that seeking parliamentary approval by Claimant was a voluntary act:

396 The cantonal government explained that AET's decision to request parliamentary approval of the investment was a voluntary one:

*"[I]n this instance, the company has the time and resources for a public and political approval process, and gladly agrees to asking the Grand Council for approval, even if the legal need for this is debatable."*³⁹⁹

397 On 7 April 2009, AET issued a press release, in which it expressed the voluntary nature of requesting approval of the Grand Council and highlighted that the submission to parliament was a precautionary act intended to ensure increased transparency of the company's commercial activities:

"The law in force does not oblige AET to seek authorisation for its investments unless they exceed ordinary administration (see Art. 5(4) LAET). However, although there are no indications as to the threshold defining what constitutes ordinary administration, AET prefers to seek authorisation from the State in the case of investments of strategic importance, in order to ensure the transparency of its actions.

*In this case, as AET had to decide quickly whether to join the project (construction work began last August), a penalty-free exit clause was included in the contract. This gives Parliament the opportunity to give its opinion, even after the project has started. In any case, this is not a request for funding from the State by AET, but only authorisation to proceed with this project, which is financed with its own funds, generated by its own profits."*⁴⁰⁰

³⁹⁹ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 3.

⁴⁰⁰ [Exhibit C-0187-IT/Exhibit C-0187-EN: AET, AET and investment in coal, Press Release of 7 April 2009](#), p. 2.

398 The Special Energy Commission as a parliamentary body adopted this view in its Majority Report of 23 February 2010:

“[U]nder Article 5(4) of the Law establishing Azienda Elettrica Ticinese (LAET) the company limit beyond which AET is obliged to have its investments approved by the Grand Council cannot be defined in exact quantitative terms. However, in this instance, the Company has the time and resources for a public and political approval process, and has willingly asked Parliament for approval, even if the legal need for this is debatable.”⁴⁰¹

399 The Commission also noted that the Grand Council's role in the approval process is that of a “*political oversight body*” that would endorse an investment “*financed by AET with its own resources and supplied by its own profits.*”⁴⁰²

400 Professor Peter's analysis is entirely in line with this understanding. Following an analysis of the legal framework and the circumstances surrounding AET's request for parliamentary approval, he concludes that:

“It therefore appears that AET decided to submit the investment in the Lünen Plant to the Parliament not because this was an obligation under Article 5 para 4 LAET, but for reasons of opportunity and of a political nature because the investment was touching upon sensitive environment related issues.

[...]

No obligation existed for AET under Article 5 para 4 LAET to obtain the approval of the Ticino Parliament with regard to the investment in the Lünen Plant.

AET however decided to seek the Ticino Parliament's position about whether or not AET's investment in the Lünen Plant should be maintained overtime. This was done as a matter of opportunity and for political reasons. The reasons

⁴⁰¹ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 1.

⁴⁰² [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 1.

thereof are that, being a carbon-based plant, the investment was a sensitive matter."⁴⁰³

(cc) The investment decision was already taken by AET, not by the Grand Council

401 The decision to invest was neither taken by the State nor did the Grand Council order AET to invest. The evidentiary record before the Tribunal confirms that AET had already independently taken the investment decision prior to any parliamentary act. Interestingly, even Respondent acknowledges this in its Counter-Memorial, explicitly stating that Claimant's board of directors "*approved the project*" in its resolution of April 2008.⁴⁰⁴ Likewise, Germany's statement that Claimant "*submitted the investment decision to Ticino's parliament*"⁴⁰⁵ presupposes the existence of an investment decision in the first place.

402 Claimant's legal expert's assessment confirms this understanding. Professor Peter begins his analysis by explaining that the parliamentary approval procedure is completely distinct from, and has no impact on the validity of, the independent conduct of AET's decision-making bodies:

*"Even in cases where a decision is subject to the Ticino Parliament's approval pursuant to Article 5 para 4 LAET, the relevant decision has to be first taken by the AET BoD. [E]ven when the submission for approval of the Ticino Parliament is required, this does not affect the fact that the initiative of any decision - including investment decision - exclusively lies with AET and its bodies."*⁴⁰⁶

⁴⁰³ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 100, 104-105.

⁴⁰⁴ Counter-Memorial, para. 370 (reference omitted); referring to [Exhibit C-0082-IT/Exhibit C-0082-EN: AET, Minutes of the 281st Meeting of the Board of Directors, 9 April 2008 \(excerpts\)](#), adobe p. 2.

⁴⁰⁵ Counter-Memorial, para. 361 (emphasis added).

⁴⁰⁶ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 63 (emphasis added); see also Peter ER, para. 92 ("*[I]t was quite clear that, from a legal standpoint, there was no need to seek the Ticino Parliament's approval for the decisions to be validly taken.*").

403 Professor Peter then scrutinised the decisions taken by AET's Board of Directors with regard to the investment in the Lünen Plant and confirmed that they had all been taken autonomously, without any interference of the Swiss State whatsoever.⁴⁰⁷ Moreover, the decisions made by AET's Board of Directors "*came into immediate full force and effect*" and were "*not subject to any condition nor meant to be subject to any approval.*"⁴⁰⁸

404 In light of the above, Respondent's allegation that parliamentary approval would have amounted to control over AET's investment decision is shown to be wholly without merit.

2. The Referendum obligation to exit the investment is no evidence of State control

405 Respondent contends that a public referendum obligating AET to exit the Lünen Plant by 2035 constitutes evidence that "*the decision to leave the power plant was made under State control.*"⁴⁰⁹

406 That is again incorrect. The argument conflates two distinct phases: on the one hand, the original investment decision and on the other hand the subsequent obligation to divest. The referendum, adopted **after** AET had already committed to the investment, addresses the latter, not the former. It has no relevance for the question on whether AET was acting under the control of the State in making the original investment.

407 Under the Articles of State Responsibility and the *Broches Test*, what matters for jurisdiction is the status and character of the original investment decision, not subsequent regulatory changes to the home State's energy policy. Compliance with regulatory changes does not transform commercial actions into governmental conduct – else players in any highly regulated industry would suddenly be State

⁴⁰⁷ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), paras 76-83.

⁴⁰⁸ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 79.

⁴⁰⁹ Counter-Memorial, para. 364.

agents. That would be a clearly absurd result. The referendum is evidence of how the State regulated AET subsequently, not evidence of how AET was controlled when making the investment.

3. Pursuing State interests is no evidence of control

408 Respondent asserts that Claimant's strategy would be driven by State interests. It points to the Cantonal Energy law, the 1958 law and the 2013 Cantonal Energy Plan.

409 Respondent does not explain how the statements in these documents should convert Claimant into an agent for the State (under the *Broches Test*) or how this should prove effective control of the Swiss State over the specific investment decision (under Art. 8 ARSIWA).

410 As explained, it is legally irrelevant whether a company's purpose aligns with State interest. Like any company which pursues interests of its owner, every State-owned enterprise will also to some extent pursue State interests. Many commercial enterprises, especially utilities, have public policy mandates written into their charters or regulatory obligations. This does not make them agents of the State in all their commercial activities. A telecoms provider, e.g. pursues a public policy mandate (to provide affordable public telecommunications). That does not convert it into an agent of the State, or makes specific business decisions subject to State control.

411 Claimant's statutory purpose, however, is not even of public nature but rather essentially commercial. Under Article 2(1) of the LAET

*"The purpose of the company is the production and trade of electricity."*⁴¹⁰

412 Respondent's reliance on the 2013 Cantonal Energy Plan⁴¹¹ is equally misplaced in this context. The document post-dates both the April 2008 Board resolution and the

⁴¹⁰ **Exhibit HP-0002-ENG:** Law establishing the "Azienda Elettrica Ticinese" ("LAET"), 25 June 1958, Article 2(1).

⁴¹¹ Counter-Memorial, paras 366-367.

2010 parliamentary approval and thus cannot be relevant for considering the nature of the 2008 investment decision.

413 Notwithstanding the temporal element, also Respondent's attempt to rely on the Cantonal Energy Plan's description of AET as "*a kind of operational arm for the Canton*" fails to support the conclusion that AET was essentially under the control of the State⁴¹². At most, it shows a kind of indirect influence on the company's policies. The label does not mean that AET has no separate legal personality or that all of AET's acts are acts of the Canton.⁴¹³ Every State-owned utility operates as an "arm" of its government in the sense that it implements government policy. But this is true of many private companies too: a private utility that is licensed by the State to provide services is, in a practical sense, an "arm" of the State's regulatory system. This operational role does not negate the commercial nature of the State-owned entity's activities.

414 What is more, the Cantonal Energy Plan of 2013 which Respondent refers to actually **confirms** the essentially commercial nature of Claimant's business model. The Plan distinguishes between the Canton and AET as two separate entities and notes that AET operates as a commercial player on the market rather than, as Respondent alleges, as the Canton itself.

"The security of electricity supply is precisely one of the basic tasks of the Canton and the Ticino Electric Company (AET). [...]

In pursuing this objective, the importance of energy trading, promoted by AET in its role as a commercial company, should not be overlooked: it allows for better management of energy prices for end consumers in Ticino, making the most of the potential for domestic electricity production while simultaneously ensuring revenue for the Canton, which has been and can be indirectly used,

⁴¹² Counter-Memorial, para. 367.

⁴¹³ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 66 ("AET is not an "Organ" of the Ticino State. In fact, it does not act on behalf of the State and does not bind the Ticino State through its actions.").

*depending on legislative priorities, to implement policies both in the energy sector and in other fields.*⁴¹⁴

415 This again shows that Claimant pursues its objectives with commercial rather than governmental means.

416 Respondent also notes that AET can issue administrative acts appealable to the Cantonal Administrative Court.⁴¹⁵ However, Germany acknowledged that the specific investment decision in TKL was not a discharge of public administrative powers.⁴¹⁶ In addition, the general possibility of Claimant rendering administrative acts does not prove that AET, *specifically when investing in Germany*, acted as agent for the Swiss State. It merely reflects AET's regulatory role in Ticino's energy market – a domestic function – not evidence that AET is a State agent when making a commercial investment abroad. As explained above, the *Broches Test* looks at the nature **of the challenged activity** and requires exercise of governmental functions in the **specific investment** – and that clearly does not exist here.

4. The investment in TKL was an essentially commercial decision

417 Respondent contends that the decision to invest in the Lünen plant was made for State interests.

418 That has no basis in the record. The record rather confirms that it was a commercial decision of an electric utility worried about its supply sources in the future.

419 Beginning in 2000, electricity demand in the Canton of Ticino grew at approximately 2-2.5% annually, creating forecasts of significant risk for electricity shortages by 2020.⁴¹⁷ Hydropower – Claimant's primary generation source – was subject to

⁴¹⁴ [Exhibit C-0188-IT/Exhibit C-0188-EN: State Council of the Republic and Canton of Ticino, Cantonal Energy Plan, 2013 \(excerpt\)](#), p. 11 (emphasis added).

⁴¹⁵ Counter-Memorial, para. 368.

⁴¹⁶ Counter Memorial, para. 368 (“*While the alleged Investment in Germany was not an administrative act, Claimant’s power under Swiss public law shows its special status.*”, emphasis added).

⁴¹⁷ Memorial, para. 99.

"seasonal and climatic fluctuations" and had "limited storage capacities," which could lead to "shortages during periods of high energy demand or prolonged dry spells, further compromising the stability of electricity supply".⁴¹⁸

420 In 2004, Claimant's Board of Directors independently decided to diversify its electricity generation to address these supply security challenges.⁴¹⁹ The Board developed a production strategy emphasising: (i) "*the adjustment of hydroelectric production capacities in Ticino, where possible*"; (ii) "*the purchase of stakes in production plants in Switzerland, where possible*"; and (iii) "*the participation in production plants abroad, so as to be able to offset the expected coverage deficit in Switzerland*".⁴²⁰

421 In April 2008, Claimant's Board of Directors further confirmed that the investment in TKL was "financially viable".⁴²¹ It analysed its financial capacity in a liquidity plan, conducted a risk assessment, and independently drafted a business plan.⁴²² The circumstances hence show that Claimant took its investment decision based on commercial considerations. Furthermore, Claimant financed its investment with its own resources and did not request any funds from the State.⁴²³

⁴¹⁸ Memorial, para. 101.

⁴¹⁹ Memorial, para. 102.

⁴²⁰ Memorial, para. 102 (emphasis added).

⁴²¹ [Exhibit C-0082-IT/Exhibit C-0082-EN: AET, Minutes of the 281st Meeting of the Board of Directors, 9 April 2008 \(excerpts\)](#), p. 5 (adobe p. 2).

⁴²² [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 23-26; see also [Exhibit C-0066-IT/Exhibit C-0066-EN: AET, Message No. 6/06 to the Board of Directors, AET's participation in "Trianel Power - Projektentwicklungsgesellschaft Kohlekraftwerk mbH & Co. KG", for the construction of a coal-fired power plant in Germany, 23 March 2006 \(excerpts\)](#), p. 11

⁴²³ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 2.

422 Even the State itself confirmed the commercial nature of Claimant's investment decision: the State executive's message to parliament of 9 July 2008 demonstrates that AET's investment in Lünen was not a governmental decision, but rather "*an investment financed by AET with its own resources, fed by its own profits*"⁴²⁴. The message further highlighted Claimant's own liquidity planning, own risk assessment and own financial capacity review.⁴²⁵

423 Ticino's Special Energy Commission's Majority Report of 23 February 2010 notes that the decision to invest in Germany would be in line with Claimant's commercial business-strategy of responding to market challenges:

*"AET has therefore sought to diversify supply sources, increase the availability of peak energy and develop environmentally certified energy sources to compensate for these weaknesses and properly respond to market challenges. At the same time, it also sought to secure transit rights on extra high-voltage lines and improve its skills, particularly in the commercial sector. It considered expanding its markets, diversifying its partners and increasing the number of customers. To this end, it wanted to further streamline its operational structures and foster likely partnerships with electricity companies active in the canton, the rest of Switzerland and abroad."*⁴²⁶

[...]

⁴²⁴ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 2.

⁴²⁵ [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 23.

⁴²⁶ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 2.

*"Pursuing the goal of energy supply and (particularly) price control therefore means AET achieving an even more important goal, i.e. its own independence in an increasingly uncertain and unpredictable energy market."*⁴²⁷

[...]

*"For AET, this choice would ensure its independence in the sector, at a time when the new scenario opened up by energy market reorganisation is seeing large players in the field swallowing up numerous small to medium-sized players, which are unable to resist for the very reason that they are less independent. This perspective will help AET to remain a strong player with regard to the final distributors who have so far turned to the cantonal company because of its ability to sell energy at extremely competitive prices."*⁴²⁸

424 Referring to an analysis of Switzerland's electricity demand and supply in the message to parliament of 9 July 2008, Respondent argues that AET *"approaches such issues from a national, rather than a company perspective"*.⁴²⁹

425 Analysing market conditions and public policy context is standard due diligence for any infrastructure investor. A private utility considering a power plant investment would also conduct macro-economic and policy analysis of the host State's energy market. The fact that AET does so simply demonstrates competent business planning on a sound commercial foundation – it does not imply that Claimant would be acting as an agent of Ticino.

426 Respondent also notes that *"Claimant had a special right to leave the project in case the Ticino Parliament refused the authorization."*⁴³⁰ This provision further confirms that parliament's role was to approve or reject a commercial proposal, not to direct AET's conduct. If parliament could have refused, then its approval of the investment is a contractual condition, not evidence of State control. The penalty-

⁴²⁷ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 4.

⁴²⁸ [Exhibit C-0084-IT/Exhibit C-0084-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Special Energy Commission: Majority Report on AETs Message No. 6091 concerning its Participation in TKL 23 February 2010](#), p. 9.

⁴²⁹ Counter-Memorial, para. 372.

⁴³⁰ Counter-Memorial, para. 363.

free exit clause was introduced precisely to protect AET's commercial interests in case the Grand Council later withheld its political endorsement.⁴³¹ It preserved corporate autonomy and was considered a viable step to minimise delays in the investment timeline.⁴³²

5. Profit remittance to the State budget is irrelevant

- 427 Lastly, Respondent notes that all of AET's operating profit, including any award, flows to the State budget.⁴³³ Respondent apparently views this as evidence that AET is not a "private investor" within the meaning of Article 25(1) of the ICSID Convention. However, Germany's reasoning is yet again flawed.
- 428 The circumstance that AET remits profits to the Canton is exactly what any wholly-owned subsidiary does with respect to its parent company, whether the parent is a State or a private conglomerate. Neither does this evidence functional control over the specific investment decision, nor does it show that the subsidiary is not a separate legal entity or that it lacks standing to bring claims. In short, it is utterly irrelevant to whether a State organ directed a specific investment.⁴³⁴

⁴³¹ see [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 2.; see also [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 102.

⁴³² [Exhibit C-0063-IT/Exhibit C-0063-EN: Department of Finance and Economic Affairs of the Canton of Ticino, Message No. 6091 to the Grand Council of the Republic and Canton of Ticino on the Participation of AET in a company for the construction of a thermal power plant in Germany, 9 July 2008](#), p. 2.

⁴³³ Counter-Memorial, para. 376.

⁴³⁴ see [Exhibit CLA-0006: Schill et al \(eds.\), Schreuer's Commentary on the ICSID Convention, Vol. I Third Ed. Cambridge University Press, 2022](#) I, Article 25, para. 582; see also [Exhibit CLA-0167: Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award, 29 July 2008](#), paras 324-328, 331.

429 If profit remittance to the home State disqualified an State-owned entity from investor status, then virtually no State-owned company could bring an ISDS claim, because State ownership presupposes some benefit flowing to the State. Following Respondent's approach would render the *Broches Test* utterly meaningless and would contradict established case law, such as the holdings in *CSOB* (joint Czech-Slovak bank, profits subject to dividend and governance decisions), *BUCG* (Chinese State-owned enterprise), *Masdar* (Abu Dhabi-owned renewable energy company), and *Cyprus Popular Bank* (Greek State-owned bank, eventually privatised) – all of which had some profit-sharing or State-benefit mechanism.

6. Conclusion

430 In sum, Germany's five attempts to cast doubt on Claimant's standing all fail and must be rejected. Germany not only failed to establish a sound legal standard, but also did not provide any evidence of supposed control or State agency whatsoever. In contrast, the evidence on the record demonstrates a commercially grounded investment decision of AET, taken independently from the State, and voluntarily presented to parliament for political endorsement.

431 Professor Henry Peter's legal expert opinion unequivocally supports Claimant's position. At the close of his analysis of the pertinent factual background and legal framework, Professor Peter underscores that

"AET cannot be considered as "controlled" by the Ticino State since:

- AET is an autonomous public-law entity whose decision-making powers lie with its own corporate bodies;

- AET is not a "body" (in Italian "organo" or in German "Organ") of the Ticino State;

- As a matter of principle and subject to limited exceptions, Canton Ticino cannot issue binding instructions to AET, and has not done so."⁴³⁵

⁴³⁵ [Exhibit CER-0006: Expert Report by Prof Henry Peter](#), para. 108.

432 The Tribunal must therefore dismiss Respondent's objection to jurisdiction *ratione personae*.

D. GERMANY BREACHED THE ENERGY CHARTER TREATY

I. Germany cannot rely on its “police powers” to escape its liability and obligation to pay compensation

1. Introduction

433 Claimant acknowledged in its Memorial that Germany possesses a legitimate right - indeed an obligation - to regulate energy markets and to take climate-action measures.⁴³⁶ Claimant does not dispute that the ECT recognises environmental concerns. Article 19 requires States to undertake certain best-efforts-obligations in relation to transboundary pollution, but without distorting investment, and 24(2)(a) ECT explicitly permits environmental regulation, and the ECT preamble refers to the UNFCCC.⁴³⁷

434 However, Claimant emphasises a simple but fundamental point: recognition of a right to regulate does **not** eliminate the duty to compensate when regulation amounts to an expropriation or violates other substantive standards under Part III of the ECT.⁴³⁸ Article 24(2)(a) ECT itself embodies this principle - it provides that even measures "*necessary to protect human, animal or plant life or health*" do not release a State from liability under Part III of the ECT. That exception is inscribed in the treaty precisely because the parties understood that the right to regulate and the obligation to compensate are complementary, not contradictory.

435 In contrast, Respondent's Counter-Memorial deploys "the right to regulate" as a transversal theme across multiple liability standards.⁴³⁹ Respondent contends that:

⁴³⁶ Memorial, paras 355, 426.

⁴³⁷ See below, section D.I.2

⁴³⁸ Memorial, para. 355.

⁴³⁹ Counter-Memorial, para. 521, 530.

- Under expropriation law, climate-action measures are shielded by the "police powers doctrine," which reflects a broad "right to regulate" in the public interest, informed by the Paris Agreement and human-rights jurisprudence.⁴⁴⁰
- Under FET, Article 10(1) sentence 1 ECT (the preamble provision on "stable, equitable, favourable and transparent conditions") does not create an autonomous stability obligation; instead, FET must be interpreted to respect the State's "right to regulate".⁴⁴¹
- Under FPS, any legal protection beyond physical security would improperly constrain the State's "regulatory freedom" and duplicate FET.⁴⁴²
- Under Article 10(1) sentence 3 ECT (unreasonableness and non-discrimination), tribunals should defer to the legislature's "margin of appreciation" in complex climate-energy balancing, without "second-guessing" legislative choices.⁴⁴³

436 In essence, Respondent seeks to convert the "right to regulate" into a quasi-immunity from accountability - doctrine that subordinates all compensation and fair-treatment obligations to the State's perceived need for regulatory flexibility in climate matters.

437 That is unwarranted.

438 Respondent's attempt to justify its actions as "*a legitimate exercise of Respondent's police powers*"⁴⁴⁴ cannot succeed. The ECT already integrates environmental concerns and regulatory flexibility (2.). In any event, a fundamental change of the regulatory framework such as prohibiting coal-fired power plants (with permits) to burn coal does not fall under any purported "*police powers*" exception (3.). The

⁴⁴⁰ Counter-Memorial, para. 381.

⁴⁴¹ Counter-Memorial, para. 509.

⁴⁴² Counter-Memorial, paras 557-559.

⁴⁴³ Counter-Memorial, paras 568-577.

⁴⁴⁴ Counter-Memorial, e.g. para. 379.

police powers doctrine hence does not justify the shutdown of the Lünen Plant without compensation (4.).

2. The ECT already integrates environmental concerns and regulatory flexibility

439 While Respondent develops at length its argument that the police powers doctrine is recognised under customary international law and delineates its scope,⁴⁴⁵ it entirely fails to explain how the doctrine would come into play in this ECT-based dispute. And indeed, Respondent could not provide such an explanation. Climate protection measures are not exempt from the scope of the ECT, and customary international law on *police powers* has no role to play in that regard.

440 As Claimant noted already in its Memorial,⁴⁴⁶ if States accord rights to foreign investors in investment treaties such as the ECT, thereby taking on international obligations with which they must comply, they simultaneously limit their sovereign right to regulate. This includes the exercise of any police powers.

441 In any investment arbitration, the limits of the State's regulatory powers – which Claimant as such does not contest – are to be found primarily in the applicable investment treaty. The arbitral tribunal in *ADC v. Hungary* set this out in the following way, which was relied on subsequently both by non-ECT⁴⁴⁷ and ECT tribunals⁴⁴⁸:

⁴⁴⁵ Counter-Memorial, pp. 111-119.

⁴⁴⁶ Memorial, para. 426.

⁴⁴⁷ [Exhibit CLA-0063: Occidental and others v. Republic of Ecuador](#), ICSID Case No. ARB/06/11, Award, 5 October 2012, paras 529, 530; [Exhibit CLA-0062-FR/Exhibit CLA-0062-EN: Meerapfel v. Central African Republic](#), ICSID Case No. ARB/07/10, Excerpts of Award, 12 May 2011, para. 312.

⁴⁴⁸ [Exhibit CLA-0066: Watkins Holdings S.à r.l. and others v. Kingdom of Spain](#), ICSID Case No. ARB/15/44, Award, 21 January 2020, para. 521; [Exhibit CLA-0060: Athena Investments AS \(formerly Greentech Energy Systems AS\) and others v. Kingdom of Spain](#), SCC Case No. V 2015-150, Final Award, 23 December 2018, para. 364; [Exhibit CLA-0064: Eiser Infrastructure Limited and Energia Solar Luxembourg S.A.R.L v. Kingdom of Spain](#), ICSID Case No. ARB/13/36, Award, 4 May 2017, para. 371.

"423. The Tribunal cannot accept the Respondent's position that the actions taken by it against the Claimants were merely an exercise of its rights under international law to regulate its domestic economic and legal affairs. It is the Tribunal's understanding of the basic international law principles that while a sovereign State possesses the inherent right to regulate its domestic affairs, the exercise of such right is not unlimited and must have its boundaries. As rightly pointed out by the Claimants, the rule of law, which includes treaty obligations, provides such boundaries. Therefore, when a State enters into a bilateral investment treaty like the one in this case, it becomes bound by it and the investment-protection obligations it undertook therein must be honoured rather than be ignored by a later argument of the State's right to regulate.

*424. The related point made by the Respondent that by investing in a host State, the investor assumes the "risk" associated with the State's regulatory regime is equally unacceptable to the Tribunal. It is one thing to say that an investor shall conduct its business in compliance with the host State's domestic laws and regulations. It is quite another to imply that the investor must also be ready to accept whatever the host State decides to do to it. In the present case, had the Claimants ever envisaged the risk of any possible depriving measures, the Tribunal believes that they took that risk with the legitimate and reasonable expectation that they would receive fair treatment and just compensation and not otherwise."*⁴⁴⁹

442 As equally set out already in the Memorial,⁴⁵⁰ there is no blanket exception for regulatory measures under the ECT. Such a general exception neither exists for regulatory measures as such nor for environmental or climate protection measures in particular.

443 The ECT itself references the UNFCCC (in the Preamble) and contains explicit environmental provisions (Articles 19, 24(2)(a)). Had the parties intended climate measures to be categorically exempt from compensation, they could have said so. They did not.

444 The ECT in Article 24 explicitly provides for the contrary: measures designed to protect life and health of humans or animals can still amount to a breach of Part III of the ECT. This is clear from the *chapeau* in Article 24(2)(b), which limits the effect of the exception in Article 24(2)(b)(i) in favour of life and health of humans or animals

⁴⁴⁹ [Exhibit CLA-0061: ADC Limited and others v. Republic of Hungary, ICSID Case No. ARB/03/16, Award, 2 October 2006.](#)

⁴⁵⁰ Memorial, para. 327.

with respect to the ECT's investment protection chapter. To be precise, that part of Article 24 reads:

(2) *The provisions of this Treaty other than*

(a) *those referred to in paragraph (1); and*

(b) *with respect to subparagraph (i), Part III of the Treaty*

shall not preclude any Contracting Party from adopting or enforcing any measure

(i) *necessary to protect human, animal or plant life or health; [...]*⁴⁵¹

445 Respondent conveniently omits this aspect when it quotes from Article 24 to argue it would have had a great margin of appreciation when adopting the Coal Ban Law.⁴⁵²

446 More importantly for Claimant's expropriation claim, Article 24 of the ECT expressly excludes the application of its exceptions to Article 13, the expropriation provision. That is to say, the ECT's exception that it "*shall not preclude any Contracting Party from adopting or enforcing any measure [...] necessary to protect human, animal or plant life or health*" does not apply at all to Claimant's expropriation case.

447 If the treaty-based exception clauses are specifically meant not to limit the protection under Part III and do not even apply in an expropriation scenario, however, there is no room to have recourse to a doctrine based in customary law such as the police powers doctrine. Such recourse to treaty-external sources would indeed override the ECT's express wording, systemic order of its provisions and ultimately the treaty drafters' intent. As already noted by Claimant previously,⁴⁵³ such an approach would constitute an interpretation of the ECT *contra legem*.

⁴⁵¹ Article 24 of the ECT (emphasis added).

⁴⁵² Counter-Memorial, para. 416

⁴⁵³ Memorial, para. 327.

3. The Coal Ban Law would not fall under the alleged *police powers* exception in light of arbitral case law

448 Even if one was to accept Respondent's contention that the Arbitral Tribunal should have recourse to customary international law and the *police powers* doctrine, Respondent's defence based on its regulatory powers furthermore cannot succeed. The Coal Ban Law does not fall within what is generally accepted under the *police powers* exception.

449 Respondent contends that the Coal Ban Law "*meets the requirements of the police powers doctrine because it is a bone fide act in the public interest of general application.*" As Claimant will show below (see Section D.II.2.), this argument already fails since the Coal Ban Law is indeed discriminatory. The Coal Ban Law does not in general ban the burning of coal, let alone the emission of CO₂, but differentiates between hard coal and lignite and stretches it over a period of 18 years. Respondent admits that social and political concerns were taken into account when deciding whether and how to act.

450 Respondent's focus beyond discrimination solely on the public interest nature of its measure, however, equally misses the point: The emphasis on the mere existence of a non-discriminatory, public-interest measure is irreconcilable with the text of Article 13 ECT. It effectively treats satisfaction of the criteria for a lawful expropriation - namely, non-discrimination, due process, and public purpose - as proof that no expropriation has occurred. Yet the fact that a measure pursues a public purpose does not, by itself, preclude it from constituting an expropriation. If every measure adopted in the public interest were excluded from Article 13's ambit, expropriation would, in practice, cease to exist.⁴⁵⁴

451 Respondent does not even offer a potential approach as to how to distinguish a valid exercise of police powers from an indirect expropriation. Indeed, Respondent

⁴⁵⁴ Cf. [Exhibit CLA-0020: *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3, Award, 20 August 2007](#), para. 7.5.21; see also [Exhibit CLA-0018: C. Schreuer, *The Concept of Expropriation under the ECT and other Investment Protection Treaties*, 2005](#) p. 144.

leaves it entirely unclear which kind of regulations maybe considered – in the words of the *Saluka* tribunal – “commonly accepted as within the police power of States”⁴⁵⁵ and which are not. Climate change measures are certainly not commonly accepted – Respondent has not submitted evidence of either State practice or *opinio iuris*.

452 The tribunal in *Continental Casualty v. Argentina* further differentiated on the basis of the impact of the measure on the investment:

“(i) On the one hand, there are certain types of measures or state conduct that are considered a form of expropriation because of their material impact on property, and which are legitimate only if adopted for public purpose, without discrimination, and against the payment of compensation according to the general or specific applicable standards One may distinguish between: (a) outright suppression or deprivation of the right of ownership, usually by its forced transfer to public entities; (b) limitations and hampering with property, short of outright suppression or deprivation, interfering with one or more key features, such as management, enjoyment, transferability, which are considered as tantamount to expropriation, because of their substantial impact on the effective right of property. Both of these types of measures entail indemnification under relevant international treaties, as well as under most constitutions which respect fundamental human rights.

(ii) On the other hand, there are limitations to the use of property in the public interest that fall within typical government regulations of property entailing mostly inevitable limitations imposed in order to ensure the rights of others or of the general public (being ultimately beneficial also to the property affected). These restrictions do not impede the basic, typical use of a given asset and do not impose an unreasonable burden on the owner as compared with other similarly situated property owners. These restrictions are not therefore considered a form of expropriation and do not require indemnification, provided however that they do not affect property in an intolerable, discriminatory or disproportionate manner.”⁴⁵⁶

⁴⁵⁵ [Exhibit CLA-0168: *Saluka Investments BV v. The Czech Republic*, PCA Case No. 2001-04, Partial Award, 17 March 2006](#), para. 262

⁴⁵⁶ [Exhibit CLA-0049: *Continental Casualty Company v. Argentine Republic*, ICSID Case No. ARB/03/9, Award, 5 September 2008](#), para. 276.

- 453 If the Arbitral Tribunal chose to adapt this test, which was relied on also by other tribunals,⁴⁵⁷ then the Coal Ban Law clearly falls outside the scope of the *police powers* doctrine. It is not, to use an example brought by Respondent, a tightening of emission levels under the *TA Luft*.⁴⁵⁸ The Coal Ban Law does not prohibit the emission of CO₂ – the only direct response to climate change – as the emission of CO₂ is solely regulated by the ETS.⁴⁵⁹ Instead, the Coal Ban Law interferes with a “*key feature*”, the “*basic, typical use*” of a coal-fired power plant: that is the firing of coal to generate electricity. A coal-fired plant which may not fire coal is essentially useless as a coal-fired plant. Claimant has further explained that investing into a conversion could not have been reasonably expected (see above, Section B.VI.3).
- 454 Finally, some tribunals reviewed whether the measure at issue was proportional to the purpose of the measure.⁴⁶⁰ As Claimant noted already in the Memorial, the prohibition of firing coal without providing for compensation is the most severe measure to achieve the Coal Ban Law’s objectives.⁴⁶¹ Indeed, it totally changed the prior regulatory framework. Despite a valid and irrevocable permit to operate a coal-fired power plant and to emit emissions (subject to the ETS requirements), the Lünen Plant will have to be shut down without any payment of compensation. It

⁴⁵⁷ [Exhibit CLA-0169: Mobil Exploration v. Argentina](#), ICSID Case ARB/04/16, Decision on Jurisdiction and Liability, 10 April 2013, para. 825; [Exhibit CLA-0069: El Paso Energy v. Argentina](#), ICSID Case No. ARB/03/15, Award, 31 October 2011, para. 248.

⁴⁵⁸ Respondent on several occasions mentions – correctly – that immission standards and power plant permits were not immutable but could be amended see Counter-Memorial paras 125-126 and 503.

⁴⁵⁹ Memorial, paras 84-90.

⁴⁶⁰ [Exhibit CLA-0082: Técnicas Medioambientales Tecmed, S.A. v. The United Mexican States](#), ICSID Case No. ARB(AF)/00/02, Award, 29 May 2003, para. 122; [Exhibit CLA-0024: LG&E Energy Group v. Argentine Republic](#), ICSID Case No. ARB/02/1, Decision on Liability of 3 October 2006, para. 195; [Exhibit CLA-0170: Deutsche Bank AG v. Democratic Socialist Republic of Sri Lanka](#), ICSID Case No. ARB/09/2, Award, 31 October 2012, para. 522; [Exhibit CLA-0171: PL Holdings S.à.r.l. v. Republic of Poland](#), SCC Case No. V 2014/163, Partial Award, 28 June 2017, paras 373-391.

⁴⁶¹ Memorial, para. 457.

would be equally effective and less restrictive, to compensate these power plants. Not paying compensation does not contribute to climate protection.

455 Respondent knew about the severe impact on new power plants such as the Lünen Plant and still did not offer compensation. Indeed, Respondent refused to consider this aspect and ignored the recommendations of the Coal Commission to pay compensation⁴⁶² during the decision-making process⁴⁶³. This is not proportional.

4. Summary

456 The core problem with Respondent's approach is that it converts the legitimate concept of "regulatory space" into something approaching immunity from accountability. By invoking a climate change + Paris Agreement + human rights + margin of appreciation, Respondent seeks to place the Coal Ban Law beyond review on all liability standards simultaneously.

457 But investment treaties do not work that way. They balance State regulatory autonomy with investor protection. A State may regulate (including for climate reasons), but:

- If the regulation amounts to an expropriation, compensation must follow.
- If the regulation violates FET, the investor may claim damages.
- If the regulation breaches MCPS or discriminates unreasonably, liability attaches.

458 The "right to regulate" is a genuine principle in international investment law. But it is not a master key that unlocks all protective provisions of the ECT. Rather, it operates within the boundaries set by Articles 13, 10 (1), and 24 of the ECT. These provisions already accommodate environmental measures and climate action; what they do not permit is the uncompensated, discriminatory deprivation of investment value that the 2020 Coal Ban Law effects.

⁴⁶² [Exhibit C-0014: Final Report of the Coal Commission, January 2019](#), p. 62, p. 64.

⁴⁶³ See already Memorial, paras 458 et seq.; further Memorial, Section E.V.2.)

II. The Coal Ban Law constitutes an indirect expropriation

1. Respondent cannot rely on the police powers doctrine to escape liability

459 Respondent pleads immunity from liability by relying on the police powers doctrine.
As just explained, this has no merit.

2. The Coal Ban Law is discriminatory

460 In the Memorial, Claimant explained why the Coal Ban Law constituted a discriminatory expropriation.⁴⁶⁴

461 Respondent's contention that the Coal Ban Law is "not discriminatory" rests on an unduly narrow conception of discrimination and an incomplete description of the effects of the measure. Properly understood, the Coal Ban Law differentiates between comparable investments in a manner that is arbitrary and disproportionate, and whose effects fall predominantly on a small sub-set of operators, including the Lünen Plant. This is sufficient to disqualify the measure from the scope of the police powers doctrine and brings it within the ambit of Article 13 ECT.

(a) Legal standard

462 Respondent writes some general passages about the alleged legal standard in paras. 435 to 442, and then under the heading "Application" in paras. 444 et seq. applies further legal standards. In the following, they will be dealt with comprehensively.

463 However, all of it is misguided.

464 First, contrary to what Respondent suggests⁴⁶⁵ discrimination in international investment law is not confined to nationality-based distinctions. It depends on **which treaty obligation** the investor relies on. Nationality-based distinctions might

⁴⁶⁴ Memorial, paras 363-367.

⁴⁶⁵ Counter-Memorial, para. 444.

be relevant in the context of the national treatment obligation, but are not required in expropriation clauses such as Article 13 ECT. The suggestion that only measures *explicitly* targeting foreign investors could amount to a discrimination ignores the reality of modern regulatory design. A scheme which, on its face, uses ostensibly neutral criteria (such as historical operating hours, commissioning dates, or fuel type), but which in practice concentrates the economic burden on a small, identifiable set of new, efficient plants (among which Lünen is paradigmatic) while protecting older, more emission-intensive assets through compensation or softer treatment, is discriminatory in result.

465 Second, Respondent's attempt to collapse the discrimination analysis into a formal inquiry as to whether a statute is "general" or "of general application"⁴⁶⁶ is misconceived. The proper approach is to put substance over form: A legislative measure can be "general" in form and yet discriminatory in substance or effect. Investment tribunals examine not only the text of the measure, but also its design, structure, and practical impact. A formally neutral measure that, by design or foreseeable effect, singles out particular investors or technologies for significantly more onerous burdens than their comparators, without an objective and reasonable justification, is discriminatory.

466 Third, the "margin of appreciation" a State enjoys does not mean that it amounts to self-judging absolute immunity. . That is inconsistent with arbitral jurisprudence, which treats comparability as an objective, context-specific inquiry grounded in economic functionality, competitive relationships, and regulatory purpose – not subjective State classification. The case law invoked by Germany to allegedly support its wide discretion shows that also a State's justification of unequal treatment is closely scrutinised by tribunals..⁴⁶⁷

467 Additionally, The relevant comparators for discrimination are not "all actors in the economy" but those in a sufficiently similar situation with respect to the protected interest and the regulatory objective. In this case, at a minimum, comparable

⁴⁶⁶ See Counter-Memorial, section IV.A.2.a.

⁴⁶⁷ See below, Section D.VI.2.dd.

investments include: (i) other hard coal power plants and (ii) lignite fired plants performing the same function of base load fossil generation. Respondent cannot artificially define the comparator group so broadly or narrowly as to pre ordain a finding of non-discrimination.

468 Fourth, human rights and climate-change considerations do not alter the legal standard of discrimination. That climate action pursues an important public interest is not in dispute. However, the weight of the objective cannot cure structural discrimination in the design and implementation of a particular measure. Non-discrimination on the one hand and public purpose on the other hand are different and separate requirements.

469 Fifth, the discrimination analysis under Article 13 is not displaced by the police powers doctrine. The doctrine itself, as Respondent accepts elsewhere,⁴⁶⁸ protects only bona fide, non-discriminatory regulation. It is internally inconsistent for Respondent to invoke police powers while at the same time arguing that the threshold of “discrimination” is so high that almost no differential treatment can ever qualify. If the measure is discriminatory, the shield of police powers falls away; the analysis reverts to whether the conditions for a lawful expropriation under Article 13(1) are met, including compensation.

470 467 Finally, as Claimant shows below, the burden of proof for discrimination is not higher or lower depending on whether discrimination is alleged as part of an expropriation claim or under a separate treaty provision.⁴⁶⁹

(b) Application to the Coal Ban Law

471 Respondent put forward five arguments,⁴⁷⁰ of which only the last one really responds to Claimant's arguments.

⁴⁶⁸ Counter-Memorial, section IV.A.1.a.; see e.g. Counter-Memorial, para. 385 at footnote 471.

⁴⁶⁹ See below, Section B.VI.2.(a)(cc).

⁴⁷⁰ Counter-Memorial, paras 443-448.

- 472 The first argument⁴⁷¹ is a strawman defence. For the reasons stated above it is irrelevant that the Coal Ban Law does not target Claimant as a foreign investor. International law also prohibits a discrimination-in-fact.
- 473 Arguments two to four all deal with the shutdown tender mechanism, which has nothing to do with the existence of expropriation and in particular does not offer compensation.⁴⁷²
- 474 The second argument⁴⁷³ is Respondent contending that it treated all other hard-coal plants of a comparable age like Lünen similarly. There are to Claimant's knowledge exactly two, i.e. the Westfalen and Moorburg plants. That does not rebut the argument of discrimination – it rather confirms it. It has been Claimant's very argument that the Coal Ban Law "*blatantly discriminates against new coal-fired power plants, treating them significantly worse than old coal-fired power plants without any reasonable or justifiable grounds*"⁴⁷⁴.
- 475 Respondent then points to the shutdown tenders and contends that the only difference between Lünen on the one hand and Moorburg and Westfalen on the other hand would be their successful participation in shutdown tenders.⁴⁷⁵ This is not an anti-discrimination argument, but rather reflects Respondent's hope that by repeating weak arguments it might make them stick. Claimant has explained above why for purposes of the shutdown tenders, the two plants cannot be compared with Lünen.⁴⁷⁶ And it has explained already in the Memorial that even a successful participation would have increased, but not mitigated damages.⁴⁷⁷

⁴⁷¹ Counter-Memorial, para. 444.

⁴⁷² Memorial, paras 227-233.

⁴⁷³ Counter-Memorial, para. 445.

⁴⁷⁴ Memorial, para. 500.

⁴⁷⁵ Counter-Memorial, para. 445.

⁴⁷⁶ See above, Section B.VI.1.

⁴⁷⁷ Memorial, paras 348, 619-623.

476 The third argument⁴⁷⁸ is not even an argument at all. It points to the shutdown tender formula and considers it to be a “reasonable policy decision”, the changing of which would have endangered the whole mechanism. As Claimant has explained, the solution was far from reasonable: Respondent offered shutdown premiums to old amortised plants but offered new plants only a pittance.⁴⁷⁹ Plants that had already largely recovered their capital costs, or that benefited from legacy support mechanisms, were either (i) allowed to operate profitably for many additional years before closure; or (ii) compensated based on book or negotiated values reflecting historical expectations. By contrast, Lünen – commissioned late and built in reliance on then-prevailing EU and German policy favouring high-efficiency, lower-emission fossil generation as a transitional technology – is forced into an early exit at a point where its sunk costs have not been recovered and without a comparable compensation pathway. This “last-in, first-out, and uncompensated” treatment of new capacity, relative to older and more polluting installations, is not rationally connected to CO₂-reduction efficiency and is therefore arbitrary. And the tender mechanism, which is separate from the mandatory shutdown, cannot justify not complying with the EG.

477 Its fourth argument⁴⁸⁰ is that there could be no discrimination since all plants older than Lünen stop firing before Lünen. That ignores central parts of Claimant's arguments: The Coal Ban Law, seen as a whole, affords unjustified benefits to:

- older, fully depreciated hard-coal assets that can monetise exit through auctions, and
- lignite operators protected by bespoke negotiated arrangements and higher compensation,

while imposing a disproportionate burden on a limited number of newer, highly efficient hard-coal plants that: (i) face an earlier or uncompensated end of economic

⁴⁷⁸ Counter-Memorial, para. 446.

⁴⁷⁹ Memorial, paras. 271, 272

⁴⁸⁰ Counter-Memorial, para. 447.

life; and (ii) are excluded from comparable compensation schemes without any rational climate or system-planning justification⁴⁸¹.

478 Whether the Lünen Plant's Coal-Firing Stop comes after that of older plants does not answer this structural point. If the objective is to minimise total emissions for any given phase-out volume, it is illogical that newer, more efficient plants should bear an equal or greater share of the lost residual life than older, more carbon-intensive units.

479 A measure can still be discriminatory even if the formal cut-off date for one operator is later, if the combination of auctions, compensation rules and regulatory choices destroys the value of a more efficient plant while preserving or softening the impact on less efficient or domestically favoured assets.

480 As Claimant's case accepts the legitimacy of coal phase-out and climate action as such, the objection is not to "the entire path until 2038" but to the *choice of instruments and allocation of burdens* within that path, in particular:

- the manner in which auction design, compensation rules and Coal-Firing Stops interacted to burden the Lünen investment disproportionately without compensation; and
- the contrast with more favourable treatment of lignite operators, which Respondent itself justifies by reference to non-climate considerations such as mining structures and regional employment.

481 The last argument deals again with the alleged difference between lignite and hard-coal plants.⁴⁸² As the Tribunal knows, lignite is more carbon-intensive per MWh than hard-coal and thus, on any climate-efficiency metric, harder – not easier – to reconcile with Paris-consistent paths. Yet lignite operators received generous, individually negotiated compensation packages and transitional arrangements, while efficient new hard-coal assets like Lünen were denied any equivalent statutory entitlement. If the paramount objective were rapid and cost-effective CO₂

⁴⁸¹ see Memorial, paras 500-508.

⁴⁸² Counter-Memorial, para. 448.

abatement, one would expect the regulatory architecture to prioritise the retirement of the dirtiest units and to avoid locking in compensation schemes that shield the most emissions-intensive capacity.

482 Respondent attempts to justify this disparity by terming both to be “different industries” invoking inter alia the mining perspective and its social dimension. Claimant explained that this has no merit. However, Respondent does not explain why – within the same fossil-generation fleet – one category of high-emitting assets is indemnified against the economic consequences of climate policy, while another category, which is both less carbon-intensive and more efficient, is left to absorb the full loss. Socio-economic mitigation for mining regions can be pursued without structurally privileging lignite generation over hard-coal, and certainly without denying any compensatory mechanism to new, efficient plants that were specifically encouraged under earlier energy-policy frameworks. It would have been more expensive for Germany, but the desire to save money is no justification for discriminatory actions.

3. Respondent fails to undermine the expropriation claim

483 In the Memorial, Claimant explained that the Coal Ban Law deprived Claimant's investment into Lünen of its value. With the shutdown, it will neither obtain repayment of its equity nor a cent of return. Claimant and its fellow shareholders will have constructed, paid, and operated a modern and efficient power plant, which Germany wanted and needed, with nothing to show for but the expenses.

484 The Counter-Memorial does not undermine the merits of the expropriation claim. It focuses on a number of misguided abstract and hypothetical arguments while ignoring the economic reality of Claimant's loss.

485 It is firstly irrelevant that the plant continues to generate profits which serve to repay the loans of the banks.⁴⁸³ Expropriation turns on whether the **investor** suffers a substantial, permanent loss of the value and economic use of the investment, not on whether some other stakeholder (here, the banks) earns interest or whether the

⁴⁸³ See above B.III.3.

corporate shell remains. A State cannot avoid expropriation by structuring its measures so that secured domestic creditors are made whole while the equity is destroyed. That would open Pandora's box. Respondent's argument that it "is not responsible for this choice" (of financing) also evidences a blatant ignorance of economic reality. A leverage of around ■% is normal in financing of coal-fired power plants. Not knowing what the consequences of its own actions are is negligent, not even inquiring or trying to analyse them is worse. Respondent did not even try to check the debt/equity ratio of the coal-fired power plants it decided to shut down.

486 Respondent, secondly, relies on a hypothetical conversion to gas-firing. That, however, would presuppose: (i) a positive conversion decision by all shareholders, (ii) a bankable financing structure, (iii) new permits, and (iv) favourable market conditions over many years. None of these contingencies is guaranteed or under Claimant's sole control⁴⁸⁴. It is thus not an option for Claimant.

487 The expropriation analysis concerns the value of the **actual hard-coal investment** at the time the Coal Ban Law "*became known in such a way as to affect the value of the Investment*", not the value of a different, future gas-fired project that would require fresh capital and regulatory risk. Treating a contingent, capital-intensive conversion into a new asset as "offsetting" the loss of the existing investment would collapse the distinction between taking one investment and allowing the investor to attempt a different one.

488 Respondent then, thirdly, tries to put the blame for its own actions on Claimant by contending that Claimant chose to "*concede all possible defenses in the negotiations with the banks*". That is as meritless as it is incredible. As shown above, the negotiations with the banks were undertaken prudently and the amendment reached was economically sound and an exercise of business judgement.⁴⁸⁵

489 Respondent, fourthly, invokes the absence of a "final and binding permit" and the pending NGO litigation to argue that if a domestic court judgment upholding

⁴⁸⁴ See above Section B.VI.3.

⁴⁸⁵ See above Section B.VI.2.

environmental law would not have been an expropriation, then neither can a Coal-Firing Stop adopted to protect “*global fauna and flora (and the survival of human civilisation)*”.⁴⁸⁶

490 This analogy fails for two reasons:

- First, ordinary project risks – such as a pending administrative challenge – were baked into Claimant’s investment decision and were being managed within the then-existing legal framework. The Coal Ban Law is extraneous to it and fundamentally **altered that framework across the sector**, imposing a definitive, legislated Coal-Firing Stop and eliminating the core economic premise of the investment.
- Second, a case-specific court decision applying pre-existing law to a particular permit is not comparable to a **new, general measure** that changes the legal environment for all hard-coal plants and that, by Respondent’s own admission, was driven by macro-climate policy rather than the local forest litigation. The fact that one hypothetical judicial outcome might have destroyed the investment does not authorise the State to achieve the same economic result through legislative action without observing treaty constraints.

491 Respondent’s last argument is that the Coal Ban Law increased electricity prices and benefitted Claimant’s wider portfolio. This however does not address whether there has been a substantial, permanent loss of the Lünen investment’s value. For the reasons set out below, this argument has no merit from an energy economics perspective. It also has no merit from the viewpoint of international law.⁴⁸⁷

492 Expropriation is assessed **per investment**, not at the level of a conglomerate’s overall portfolio: the fact that other assets (hydro, wind, nuclear) may have become more profitable cannot compensate for the loss inflicted on this specific hard-coal investment.⁴⁸⁸ To hold otherwise would allow States to expropriate one project without compensation whenever the same investor happens to hold other assets

⁴⁸⁶ Counter-Memorial, para. 468.

⁴⁸⁷ See below, Section E.VI.

⁴⁸⁸ See below, Section E.VI.

that benefit from the measure. If all operating plants became more profitable, then this applied to all plants – hard coal, lignite, hydro, wind and PV. It would be discriminatory to absorb only potential benefits obtained by AET and not by other operators on the market. A State may not profit from its own wrong.

4. Summary

493 Germany's expropriation defence ultimately asks the Tribunal to declare that once a measure is labelled "climate action", it falls outside the normal criteria of Article 13 ECT and outside meaningful arbitral review. That is not a submission about the content of the standard; it is an invitation to abstain from applying the standard at all.

494 Yet Article 13(1) ECT is drafted on the opposite premise. It accepts that expropriations will frequently pursue a "public interest" – and climate protection is undoubtedly such an interest. However, Article 13(1) then subjects those very measures to clear conditions: non-discrimination, due process, and "*prompt, adequate and effective compensation*." If every measure pursuing climate goals were, by definition, non-expropriatory and non-compensable, there would be no reason for Article 13(1) to speak of expropriations taken "for a purpose which is in the public interest" at all; that category would be empty.

495 What Germany calls an "even greater margin of appreciation" in climate matters is therefore not a free-standing defence to expropriation; at most, it is one factor in assessing whether a particular interference was proportionate and whether compensation is owed. The Tribunal remains bound to examine the concrete effects of the Coal Ban Law on Lünen - its forced premature shutdown, the deliberate exclusion of new plants from compensation, and the resulting near-total loss of investment value - and to determine whether that combination crosses the threshold into an indirect expropriation within the meaning of Article 13 ECT.

496 Accepting Germany's plea for effective immunity would mean that whenever a State invokes climate change, Article 13 becomes inoperative and the Tribunal's role shrinks to endorsing whatever regulatory design the legislature chose. That is not what the Contracting Parties agreed to when they drafted a detailed expropriation

clause and preserved its application even to environmental measures via Article 24(2). The Tribunal's mandate is to ensure that climate action is implemented within the framework of the ECT's protections, not to declare that these protections simply do not apply whenever the word "climate" appears in the title of a statute.

III. Respondent breached its obligation under the Umbrella Clause

497 In the Memorial, Claimant explained at length that the Umbrella Clause in Article 10(1) ECT applies also to non-contractual obligations.⁴⁸⁹ Claimant explained also why contract-like permit obligations are "obligations entered into with an Investor or an Investment". The Memorial also explained that in the area of power plant construction, the permitting procedure under the FICL could not be replaced by contracts and that the issued permits are functional substitutes to a contract.

498 Respondent raised a number of misguided objections.

1. Limiting the Umbrella Clause to contracts deprives it of meaning in heavily regulated industries

499 Respondent seeks to confine Article 10(1) sentence 5 ECT to classic contracts and to exclude any unilateral acts such as permits. As explained in the Memorial, that is neither compelled by the text nor consistent with the clause's function in a highly regulated sector such as power plant construction and operation. The wording ("observe any obligations it has entered into with an Investor or an Investment") is deliberately wider than "contracts" and does not limit itself to private law agreements. If that had been the intention, then the drafters could have said so. Similarly, the text does not say anything about the need for a "consideration".⁴⁹⁰ Respondent reads something into the text which is not there.

500 Where domestic law channels State commitments into administrative acts rather than contracts, the only way to give the clause effective meaning is to recognise

⁴⁸⁹ Memorial, paras. 374 et seq.

⁴⁹⁰ Counter-Memorial, para. 480.

those acts when they are specific, bilateral in effect and relied upon to commit capital.

501 Claimant's Memorial and public law analysis explain that FICL permits are issued only after an application and a detailed, bilateral procedure; they confer subjective public rights on the operator and bind all German authorities until lawfully modified or revoked.⁴⁹¹ Functionally, they are the German law equivalent of an implementation agreement: they define the conditions, duration and modalities under which this specific plant may be built and operated.

502 Tribunals have consistently stressed that umbrella clauses exist to prevent States from evading their concrete investment-related undertakings by changing form or law. If a State can internationalise only commitments that it chooses to express in a contract, but never commitments it chooses to express in a permit, the host State retains unilateral control over whether the umbrella clause ever applies. That reading:

- empties the clause of practical content in heavily regulated industries where public law permits, not contracts, are the norm;
- incentivises States to avoid contracts precisely in order to avoid the umbrella clause; and
- creates arbitrary distinctions between two legally equivalent ways of conferring investment enabling rights (permit vs contract).

503 By contrast, recognising permits which (i) are project specific, (ii) result from interaction "with" the investor, (iii) grant rights respectively determine important parts of a project, and (iv) are intended to induce or support investment, fits both the treaty text and its object and purpose without opening any "floodgates": general, abstract legislation remains outside the clause; only individualised commitments qualify.

⁴⁹¹ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), Section D.II.1.

- 504 Respondent mentions (implicitly through references to case law) the concern that tribunals should not become general appellate courts reviewing domestic judicial and administrative decisions. This concern is shared entirely, but is inapposite here.
- 505 Claimant does not ask the Tribunal to correct alleged errors by German courts or the Arnsberg authority in applying FICL, FFH law, or *TA Luft* standards. The complaint is **a treaty claim**: that Germany legislated the Coal-Firing Stop in a way that neutralised specific, project-tailored rights conferred by the FICL permits, while deliberately circumventing the ordinary FICL compensation regime and the expectations created by those permits.
- 506 The decisive question under Article 10(1) sentence 5 ECT is whether Germany "observed" its obligations to Lünen once it chose to legislate a hard-coal phase-out via the Coal Ban Law. That is a question of international law, not of whether German regulators correctly applied domestic permitting law at the time of permit issuance. The Tribunal's role is to assess whether the subsequent legislative override of bilateral commitments (the permits) is compatible with the ECT – not to sit as a fourth instance reviewing prior administrative or judicial decisions.
- 507 In short, the distinction Respondent draws between "tribunal as appeal court" and "tribunal as treaty interpreter" is precisely why the umbrella clause claim is alive: it is forward-looking, not backward-looking, and it assesses State conduct (the Coal Ban Law) against treaty obligations, not domestic administrative law.

2. Respondent's arguments are not convincing

- 508 Respondent raises a number of objections against a breach of the umbrella clause. They are not convincing.
- 509 Respondent, firstly, says that the 2013 Advance Decision post-dates the investment. That is correct, but irrelevant. As explained above, the 2013 Advance Decision is nothing other than the 2008 Advance Decision recast – with the initially missing environmental compatibility assessment. As Dr. Krahnefeld explains in his Legal Opinion, it is that 2008 Advance Decision – recast in 2013 – which was the basis for the Partial Permits 1-5 and thus the construction of the plant. It was valid

and enforceable until annulled in 2011 by the Higher Administrative Court. At that time, work under Partial Permit 1 had already been completed and Partial Permits 2-5 were never challenged or annulled.

510 Respondent, secondly, contests that the Advance Decision induced the investment as such. As explained above, the 2013 Decision is the 2008 Decision recast. And it should be undisputed that it is the function of an Advance Decision to give an investor safety and security for its planned investment, as it fixes certain important parts of future permits.

511 Respondent, thirdly, emphasises that the 2013 Advance Decision was not “final and binding” since challenged in Court. That does not mean, however, that it was not enforceable. It had been issued as immediately enforceable, so that the legal action by the NGO did not prevent it from taking effect. Respondent knows this of course, but has refrained from explaining this to the Tribunal.

512 Respondent, lastly, argues that the 2013 Permit would not create any relevant obligations. It contends that an operating permit under FICL would not be different from other operating permits. Claimant agrees – with one caveat: the important difference is that an operating permit under FICL usually relates to a substantial investment, while other operating permits may not and would thus be irrelevant for an investment case.

513 Respondent then tries to deny that permits could only be changed according to the existing regulatory framework, but in fact confirms it. The reference to *TA Luft* and *TA Lärm* as well as to EU law requirements are part of the regulatory framework of an operating permit. The Coal Ban Law is extraneous to the initial framework and does not amend it, but substantively overrides and empties it. It then misrepresents its own law when contending that “*the German constitution does not protect a permit from legislative changes either*”⁴⁹². The authority to which it refers is the Constitutional Court judgement about the nuclear phase-out case. Permits under nuclear law, however, are different from FICL permits. Nuclear law prohibited the operation of nuclear power plants, but gave the State the right to allow exceptions

⁴⁹² Memorial, para 503.

(“*Verbot mit Erlaubnisvorbehalt*”), while FICL gives an applicant a right to operate a plant if the plant fulfils the conditions. Both might be called “permits”, but they are legally different.

IV. Respondent breached its obligation to treat Claimant's investment fairly and equitably

514 Claimant demonstrated in the Memorial⁴⁹³ that the ECT's fair and equitable treatment (“**FET**”) standard protects against regulatory changes which exceed State's acceptable margin of appreciation. This margin is exceeded since Respondent fundamentally altered the essential characteristics of the regulatory framework for operating coal-fired power plants, and disproportionately burdened Claimant by not granting compensation.

515 Respondent **fails** to refute this.

516 Section IV.C of its Counter-Memorial represents a fundamental misreading of the ECT's protective architecture. Respondent seeks to subordinate the FET standard to a doctrine of regulatory deference that finds no basis in the treaty text, the preamble, the ECT's preparatory materials, or the weight of contemporary arbitral jurisprudence.

1. Legal standard

517 Respondent assumes that the FET-standard does not protect investors against fundamental changes or disproportional burdens.⁴⁹⁴ It contends that Claimant would raise an “*abstract theory*” and tries to support its contention with five arguments,⁴⁹⁵ all of which are misguided.

⁴⁹³ Memorial, Section E.V.

⁴⁹⁴ See for instance: Counter-Memorial, paras 517, 519-520.

⁴⁹⁵ Counter-Memorial, para. 508.

(a) Claimant does not rely on the first sentence of Article 10(1) ECT as a stand-alone obligation of stability

518 Respondent's first argument is - again - a strawman argument. Respondent devotes substantial effort to argue that the first sentence of Article 10(1) ECT is "*merely declaratory in nature*"⁴⁹⁶ and does not "*impose a stand-alone 'obligation of stability'*".⁴⁹⁷ On the basis of this argument, Respondent appears to suggest that Claimant's FET claim collapses if the first sentence is read as non-operative. It apparently contends that Claimant would ground the breach of the FET standard "*only on sentence 1 of Article 10 (1) ECT*".⁴⁹⁸

519 However, this characterisation misrepresents the Memorial and the methodology by which Claimant invokes Article 10(1) ECT. The Memorial does **not** base the claim on the first sentence of Article 10(1) ECT as a free-standing "stability clause". Rather, consistent with Article 31 of the Vienna Convention on the Law of Treaties ("**VCLT**"), the Memorial uses the first sentence as interpretative context.⁴⁹⁹ It serves as evidence of the ECT's stability-oriented object and purpose to clarify the meaning and application of the FET obligation set out in sentence 2 of Article 10(1) ECT.

520 Therefore, the whole discussion in paras 510 to 515 of the Counter-Memorial is irrelevant and beside the point. The decisions cited by Respondent as authority for the proposition that Article 10(1) 1st sentence does not contain a stand-alone obligation, i.e. *AES v. Kazakhstan*, *Isolux v. Spain* and *Stadtwerke München*, do not disprove Claimant's claim. They dealt with different claims.

521 Those tribunals also did not disagree in substance that there was an obligation not to fundamentally alter the legal framework on which an investor relied. They merely reviewed it within the context of legitimate expectations.⁵⁰⁰ As will be explained

⁴⁹⁶ Counter-Memorial, para. 508.

⁴⁹⁷ Counter-Memorial, para. 509.

⁴⁹⁸ Counter-Memorial, para. 509.

⁴⁹⁹ Memorial, para. 425.

⁵⁰⁰ See, e.g. [Exhibit CLA-0051: Stadtwerke München GmbH and others v. Kingdom of Spain](#), ICSID Case No. ARB/15/1, Award, 2 December 2019, para. 264; [Exhibit CLA-0058: Isolux](#)

below, that is a dogmatic different conception which does not affect the substance of the obligation as such. Respondent also in vain tries to impress the Arbitral Tribunal by pointing out that the *Stadtwerke München* tribunal rejected the investor's claims: that was for case-specific reasons relating to the claims presented which have no relevance in the case at hand.

522 Claimant notes that Respondent has chosen not to engage with its explanation in paras 433 to 438 of its Memorial. Arbitral decisions⁵⁰¹ and renowned scholars⁵⁰² confirm that FET contains an element of stability. The tribunal in *Foresight v. Spain* summarised this as follows: “Indeed, the Tribunal considers that it is well established that legal stability is part of the FET standard under the ECT.”⁵⁰³ Similarly, the tribunal in *Plama v. Bulgaria* emphasised that “stable and equitable conditions are clearly part of the fair and equitable treatment standard under the ECT.”⁵⁰⁴ This is even acknowledged by non-ECT-tribunals with less focus on stable investment conditions.⁵⁰⁵

[Infrastructure Netherlands B.V v. Kingdom of Spain, SCC Case No. V2013/153, Award \(Extracts\) dated 12 July 2016 and Dissenting Opinion, 6 July 2016 \(Unofficial Translation\), para. 512.](#)

⁵⁰¹ See for instance recently: [Exhibit CLA-0064: Eiser Infrastructure Limited and Energia Solar Luxembourg S.A.R.L v. Kingdom of Spain, ICSID Case No. ARB/13/36, Award, 4 May 2017, para. 429.](#)

⁵⁰² [Exhibit CLA-0010: R. Dolzer, Fair and Equitable Treatment: Today's Contours, 12 Santa Clara Journal of International Law 7 \(2014\), p. 15; Exhibit CLA-0078: B. Kingsbury and S. Schill, Public Law Concepts to Balance Investors' Rights with State Regulatory Actions in the Public Interest – The Concept of Proportionality, in S. Schill, International Investment Law and Comparative Public Law \(2010\), p. 96.](#)

⁵⁰³ [Exhibit CLA-0065: Foresight Luxembourg Solar S.a.r.l. and others v. Kingdom of Spain, SCC Case No. V\(2015150\), Final Award, 14 November 2018, para. 351.](#)

⁵⁰⁴ [Exhibit CLA-0016: Plama Consortium Limited v. Republic of Bulgaria, ICSID Case No. ARB/03/24, Award, 27 August 2008, para. 175; see also: Exhibit CLA-0051: Stadtwerke München GmbH and others v. Kingdom of Spain, ICSID Case No. ARB/15/1, Award, 2 December 2019, para. 195.](#)

⁵⁰⁵ See Memorial, para. 427; see also [Exhibit CLA-0043: Enron Creditors Recovery Corporation \(formerly Enron Corporation\) and Ponderosa Assets, L.P. v. Argentine Republic, ICSID Case No. ARB/01/3, Award, 22 May 2007, para. 260; Exhibit CLA-0172: Duke](#)

- 523 Within this context of stability as part of FET, Respondent also tries to oppose Claimant's argument that the FET standard protects an investor against disproportional changes of the regulatory framework.⁵⁰⁶ It purports that "*the alleged principle of proportionality does not import a stand-alone 'obligation of stability' into the FET standard either,*"⁵⁰⁷ suggesting that a mere violation of the principle of proportionality could not violate Respondent's obligation to treat Claimant fairly and equitably. Yet, this also misses the core. Claimant has not argued that the violation of the principle of proportionality reflects a stand-alone obligation, but rather in combination with a fundamental change of the essential characteristics of the legal framework that Claimant relied on when making its investment.⁵⁰⁸
- 524 Further, Respondent is of the view that "the alleged principle of proportionality" would not impose restrictions on a State's right to regulate, but provide a "justification for State action where it would otherwise be a violation of international law".⁵⁰⁹
- 525 That is astonishing. This objection has two sub-aspects: firstly, that Germany considers the principle to be alleged, i.e. doubts that it exists; and secondly, that Germany considers proportionality a justification of otherwise unlawful conduct.
- 526 Both are incorrect.
- 527 Respondent should be well aware that one of the main functions of the principle of proportionality, which has its roots in German administrative and constitutional law,

[Energy Electroquil Partners & Electroquil SA v. Ecuador](#), ICSID Case No. ARB/04/19, Award, August 18, 2008, para. 339; [Exhibit CLA-0024: LG&E Energy Group v. Argentine Republic](#), ICSID Case No. ARB/02/1, Decision on Liability of 3 October 2006, para. 124; [Exhibit CLA-0045: CMS Gas Transmission Company v. The Argentine Republic](#), ICSID Case No. ARB/01/8, Award, 12 May 2005, para. 274.

⁵⁰⁶ Memorial, paras 447-454.

⁵⁰⁷ Counter-Memorial, para. 516.

⁵⁰⁸ see also: [Exhibit CLA-0070: M. Aggarwal and R. Kabra, 'Regulating for Climate Change Without Breaching Investment Treaties', in A. Ipp and A. Magnusson \(eds\), *Investment Arbitration and Climate Change*, 2024](#) p. 170.

⁵⁰⁹ Counter-Memorial, para. 516.

is to balance State's power with rights of individuals. As such, it inherently limits the State's power. *Benedict Kingsbury* and *Stephan Schill* outline this as follows:

*"Proportionality 'sets material limits to the interference of public authorities into the private sphere of the citizen' and 'provide[s] a tool to define and restrain the regulatory freedom of governments'. It helps to define and to balance the public, represented by the interference and the underlying interest of the state or the community concerned, and the private, represented by the interests of the individuals affected."*⁵¹⁰ (emphasis added)

528 Claimant has demonstrated in the Memorial that under Article 10(1) ECT, the principle of proportionality functions as an **integral element of the assessment of whether State's actions remain fair and equitable**. Its role is to determine whether, in pursuing a legitimate public interest, the State has **maintained a reasonable balance between that interest and the rights and interests of the affected investor**.⁵¹¹ In doing so, tribunals found that this requirement is lacking if the regulatory change imposes an excessive, disproportional burden on investors.⁵¹² This, however, is a limiting test, not a *post hoc* justification, as suggested by Respondent.

529 The tribunal in *Occidental* illustratively outlined this: "The obligation for fair and equitable treatment has on several occasions been interpreted to import an obligation of proportionality."⁵¹³ In the same vein, the tribunal in *Electrabel* substantiated:

"The relevance of the proportionality of the measure has been increasingly addressed by investment tribunals and other international tribunals, including the ECHR. The test for proportionality has been developed from certain municipal administrative laws, and requires the measure to be suitable to

⁵¹⁰ [Exhibit CLA-0078: B. Kingsbury and S. Schill, *Public Law Concepts to Balance Investors' Rights with State Regulatory Actions in the Public Interest – The Concept of Proportionality*, in S. Schill, *International Investment Law and Comparative Public Law* \(2010\), p. 80.](#)

⁵¹¹ Memorial, para. 448.

⁵¹² Memorial, para. 459, with further reference to jurisprudence.

⁵¹³ [Exhibit CLA-0063: *Occidental and others v. Republic of Ecuador*, ICSID Case No. ARB/06/11, Award, 5 October 2012](#), para. 404.

*achieve a legitimate policy objective, necessary for that objective, and not excessive considering the relative weight of each interest involved.*⁵¹⁴

530 Respondent's attempt to characterise the principle of proportionality as a "justification" is already not convincing since neither the ILC Articles on State Responsibility nor the ECT provide for such a justification. It is also pure sophistry: for the outcome of an assessment of the legality of State actions, it makes no difference whether the principle of proportionality restricts lawful actions of a State from the outset (as applied by Claimant and the wealth of authority cited), or justifies State's unlawful actions in a second step (as suggested by Respondent).

(b) FET does not protect only a narrow set of specified categories

531 With its second argument, Respondent tries to weaken the authoritative force of the line of decisions according to which stable investment conditions are part of the FET standard under the ECT. It contends that FET standard would not contain "*an obligation of stability outside the protection of specific legitimate expectations*"⁵¹⁵ but only "*narrow categories of specific obligations as they are now developed on jurisprudence*", without an obligation of stability.⁵¹⁶

532 That argument contains two parts, both of which are misguided.

533 The first erroneous part is the premise that FET contains only "a narrow catalogue of categories" of specific obligations.⁵¹⁷ Apparently, Respondent bases its assertion of alleged "narrow categories of specific obligations" not on the ECT as it stands, but on other investment treaties which unlike the ECT explicitly envisage such

⁵¹⁴ [Exhibit CLA-0084: Electrabel S.A. v. Republic of Hungary](#), ICSID Case No. ARB/07/19, Award, 25 November 2015, para. 179; see also: [Exhibit CLA-0076: RWE Innogy GmbH v. Kingdom of Spain](#), ICSID Case No. ARB/14/34, Decision on Jurisdiction, Liability, and Certain Issues of Quantum of 30 December 2019, para. 462.

⁵¹⁵ Counter-Memorial, para. 520.

⁵¹⁶ Counter-Memorial, para. 518.

⁵¹⁷ Counter-Memorial, para. 520.

narrow categories,⁵¹⁸ or on the proposed amended ECT.⁵¹⁹ However, the Arbitral Tribunal has to apply the ECT in its current version and not a version which Respondent itself has not accepted.⁵²⁰ The ECT in its current form speaks of an obligation to provide fair and equitable treatment, which is not further broken down into subcategories.

- 534 The second erroneous part is the view that “FET does not contain an obligation of stability outside the protection of specific legitimate expectations”.
- 535 It does therefore not surprise that Respondent’s cited “*almost endless line of arbitral awards rendered over the last 20 years*”⁵²¹ either reaffirms Claimant’s position or the decisions are subject to entirely different investment treaties:
- 536 First, Respondent is only able to cite **two out of 23 decisions**⁵²² which are based on the ECT to support its contention that the FET standard only protects a narrow

⁵¹⁸ See for instance, [Exhibit CLA-0173: Comprehensive Economic and Trade Agreement \(“CETA”\) between Canada and the European Union and its Member States](#), Article 8.10(2):

“2. A Party breaches the obligation of fair and equitable treatment referenced in paragraph 1 if a measure or series of measures constitutes:

- (a) denial of justice in criminal, civil or administrative proceedings;
- (b) fundamental breach of due process, including a fundamental breach of transparency, in judicial and administrative proceedings;
- (c) manifest arbitrariness;
- (d) targeted discrimination on manifestly wrongful grounds, such as gender, race or religious belief;
- (e) abusive treatment of investors, such as coercion, duress and harassment; or
- (f) a breach of any further elements of the fair and equitable treatment obligation adopted by the Parties in accordance with paragraph 3 of this Article.”

⁵¹⁹ [Exhibit C-0189: Energy Charter Secretariat, Decision of the Energy Charter Conference – Public Communication explaining the main changes contained in the agreement \(CCDEC 2022 10 GEN\), 24 June 2022](#), CCDEC 2022 10 GEN.

⁵²⁰ [Exhibit C-0190: Federal German Government, Key issues paper further development of the key issues paper “Trade policy of the Federal Government, 30 November 2022](#), p. 2.

⁵²¹ Counter-Memorial, para. 520.

⁵²² [Exhibit CLA-0174: SunReserve Luxco Holdings S.A.R.L. et al. v. The Italian Republic, SCC Case No. V\(2016/32\), Final Award, 25 March 2020](#); [Exhibit CLA-0057: Electrabel S.A. v.](#)

set of measures. Both decisions do not support Respondent's assertion. The tribunal in *SunReserve v. Italy* stated that it follows from the ECT's context and purpose as well as standard arbitral practice that the obligation to ensure a stable regulatory framework is an essential part of the ECT's FET standard:

*"[S]tability and transparency in the legal framework are important ingredients of the host State's FET obligation. This is evidenced not only from the above discussed context and object and purpose of the ECT, but is also unanimously accepted in investment arbitration case law. In this connection, it is also important to note that as part of this general obligation to maintain stability and transparency in the legal framework, host States are also required to generally create a favourable environment for investments".*⁵²³

537 It further outlined that claims related to the obligation to ensure stability and claims regarding investors legitimate expectations may, but not necessarily overlap:

*"Both Parties agree that the host State's duty to conduct itself in a transparent and consistent manner forms part of the FET obligation in general, and that the demarcation between this duty and the duty to preserve legitimate expectations is not watertight. In other words, claims relating to the notions of transparent and consistent conduct may often factually overlap with claims relating to the investor's legitimate expectations. The Tribunal finds this proposition uncontroversial. In this regard, the Tribunal recalls that it has already found stability and transparency to be inherent in the meaning of the FET obligation under Article 10(1) ECT."*⁵²⁴

538 Finally, both the tribunal in *Electrabel v. Hungary*⁵²⁵ and *SunReserve v. Italy* held that an explicit assurance or commitment was not required to establish a violation

[*The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012.](#)

⁵²³ [Exhibit CLA-0174: *SunReserve Luxco Holdings S.A.R.L. et al. v. The Italian Republic*, SCC Case No. V\(2016/32\), Final Award, 25 March 2020, para. 684; see also: \[Exhibit CLA-0057: *Electrabel S.A. v. The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012, para. 7.73.\]\(#\)](#)

⁵²⁴ [Exhibit CLA-0174: *SunReserve Luxco Holdings S.A.R.L. et al. v. The Italian Republic*, SCC Case No. V\(2016/32\), Final Award, 25 March 2020, para. 731.](#)

⁵²⁵ [Exhibit CLA-0057: *Electrabel S.A. v. The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012, paras 7.77-7.78.](#)

of the FET standard. The latter explicitly highlighted that absent a specific assurance, the ECT's FET standard still protects against fundamental changes:

*"In the absence of such specific undertakings, when the question of breach only implicates a host State's regulatory changes, not every non-transparent or inconsistent regulatory change of conduct would amount to a breach of the FET obligation. As already observed by the Tribunal above, in order for the regulatory change to amount to a breach of the FET obligation, such a change should rise to the level of a "radical or fundamental" change, in light of the high standard to satisfy a breach of the FET obligation."*⁵²⁶

539 Second, all 21 additional decisions are based on different investment treaties from the ECT with a different context and purpose.⁵²⁷ Having recourse to these investment treaties when interpreting provisions of the ECT completely undermines the special purpose of the ECT as well as of Article 31(3)(c) VCLT. The case of *Rumeli v. Kazakhstan* – to which Respondent extensively refers⁵²⁸ – illustrates this: In contrast to the ECT, the Turkey-Kazakhstan BIT, which was the applicable legal instrument in that dispute, does not itself provide for an obligation to accord fair and equitable treatment.⁵²⁹ Even less does it include similar provisions such as Articles 2, 10(1)(1) or 24(2)(b) ECT. The only reference to stable investment conditions can be found in its preamble.⁵³⁰ There, claimant also did not claim that Kazakhstan breached the FET standard because it had not ensured stable investment

⁵²⁶ [Exhibit CLA-0174: SunReserve Luxco Holdings S.A.R.L. et al. v. The Italian Republic, SCC Case No. V\(2016/32\), Final Award, 25 March 2020](#), para. 735; see also: [Exhibit CLA-0031: RENERGY S.à r.l. v. Kingdom of Spain, ICSID Case No. ARB/14/18, Award, 6 May 2022](#), para. 642; [Exhibit CLA-0076: RWE Innogy GmbH v. Kingdom of Spain, ICSID Case No. ARB/14/34, Decision on Jurisdiction, Liability, and Certain Issues of Quantum of 30 December 2019](#), para. 451.

⁵²⁷ See Counter-Memorial, paras 518-520.

⁵²⁸ Counter-Memorial, para. 519; [Exhibit CLA-0167: Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award, 29 July 2008](#).

⁵²⁹ The Claimants could only invoke a violation of a fair and equitable treatment through the BIT's MFN clause ([Exhibit CLA-0167: Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award, 29 July 2008](#), para. 575).

⁵³⁰ [Exhibit CLA-0175: Turkey-Kazakhstan Bilateral Investment Treaty](#), Preamble.

conditions. The investor merely argued that the FET standard would protect certain treatments, albeit explicitly outlining that its list was not exhaustive (*"inter alia"*).⁵³¹ Since the Respondent agreed to that list, the tribunal simply adopted this list, without analysing whether additional treatment was protected.⁵³²

540 Respondent's argument appears to be based on a different dogmatic understanding of the "fundamental change"-concept. Apparently, Respondent considers it a sub-aspect of the protection of legitimate expectations, and therefore argues that Claimant cannot rely on it (as Claimant does not explicitly invoke legitimate expectations). Claimant considers the protection against fundamental changes to be separate from the obligation to protect legitimate expectations, which pertains to specific expectations.

541 Such different dogmatic understandings are quite common. The tribunal in *ACF Renewables v. Bulgaria* noted this as follows:

"1725. The Tribunal observes that nuanced thoughts can be had about what FET must entail in addition to not violating legitimate expectations and to what extent Article 10(1), sentence one, ECT informs, determines, or provides context to, the notion of what FET entails, or even what can be expected by an Investor.

1726. Nevertheless, there seems to be a core agreement between the Parties to this case, and also among most interpreters of the ECT, that FET is not accorded when after an investment is executed and costs are sunk, conditions that formed the basis for an investment are not kept stable to a certain degree, or when an investment is not treated in a stable and consistent manner to a sufficient degree, or when it turns out that a host State was insufficiently transparent about the true conditions for an investment.

1727. The Tribunal notes in that regard that many adjectives such as "arbitrary", "radical", "reasonable", and "proportionate" have been used to describe what degree is a "certain" or "sufficient" degree that qualifies an act

⁵³¹ [Exhibit CLA-0167: Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award, 29 July 2008](#), para. 583.

⁵³² [Exhibit CLA-0167: Rumeli Telekom A.S. and Telsim Mobil Telekomunikasyon Hizmetleri A.S. v. Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award, 29 July 2008](#), para. 609.

as a violation of the FET Obligation, although none of those adjectives appears in the text of Article 10(1) ECT sentences one and two. Therefore, none of the adjectives deemed important in case law and argument, or the tests developed in case law, will relieve a tribunal from its duty to determine on the basis of all circumstances of a case whether FET, that is “fair” and “equitable” treatment, was accorded or not.”⁵³³

542 Similarly, the tribunal in the recent decision in *EP Wind v. Romania* observed that tribunals might take divergent views on certain dogmatic questions, but were fundamentally in agreement as to the result:

“723. While the decisions of the ECT tribunals take diverging views on (i) whether so-called “no fundamental change” obligation differs from the obligation not to frustrate legitimate expectations; and (ii) whether that obligation is subject to a balancing test such as that proposed by the Respondent, there is some level of agreement on this “no fundamental change” obligation. In Next Era, 9REN, InfraRed, Blusun, as well as in other cases, the tribunals have found that to succeed on a claim relating to the so-called “no fundamental change standard,” a claimant must prove at least the following: first, that there was an essential characteristic of the legal framework of the investment, and second, that the State “fundamentally changed the essential characteristics” or “fundamentally or radically [altered] the essential elements of the [regulatory framework] [...]” As noted above, the Parties are also largely in agreement about these two requirements.”⁵³⁴

543 Respondent's arguments are thus unfounded. The FET obligation does not merely contain an enumerated narrow set of sub-obligations. The treaty applicable to this dispute is neither the modernised ECT nor CETA. The ECT as applicable contains only a general obligation: to treat Investors fairly and equitably. Tribunals have different dogmatic concepts to approach similar cases, but come to the same conclusions: a State which fundamentally changes the regulatory framework for

⁵³³ [Exhibit CLA-0176: ACF Renewable Energy Limited v. Republic of Bulgaria, ICSID Case No. ARB/18/1, Award, 05 January 2024](#), paras 1725-1727.

⁵³⁴ [Exhibit CLA-0177: EP Wind Project \(Rom\) Six Ltd. v. Romania, ICSID Case No. ARB/20/15, Decision on Jurisdiction, Liability and Select Issues of Quantum, 17 March 2025](#), para. 723; see also: [Exhibit CLA-0178: InfraRed Environmental Infrastructure GP Limited and others v. Kingdom of Spain, ICSID Case No. ARB/14/12, Award, 2 August 2019](#), para. 368.

investments in an industry can breach FET. Whether that aspect of FET is considered part of legitimate expectations or not is irrelevant.

(c) The ECT limits the State's right to regulate

544 Respondent further asserts that the ECT would “*not seek to constrain but acknowledge[s] the deference to the State*” when it comes to regulatory changes.⁵³⁵

545 That is misguided.

546 It is based, firstly, on a misrepresentation of Article 24(2)(i) ECT. Respondent's citation of this provision is selective. It omits mentioning that Article 24(2)(i) ECT does not apply to the provisions of Part III ECT. Respondent cannot escape its liability to pay compensation for a breach of Article 10(1) ECT by arguing that the measure adopted was necessary to protect the environment or human life or health. Claimant explained this already in detail in its Memorial⁵³⁶ and above under Section D.I.

547 Respondent's reference to GATT⁵³⁷ is also misguided. The Contracting Parties did not simply adopt the language from Article XX of the 1994 GATT. They included an exception to the exception of Article XX of the 1994 GATT. This exception mandates that measures “*necessary to protect human, animal or plant life or health*” precisely do not justify a breach of the obligations under Part III of the ECT.⁵³⁸

548 Respondent, secondly, attempts to rely on Article 19 ECT. Its argumentation also borders on misrepresentation. It stops reproducing the text of Article 19 when it comes to the various and detailed best-efforts obligations of Contracting States. The provision does not mention a need to undertake all necessary measures (let alone any) to combat climate change, nor does it constitute an explicit exception to

⁵³⁵ Counter-Memorial, para. 521.

⁵³⁶ Memorial, para. 317.

⁵³⁷ Counter-Memorial, paras 522-523.

⁵³⁸ See above para. 441.

Part III ECT. Unlike Article 17 ECT, Article 19 is not even contained in Part III ECT and thus cannot be light-heartedly used to interpret the provisions in Part III.

549 Respondent further draws the Tribunal's attention to the preamble of the ECT which recognises the UNFCCC. As Claimant explained under Section D.I.2 of the Reply, this strengthens but does not weaken its argumentation. The Contracting Parties were aware of the Convention and the need to combat climate change, but did not include any substantive provision on it. Respondent wants the Tribunal to read something into the ECT which is not there.

550 For lack of anything solid, Respondent also invoked the objectives of the 1991 Energy Charter and the preamble of the 1994 Protocol on Energy Efficiency. Besides those references being vague, they cannot overwrite the clear rules of Part III of the ECT. Respondent had the chance with the attempted modernisation of the ECT, but blew it by withdrawing from the ECT.

(d) FET limits the right to regulate.

551 Respondent further argues that the "FET does not prohibit but recognizes the right of States to regulate and the legislators' margin of appreciation."⁵³⁹

552 That is correct, but does not support Respondent's defence. Claimant has already emphasised that it acknowledges a State's right to regulate. Yet, by reference to standard arbitral practice of non-ECT and ECT tribunals, it also demonstrated that this right to regulate does not apply without limits. It finds its limits in the rule of law, namely in substantial investment protection provisions of treaties States have voluntarily committed to.⁵⁴⁰ The tribunals in *Eiser v. Spain (II)* illustratively outlined this by explaining that otherwise the substance of the ECT's FET-standard would be meaningless:

"In other words, while an investor accepts the risk inherent in the State's power to regulate, all the more so in situations in which the State must address serious problems, such as a Tariff Deficit, it cannot be deemed to accept

⁵³⁹ Counter-Memorial, para. 530.

⁵⁴⁰ Memorial, paras 426-427.

whatever the State decides to do. The international obligations undertaken by a State when entering into investment promotion and protection treaties, such as the ECT, limit the way in which the State exercises its power to regulate under international law. Arguing otherwise, FET obligations contained in bilateral and multilateral treaties would serve no meaningful purpose.”⁵⁴¹ (emphasis added)

553 Hence, it lies in the nature of investment treaties such as the ECT to restrict a State's margin of appreciation. Respondent's contention that the “*ECT does not seek to constrain*”⁵⁴² States is therefore completely beyond anything that is accepted in general arbitral practice.

554 Furthermore, Respondent is not even able to indicate how it wants to apply its conception of the right to regulate in practice. It simply asserts it would exist. This cannot discredit Claimant's proposed standard. In contrast, Claimant has demonstrated on which criteria tribunals relied when balancing Respondent's right to regulate against Claimant's right to fair and equitable treatment: namely, the fundamentality of the change and/or the degree of impact on investors.⁵⁴³ Yet, Respondent mainly purports that the ECT's FET standard would not include “*some abstract prohibition of regulatory changes.*”⁵⁴⁴ This was never argued and is completely beyond Claimant's point.

(e) The ECT and also FET are agnostic as to energy industry

555 With its last argument, Respondent attempts to distinguish Claimant's reliance on the clear line of authority established in the renewables cases under the ECT -

⁵⁴¹ [Exhibit CLA-0179: Eiser Infrastructure Limited and Energía Solar Luxembourg S.à r.l. v. Kingdom of Spain, ICSID Case No. ARB/13/36, Award, 16 October 2025](#), para. 429.

⁵⁴² Counter-Memorial, para. 521.

⁵⁴³ Memorial, Section E.V.1.

⁵⁴⁴ Counter-Memorial, para. 518.

specifically the FET line of authority in *Eiser*⁵⁴⁵, *RWE Innogy*,⁵⁴⁶ *Foresight*,⁵⁴⁷ *ACF Renewable*⁵⁴⁸ and *EP Wind*⁵⁴⁹ - on the basis that they involved "renewable energy" cases whereas the present dispute concerns coal, a "conventional" energy source.

556 This distinction is analytically unsound and legally irrelevant. It mistakes the factual context for the legal principle. The reason the Spain cases are cited is not because they address renewable energy per se, but because they establish the controlling legal standard for FET in energy disputes: when a State induces investment through a specific legal framework and then fundamentally alters that framework, causing substantial value destruction, the State breaches FET and must compensate the investor, regardless of whether the underlying measure serves a legitimate environmental or energy policy purpose.

557 Respondent's attempted distinction collapses under scrutiny.

558 Respondent's **first distinction** is that "renewable energy is in the interest of climate action, hard-coal is not."⁵⁵⁰

⁵⁴⁵ [Exhibit CLA-0064: Eiser Infrastructure Limited and Energia Solar Luxembourg S.A.R.L v. Kingdom of Spain](#), ICSID Case No. ARB/13/36, Award, 4 May 2017, para. 382; see also: [Exhibit CLA-0179: Eiser Infrastructure Limited and Energía Solar Luxembourg S.à r.l. v. Kingdom of Spain](#), ICSID Case No. ARB/13/36, Award, 16 October 2025, para. 429.

⁵⁴⁶ [Exhibit CLA-0076: RWE Innogy GmbH v. Kingdom of Spain](#), ICSID Case No. ARB/14/34, Decision on Jurisdiction, Liability, and Certain Issues of Quantum of 30 December 2019, para. 451

⁵⁴⁷ [Exhibit CLA-0065: Foresight Luxembourg Solar S.a.r.l. and others v. Kingdom of Spain](#), SCC Case No. V(2015150), Final Award, 14 November 2018, para. 397.

⁵⁴⁸ [Exhibit CLA-0176: ACF Renewable Energy Limited v. Republic of Bulgaria](#), ICSID Case No. ARB/18/1, Award, 05 January 2024, paras 1725-1727.

⁵⁴⁹ [Exhibit CLA-0177: EP Wind Project \(Rom\) Six Ltd. v. Romania](#), ICSID Case No. ARB/20/15, Decision on Jurisdiction, Liability and Select Issues of Quantum, 17 March 2025, para. 723.

⁵⁵⁰ Counter-Memorial, para. 535.

- 559 Yet, this is a policy preference, not a legal principle. The Spain tribunals never held that FET protection is stronger for climate-beneficial investments than for climate-harmful investments.
- 560 The relevance of this jurisprudence does not lie in the specific energy source at issue, but in the legal criteria articulated by these tribunals when assessing whether a State has exceeded its acceptable margin of regulation. In particular, these tribunals have already established criteria for how to exercise this weighing – namely the fundamentality and the impacts of a regulatory change. The present Tribunal will have to do the same exercise⁵⁵¹. In contrast, Respondent did not indicate once on what criteria it would suggest to conduct this exercise.
- 561 Contrary to what Respondent purports, these criteria are neither industry-specific,⁵⁵² nor do they depend on the outcome of a respective case⁵⁵³ or on whether the investment concerns renewable energy, fossil fuels, or any other energy technology.⁵⁵⁴ They reflect general principles governing the balance between a State's right to regulate and the protection afforded to investors under Part III of the ECT. The Treaty itself draws no distinction between different energy materials and products in this respect. Annex EU I to the ECT lists Energy Materials and Products. Hard coal is listed under 27.01, lignite under 27.02. The modernised apparently ECT would have done so – but it is not the basis for this case.
- 562 Accordingly, Claimant does not rely on renewable-energy cases as factual precedents, but as authoritative guidance as to how to weigh a State's right to

⁵⁵¹ Respondent seems to be aware of this which is why it tries to disregard the renewable cases to be simply a “minority jurisprudence”. Yet, no other energy sources are known to be subject to more legal disputes under the ECT. By December 2023, from 162 publicly known cases under the ECT alone 94 are based on renewable energy ([Exhibit C-0191: International Energy Charter, Statistics, 1 December 2023](#))

⁵⁵² Counter-Memorial, para. 535.

⁵⁵³ Counter-Memorial, para. 538.

⁵⁵⁴ Counter-Memorial, para. 537.

regulate with Claimant's right to a fair and equitable treatment under Article 10(1) of the ECT.

563 Respondent's **second distinction** asserts that Spain cases involved "legitimate expectations" claims whereas Claimant does not.⁵⁵⁵

564 That is erroneous sophistry. Claimant pleads a fundamental change through the Coal Ban Law, and tribunals in Spanish cases (and also against Italy) have found this to be in breach of the ECT's FET standard. Claimant refers to the authorities submitted with the Memorial and above under **Section D.IV.1.b of the Reply**. As explained above, some tribunals see this as a breach of (non-specific) legitimate expectations, others do not. It does not affect the issue of whether FET is breached or not.

565 Respondent's **third distinction** claims that "a specific hard-coal regime never existed before the 2020 Act", whereas Spain had enacted "Article 44(3) Royal Decree 661/2007".⁵⁵⁶

566 This distinction misses the point entirely. The relevant "regime" that induced investment was not a hard-coal-specific regulation. Instead, it was:

- permits issued under the FICL allowing indefinite operation,
- the ETS, which Germany itself had embraced as the mechanism for managing emissions across the EU, and
- Germany's consistent energy policy statements emphasising the importance of coal for energy security and grid stability (as confirmed by the Advance Decision of 2013).

567 These frameworks existed before 2008 and were in force when Claimant invested. The Coal Ban Law then fundamentally altered all three by imposing a categorical prohibition that supersedes both the permits and the ETS mechanism.

⁵⁵⁵ Counter-Memorial, para. 536.

⁵⁵⁶ Counter-Memorial, para. 537.

568 Respondent's **fourth and last distinction** notes that Spain cases "granted only limited compensation" and suggests that Claimant's "approach to theorize that the minority jurisprudence rejecting more claims than in other cases leads to a new obligation is absurd".⁵⁵⁷

569 This argument misses the entire point.

570 This is not about minority jurisprudence, and Claimant does not argue for a "new obligation". Claimant argues that the Spain cases establish a controlling legal principle: FET is breached when regulatory frameworks upon which an investor relied are fundamentally altered in a manner that causes substantial value destruction.

571 The quantum of compensation in the Spanish cases is a separate question from liability. Nothing can be derived from them except that the "reasonable rate of return" constituted, in the views of those tribunals, full compensation for breach of specific legitimate expectations. However, that notion is irrelevant for the case at hand.

2. Application

572 In its Memorial, Claimant explained at length why the Coal Ban Law constituted a fundamental change of legal framework. Claimant demonstrated⁵⁵⁸ that at the time and long after its investment decision, the regulatory framework permitted the operation of hard coal-fired power plants subject to valid permits and emissions regulation. The latter was governed by a market mechanism in terms of the ETS. The Coal Ban Law completely replaced this framework. It requires the mandatory shutdown of New Plants, irrespective of its permits, efficiency, emissions performance or amortisation. It thus eliminated the regulatory basis on which the investment had been made and constitutes a radical departure from it.

⁵⁵⁷ Counter-Memorial, para. 538.

⁵⁵⁸ Memorial, paras 439-446.

573 Claimant further explained⁵⁵⁹ that mandatory shutdowns without compensation are the most severe regulatory measure available. They completely deprive New Plants of their value despite their valid permits. Less restrictive and equally effective alternatives - most notably providing compensation - were available but not adopted. Instead, Respondent ignored expert criticism highlighting the severe economic impacts on New Plants. Although Respondent acknowledged that New Plants would not be amortised if shut down early, it deliberately imposed the full economic burden on operators of New Plants, thereby exceeding its acceptable margin of appreciation under Article 10(1) ECT.

574 Respondent **fails** to refute this.

575 It does not even submit a detailed legal analysis. Rather than engaging with Claimant's structured case on fundamental change and disproportionate burden, it presents the Tribunal merely with 15 individual one- (at maximum two-) sentence assertions.

576 These can be grouped into three clusters. None of these allegations have merit and they do not obstruct Claimant's case:

- The **first cluster** includes Respondent's first four allegations according to which Claimant would have had to anticipate the Coal Ban Law. To support this, Respondent purports that Claimant (**assertion 1**) would have had to expect climate change measures,⁵⁶⁰ (**assertion 2**) anyway did not have expectations regarding the stability,⁵⁶¹ (**assertion 3**) there were no assurances under German law or regulation or by the German government,⁵⁶² and (**assertion 4**), Claimant anyway did not have final and binding permits.⁵⁶³

⁵⁵⁹ Memorial, paras 455-461.

⁵⁶⁰ Counter-Memorial, para. 540.

⁵⁶¹ Counter-Memorial, para. 541.

⁵⁶² Counter-Memorial, para. 542.

⁵⁶³ Counter-Memorial, para. 543.

Claimant explained in detail why it did not have to expect a Coal Ban Law when deciding to participate in the Lünen plant. It showed that New Plants such as the Lünen plant were for a long time an essential part of Germany's strategy to achieve its emission reduction goals.⁵⁶⁴ As regards the allegedly lacking legitimate expectations, Claimant gladly repeats that it does not depend on the existence of subjective expectations, but on the objective alteration of the regulatory framework and the disproportionate burden imposed by the Coal Ban Law. Therefore, the absence of an explicit assurance does not shield Respondent from its liability under Article 10(1) ECT.⁵⁶⁵ In any event, Claimant showed that it relied on a regulatory framework and consistent policy signals, confirmed in its permits, that permitted the long-term operation of hard coal-fired power plants subject to the ETS.⁵⁶⁶ Respondent's reliance on the alleged revocability nature of the permits does not alter this conclusion.⁵⁶⁷

- Assertions 5-10 constitute the **second cluster**. They support Respondent's contention that the Coal Ban Law would pursue a legitimate public policy objective and would be allegedly carefully designed. However, the existence of a legitimate public purpose does not resolve the ECT's FET-standard inquiry. The decisive question here is not whether a measure pursues a legitimate aim, but whether the State maintained a proportional balance between that aim and the protection owed to the investor. The end does not justify the means. Claimant has demonstrated in the Memorial that Respondent failed to do so.⁵⁶⁸

Respondent's reference to the Coal Commission's recommendations (**assertion 5**)⁵⁶⁹ does not change this conclusion. Claimant demonstrated

⁵⁶⁴ See Memorial, Sections C.II and IV; Reply, Sections B.II.2-B.II.4, B.III.

⁵⁶⁵ See Reply, Sections B.II.1 and D.IV.1.b.

⁵⁶⁶ See Reply, Section B.II.6

⁵⁶⁷ See Reply, Section B.II.5.

⁵⁶⁸ Memorial, Section E.V.

⁵⁶⁹ Counter-Memorial, para. 544.

that Respondent cannot hide behind this non-binding, political compromise, which it did not even implement in crucial parts.⁵⁷⁰ Equally, its references to the alleged Coal Ban Law's goal to reduce emissions (**assertion 6**)⁵⁷¹ and Germany's domestic and international climate change obligations (**assertions 7-8**)⁵⁷² fail to refute that Respondent exceeded the acceptable margin of regulation. Respondent admits that no one examined the situation of young hard-coal plants, and that it knew that these plants might not be amortised. It failed to explain why a shutdown without compensation would have been necessary. Its own witnesses rather seem to confirm that Germany wanted to pay as little as possible as late as possible, and only if required to do so.⁵⁷³ Moreover, the shutdown paths adopted by the Coal Ban Law themselves undermine Respondent's alleged aim of emission reduction by favouring the much more polluting lignite power plants due to political reasons.⁵⁷⁴ Finally, the self-judged constitutionality (**assertion 9**)⁵⁷⁵ and the ECHR compatibility (**assertion 10**)⁵⁷⁶ are irrelevant for the ECT analysis.⁵⁷⁷

- With the **third cluster** of allegations (assertions 11-15) Respondent seeks to deny any excessive and individual burden by aiming to blame Claimant for its damages.

Yet, any participation in the tenders (**assertion 11**)⁵⁷⁸ would not have mitigated but increased damages.⁵⁷⁹ Likewise, any hypothetical gas

⁵⁷⁰ Reply, Section D.V.1

⁵⁷¹ Counter-Memorial, para. 545.

⁵⁷² Counter-Memorial, paras 546-547.

⁵⁷³ Reply, Section B.V.3

⁵⁷⁴ Reply, Section B.V.4

⁵⁷⁵ Counter-Memorial, para. 548.

⁵⁷⁶ Counter-Memorial, para. 549.

⁵⁷⁷ Reply, Section B.V.5-B.V.6.

⁵⁷⁸ Counter-Memorial, para. 550.

⁵⁷⁹ Reply, Section B.VI.1.

conversion of the Lünen plant (**assertion 12**)⁵⁸⁰ would be beyond any damage mitigation duty and could not be reasonably expected by Claimant.⁵⁸¹ Respondent also overlooks that the shareholders of TKL consistently analysed this option, but ultimately rejected it due to significant risks and uncertainties.⁵⁸² Similarly, Respondent's **assertion 13**⁵⁸³ concerning the alleged benefits obtained by Claimant (and all other plant operators in Germany) fails on the economics.⁵⁸⁴ The **14th assertion** relates again to the bank negotiations.⁵⁸⁵ Yet, these were prudent and in good faith.⁵⁸⁶ Finally, **the last argument** merely says that Claimant anyway has to divest its share in Lünen.⁵⁸⁷ That Respondent made exactly this now much more difficult, if not impossible, is outside Respondent's analysis.⁵⁸⁸

577 In summary, Respondent fails to rebut the fundamentality of the change and the disproportionality of the burden imposed on Claimant. It thus breached its obligation to treat Claimant's investment fairly and equitably.

V. Respondent breached its obligation to provide Claimant with most constant protection and security

578 In its Memorial, Claimant set out that Respondent breached its obligation under Article 10 (1) of the ECT to accord most constant protection and security ("**MCPS**")

⁵⁸⁰ Counter-Memorial, para. 551.

⁵⁸¹ Reply, Section E.VI.

⁵⁸² Reply, Section B.VI.3.c.

⁵⁸³ Counter-Memorial, para. 552.

⁵⁸⁴ Section E.VI.

⁵⁸⁵ Counter-Memorial, para. 553.

⁵⁸⁶ Reply, Section B.VI.2.

⁵⁸⁷ Counter-Memorial, para. 554.

⁵⁸⁸ Reply, Section B.III.1.

to the Lünen Plant and to Claimant's investment.⁵⁸⁹ Specifically, Claimant showed that the MCPS standard protects both the physical integrity and the **legal security** of an investment, particularly where intangible assets such as shares and permits form the basis of the investor's rights.

579 Germany issued permits – beside the 2008 and 2013 Advance Decision also the Seventh Partial Permit (2013) – which conferred indefinite operating rights upon the Lünen Plant, subject to compliance with FICL and ETS requirements. These permits were part of the legal framework upon which Claimant relied when committing EUR [REDACTED] in equity capital to TKL, and they were protected by German law's own compensation mechanisms (Section 21a FICL). The Coal Ban Law breached the MCPS standard by circumventing this legal framework, hollowing out indefinite operating rights while explicitly excluding compensation for hard-coal plants. It thereby dismantled the legal security upon which the investment depended.

580 In its Counter-Memorial, Respondent suggests that the MCPS standard was limited to physical protection of tangible assets and does not extend to legal security or the stability of regulatory frameworks.⁵⁹⁰ In particular, Respondent attempts to argue that the term "*most constant protection and security*" referred only to physical integrity and another reading would render the MCPS standard redundant due to an overlap with FET.⁵⁹¹ Germany further contends that the 2013 Permit was merely preliminary subject to ongoing litigation, and thus could not be the basis for a stable legal framework.

581 Claimant will address those arguments in turn:

⁵⁸⁹ Memorial, paras 463–483.

⁵⁹⁰ Counter-Memorial, para. 557.

⁵⁹¹ Counter-Memorial, para. 558.

1. Respondent's "physical protection only" reading of the MCPS standard cannot be reconciled with the ECT's system of investment protection

582 Respondent's position, in reliance on the awards in *Electrabel* and *Hydro Energy*, that MCPS was limited to physical security lacks merit. Specifically, that position cannot be reconciled with the broad protection of investments that the ECT foresees.

583 Indeed, as pointed out by the tribunal in *Electrabel* (on which the tribunal in *Hydro Energy* relied, as Respondent also highlights⁵⁹²), treaties must be interpreted in a way that gives full effect to their particular wording, following the principle of *effet utile*.⁵⁹³ Yet, the tribunals in *Electrabel* and *Hydro Energy* were solely concerned with avoiding overlap between the FET and the MCPS limbs of Article 10 of the ECT, which – as Claimant already set out in the Memorial – is not convincing and not an established maxim of treaty interpretation either.⁵⁹⁴

584 Those tribunals' reasoning ultimately leads to a result which leaves no room for the application of the MCPS standard to a whole range of assets, in exact opposition to the *effet utile* principle.

585 As the tribunal in *Urbaser v. Argentina* made clear, "[e]ffectiveness of a treaty rule denotes the need to avoid an interpretation which leads to either an impossibility or absurdity or empties the provision of any legal effects."⁵⁹⁵

586 Correspondingly, the WTO Appellate Body held on several occasions:

"[T]he task of the treaty interpreter is to ascertain and give effect to a legally operative meaning for the terms of the treaty. The applicable fundamental

⁵⁹² Counter-Memorial, para. 559.

⁵⁹³ Counter-Memorial, para. 558, with reference to [Exhibit CLA-0057: *Electrabel S.A. v. The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012](#), paras 7.80, 7.83.

⁵⁹⁴ Memorial, para. 468.

⁵⁹⁵ [Exhibit CLA-0180: *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Bizkaia Ur Partzuergoa v. The Argentine Republic*, ICSID Case No. ARB/07/26, Decision on Jurisdiction, 19 December 2012](#), para. 52

*principle of effet utile is that a treaty interpreter is not free to adopt a meaning that would reduce parts of a treaty to redundancy or inutility.*⁵⁹⁶ (emphasis added)

587 Article 1(6) ECT defines "Investment" to include various intangible assets: shares, contractual rights, and intellectual property. An intangible asset cannot be physically protected. To say that the MCPS standard protects only physical integrity would render it inapplicable to half the assets that the ECT seeks to protect. This is incompatible with the principle of *effet utile* on which the entire reasoning of the *Electrabel* tribunal – and by extension also the *Hydro Energy* tribunal – rests. It equally cannot have been the Contracting Parties' intent.

588 Respondent's "*long list of investment treaty awards confirm that the FPS standard is restricted to physical integrity*" in footnote 637 to the Counter-Memorial adds nothing to the interpretative exercise and is contradictory at best. Almost all of those awards were rendered by tribunals on the basis of treaties other than the ECT. Yet, Respondent itself criticises in its Counter-Memorial with respect to Claimant's argument that authorities operating on the basis of other treaties should not be had recourse to due to differences in wording.⁵⁹⁷

2. Overlap between MCPS and FET is neither forbidden nor a disqualifier

589 Respondent's concern about overlap between FET and MCPS misconceives the structure of investment treaty protection. The ECT contains multiple, sometimes overlapping standards – FET, MCPS, expropriation, and the umbrella clause – each addressing distinct concerns. Overlap between provisions is neither forbidden nor uncommon in international law.

⁵⁹⁶ [Exhibit CLA-0181: Appellate Body Report, *Canada – Measures Affecting The Importation of Milk and the Exportation of Dairy Products*, WT/DS113/AB/R, 13 October 1999](#), para. 133 (emphasis added); see also [Exhibit CLA-0182: Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, 29 April 1996](#), p. 23.

⁵⁹⁷ See Counter-Memorial, para. 563.

- 590 **MCPS** protects the stability and integrity of the legal framework – the permits, licenses, and specific entitlements – upon which an investor has relied to commit capital. **FET** protects the fairness of regulatory conduct and the legitimate expectations of investors regarding how a State will exercise its regulatory authority.
- 591 The two standards address different interests. That they may both apply to the same measure does not negate either standard's operation. The same is true for prior awards in which tribunals simultaneously found violations of FET and MCPS (as a corollary violation). The fact that many tribunals found violations of the MCPS standard where also the FET standard was considered violated does not further render those tribunals' decisions "*obiter dicta*", as Respondent attempts to argue⁵⁹⁸. They represent considered holdings addressing precisely the question of legal security.

3. The 2013 Permit's preliminary character does not defeat MCPS protection

- 592 Respondent argues that, because the 2013 *Permit* was subject to litigation until 2020, it was not "*final and binding*" and therefore did not create the legal security that MCPS protects.
- 593 This argument conflates **finality** (immunity from judicial review) with **operative effect** (the permit's effect and enforceability). The Lünen plant in 2013 received both the Advance Decision and the Seventh Partial Permit which allowed it to operate. The 2013 Advance Decision, the 2013 First and Seventh Partial Permit were issued in November 2013 and are still in force. The fact that the permit was subject to potential judicial reversal does not vitiate its operative effect or the reliance interest it created during that period.
- 594 International law protects contested rights; the existence of a potential judicial challenge does not eliminate the protection owed to a right as it exists and is relied upon. Moreover, Respondent offers no evidence that the litigation was likely to succeed (which it never did!) or that Claimant knew of material defects in the permit.

⁵⁹⁸ Counter-Memorial, para. 561.

Under these circumstances, Claimant was entitled to rely on the permit's stipulations.

4. Respondent's legislative circumvention of FICL violates the MCPS standard

595 Critically, the Coal Ban Law does not merely update or modify permits through FICL's ordinary channels. Instead, it **legislatively nullifies** the legal basis for the investment while deliberately circumventing FICL's protective mechanisms.

596 Under ordinary FICL law, if Germany wished to modify or revoke permits due to changed environmental or technical standards, it could do so under Section 21 FICL but would be required to consider compensation under Section 21a(4) FICL for certain categories of changed circumstances. As Dr. Krahnefeld explains, however, this would not allow for a coal ban.⁵⁹⁹ Thus, the Coal Ban Law sidesteps this framework entirely. It legislates the closure of hard-coal plants on policy grounds and explicitly excludes compensation for hard-coal plants (while providing substantial compensation for lignite plants) – thereby using legislative power to bypass the very protective framework that German law itself provides.⁶⁰⁰

597 This legislative circumvention of Germany's own statutory protections is precisely what the MCPS standard is designed to prevent. The standard does not prohibit regulatory change; it requires that when a State dismantles the legal framework upon which an investor has relied, it must do so through mechanisms that respect the legal protections ordinarily provided by the host State's own law.

5. Conclusion

598 Respondent consequently breached the ECT's MCPS standard by legislatively dismantling the legal framework – the permits and indefinite operating rights – upon

⁵⁹⁹ Verweis auf [Exhibit CER-0005-DE](#), [Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#)

⁶⁰⁰ See also Memorial, paras Section E.VI.3.

which Claimant's investment was based and on which Claimant relied, while deliberately circumventing the compensation safeguards of German law itself.

VI. The Coal Ban Law constitutes an unreasonable and discriminatory measure

599 In **Section E.VII** of its Memorial, Claimant explained that Respondent's Coal Ban Law constitutes an unreasonable as well as discriminatory measure in breach of Article 10(1) sentence 3 of the ECT, which provides that

“no Contracting Party shall in any way impair by unreasonable or discriminatory measures their [= the investments] management, maintenance, use, enjoyment or disposal.” (emphasis added)

600 The formulation in Article 10(1) sentence 3 ECT contains two, albeit closely related, distinct obligations: to avoid unreasonable measures, and to avoid discriminatory measures. These are each autonomous standards and Respondent's breach thereof is in addition to its breach of other standards under the ECT.⁶⁰¹ Respondent denies that it has acted unreasonably and discriminatorily and blends its arguments on both issues, partly arguing also under the expropriation standard.⁶⁰² Respondent's arguments are neither correct nor persuasive.

1. Shutting down the Lünen plant is unreasonable

601 As Claimant explained in paras 486 *et seq.* of its Memorial, Respondent's Coal Ban Law is an unreasonable measure because it fails to meet the well-established legal standard⁶⁰³ according to which it is not sufficient that the measure is a rational public policy, such as aiming “*to reduce emissions*”, it must also meet the second leg of the reasonableness test:

⁶⁰¹ [Exhibit CLA-0183: T. Roe and M. Happold, *Settlement of Investment Disputes under the ECT*, CUP 2011](#), p. 116-117; See also [Exhibit CLA-0184: R. Dolzer and C. Schreuer, *Principles of International Investment Law*, OUP 2012](#), p. 191.

⁶⁰² Counter-Memorial, paras. 434 *et seq.*

⁶⁰³ [Exhibit CLA-0032: AES Summit Generation Limited and AES-Tisza Erőmű Kft v. The Republic of Hungary](#), ICSID Case No. ARB/07/22, Award, 23 September 2010, para. 10.3.7.

*"That is, there needs to be an appropriate correlation between the state's public policy objective and the measure adopted to achieve it. This has to do with the nature of the measure and the way it is implemented."*⁶⁰⁴

602 To fulfil this criterion, the State must demonstrate that its "acts have been appropriately tailored to the pursuit of that rational policy with due regard for the consequences imposed on investors".⁶⁰⁵

603 In its Memorial, Claimant explained that the Coal Ban Law fails to meet this standard on multiple grounds. First, as it does not take into account the effect of the Coal Ban Law on Claimant and its investment, ignoring that hard coal plants put into operation after 2010 may not yet be amortised by the time it's ordered to shut down, and that none of the alternatives presented (shutdown incentives through auctions or operation until the forced shutdown) allow Claimant at least a chance to recoup its investment costs due to the short remaining time.⁶⁰⁶ Second, modifying existing laws to allow for the withdrawal of its final operating permit under the FICL.⁶⁰⁷ Third, adopting a Shutdown Path that favours more polluting lignite-fired power plants.⁶⁰⁸ (see **Section B.V** above). Lastly, on top of all of the above, Respondent has itself encouraged investments such as the Lünen plant, i.e. newly constructed, highly efficient hard coal-fired power plants, to then unreasonably change its mind 180 degrees and undermine its investment with the Coal Ban Law.⁶⁰⁹

604 In its Counter-Memorial, Respondent denies that its measure is 'unreasonable', firstly because it complies with the Paris Agreement, EU law⁶¹⁰, and with "*the – strict – requirements under German constitutional law*"⁶¹¹, as well as because it was

⁶⁰⁴ [Exhibit CLA-0032: AES Summit Generation Limited and AES-Tisza Erőmű Kft v. The Republic of Hungary](#), ICSID Case No. ARB/07/22, Award, 23 September 2010, para. 10.3.9.

⁶⁰⁵ [Exhibit CLA-0041: Ioan Micula, Viorel Micula, S.C. European Food S.A. S.C. Starmill S.R.L. and S.C. Multipack S.R.L. v. Romania](#), ICSID Case No. ARB/05/20, Final Award, 11 December 2013, para. 525

⁶⁰⁶ Memorial, Sections C.VI.5-6.

⁶⁰⁷ Memorial, para. 419.

⁶⁰⁸ Memorial, Section C.VI.2.

⁶⁰⁹ Memorial, Section C.II.

⁶¹⁰ Counter memorial, para. 180.

⁶¹¹ Counter memorial, paras. 224-233.

challenged and confirmed by the European Court of Human Rights⁶¹². Secondly, because the Coal Ban Law was enacted following the recommendation of a “*pluralistic commission of stakeholders*” of the Coal Commission⁶¹³. And thirdly, because its legislator rejected alternatives within its margin of appreciation following “*legitimate and reasonable considerations*”⁶¹⁴. Respondent also argues that it enjoys an even “wider margin of appreciation” in the exercise of its police powers due to the environmental character of this policy.⁶¹⁵

605 Finally, Respondent contends that, following Saluka’s standard of ‘reasonableness’, it is sufficient that its conduct “*bears a reasonable relationship to some rational policy*”⁶¹⁶ (emphasis added) and alleges that since its measure “*mitigates climate change*” (*quod non*) and “*Claimant has not disputed that climate action is rational*”⁶¹⁷, hence, its measure is reasonable.

606 In addition, Respondent asserts that Respondent “*is not required to show that the measures were perfect in their design or implementation*”⁶¹⁸ and that Claimant “confuses the standard of reasonableness with the standard of legitimate expectations” and argues that, as decided in *Kruck v. Spain*, a violation of Article 10(1) sentence 3 ECT could not follow from a frustration of legitimate expectations, but “*that measures must be unreasonable by themselves and not by reference to any prior conduct by the State*”⁶¹⁹..

607 As explained in above in the **Sections B.V.1-7**, Respondent’s arguments on reasonableness are misconceived.

608 First, it is irrelevant that the Coal Ban Law complies with the Paris Agreement, other climate action agreements, EU or domestic constitutional legislation. It must still

⁶¹² Counter memorial, paras. 234-240.

⁶¹³ Counter memorial, paras. 181-193.

⁶¹⁴ Counter memorial, paras. 207-212

⁶¹⁵ Counter Memorial, paras. 402 et seq. and para. 439.

⁶¹⁶ Counter Memorial, paras. 571 and 576.

⁶¹⁷ Counter Memorial, para. 576.

⁶¹⁸ Counter Memorial, para. 569 et seq

⁶¹⁹ Counter Memorial, para. 575.

conform to international standards of treatment under the ECT, which the Coal Ban Law with its uncompensated shutdown orders does not. In addition, as Claimant explained above in **Section B.VI.**, neither the Paris Agreement nor European or Constitutional law required a shutdown of Lünen without compensation. Investment tribunals have found that States acted arbitrarily or unreasonably when measures taken under the pretext of a decision based on law were, in fact, unjustified⁶²⁰.

609 Second, the fact that it followed the recommendations of its Coal Commission (*quod non*) equally does not justify having adopted measures in breach with the ECT. The work of the Coal Commission was having influenced by domestic German policy considerations about lignite mining. It was and is Respondent's sole responsibility to comply with its obligations under international law.

610 Third, Respondent acted beyond the rational and proportionate limits of its margin of appreciation, as alternatives to mandated Shutdown Orders without compensation were not properly assessed. The decision not to compensate hard-coal plants was politically motivated and based on discretion and preference rather than on any legal standard or facts, thus, arbitrary and, necessarily, unreasonable.

611 Respondent's reliance on a supposedly "broad" margin of appreciation is overstated and unsupported by ECT jurisprudence. Even where tribunals acknowledge a measure of deference, they explicitly hold that such discretion is not unlimited. ECT tribunals consistently apply this stricter, structured proportionality test that sharply limits the State's discretion. For example, the *Electrabel* tribunal stated that Hungary enjoyed "reasonable margin of appreciation" (emphasis added)⁶²¹, and later confirmed that while enjoying a "*wide scope of discretion*", it was required to apply

⁶²⁰ [Exhibit CLA-0185: C. Schreuer, 'Protection against Arbitrary or Discriminatory Measures' in C.A. Rogers et al., *The Future of Investment Arbitration*, 2009, p.186; See also Exhibit CLA-0095: *CME Czech Republic BV v. Czech Republic*, Partial Award, UNCITRAL, 13 September 2001, para. 612.](#)

⁶²¹ [Exhibit CLA-0057: *Electrabel S.A. v. The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012, para. 8.35.](#)

a “balancing or weighing exercise so as to ensure that the effects of the intended measure remain proportionate in regard to the affected rights and interests”⁶²².

612 Finally, it is clear from the established reasonableness test⁶²³ that the standard of reasonableness is not fulfilled if the measure follows “some” rational public policy, such as aiming “to reduce emissions”. It must also – as Respondent agrees⁶²⁴ – “bear a reasonable relationship” with such policy to also meet the second leg of the reasonableness test. For that, it must have tailored its measure proportionally to its policy goal, taking into account the impact on the investors. This has been neglected by Respondent. Yet, the *Electrabel* tribunal illustrates: :

“A challenged measure must also be reasonable. That is, there needs to be an appropriate correlation between the state’s public policy objective and the measure adopted to achieve it. This has to do with the nature of the measure and the way it is implemented.” In the Tribunal’s view, this includes the requirement that the impact of the measure on the investor be proportional to the policy objective sought. The relevance of the proportionality of the measure has been increasingly addressed by investment tribunals and other international tribunals, including the ECHR. The test for proportionality has been developed from certain municipal administrative laws, and requires the measure to be suitable to achieve a legitimate policy objective, necessary for that objective, and not excessive considering the relative weight of each interest involved.” (Emphasis added)⁶²⁵

613 Likewise, the *AES* tribunal held that it is for the State to satisfy both a “rational policy” requirement and a “reasonable relationship” between means and ends⁶²⁶. These formulations demonstrate that the margin of appreciation is bounded, reviewable, and cannot shield arbitrary treatment of investors. In *RWE Innogy v.*

⁶²² [Exhibit CLA-0084: Electrabel S.A. v. Republic of Hungary](#), ICSID Case No. ARB/07/19, Award, 25 November 2015, para. 180.

⁶²³ See above, para. 598.

⁶²⁴ Counter Memorial, paras. 571 and 576

⁶²⁵ [Exhibit CLA-0084: Electrabel S.A. v. Republic of Hungary](#), ICSID Case No. ARB/07/19, Award, 25 November 2015, para. 179. See also [Exhibit CLA-0186: Philip Morris Brands Sàrl, Philip Morris Products S.A. and Abal Hermanos S.A. v. Oriental Republic of Uruguay](#), ICSID Case No. ARB/10/7, Concurring and Dissenting Opinion by Gary Born, 8 July 2016, para. 145.

⁶²⁶ [Exhibit CLA-0032: AES Summit Generation Limited and AES-Tisza Erőmű Kft v. The Republic of Hungary](#), ICSID Case No. ARB/07/22, Award, 23 September 2010, para. 10.3.9.

Spain, the tribunal found that, even allowing a “reasonable margin of appreciation,” Spain imposed an “excessive burden” on certain investors.⁶²⁷ This jurisprudence confirms that the ECT does not accept the existence of a policy alone as justification. It requires evidence-based, proportionate reasoning.

2. Shutting down the Lünen plant without compensation is also discriminatory

(a) Legal standard

614 As Respondent is aware that its discrimination of new hard coal-fired power plants against lignite-fired plants and newer hard coal-fired plants cannot be reasonably justified, it unsuccessfully tries to weaken the legal standard.

(aa) Comparability is an objective inquiry

615 In its Memorial, Claimant set out that the protection offered under the ECT in terms of discrimination “corresponds to the negative formulation of the principle of equality.”⁶²⁸ Accordingly, the ECT is breached when “like persons [are] being treated in a different manner in similar circumstances without reasonable or justifiable grounds.”⁶²⁹ Respondent agrees with this standard.⁶³⁰

616 Investment tribunals treat comparability as an objective, context-specific inquiry grounded in economic functionality, competitive relationships, and regulatory purpose – not subjective State classification. In *SD Myers*, the tribunal found investors to be in like circumstances where they operated “in the same economic

⁶²⁷ [Exhibit CLA-0187: RWE Innogy GmbH and RWE Innogy AERSA S.A.U. v. Kingdom of Spain](#), ICSID Case No. ARB/14/34, Award, 18 December 2020, paras. 589, 598-599, 647-650.

⁶²⁸ Memorial, para. 498, citing [Exhibit CLA-0016: Plama Consortium Limited v. Republic of Bulgaria](#), ICSID Case No. ARB/03/24, Award, 27 August 2008, para. 184.

⁶²⁹ Memorial, para. 498, citing [Exhibit CLA-0016: Plama Consortium Limited v. Republic of Bulgaria](#), ICSID Case No. ARB/03/24, Award, 27 August 2008, para. 184.

⁶³⁰ Counter-Memorial, para. 437.

sector”⁶³¹. In *Occidental v Ecuador*, the tribunal rejected the narrow comparison guided by the practice developed within the GATT/WTO that would have looked only at the same economic sector or activity. It prefers looking at all exporters “in like situations”, sharing such condition affected by the measure.⁶³² Thus, “like circumstances” is an objective legal standard applied by the tribunal and not a policy choice left to the State.

617 Schreuer proposes a staggered approach for this analysis:

*“... start by looking at a narrow circle of comparators that are closest to the case at hand. In other words, the treatment of other investors in the same line of business will have to be looked at first. If there are clear indications of discrimination already on that basis, the matter may be regarded as settled. But the absence of discrimination within this narrow group is not necessarily conclusive. For instance, if the particular sector of the economy is small or is strongly dominated by foreign interests, it would not be sufficient for the tribunal to satisfy itself that no discrimination has occurred within that group of investors. The circle may be widened to a broader sector of activity that includes a variety of economic actors until a workable basis for comparison can be found.”*⁶³³ (emphasis added)

618 ECT tribunals follow a similar approach when applying Article 10(1) to assess whether investors in ‘like circumstances’ received unjustifiable differential treatment. Pursuant to the *Plama v. Bulgaria* tribunal, a discrimination claim “*entails like persons being treated in a different manner in similar circumstances without reasonable or justifiable grounds.*”⁶³⁴ In *Electrabel v Hungary*, the Tribunal held that “*comparators must be materially similar; and there must then be no reasonable justification for differential treatment*”.⁶³⁵ In some cases, where tribunals were able

⁶³¹ [Exhibit CLA-0105: *SD Myers Inc v. Canada*, UNCITRAL, First Partial Award, 13 November 2000](#), para. 250.

⁶³² [Exhibit CLA-0188: *Occidental Exploration and Production Company v. The Republic of Ecuador*, LCIA Case No. UN3467, Final Award, 1 July 2004](#), paras. 173-176

⁶³³ [Exhibit CLA-0185: C. Schreuer, ‘Protection against Arbitrary or Discriminatory Measures’ in C.A. Rogers et al, *The Future of Investment Arbitration*, 2009](#), p. 196; See also: [Exhibit CLA-0098: *Pawłowski AG v. Czech Republic*, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), paras 307

⁶³⁴ [Exhibit CLA-0016: *Plama Consortium Limited v. Republic of Bulgaria*, ICSID Case No. ARB/03/24, Award, 27 August 2008](#), para. 184.

⁶³⁵ [Exhibit CLA-0057: *Electrabel S.A. v. The Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012](#), para. 175.

to pinpoint the unjustifiable differential treatment among business within the same area of activity, the issue of the basis of comparison did not even arise.⁶³⁶

(bb) Respondent bears the burden of substantiate any justifications

619 In its Counter-Memorial, Respondent claims that Claimant would bear the burden of proving a discrimination.⁶³⁷ That is incorrect.

620 While Claimant bears the *prima facie* burden of demonstrating that it was treated differently from investors in “like circumstances”⁶³⁸, this does not mean that it must establish every element of discrimination under Article 10(1) sentence 3 of the ECT. Investment tribunals consistently hold that once a *prima facie* differential treatment is shown, the burden of proof lies with the State to demonstrate that the distinction was based on legitimate, objective and proportionate grounds. In *Nycomb v Latvia*, the tribunal held that since the companies in analysis were “*comparable, and subject to the same laws and regulations*”,

*“[i]n such a situation, and in accordance with established international law, the burden of proof lies with the Respondent to prove that no discrimination has taken or is taking place”*⁶³⁹.

621 This principle was also confirmed in *Saluka v Czech Republic*, where the tribunal stated that “[s]tate conduct is discriminatory, if (i) similar cases are (ii) treated differently (iii) and without reasonable justification.”⁶⁴⁰ It explained that:

⁶³⁶ [Exhibit CLA-0101: Nykomb Synergetics Technology Holding AB v. The Republik of Latvia, SCC Case, Award, 16 December 2003](#), para. Section 4.3.2 (b). See also: [Exhibit CLA-0184: R. Dolzer and C. Schreuer, Principles of International Investment Law](#), OUP 2012, p. 196; and [Exhibit CLA-0113: Petrobart Ltd v. Kyrgyz Republic, SCC 126/2003, Award, 29 March 2005](#), p. 76.

⁶³⁷ Counter-Memorial, para. 436.

⁶³⁸ [Exhibit CLA-0189: Parkerings-Compagniet AS v. Lithuania, ICSID Case No. ARB/05/8, Award, 11 September 2007](#), para. 393 (“It is the Claimant’s burden of proof to show that the foreign investor has been treated more favourably.”).

⁶³⁹ [Exhibit CLA-0101: Nykomb Synergetics Technology Holding AB v. The Republik of Latvia, SCC Case, Award, 16 December 2003](#), p. 34 (emphasis added)

⁶⁴⁰ [Exhibit CLA-0168: Saluka Investments BV v. The Czech Republic, PCA Case No. 2001-04, Partial Award, 17 March 2006](#), para. 313.

*“any differential treatment of a foreign investor must not be based on unreasonable distinctions and demands, and must be justified by showing that it bears a reasonable relationship to rational policies not motivated by a preference for other investments over the foreign-owned investment”.*⁶⁴¹

622 It found that the Czech Republic treated the investor discriminatorily – not because the investor showed that no justification existed but – since

*“the Respondent has not offered a reasonable justification for IPB’s differential treatment.”*⁶⁴²

623 None of the cases cited by Respondent imposes a contrary rule. Both *Parkerings v. Lithuania* and *Pawłowski v. Czech Republic* merely confirm the basic *prima facie* requirement that claimant must identify comparable investors and unequal treatment. *Parkerings* confirms the uncontroversial rule that the claimant must identify comparable investors and show (*prima facie*) differential treatment. The analysis of the tribunal then looks to the State to provide the justification.⁶⁴³ *Pawłowski* adopts the same two-step approach and dismisses the discrimination claim not because the claimant failed to disprove justifications, but because “*Claimants have been unable to identify a comparator in a similar situation*”.⁶⁴⁴ In that case, the tribunal however also held that, even assuming in *arguendo* that claimant had been able to show that it had been treated differently to others in ‘like circumstances’, “[...] *there may be valid reasons which justify the difference in treatment. Investment tribunals have consistently held that reasonable distinctions*

⁶⁴¹ [Exhibit CLA-0168: *Saluka Investments BV v. The Czech Republic*, PCA Case No. 2001-04, Partial Award, 17 March 2006](#), para. 307.

⁶⁴² [Exhibit CLA-0168: *Saluka Investments BV v. The Czech Republic*, PCA Case No. 2001-04, Partial Award, 17 March 2006](#), para. 347. See also [Exhibit CLA-0190: *Yury Bogdanov et al v. Republic of Moldova*, SCC Arbitration No. V \(114/2009\), Arbitral Award, 30 Mar 2010](#), paras. 88 and 90; [Exhibit CLA-0110: *Joseph C Lemire v. Ukraine*, ICSID Case No. ARB/06/18, Award, 28 March 2011](#), para. 261; [Exhibit CLA-0191: *RosInvestCo UK Ltd. v. The Russian Federation*, SCC Case No. V0792005, Final Award, 12 September 2010](#), para. 556. (“*Yukos was treated by Respondent quite different to the treatment accorded to its competitors and other comparable tax payers and no convincing reasons have been shown by Respondent for this differentiation.*”)

⁶⁴³ [Exhibit CLA-0189: *Parkerings-Compagniet AS v. Lithuania*, ICSID Case No. ARB/05/8, Award, 11 September 2007](#), paras 368–375 (“*An objective justification may justify differentiated treatments of similar cases*”).

⁶⁴⁴ [Exhibit CLA-0098: *Pawłowski AG v. Czech Republic*, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), para. 550.

*between domestic and foreign investors do not imply discrimination*⁶⁴⁵ confirming that the analysis of a justification by the State of the differential treatment is a second step.

(cc) No higher burden of proof

- 624 Moreover, as Respondent rightfully points out, the standard of discriminatory treatment under expropriation assessments entails no obligations beyond what is already required under Article 10(1) sentence 3 ECT. Respondent's assertion that "[i]f anything, the burden for a claimant to prove discrimination [under expropriation] must be higher"⁶⁴⁶ is however incorrect. Under the ECT and general investment law, while "the burden of proof for an investor to demonstrate a violation of FET is usually lighter than to establish an expropriation"⁶⁴⁷ this is not true for the standard of discriminatory treatment itself. The standard of "discriminatory expropriation" does not impose a higher burden on the investor, nor is it narrower than the discrimination test under Article 10(1) sentence 3 ECT.
- 625 Neither the Energy Charter Treaty itself nor any ECT tribunal has held that discrimination under Article 10(1) sentence 3 ECT imposes a less demanding evidentiary threshold than discriminatory expropriation. The legal consequence differs - unlawfulness of expropriation versus breach of Art. 10(1) - but the definition of discrimination and the burden of proof do not. There is no ECT award holding that the claimant's burden for proving discrimination is higher when discrimination is invoked as part of an expropriation claim. Instead, ECT jurisprudence expressly applies the same discrimination test under both Articles 10(1) and 13 ECT. In *Yukos Capital v. Russia*, the tribunal articulated that since it would analyze the claim for discriminatory treatment for the purpose of its assessment of the claim of expropriation under Article 13, it would be "*unnecessary for it to consider the*

⁶⁴⁵ [Exhibit CLA-0098: Pawlowski AG v. Czech Republic, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), para. 546.

⁶⁴⁶ Counter-Memorial, para. 435.

⁶⁴⁷ [Exhibit CLA-0192: C. Schreuer, 'Chapter 2 Selected standards of treatment available under the Energy Charter Treaty' in G Coop et al \(eds\), *Investment Protection and the Energy Charter Treaty*, 2008](#) pp. 95-96.

*alternative formulation of the claim under Article 10, since it would not add anything to the analysis or the relief sought".*⁶⁴⁸

(dd) No margin of appreciation

- 626 Respondent claims to have a “*broad margin of appreciation regarding the assessment whether like circumstances or a reasonable/justifiable ground for a distinction exist*”.⁶⁴⁹ That is inconsistent with arbitral jurisprudence.
- 627 As demonstrated above, investment tribunals treat comparability as an objective, context-specific inquiry grounded in economic functionality, competitive relationships, and regulatory purpose – not subjective State classification.
- 628 Likewise, also the case law invoked by Germany to allegedly support its wide discretion shows that also a State’s justification of unequal treatment is closely scrutinised by tribunals. Therefore, they reinforce – rather than weaken – the principle that where differential treatment exists, justification must be objective, legitimate, and demonstrably reasonable. Far from proving a broad margin of appreciation, these cases confirm that bad policy is tolerable only when it is not discriminatory. In addition, they are not ECT authorities on discriminatory treatment.
- 629 In detail:
- 630 The tribunal in ***Pawłowski v. Czech Republic*** cited by Respondent, firstly, only speaks of a “certain margin of discretion”,⁶⁵⁰ not a “broad” or “wide” one. Secondly, it does not address a State’s discretion to determine the existence of like circumstances. The tribunal had already dismissed a discrimination because the investor had failed to establish a suitable comparator (i.e. another investor in like circumstances), making its statements on the justification of an unequal treatment

⁶⁴⁸ [Exhibit CLA-0155: Yukos Universal Limited \(Isle of Man\) v. The Russian Federation, PCA Case No. AA 227, Interim Award on Jurisdiction and Admissibility, 30 November 2009, paras. 385-387, 390 \(iv\).](#)

⁶⁴⁹ Counter-Memorial, para. 439.

⁶⁵⁰ Counter-Memorial, para. 439, citing [Exhibit CLA-0098: Pawłowski AG v. Czech Republic, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), para. 547.

mere *obiter dicta*.⁶⁵¹ Thirdly, in its *obiter dicta*, the tribunal did not award State's a broad margin of discretion but merely held that, as the authorities had to consider and balance different factors, the differences in treatment could be justified by the difference between the characteristics of the projects.⁶⁵² Moreover, fourthly, what is at issue in the present Arbitration, however, is not a potential discrimination in the application of the law but that already the design of the law itself leads to a discrimination of Claimant.

631 Respondent also suggests that its alleged wide margin of discretion would be confirmed by the decision in **GAMI v. Mexico**. It is not. Respondent cites *GAMI* for the proposition that a legitimate policy would be sufficient even if it was misguided or clumsily applied measures. However, that is not what the tribunal said. The case concerned a US company, which argued that the company it had invested in had been treated less favourably because it, as a US investor, was one of the minority shareholders. All the tribunal said in that case was that a misguided or clumsy application of a measure was not sufficient in itself to assume that the foreign shareholding was the reason for the unequal treatment and, thus, that the measure amounted to a discrimination based on nationality⁶⁵³— which was the only type of discrimination the tribunal needed to address.

632 Also the decision in **Pope & Talbot** does not support Respondent's case. Firstly, the "*reasonable nexus to rational government policies*" to which Respondent refers, again only applies to the level of the justification of a difference in treatment.⁶⁵⁴ Secondly, according to the tribunal, such government policy can only justify a difference in treatment if the policy "*do[es] not distinguish, on their face or de facto*,

⁶⁵¹ [Exhibit CLA-0098: Pawlowski AG v. Czech Republic, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), paras 545-546.

⁶⁵² [Exhibit CLA-0098: Pawlowski AG v. Czech Republic, ICSID Case No. ARB/17/11, Award, 1 November 2021](#), para. 547.

⁶⁵³ [Exhibit RL-0059: GAMI Invs. Inc. v. United Mexican States, UNCITRAL, Final Award, 15 November 2004](#), para. 115.

⁶⁵⁴ [Exhibit RL-0060: Pope & Talbot Inc. v. Government of Canada, UNCITRAL, Award on the Merits of Phase 2, 10 April 2001](#), para. 78.

between foreign-owned and domestic companies".⁶⁵⁵ This addition is relevant since the tribunal was solely considering a violation of the national treatment standard and, thus, a discrimination based on nationality. Hence, what the tribunal said was that justifications could only be considered if they do not specifically relate to the prohibited differentiation. Thirdly, the tribunal also limited the permissible considerations to those which do not undermine the objectives of the investment protection agreement at issue.⁶⁵⁶ Thus, rather than granting State's a wide margin of appreciation, the tribunal tightly scrutinised the justification of a difference in treatment.

633 The phrase quoted from the Partial Award in ***SD Myers v Canada*** is taken completely out of context. What Respondent relies on is the *SD Myers* tribunal's description of the understanding of "likeness" under the GATT agreement, from which it then distinguishes the standard to be applied in the NAFTA context. That standard is stricter. It looks in first instance on general principles emerging from the legal context of NAFTA and does not contain any soft language such as "*reasonable manner*" but engages in a full scrutiny of whether governmental regulations could justify differences in treatment.⁶⁵⁷ Moreover, in any event, the case again does not relate to a general non-discrimination provision but to an assessment of discrimination based on nationality, namely NAFTA's national treatment standard.

634 Finally, also the award in ***Feldman v. Mexico*** is of no assistance to Respondent. The tribunal merely concludes that "*there does not appear to be any rational justification in the record for SHCP's less favourable de facto treatment*".⁶⁵⁸ For that reasons, the decision does not need to address what requirements would apply with

⁶⁵⁵ [Exhibit RL-0060: Pope & Talbot Inc. v. Government of Canada, UNCITRAL, Award on the Merits of Phase 2, 10 April 2001](#), para. 78

⁶⁵⁶ [Exhibit RL-0060: Pope & Talbot Inc. v. Government of Canada, UNCITRAL, Award on the Merits of Phase 2, 10 April 2001](#), para. 78.

⁶⁵⁷ [Exhibit CLA-0105: SD Myers Inc v. Canada, UNCITRAL, First Partial Award, 13 November 2000](#), para. 250.

⁶⁵⁸ [Exhibit RL-0022: Marvin Roy Feldman Karpa v. United Mexican States, ICSID Case No. ARB\(AF\)/99/1, Award, 16 December 2002](#), para. 182.

regard to the “rational justification”. Moreover, the decision confirms that the burden of proof concerning the justification of a difference in treatment lies with the State.

635 In conclusion, what, Respondent does is to mischaracterises a line of NAFTA cases. The every statements Respondent relies on show the opposite of what Respondent wishes them to say. In, *Pope & Talbot* held that measures had a “reasonable nexus with the rational”.⁶⁵⁹, *SD Myers* held that distinctions must be justified by “legitimate public policy measures that are pursued in a reasonable manner”⁶⁶⁰, and *Feldman* held that the measure was discriminatory regardless of the State’s intention, and due to the weakness of the State’s arguments in demonstrating that there had been no *de facto* discrimination.⁶⁶¹ Yet, rather than endorsing unconditional deference, in truth, those cases demonstrate that a plausible or reasonable connection reasoning was necessary in order to uphold the measure as non-discriminatory.

636 Hence, Respondent’s proposition of a wide margin of appreciation must be rejected in total.

(b) Discrimination vis-à-vis older hard coal-fired power plants

(aa) The Lünen plant and old hard coal-fired power plants are comparable

637 There is no disagreement between the Parties that Lünen plant and hard-coal power plants which started commercial operation before 2010 (“**Old Coal Plants**”) are not in like circumstances. While Respondent contends that lignite plants and the Lünen plant would not be comparable, no such argument is raised in the Counter-Memorial with regard to the discrimination vis-à-vis Old Coal Plants.

⁶⁵⁹ [Exhibit CLA-0193: *Pope & Talbot Inc. v. Government of Canada*, UNCITRAL, Award on the Merits of Phase 2, 10 April 2001](#), para. 93.

⁶⁶⁰ [Exhibit CLA-0105: *SD Myers Inc v. Canada*, UNCITRAL, First Partial Award, 13 November 2000](#), para. 250.

⁶⁶¹ [Exhibit CLA-0194: *Marvin Roy Feldman Karpa v. United Mexican States*, ICSID Case No. ARB\(AF\)/99/1, Award, 16 December 2002](#), paras. 184-185.

638 Respondent, however, disputes that there is a difference in treatment.

(bb) The Lünen plant is treated less favourably than older hard coal-fired power plants

639 In its Memorial, Claimant explained that, despite Germany's stated aim that all plants are amortised by the time they are required to shut down under the Coal Ban Law, this was not the case for new plants like Lünen. While the Shutdown Path generally permitted Old Plants to (almost) achieve the generally assumed lifetime of 40 years, New Plants like Lünen had to shut down before even reaching half of that lifetime.

640 Claimant also sets out that the decommissioning tenders do not undo the unequal treatment but exacerbate it. The maximum tender prices offered (but which might not even be achievable) in the decommissioning tenders do not even compensate new plants like Lünen for the additional damage they would suffer from shutting down already before the mandated shutdown date. Even less so, they provide a compensation which would ensure an amortisation of the plant and do not offer Claimant at least some return on their investment. Instead, over one quarter of the shutdown incentives were awarded to plants which were already over 50 years old and, thus, well amortised.⁶⁶² Moreover, half of the received a shutdown incentive for closing down in the same year or even later than if they would have had to close based on their age-ranking.⁶⁶³

641 Germany's response to these points in its Counter-Memorial fails to address these points. Germany merely argues that there would be no unequal treatment because the same principles for awarding tenders would be equal for all plants.⁶⁶⁴ It contends that New Plants like Lünen would even be preferred under the tender mechanism.⁶⁶⁵

⁶⁶² Memorial, para. 272.

⁶⁶³ Memorial, para. 272.

⁶⁶⁴ Counter-Memorial, para. 201.

⁶⁶⁵ Counter-Memorial, para. 201.

- 642 While it is true that, if Lünen were to bid the same compensation amount per MW as an Old Coal Plant, it would likely succeed because – due to its higher efficiency – it would likely have operated more and, consequently, would have emitted more CO₂. That, however, is beside the point. As just explained, for new plants like Lünen, the maximum tender caps are insufficient. Therefore, it is immaterial whether Lünen could win a tender because winning a tender and shutting down even earlier would increase Lünen's damage even taking into account the tender proceeds. As set out in the factual background above (see Section B.VI.1), contrary to Respondent's contentions,⁶⁶⁶ the fact that the plants Westfalen and Moorburg A/B successfully participated in the tender does not demonstrate the contrary as the bids by these plants were motivated by other considerations.
- 643 What causes the unequal treatment is that Respondent fails to provide any compensation to hard coal-fired power plants which shut down after 2026/2027 – and there are almost exclusively the new plants like Lünen. In fact, based on the Shutdown Path as of the valuation date, 12 of the 15 plants to shut down after 2027 are new plants like Lünen.
- 644 Using the Shutdown Path is a relevant yardstick determining who could likely be expected to accept the shutdown incentives. In its Explanatory Memorandum to the Coal Ban Law, Germany itself justified its aged-based Shutdown Path by qualifying age as a suitable proxy for (the likely) amortisation. Similarly, as Frontier explains,⁶⁶⁷ the expected remaining lifetime of a plant has a significant impact on the amount of compensation necessary to incentivise a plant to shut down. Hence, the older the plant, the lower the expected remaining lifetime (and profitability due to lower energy efficiency), and, hence, the lower the required compensation to incentivise a shut down. Consequently, the plants that can be expected to accept the shutdown incentives are generally those with the least remaining lifetime means that the Shutdown Path should broadly reflect which plants are likely to succeed / be interested in participating in the shutdown tenders.

⁶⁶⁶ Counter-Memorial, para. 445.

⁶⁶⁷ See [Exhibit CER-0004: Second Frontier Report](#), paras 319, 342 *et seq.*

- 645 Respondent thus left precisely those plants without appropriate compensation which would have required it the most and for which even the Coal Commission itself had suggested a special treatment in order to ensure their fair compensation. Yet, this was not done.
- 646 In its Counter-Memorial, Respondent suggests that, for new plants like Lünen, the hardship clause in Section 54(2) of the Coal Ban Law would ensure the required compensation.
- 647 However, Respondent fails to address the argument in Claimant's Memorial that Section 54(2) does not remedy the situation as it only obliges the legislator to reevaluate the situation of the new plants like Lünen and does not specify at all under which conditions how much compensation would be provided. It also conveniently avoids addressing that Respondent has failed to perform this evaluation mandate by law, which is now already over three years overdue.
- 648 Rather, in order to divert attention from these deficiencies of the law and its own implementation, Respondent appears to suggest that no compensation under this provision would be required since a conversion of the Lünen plant to a gas-fired power plant would be possible and profitable. As Claimant already explained in the Memorial and will further explain in Section E.IV., a conversion to gas would not generate additional value for Claimant. Moreover, Respondent ignores that it would not even be sufficient if the conversion generated any value. A conversion would only have to cancel out the damage suffered by Claimant in order to compensate Claimant.
- 649 Hence, there is an unequal treatment between new plants like Lünen and Old Coal Plants in that the latter are (almost) fully amortised and that can moreover receive further compensation through the participation in shutdown tenders while new plants like Lünen are not amortised and cannot improve their economic situation by tender participation because the maximum tender prices are below the additional damage caused by an even earlier shutdown.

(cc) Germany's offers no justifications for the difference in treatment

- 650 There is also no justification for this difference in treatment. The only futile defence Respondent raises is that it wanted to reduce as much emissions as possible with as little public spending as necessary.⁶⁶⁸
- 651 Firstly, wanting to spend less public money is not a relevant justification for discrimination.
- 652 Secondly, providing incentives to more polluting, already amortised plants to shut down even earlier, is no justification not to provide any compensation to plants which must shut down after a fraction of these more polluting plants and which have not had a chance to amortise their investment and obtain any reasonable return. This applies even more so where Germany called for the construction of such plants as part of its climate change policy.
- 653 Thirdly, as set out in the factual background above (see Section B.V.2), taking into account the CO2 emissions of the last three years does not ensure the quickest possible reduction of CO2 emissions since Germany fails to put this into perspective with the electricity generation during that period. Germany's mechanism actually favours the shutdown of new efficient power plants, thereby keeping old, more polluting plants in operation longer.
- 654 Fourthly, limiting compensation to plants being shut down in the 2020s, also does not excuse a discrimination. This is the case irrespective of whether the unsupported assertion⁶⁶⁹ that also providing compensation for shutdowns in the 2030s would have put the entire tender mechanism at risk. Germany's choice to use a tender mechanism to compensate part of the plants, cannot be a justification not to compensate others.

⁶⁶⁸ Counter-Memorial, para. 201, citing [Exhibit Wellershoff WS: Witness Statement of Mr. Jan-Kristof Wellershoff](#), para. 21.

⁶⁶⁹ Counter-Memorial, para. 211, citing [Exhibit Wellershoff WS: Witness Statement of Mr. Jan-Kristof Wellershoff](#), paras 37-41.

655 Moreover, it is not even true that Germany does not compensate any shutdowns in the 2030s. As described in the factual background (see above Section B.V.3), the compensation for lignite-fired power plants does take into account lost profits of plants shut down in the 2030s.

656 Fifthly, and finally, whether it was within Germany's margin of appreciation to set the end date for coal-fired power generation to 2038⁶⁷⁰ is irrelevant. Irrespective of the end date chosen, Respondent must ensure that the plants affected are treated equally – or are compensated.

(c) Discrimination vis-à-vis lignite-fired power plants

(aa) The Lünen plant and lignite-fired power plants are comparable

657 In its Counter-Memorial, Respondent contends that lignite- and hard coal-fired power plants are not comparable due to the “mining” perspective”.⁶⁷¹ That is incorrect.

658 Both lignite- and hard coal-fired power plants are engaged in the same economic activity and active in the business of producing electricity from burning coal. Moreover, both share several technical similarities and are subject to similar laws and regulations. As a consequence, any differentiation between these plants was politically motivated and is now artificially construed by Respondent out of convenience, capriciously to arbitrarily benefit the lignite plant operators.⁶⁷²

(bb) The Lünen plant is treated less favourably than lignite-fired power plants

659 Claimant explained in its Memorial that coal-fired power plants in general and new plants like Lünen in particular were treated less favourably than lignite-fired plants.

⁶⁷⁰ Counter-Memorial, paras 204, 447.

⁶⁷¹ Counter-Memorial, para. 214.

⁶⁷² See above, Section B.V.1.

660 Firstly, while the Lünen plant is newer than any lignite-fired power plant, is shut down up to seven years later than up to 39 years older lignite-fired power plants. Consequently, the number of years during which Lünen could have still generated revenues is shortened at the expense of longer lifetimes for older lignite-fired power plants.

661 Secondly, while the older lignite-fired power plants shutting down up to seven years after the Lünen plant receive compensation, the Lünen plant does not receive any compensation. As set out above (see paras 205-211), it is clearly visible from the calculation formula set out in Annex 4 to the Coal Ban Law that lignite-fired power plants are also compensated for lost profits for shutdowns in the 2030s.

(cc) Germany's offers no justifications for the difference in treatment

662 Respondent advances a number of attempts to justify this difference in treatment. All of them are unsuccessful:

663 Firstly, Respondent tries to justify the difference in treatment by claiming that the deviation from the age-based order would be necessary since all power plants connected to one lignite mine would need to be shut down together.

664 That, however, does not explain the deviation from the age-based Shutdown Path since none of the lignite-fired power plants are newer than Lünen. The newest lignite-fired power plants (Neurath F and G and Boxberg R) were commissioned one year before Lünen. Nonetheless, they close only in 2038 and, thus, seven (!) years after Lünen. Accordingly, that these power plants close after Lünen cannot be justified by the fact that they are attached to a mine supplying another, newer power plant. The same applies for all of the other nine lignite plants closing after the Lünen plant:

Power Plant	Mining Region	Shutdown Date ⁶⁷³	Start of Operation ⁶⁷⁴	Age Difference to Lünen Plant
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⁶⁷³ According to [Exhibit C-0005: Coal Ban Law \(Kohleausstiegsgesetz, KVBG\)](#), Annex 2.

⁶⁷⁴ According to the [Exhibit C-0112-DE / EN: Federal Network Agency, Power Plant List, 1 April 2020](#).

Claimant's Reply on the Merits & Counter-Memorial on Jurisdiction

16 January 2026

Lünen	---	01 Apr 2031	2013	
Niederaußem G or Niederaußem H	Rhineland	31 Dec 2033	23 Oct 1974 16 Sep 1974	39 years 39 years
Schkopau A	Central (Profen)	31 Dec 2034	01 Jan 1996	18 years
Schkopau B	Central (Profen)	31 Dec 2034	01 Jan 1996	18 years
Lippendorf S	Central (Schleenhain)	31 Dec 2035	01 Dec 1999	14 years
Lippendorf R	Central (Schleenhain)	31 Dec 2035	20 Jun 2000	13 years
Schwarze Pumpe A	Lausitz	31 Dec 2038	15 Dec 1997	16 years
Schwarze Pumpe B	Lausitz	31 Dec 2038	25 May 1998	15 years
Boxberg Q	Lausitz	31 Dec 2038	01 Oct 2000	13 years
Boxberg R	Lausitz	31 Dec 2038	06 Nov 2012	1 year
Niederaußem K	Rhineland	31 Dec 2038	30 Aug 2002	11 years
Neurath F	Rhineland	31 Dec 2038	08 Jul 2012	1 year
Neurath G	Rhineland	31 Dec 2038	03 Aug 2012	1 year

665 Secondly, Respondent tries to justify the lack of compensation by alleging that the hard coal industry would have received substantial subsidies in the past and that the compensation now offered to the lignite sector would be far less.⁶⁷⁵ Claimant notes that Respondent hence evidently does not deny the difference in treatment but merely tries to justify it. This justification, however, is completely inapposite. The subsidies granted to the “hard coal industry” in the past were granted not to the hard coal-fired power plants but to the operators of hard coal mines and were aimed at allowing German hard coal to compete on the world market. The subsidies thus only reduced the price for German hard coal to world market levels. The hard coal-fired power plants did not benefit from these subsidies – they still needed to buy hard coal at world market prices.

666 Thirdly, Respondent refers to the social and regional effects (i.e. laying off of workers and decline of economic prosperity of regions)⁶⁷⁶ to justify the difference in treatment. Notably, also this argument shows that Respondent actually agrees that there is a preferential treatment of lignite-fired power plants. While the lignite phase out may have social and regional effects, Respondent omits that together with the Coal Ban Law it adopted a law to financially support the structural change of lignite

⁶⁷⁵ Counter-Memorial, para. 219.

⁶⁷⁶ Counter-Memorial, para. 216.

mining regions with up to EUR 40 billion (!). Hence, there is no reason to additionally compensate the lignite operators. Rather, it can be expected that lignite operators will – directly or indirectly – benefit from these additional subsidies. Hence, they rather exacerbate the discrimination. Moreover, whether more or less employees are affected may have an impact on the amount of compensation but not on the principle decision whether to grant compensation.

667 Lastly, closing down lignite-fired power plants last is inconsistent with Respondent's other alleged aim (as well as with the international climate change obligations it invokes) to reduce CO₂ emissions as much and as quickly as possible. As lignite-fired power plants emit more CO₂ than hard coal-fired plants, Respondent causes more CO₂ emissions by closing lignite-fired plants down after hard coal-fired ones.

3. Conclusion

668 In line with established arbitral jurisprudence⁶⁷⁷, it is not enough that a State presents an explanation for its unreasonable and discriminatory treatment but that this explanation presents a sensible approach to achieve the purported aim of its policy. In other words, only presenting a *reason* why the lignite and hard-coal sectors were treated differently is not sufficient to justify the discriminatory treatment. This reason must bear a nexus with the aim of the policy of reducing

⁶⁷⁷ See already Claimant's Memorial, paras 488 et seq.; [Exhibit CLA-0032: AES Summit Generation Limited and AES-Tisza Erőmű Kft v. The Republic of Hungary](#), ICSID Case No. ARB/07/22, Award, 23 September 2010, para. 10.3.7; [Exhibit CLA-0032: AES Summit Generation Limited and AES-Tisza Erőmű Kft v. The Republic of Hungary](#), ICSID Case No. ARB/07/22, Award, 23 September 2010, para. 10.3.9.; [Exhibit CLA-0041: Ioan Micula, Viorel Micula, S.C. European Food S.A., S.C. Starmill S.R.L. and S.C. Multipack S.R.L. v. Romania](#), ICSID Case No. ARB/05/20, Final Award, 11 December 2013, para. 525, confirmed by [Exhibit CLA-0077: Hydro Energy 1 S.à r.l. and Hydroxana Sweden AB v. Kingdom of Spain](#), ICSID Case No. ARB/15/42, Decision on Jurisdiction, Liability and Directions on Quantum, 9 March 2020, para. 569, and [Exhibit CLA-0027: Cavalum SGPS, S.A. v. Kingdom of Spain](#), ICSID Case No. ARB/15/34, Decision on Jurisdiction, Liability and Directions on Quantum, 31 August 2020, para. 412; [Exhibit CLA-0066: Watkins Holdings S.à r.l. and others v. Kingdom of Spain](#), ICSID Case No. ARB/15/44, Award, 21 January 2020, para. 596. See also: [Exhibit CLA-0024: LG&E Energy Group v. Argentine Republic](#), ICSID Case No. ARB/02/1, Decision on Liability of 3 October 2006, para. 158.

carbon emissions and fighting climate change, and not result in a *de facto* discrimination, whatever the State intention might have been. And none of Respondent's reasons fulfil this criteria. Its reasons for favouring are social, political, economic and even convenient, but are not directed at reducing carbon emissions and fighting climate change – and even go against these aims when allowing lignite (more polluting) plants to run much longer than hard-coal (less polluting) plants.

669 Ultimately, Respondent's assertion that climate change, the Paris Agreement, or its police powers mandate a broader margin of appreciation must be rejected. Police powers identify permissible objectives, not permissible violations. International tribunals are unanimous that States retain only a reasonable, reviewable margin of appreciation, bounded by proportionality, reasonableness, and non-discrimination. Climate-policy measures remain fully subject to the ECT, which has no environment exceptions, and tribunals have refused to accept arguments that environmental objectives override the treaty. Even under the ECHR, the margin narrows, not expands, where economic/proprietary rights are at stake. Accordingly, Respondent cannot invoke climate change or human-rights rhetoric as a shield for discriminatory and unreasonable treatment. The legality of its objectives does not transform disproportionate or arbitrary means into lawful conduct.

VII. Summary Liability

670 Respondent's defences are unconvincing.

671 The Arbitral Tribunal has jurisdiction to decide this dispute. Claimant is a State-owned company, but did not invest in Germany under the control or instructions of the Swiss State (or the Canton of Ticino). Respondent anyway failed to explain why and how investing into a power plant in a foreign country could be an extraterritorial government measure. It was a commercial decision taken by Claimant's board of directors in their own responsibility and autonomously from the State.

672 On the facts, the uncompensated shutdown of Lünen by the Coal Ban Law breaches Germany's obligations under the ECT. The Coal Ban Law climate-policy purpose does not immunize its effects: the measure substantially deprived Claimant of the use and value of its investment, meeting the standard for indirect

expropriation. The Coal Ban Law politically motivated differential treatment. An accelerated and uncompensated hard-coal exit versus a slower, negotiated and compensated exit for lignite constitutes unjustified discrimination among electricity generators in like circumstances, rendering any taking unlawful under Article 13(1) ECT. Respondent's assertions that tenders were voluntary mitigation, that banking dynamics sever causation, or that conversion was a reasonable alternative are unsupported on the plant-specific record. Claimant is therefore entitled to full reparation consistent with the ECT and customary international law.

673 Independent of expropriation, Respondent also breached the obligation to accord fair and equitable treatment under Article 10(1) ECT. The FET standard, as applied by ECT tribunals, encompasses requirements of stability, transparency, due process, and protection against arbitrariness and discrimination. Tribunals have recognized that legal stability is part of the ECT's FET standard. A State can breach FET by fundamentally altering the regulatory framework or fails basic standards of fairness. The Coal Ban Law effected a fundamental shift from the framework under which Lünen was permitted and operated – coal-fired plants will be prohibited to burn coal irrespective of their permits, did so without transparent, even-handed treatment of like generators, and imposed an accelerated, uncompensated exit on efficient hard-coal plants. These features are inconsistent with fair and equitable treatment, independently supporting liability.

674 This fundamental change also supersedes the permits granted to the Lünen plant. It constitutes a breach of the ECT's umbrella clause and the obligation to provide most constant protection and security to investors. The latter encompasses the prohibition to dismantle the legal framework on which investments are based. The permits evidence the public purpose of the plant's operation and bind Respondent as a whole.

675 This dispute is, as Claimant stated from the beginning, not about the need for climate change or a coal-phase out. It is about the need to pay compensation for what is a politically motivated uncompensated closure of a coal-fired power plant which Germany explicitly wanted to be built as part of its climate protection plans. Investors should not suffer from such a change of political heart.

E. QUANTUM

- 676 For the breaches of the Energy Charter Treaty confirmed in the preceding section, Respondent must pay damages amounting to EUR [REDACTED] plus interest at the 12-month EURIBOR rate plus 400 bps, compounded annually.
- 677 The challenges Respondent raises in its Counter-Memorial against Claimant's damage assessment are all unfounded. Claimant's damage methodology is legally and commercially sound (I) and Frontier's energy market modelling (II) and dispatch modelling (III) is reliable. Also Respondent's manifold attempts to reduce Claimant's damage fail. Claimant has neither failed to mitigate damages neither by not converting the Lünen plant to gas (IV) nor by acting prudently vis-à-vis the banks when amending the financing agreement (V). Likewise, there are no benefits from an alleged portfolio effect which could be offset against Claimant's damages (VI), nor is there a basis for other deductions (VII). As Respondent does not dispute that taxes may be levied on any award, Claimant maintains its request to confirm that Claimant must also be compensated for any taxes levied on the Award (VIII). Finally, EURIBOR plus 400bps constitutes an appropriate interest rate (IX).

I. Claimant's damage assessment is methodologically sound

- 678 In the Memorial and the first expert reports of Secretariat and Frontier Economics ("**First Secretariat Report**" and "**First Frontier Report**", respectively), Claimant provided the Tribunal with a *lege artis* quantification of damages.
- 679 Respondent in the Counter-Memorial challenges these assessments on numerous made-up grounds. Claimant will rebut this misguided criticism in the sections that follow.
- 680 In doing so, Claimant relies on the Second Secretariat Report and Second Frontier Report in their entirety and, where necessary, will include specific references to these reports.

1. Damages for expropriation are EUR [REDACTED], not EUR [REDACTED]

- 681 In accordance with standard valuation practice, Secretariat calculated Claimant's losses by determining a monetary sum that would put the damaged party in the same economic position it would have been in had the alleged breaches not taken place.⁶⁷⁸ To that effect, Secretariat have compared Claimant's actual economic position with the Coal Ban Law in place ("**Actual value**") with its economic position in a scenario without the ("**But-For value**").⁶⁷⁹
- 682 Claimant's experts calculated both parameters under the Fair Market Value ("**FMV**") standard, using an *ex ante* valuation date of 30 January 2020.⁶⁸⁰ Secretariat then computed these values with the Discount Cash Flow ("**DCF**") approach, focusing on Claimant's 15.84% shareholding in TKL.⁶⁸¹ They assessed the Actual value of Claimant's investment in TKL as negative EUR [REDACTED]⁶⁸² and the But-For-Value as positive EUR [REDACTED].⁶⁸³
- 683 In the Counter-Memorial, Respondent makes the bizarre allegation that Secretariat would have conceded the expropriation claim to be only the But-For value, i.e. EUR [REDACTED].⁶⁸⁴ The remaining EUR [REDACTED] of negative Actual value would not qualify as damages under Article 13(1) ECT.⁶⁸⁵
- 684 Germany's attempt to confine compensation to the But-For value only, and hence artificially reduce the damages suffered, is severely misguided. Respondent's

⁶⁷⁸ [Exhibit CER-0001: First Secretariat Report](#), para. 4.2; see also [Exhibit CER-0003: Second Secretariat Report](#), para. 3.2.

⁶⁷⁹ [Exhibit CER-0001: First Secretariat Report](#), para. 4.3.

⁶⁸⁰ [Exhibit CER-0001: First Secretariat Report](#), sections 4.A. and 4.B.

⁶⁸¹ [Exhibit CER-0001: First Secretariat Report](#), section 4.D.

⁶⁸² [Exhibit CER-0001: First Secretariat Report](#), para. 6.14. and Section 6.

⁶⁸³ [Exhibit CER-0001: First Secretariat Report](#), para. 5.40 and Section 5.

⁶⁸⁴ Counter-Memorial, paras 579-580.

⁶⁸⁵ Counter-Memorial, para. 581.

assertion defies not only the law and common damage computation practice but also common sense.

685 If Respondent's contention were right, a claimant with any investment that had debt obligations or other liabilities would be much better off, if a State directly expropriated its investment than a State doing so indirectly.

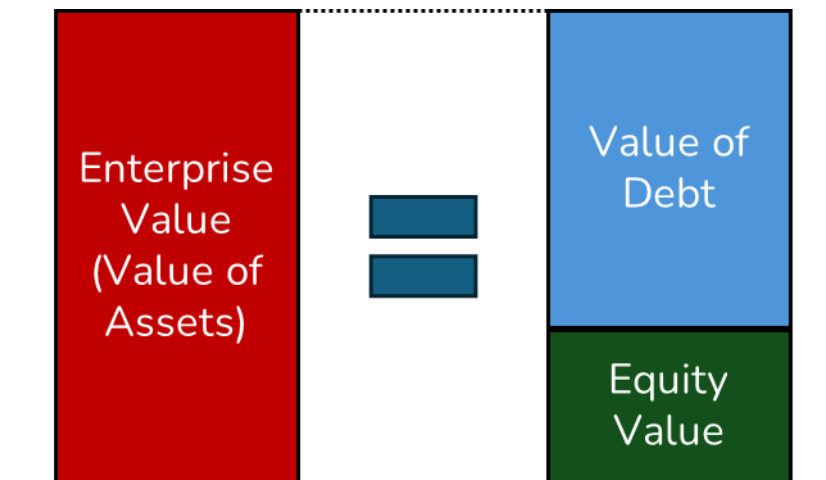
- In a direct expropriation, the State takes the title to property. By doing so, it becomes the new owner of the expropriated property – with all the rights and obligations thereof. Hence, by taking the asset, the State on the one hand deprives the investor of the ability to generate positive cashflows but also relieves the investor of any debt obligations which rests on the asset. It is therefore sufficient to compensate the investor for the (But-For) value of its equity investment.
- In an indirect expropriation, the States adopts a measure which deprives an investment of its value. Where the investment is financed by debt, the investor not only loses the higher cash flows it could have generated with the investment (which led to a positive But-For value) but, as it remains the owner of the asset, also remains liable for repaying any debt (leading overall to a negative Actual value). If the investor is now only compensated for the But-For value, it would be significantly worse off than if the State deprived it also of the ownership of the investment.

686 This clearly shows that Repsondent's argument cannot be sustained.

687 Moreover, this can also be shown from an economic perspective: As explained by Secretariat, the Actual Value and the But-For-Value are determined correspondent to the FMV standard.⁶⁸⁶ The FMV of all of a company's assets, commonly known as the Enterprise Value ("**EV**"), equals the sum of the value of the debt and the value of the equity.⁶⁸⁷

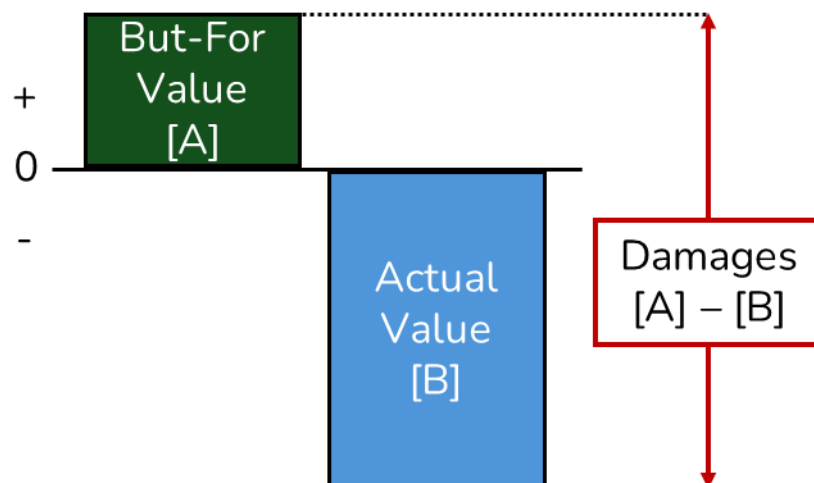
⁶⁸⁶ [Exhibit CER-0001: First Secretariat Report](#), para. 4.9.

⁶⁸⁷ [Exhibit CER-0001: First Secretariat Report](#), para. 4.11; [Exhibit CER-0003: Second Secretariat Report](#), para. 3.23.



Second Secretariat Report, Figure 1: Conceptual Representation of EV, Debt, and Equity Value

688 Where a measure forces an enterprise to shut down early, as was the case with the Lünen Plant, cash flows may be insufficient to service and repay debt, producing a negative equity and thus a negative Actual Value.⁶⁸⁸ In accordance with the standard formula that damages represent the difference between the But-For-Value and the Actual Value, if the Actual Value lies below zero, damages are simply the combination of the But-For value and the (negative) Actual value:



⁶⁸⁸ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.4.

Second Secretariat Report, Figure 1: Conceptual Depiction of our Damages Framework

689 In their Second Report, Secretariat aptly explain the difference between the concepts of enterprise value and equity value with the following hypothetical example:

“3.24 In its simplest terms this can perhaps be most easily conceptualized using an analogy to homes. If an individual purchases a € 1 million house, and has a € 800,000 mortgage, then the EV of the house is € 1 million while the equity value is € 200,000 (i.e., € 1 million less € 800,000).

3.25 Now consider that the value of the house has fallen by € 500,000 and assume that the owner is still liable to repay the mortgage (analogous to our assumptions regarding AET's investment in TKL). Looking at this from the perspective of EV, the value has fallen from € 1 million to € 500,000 and the owner has suffered a loss of € 500,000. From an equity value perspective, the value has fallen from € 200,000 to negative € 300,000, which results in the exact same € 500,000 loss. Thus, while the But-For Value and Actual Value are different depending on whether one views this from an EV or equity value perspective, the difference (or loss) is the same.”⁶⁸⁹

690 Accordingly, also from an economic perspective it is usual to assess expropriation claims by taking the difference between the investment's But-For value and its Actual value, even if the Actual value is below zero.⁶⁹⁰

691 This is fully consistent with Article 13(1) of the ECT. Limiting the claim solely to the But-For Value – as Respondent proposes – would fail to place a claimant in the position they would have been in absent the wrongful measure in circumstances where the claimant is left bearing a significant liability in form of an outstanding debt.⁶⁹¹

⁶⁸⁹ [Exhibit CER-0003: Second Secretariat Report](#), paras 3.24-3.25.

⁶⁹⁰ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.4.

⁶⁹¹ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.4.

2. Claimant's valuation date is correct

692 In the Memorial, Claimant explained that the correct valuation date is 30 January 2020, i.e. the day before the Coal ban Law was submitted to Parliament.⁶⁹² That is when the impending expropriation became known in a way that tangibly affected the Lünen Plant's market value. As the First Secretariat Report shows, fixing this ex ante date ensures a clean, unaffected But-For Value.⁶⁹³

693 Respondent now characterises the 30 January 2020 valuation date as “premature”. It contends that the “time immediately before the Expropriation or impending Expropriation became known” in terms of Article 13(1) ECT, would be the future issuance of the shutdown orders (called “Coal-Firing Stops” by Respondent), not the value reduction of Claimant's investment when the draft Coal Ban Law was introduced into Parliament.⁶⁹⁴

694 Respondent tries to support this with five flawed arguments, of which the first three are closely related:

695 Firstly, it contends that the Shutdown Path contained in the Coal Ban Law would be insufficient to determine the shutdown date of the Lünen plant.⁶⁹⁵ Secondly, this could only be determined once the Coal-Firing Stops would be issued.⁶⁹⁶ Thirdly, the reduction targets would be subject to review, which could impact the Shutdown Path.⁶⁹⁷

696 None of these contentions have any merit.

697 Already the draft Coal Ban Law contained the criteria permitting market participants to determine the shutdown date of power plants based on the age-based Shutdown

⁶⁹² Memorial, para. 528.

⁶⁹³ [Exhibit CER-0001: First Secretariat Report](#), paras 4.9-4.10.

⁶⁹⁴ Counter-Memorial, para. 582-583.

⁶⁹⁵ Counter-Memorial, para. 583.

⁶⁹⁶ Counter-Memorial, para. 584.

⁶⁹⁷ Counter-Memorial, para. 585.

Path⁶⁹⁸. It only requires reading the Coal Ban Law and understanding the annual reduction targets derived from the law in conjunction with the agreed shutdown dates for the lignite-fired power plants and, then, determine the age-ranking based on a power plant list published by the Federal Network Agency. Any changes possible under the Coal Ban Law for modernisation investments could only affect the order of older plants but not of the New Plants.

698 Moreover, what is relevant under Article 13(1) ECT is not the point in time when the last certainty about the economic impact of a measure is known but when the measure – here the Coal Ban Law – “*became known in such a way as to affect the value of the Investment became known in such a way as to affect the value of the Investment*”. With the introduction of the Coal Ban Law, it was foreseeable that the value of the Claimant’s investment would be seriously affected as its lifetime would be reduced from 2053 to at most 2038 – and based on the Shutdown Path – very likely even to 2031⁶⁹⁹. Even if the legislator would decide to slightly change the Shutdown Path following a review of the Coal Ban Law, this would not change that with the introduction of the Coal Ban Law, the value of Claimant’s investment was already seriously impacted.

699 Fourthly, Respondent claimed that it would be possible to adjust Shutdown Paths under the Coal Ban Law in individual circumstances.⁷⁰⁰ In support, it relies on the agreement reached with RWE that it could operate to lignite-fired power plants longer in exchange for closing other lignite-fired power plants down earlier. This shows that such a “deal” would not have been possible for Claimant since it does not operate multiple plants. There is no indication that Germany would permit a single plant to close down later than foreseen – which would likely also raise objections from other market participants. An earlier shutdown would of course generally be possible, but this would onlyacerbate the impact on Claimant’s investment.

⁶⁹⁸ Memorial, Section C.VI.3.

⁶⁹⁹ See Memorial, para. 528.

⁷⁰⁰ Counter-Memorial, para. 586.

700 Fifthly, Respondent alleges that the Lünen Plant might stop firing hard-coal voluntarily in the late 2020s.⁷⁰¹ That is pure speculation and contradicted not only by Claimant's expert reports. The fact that Germany is offering compensation for shutting down lignite- and hard coal-fired power plants in the 2020s moreover shows that also Respondent did not expect such shutdowns. Otherwise, under EU State Aid Law, it would not have been permitted to compensate them for shutdowns.

3. The correct valuation approach is an ex ante assessment, not ex post

701 Respondent's proposal to adopt an ex post valuation date for the assessment of damages is misguided. Germany's approach is flawed both on legal grounds (a.) and, in any event, on economic and methodological grounds (b.).

(a) Respondent misrepresents the legal standard

702 Respondent contends that, because Claimant's losses are not only based on Germany's unlawful expropriation, but also breaches of other standards of the ECT, customary international law would require an ex-post valuation date, i.e. a valuation as of (or close to) the date of the award rather than as of 30 January 2020.⁷⁰² This approach overstates and misunderstands the authorities Germany relies on.

703 Germany argues that the "full reparation" standard drawn from *Chorzów Factory* allegedly favours using the date of the award so that the tribunal can take into account "*all information available until that date*" and avoid over-compensating the investor.⁷⁰³

704 Respondent's reliance on this case is, at best, unsound. In *Chorzów Factory*, the PCIJ articulated a principle of full reparation - it did not establish a general rule that valuation must always be performed at the time of the award, still less in

⁷⁰¹ Counter-Memorial, para. 587.

⁷⁰² Counter-Memorial, paras 589-606.

⁷⁰³ Counter-Memorial, paras 593, 599.

non-expropriation cases. As Claimant noted in the Memorial, the starting point is the well-known statement that

“Reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed.”⁷⁰⁴

705 Crucially, the Court neither attached the full reparation standard to a single fixed valuation date nor did it establish a hard rule about valuation dates. Instead it directed independent experts to assess the value of the undertaking as of the date of dispossession (*ex ante*) and also as of the date of judgment (*ex post*), in order to determine which measure better achieved full reparation in the specific circumstances.⁷⁰⁵ In other words, the Court was willing to test more than one date to see which best offered full reparation in light of the facts of the case.

706 Moreover, the PCIJ never applied these alternative valuations in a quantum decision, because the case was settled before the Court could decide on damages. Hence, it is simply incorrect that the PCIJ established in *Chorzów* a presumption in favour of an *ex post* valuation date as Respondent tries to construe.

707 Tribunals have repeatedly emphasised that the choice of valuation date must be adapted to the nature of the breach, the characteristics of the investment, and the available evidence.

708 In *Perenco v Ecuador*, for example, the tribunal emphasised that tribunals “*are not bound to accept a party’s proposed date of valuation*”⁷⁰⁶ and refused to adopt an *ex post* valuation noting that market volatility would render any such calculation essentially “random”.⁷⁰⁷ It stressed, in particular, that it had

⁷⁰⁴ [Exhibit CLA-0106: Factory at Chórzow, 1928 PCIJ Series A No 17](#), p. 47.

⁷⁰⁵ See [Exhibit CLA-0106: Factory at Chórzow, 1928 PCIJ Series A No 17](#), pp. 49-54.

⁷⁰⁶ [Exhibit CLA-0195: Perenco v. Ecuador, ICSID Case No. ARB/08/6, Award, 27 September 2019](#), para. 84.

⁷⁰⁷ [Exhibit CLA-0195: Perenco v. Ecuador, ICSID Case No. ARB/08/6, Award, 27 September 2019](#), para. 116.

“no interest in attempting to ‘unscramble the egg’ by drawing a strict line between these [mixed ex ante with ex post] data.”⁷⁰⁸

709 The *Perenco* case thus confirms that the tribunal retains discretion to choose a date that avoids speculative and hindsight-driven outcomes.

710 Similarly, in *Murphy v Ecuador*, the tribunal held that

“The applicable international law standard of full reparation, as reflected in the Chorzów Factory judgment and Article 31 of the ILC Articles on State Responsibility, does not determine the valuation methodology. Nor does the Treaty. Tribunals enjoy a large margin of appreciation in order to determine how an amount of money may “as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed.

[...]

This Tribunal determines that an ex-post approach is not appropriate in this case because the ex post data generated after the sale of Murphy Ecuador does not reflect what the situation would have been in a but-for scenario.”⁷⁰⁹

711 The arbitrators therefore expressly rejected the idea that *Chorzów* or the ILC Articles mandate a sweeping ex post valuation standard *per se*, and confirms that an ex ante date may be required where ex post data does not offer a credible But-for scenario.

712 The practice of investment tribunals in non-expropriation or mixed-breach cases confirms that there is no “blanket” practice of ex post valuation in non-expropriatory cases, as Respondent wants the Tribunal to believe. In *Azurix*,⁷¹⁰ *CMS*,⁷¹¹ and

⁷⁰⁸ [Exhibit CLA-0195: *Perenco v. Ecuador*, ICSID Case No. ARB/08/6, Award, 27 September 2019](#), para. 117.

⁷⁰⁹ [Exhibit CLA-0116: *Murphy Exploration and Production Company International v. Republic of Ecuador II*, PCA Case No. 2012-16 \(formerly AA 434\), Partial Final Award, 6 May 2016](#), paras 481, 484.

⁷¹⁰ [Exhibit CLA-0083: *Azurix Corp. v. The Argentine Republic*, ICSID Case No. ARB/01/12, Award, 14 July 2006](#), paras 418, 442.

⁷¹¹ [Exhibit CLA-0045: *CMS Gas Transmission Company v. The Argentine Republic*, ICSID Case No. ARB/01/8, Award, 12 May 2005](#), paras 410, 441.

Enron,⁷¹² the tribunals applied FMV approaches as of dates tied to Argentina's unlawful measures, not the award date. Similarly, in the Spanish renewables cases, *Masdar*,⁷¹³ *AES Solar/PV Investors*,⁷¹⁴ *Cavalum*⁷¹⁵ and *JGC*,⁷¹⁶ the tribunals consistently fixed valuation at or around the first disputed regulatory changes, despite dealing primarily with FET and related treaty breaches. Also in *Crystallex*, the tribunal held that damages should be based on an earlier date when the first non-expropriatory breach occurred.⁷¹⁷

713 AAPL v Sri Lanka, which Respondent itself cites only to dismiss as irrelevant, in fact illustrates that the valuation date can be tied to the harmful measure even in non-expropriation contexts. The tribunal considered the destruction of the investment during military operations as the relevant point in time and valued the losses as of that date, although the breach was framed under the BIT's protection and security standard rather than as a formal expropriation.⁷¹⁸

714 Also the analyses of legal scholars contradict Respondent's sweeping/across-the-board application of an ex post valuation date. *Sergey Ripinsky* and *Kevin Williams*, who examined various aspects of damage calculation in international investment

⁷¹² [Exhibit CLA-0043: Enron Creditors Recovery Corporation \(formerly Enron Corporation\) and Ponderosa Assets, L.P. v. Argentine Republic](#), ICSID Case No. ARB/01/3, Award, 22 May 2007, para 389.

⁷¹³ [Exhibit CLA-0068: Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain](#), ICSID Case No. ARB/14/1, Award, 16 May 2018, para. 605.

⁷¹⁴ [Exhibit CLA-0196: AES Solar and others \(PV Investors\) v. Kingdom of Spain](#), PCA Case No. 2012-14, Final Award, 28 February 2020, paras 720–723.

⁷¹⁵ [Exhibit CLA-0027: Cavalum SGPS, S.A. v. Kingdom of Spain](#), ICSID Case No. ARB/15/34, Decision on Jurisdiction, Liability and Directions on Quantum, 31 August 2020, para 698(c).

⁷¹⁶ [Exhibit CLA-0197: JGC Holdings Corporation v. Kingdom of Spain](#), ICSID Case No. ARB/15/27, Decision on Jurisdiction, Liability, and Certain Issues of Quantum, 21 May 2021, para 1138.

⁷¹⁷ [Exhibit CLA-0198: Crystallex International Corporation v. Bolivarian Republic of Venezuela](#), ICSID Case No. ARB(AF) 11/2, Award, 4 April 2016, paras 854–855.

⁷¹⁸ [Exhibit CLA-0092: Asian Agricultural Products Ltd. \(AAPL\) v. Republic of Sri Lanka](#), ICSID Case No. ARB/87/3, Award, 27 June 1990, paras 96–97, 106–107.

law as part of a major research project carried out at the British Institute of International and Comparative law, noted that

*“When there is only one governmental measure at issue (even if it is in violation of more than one treaty provision), the date of, or that immediately preceding, the measure has been fixed as the relevant valuation date.”*⁷¹⁹

715 Respondent also relies on the majority decision in *Quiborax v. Bolivia*.⁷²⁰ What Respondent omits is that the tribunal's ex post valuation approach has been strongly criticised, including by *Professor Stern* in her Separate Opinion.⁷²¹ In her dissent, Professor Stern stressed that *Chorzów's* reference to an ex post valuation was hypothetical⁷²² and not an open invitation to ex post information for the calculation of damages.

716 Finally, Germany raises the absurd argument that, if customary international law permitted an ex ante valuation date for non-expropriatory breaches, Article 13(1) second sentence ECT (which fixes an ex ante valuation for expropriation) would be “redundant”.⁷²³ This eminent Tribunal does not require Claimant to explain that the existence of an express provision in an international treaty does not suggest that the customary international law says the opposite. Clearly, many the provisions in many treaty reflect customary international law.

⁷¹⁹ [Exhibit CLA-0007: S. Ripinsky and K. Williams, *Damages in International Investment Law*, 2008, pp. 248-249; referring to \[Exhibit CLA-0092: *Asian Agricultural Products Ltd. \\(AAPL\\) v. Republic of Sri Lanka*, ICSID Case No. ARB/87/3, Award, 27 June 1990\]\(#\), paras 96–97, 106–107.](#)

⁷²⁰ Counter-Memorial, paras 601-602.

⁷²¹ [Exhibit CLA-0199: *Quiborax S.A. and others v. Plurinational State of Bolivia*, ICSID Case No. ARB/06/2, Partially Dissenting Opinion of Professor Brigitte Stern, 7 September 2015.](#)

⁷²² [Exhibit CLA-0199: *Quiborax S.A. and others v. Plurinational State of Bolivia*, ICSID Case No. ARB/06/2, Partially Dissenting Opinion of Professor Brigitte Stern, 7 September 2015](#) paras 39–40.

⁷²³ Counter-Memorial, para. 600.

(b) An ex post valuation is not viable in the present case as it would not provide a “clean” But-for value

717 Moreover, an ex post valuation would rely on highly speculative input data and could not offer a reliable basis for damage calculation.

718 From an economic perspective, an ex-post valuation using a current date would not provide the “clean” but-for value that Article 13 ECT requires. As mentioned above, Article 13 of the ECT calls for a comparison between (i) the value of the investment immediately before impending expropriation was known in a way that affected its value and (ii) its value with the expropriatory measure in place. If, as proposed by Respondent, the valuation date is pushed several years forward into a period in which the Coal Ban Law has already affected prices and investment behaviour, it becomes at best extremely difficult (if not impossible) to obtain an unaffected or “clean” But-for value.⁷²⁴

719 To construct a But-For scenario on a later, ex-post valuation date, one would have to re-engineer six years of market history: identify every material regulatory measure, capacity addition and retirement, grid and storage investment, and change in power and carbon prices since January 2020, and then decide, for each, to what extent it was caused by the Coal Ban Law and to what extent it would have occurred anyway. Only then could one attempt to build a scenario “but-for” the Coal Ban Law in its present form over that period and value Lünen against that hypothetical background.⁷²⁵ As Secretariat explain, doing so would require “*many highly speculative assumptions*” about how the German electricity market would have evolved but-for the law,⁷²⁶ in circumstances where the law itself has been a key driver of that evolution.⁷²⁷

⁷²⁴ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.16.

⁷²⁵ [Exhibit CER-0003: Second Secretariat Report](#), paras 3.16, 3.19 – 3.20.

⁷²⁶ [Exhibit CER-0003: Second Secretariat Report](#) para. 3.16.

⁷²⁷ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.16.

- 720 Secretariat highlight that, since January 2020, there have been numerous major developments in Germany's power sector that would necessarily need to be reviewed in an ex post valuation of Claimant's investment. These are, among others: large subsidy plans for new "hydrogen-ready" gas plants to replace lost coal and nuclear baseload, record investment programs in renewables, grids, and gas-fired capacity, and reforms to the EU ETS, including the cancellation of more than 500,000 emission allowances freed up by the coal exit, which have contributed to higher CO₂ prices.⁷²⁸ Many of these factors and decisions are at least partly a consequence of the Coal Ban Law.⁷²⁹ In simple terms, the Coal Ban Law has changed the system in ways that cannot be cleanly separated ex post.
- 721 The analysis of Frontier Economics reinforces these concerns. Frontier explain that Germany's ex post proposal suffers from a basic logical problem: A proper "ex post but for" scenario must describe a world in which the Coal Ban Law never existed, yet Aurora's ex post modelling builds its assumptions using market and policy developments that themselves occurred in response to that Law.⁷³⁰ The supposed alternative scenario without the measure is thus contaminated by the very measure it is meant to exclude.
- 722 Frontier stress that this is not a marginal modelling issue but rather a structural flaw. Once one recognises that the Coal Ban Law has driven how Germany and market participants have invested in replacement dispatchable capacity, expanded renewables, and introduced system-security instruments over the last several years, a consistent "ex post but-for scenario" would require re-designing those developments in a counterfactual world.⁷³¹ Aurora do not even attempt that

⁷²⁸ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.19.

⁷²⁹ [Exhibit CER-0003: Second Secretariat Report](#), paras 3.18 – 3.19.

⁷³⁰ [Exhibit CER-0004: Second Frontier Report](#), paras 260-263. For greater detail, see Section 6 of [Exhibit CER-0004: Second Frontier Report](#).

⁷³¹ [Exhibit CER-0004: Second Frontier Report](#), paras 264-271.

exercise. Instead, they largely take the post-2020 policy and capacity landscape as given in the but-for case and alters only selected inputs.⁷³²

723 Consequently, an ex-post valuation date would not give the Tribunal a reliable, unaffected benchmark for Lünen's value. By fixing the valuation at 30 January 2020, the Tribunal obtains the "clean" but-for value and avoids contaminating the comparison with later consequences of the measure itself.⁷³³

4. As a fair market valuation, Claimant's damages take into account the market view on the effect of the Paris Agreement on prices

724 In its Counter-Memorial, Germany claims that Frontier's modelling "*denies all necessities to mitigate climate change*" and relies on "*very low CO2 certificate costs*", which supposedly ignore the Paris Agreement and Germany's climate-neutrality objectives.⁷³⁴

725 This is incorrect.

726 First, neither Claimant nor its experts deny the necessities of climate change. As emphasised from the outset,

*"This dispute is neither about the existence of climate change and its consequences, nor is it about contesting the need to reduce CO2 emissions or even a State's right – in principle – to prohibit the firing of coal. It is instead about a very simple issue: if a State forces an investor to sacrifice its lawful investment for the public benefit, then the State has to pay compensation."*⁷³⁵

727 Second, the price paths adopted by Claimant's experts do not ignore the Paris Agreement or Germany's climate targets.

728 They determine Claimant's damages based on the difference in value of its investment due to the Coal Ban Law. In accordance with international law, they use for this the fair

⁷³² [Exhibit CER-0004: Second Frontier Report](#), Summary of Section 6.

⁷³³ [Exhibit CER-0003: Second Secretariat Report](#), paras 3.16 – 3.20.

⁷³⁴ Counter-Memorial, paras 607-619.

⁷³⁵ Memorial, para. 6.

market value (FMV) standard. As the name suggests, this determines the value of an asset based on market expectations.⁷³⁶ As Secretariat explain:

“When conducting any valuation, particularly under the FMV standard, the key aspect is to rely on projections which represent reasonable estimates of central case market expectations. This is because FMV assumes a hypothetical transaction between hypothetical willing and able buyers and sellers.”⁷³⁷

729 This is what Claimant's experts do. For example, Frontier explain that all its sources

*“**share a consistent underlying narrative:** they all reflect current or stated policy expectations as of early 2020. The TYNDP National Trends scenario, NEP Scenario B, and the WEO Stated Policies scenario each represent central-case trajectories under the policy environment of that time.”⁷³⁸*

730 By basing their assessment on central market expectations, Claimant's expert take into account policy objectives, such as the Paris Agreement:

“The expectations of a rational buyer (investor) and rational seller about the fair value of an asset are founded on market expectations and while these are influenced by policy objectives, they do not need to be fully aligned with these, because market participants can reasonably expect that normative policy objectives can be missed.”⁷³⁹

731 Accordingly, the adopted approach

“reflects market expectations via market prices. Market prices integrate the collective view of all market participants. Hence, our model does not exclude scenarios of full target achievement which may be held by certain investors; it merely reflects the prevailing expectation that, as of the valuation date, some investors may have assigned higher likelihood to outcomes involving slower or less stringent decarbonisation.”⁷⁴⁰

Put differently,

⁷³⁶ [Exhibit CER-0004: Second Frontier Report](#), para. 4.10.

⁷³⁷ [Exhibit CER-0004: Second Frontier Report](#), para. 4.10.

⁷³⁸ [Exhibit CER-0004: Second Frontier Report](#), p. 73 (Summary of Section 4).

⁷³⁹ [Exhibit CER-0004: Second Frontier Report](#), para. 118.

⁷⁴⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 126.

“While political targets do not constitute any forecast – these targets may be met or failed in the perception of the market participants. What matters for FMV is what the market expects, regardless of whether that expectation leads to the failure or achievement of climate targets.”⁷⁴¹

732 As Frontier explain, at the valuation date the climate targets were generally expected to be missed.⁷⁴² This expectation in Germany was prevalent among specialised research institutes, the German government, and even Respondent's experts – Aurora – themselves.⁷⁴³ A corresponding scepticism was also present with regard to the European level.⁷⁴⁴

733 Third, Claimant's approach is entirely consistent, not only with general market practice, but also specifically with the core belief's Respondent's expert Aurora adopted outside of these proceedings around Claimant's *ex ante* valuation date. In those reports, Aurora applied price paths and market data very similar to that Frontier use in their reports. The approach Aurora presents in this Arbitration is entirely add odds with its previously held position and must be rejected. Frontier set out these inconsistencies in details in Section 3 of their Second Report.

734 Fourth, also relying on the successful shutdown tender bids by Moorburg and Westfalen does not support Respondent's case.⁷⁴⁵ As explained above, not much is known about the motives of RWE and Vattenfall. What is known, however, makes both plants unsuitable as comparators.

735 Accordingly, contrary to Germany's allegation, Frontier's EU ETS price path is not a denial of Paris-driven transition risks. It is expressly constructed from contemporaneous market evidence. The used input data thus includes EU and German climate legislation and targets in force at the valuation date. Frontier state that its EU ETS price assumptions “*follow a carry-forward logic grounded in financial*

⁷⁴¹ [Exhibit CER-0004: Second Frontier Report](#), para. 139.

⁷⁴² [Exhibit CER-0004: Second Frontier Report](#), para. 131.

⁷⁴³ See [Exhibit CER-0004: Second Frontier Report](#), para. 131(a)-(d) with further references.

⁷⁴⁴ [Exhibit CER-0004: Second Frontier Report](#), paras 135-138.

⁷⁴⁵ Counter-Memorial, para. 617.

theory and validated by empirical research".⁷⁴⁶ The resulting price trajectory reflects how a hypothetical willing buyer and seller would have expected EUA prices, and thus Lünen's costs for compliance with EU emission targets to evolve as of 30 January 2020.⁷⁴⁷

5. Claimant's obligation to exit the Lünen plant has no impact on the damage assessment in this case

736 Respondent further alleges that Claimant's valuation with cash flow projections until 2053 would be inconsistent with Swiss law obligations requiring AET to exit the Lünen investment once breakeven is reached or in any event, latest by 2035.⁷⁴⁸ Germany also contends that Claimant claiming lost profits would be contrary to its divestment obligations under Swiss law and that it could not seek a hypothetical FMV without proving specific divestment efforts of its 15.84% stake in the Lünen Plant.⁷⁴⁹

737 All these allegations are completely erroneous.

738 First, whether or not Claimant was obliged to leave the Lünen plant by 2035 is irrelevant. Claimant's damage in the present case derives from the difference between the Actual and But-For values of their investment at the valuation date. This again depends on the price a willing buyer and willing seller would agree on in a hypothetical transaction. For a buyer, it is irrelevant whether Claimant needs to sell its investment by 2035. The Lünen plant does not stop operations and generating value just because Claimant sells its participation.

⁷⁴⁶ [Exhibit CER-0004: Second Frontier Report](#), para. 117.

⁷⁴⁷ [Exhibit CER-0004: Second Frontier Report](#), para. 117, referring to [Exhibit RER: Compass Lexecon expert report](#), para. 17.

⁷⁴⁸ Counter-Memorial, para. 620.

⁷⁴⁹ Counter-Memorial, para. 620.

739 Second, Swiss law only obliges Claimant to sell the investment latest by 2025 – or earlier if it is able to sell the participation without losses. There is, however, no obligation not to make a profit by selling it.

740 Third, a damage claim does not depend on whether Claimant tried to sell its investment or not.

741 The only relevant question from an economic perspective is what a hypothetical buyer would have paid on 30 January 2020 in the But-For versus the Actual Scenario. That, Claimant evidenced with the expert reports submitted in this Arbitration.

6. Germany can properly replicate Frontier Economics' power market modelling

742 Respondent contends that it was unable to replicate and review Claimant's power market model. It argues that this would violate its due process rights and that the damages case would thus be unsubstantiated. This is erroneous.

743 To the extent Respondent seeks, in paragraph 623 of the Counter-Memorial, to characterise this issue as a due process concern, that characterisation is misplaced. Respondent does not complain about the conduct of the arbitral proceedings. Rather, it challenges the weight and persuasiveness of Claimant's evidence. No procedural defect arises from such disagreement.

744 Due process guarantees a fair opportunity to understand and to comment on the opposing party's case. It does not confer a right to the complete technical reconstruction of every individual data point or internal modelling step. The relevant standard is whether the case can be understood and meaningfully challenged. That standard is plainly met here.

745 Frontier Economics employed a power market model to derive hourly electricity prices under both the Actual and the But-For scenarios. These price series form the basis for the calculation of the Lünen power plant's gross profits. The quantification therefore follows a two-stage approach. First, market-wide electricity prices are

- determined. Second, the profits of the specific plant are calculated on the basis of those prices.
- 746 To determine the Lünen power plant's gross profits, Frontier apply a single-unit dispatch model known as SPIRIT. This model simulates the plant's hourly generation by reference to its technical characteristics and the scenario-specific electricity price paths produced by the power market model. It determines hourly output, revenues and variable costs, including fuel costs, EU ETS costs and other variable operating expenditures, and aggregates these results into annual gross-profit figures. The model is calibrated using plant-specific parameters provided by TKL in order to reflect the Lünen plant's operational capabilities in a realistic manner (Frontier ER II paras 184–185).
- 747 Contrary to Respondent's assertion, the modelling framework used to translate electricity price outcomes into plant-level gross profits is replicable. Frontier report that Aurora tested this step by running its own dispatch model using the same parameterisation and identical electricity price paths as in Frontier's analysis, and obtained results that are almost identical to Frontier's dispatch results. Aurora carried out this exercise in order to assess how the gross profits modelled in Frontier's First Expert Report would change if individual input parameters were modified (Frontier ER II paras 186–188).
- 748 In fact, Respondent has identified the electricity prices produced by Frontier, described the assumptions underlying those prices, and challenged those assumptions in detail. This includes extensive criticism relating to, inter alia, flexible demand, the treatment of the Nordic and Baltic regions, negative price hours and the timing of maintenance outages (Aurora ER I paras 49–62; Counter-Memorial paras 676–694). These are substantive critiques of modelling assumptions and outcomes. They do not reflect any inability to understand or engage with Claimant's case.
- 749 The results confirm the replicability of the dispatch analysis. In the But-For scenario, the deviation in modelled gross profits compared to Frontier's results remains below 1% in all years, except for 2050, where it reaches 1.3%. The two models also produce comparable results with respect to the number of starts. Only in 2020 and

2050 does Aurora's model shows between three and five additional starts. Notably, Aurora's modelling even yields higher gross profits when applying the same input parameters. This confirms that Frontier's modelling approach is conservative rather than overstated (Frontier ER II para. 188; Figure 13).

750 Against this background, Respondent's objection that Claimant's power market modelling is not reviewable and that the quantum claim is therefore unsubstantiated must fail. Respondent's reliance on Aurora's assertion that the power market model cannot be fully replicated (Counter-Memorial para. 623, referring to Aurora ER I Chapter 3) conflates full technical reconstruction with reviewability and substantiation.

751 In particular, Aurora's ability to formulate detailed, technical and scenario-specific criticism of Frontier's electricity price projections presupposes that those price paths were identifiable, intelligible and capable of analytical assessment. A model whose outputs can be dissected, challenged and tested in this manner cannot plausibly be characterised as unreviewable or insufficiently substantiated. Claimant addresses Respondent's detailed criticism of Frontier's electricity price modelling in Chapter V below.

752 In conclusion, Frontier's power market and dispatch modelling, as applied in the quantification of Claimant's loss, is replicable and has in fact been subjected to detailed scrutiny by Respondent and its expert. Claimant's quantum case is therefore properly substantiated, and Respondent's objection must fail.

II. Frontier's energy market modelling is correct

1. Flexible demand (e.g. heat pumps and electricity vehicles)

753 Respondent contends that Frontier would have failed to account for increased flexibility of demand in the future.⁷⁵⁰ This is incorrect. As set out in Annex A, paragraph A2(b)(i) of the First Frontier Report, Frontier model Demand Side Response (DSR) on the

⁷⁵⁰ Counter-Memorial, para. 676.

supply side. When activated in response to price signals, DSR reduces effective demand and provides the flexibility in the model that Aurora claim we have omitted.⁷⁵¹

2. Treatment of Nordic region

754 Frontier model the European electricity market in different levels of granularity, depending on their impact on the German electricity market. The higher the impact on the German electricity market, the more detailed a region is modelled.⁷⁵² The Nord Pool region (Sweden and Norway) is modelled as a satellite region.

755 Germany's experts Aurora criticise this, contending that Frontier's modelling failed to capture adequately the flexibility provided by the Nord Pool region, in particular hydropower generation in Norway and Sweden. According to Respondent, this flexibility allegedly exerts significant competitive pressure on German hard-coal generation and limits the operating hours and profitability of the Lünen power plant, such that its gross margins are overstated.⁷⁵³

756 This criticism is unfounded.

757 Contrary to Respondent's allegation, Frontier's model rather overestimates the impact of the Nord Pool region on the German electricity market. It actually considers more electricity imports from the Nord Pool region than Aurora's own model and exceeds the recorded volumes in the ENTSO-E statistics.⁷⁵⁴ Frontier's model permits fully flexible cross-border trade, which exerts stronger pressure on German thermal generation capacity such as Lünen as would normally be possible since interconnection capacity between Germany and the Nord Pool region is more limited.⁷⁵⁵

⁷⁵¹ [Exhibit CER-0002: First Frontier Report](#), Appendix A, para. A2(b)(i); [Exhibit CER-0004: Second Frontier Report](#), footnote 115.

⁷⁵² [Exhibit CER-0002: First Frontier Report](#), Annex A.2.

⁷⁵³ Counter-Memorial, para. 677; [Exhibit RER: Aurora, expert report](#), paras 53-54.

⁷⁵⁴ [Exhibit CER-0004: Second Frontier Report](#), para. 192-193, 468.

⁷⁵⁵ [Exhibit CER-0004: Second Frontier Report](#), paras 469.

758 Hence, Frontier's modelling of the Nord Pool Region is rather conservative.⁷⁵⁶

3. Negative price hours

759 Respondent submits that Frontier's modelling does not generate negative wholesale electricity prices. As a consequence, the Lünen power plant's profitability would be overstated.⁷⁵⁷

760 Also this criticism is unfounded. While negative prices have occurred historically to a very minor degree, also Aurora's own modelling shows that they are not expected to occur after 2027.⁷⁵⁸ Up to 2027, they occur with similar frequency in the Actual and But-For scenarios, meaning that any effects these negative price hours might have on the Lünen plant's profitability (which usually does not operate during such hours in any event) would cancel each other out.⁷⁵⁹ Moreover, just like Frontier do not consider negative price events, they also apply an upper limit for hourly electricity prices.⁷⁶⁰

III. Frontier's dispatch modelling is correct

1. Frontier's timing of annual maintenance is reasonable and appropriate

761 In their plant dispatch modelling, Frontier assume that the annual planned maintenance will take place each year during the period with the lowest electricity prices.⁷⁶¹

⁷⁵⁶ [Exhibit CER-0004: Second Frontier Report](#), para. 470.

⁷⁵⁷ Counter-Memorial, para. 678; [Exhibit RER: Aurora, expert report](#), paras 55-56.

⁷⁵⁸ [Exhibit CER-0004: Second Frontier Report](#), paras 195-196.

⁷⁵⁹ [Exhibit CER-0004: Second Frontier Report](#), paras 196, 481.

⁷⁶⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 479.

⁷⁶¹ [Exhibit CER-0002: First Frontier Report](#), Annex B, para. B.13.

- 762 Respondent's experts Aurora and Prognos criticise this assumption contending that such perfect foresight would be unrealistic as operators would need to schedule their annual maintenance one year in advance.⁷⁶² Therefore, instead, they propose that the annual maintenance would start in every year on the same date.⁷⁶³
- 763 However, it is incorrect that operators would not be able to predict at least one year in advance cost-efficient maintenance windows. This is also consistent with findings by the *Bundeskartellamt* (Federal Cartel Office) that power producers are able to anticipate market developments.⁷⁶⁴
- 764 Moreover, assuming that maintenance would take place at the same date each year, as done by Aurora, is completely unreasonable. As Aurora itself recognise, the changing mix of the generation capacity in the market will change which periods are generally more cost-efficient for downtimes to carry out maintenance work.⁷⁶⁵ It can therefore be expected that reasonable market participants will adapt their maintenance windows to changing market conditions.
- 765 Finally, Respondent's "rant" about the implausibility of assuming the same whether for each year, merely shows its ignorance of standard market approaches (which may have also led to its flawed economic approach regarding the economic effect of the Coal Ban Law). It is standard practice for electricity market modelling to use a sample weather year for the entire modelling period.⁷⁶⁶

⁷⁶² Counter-Memorial, para. 679; [Exhibit RER: Aurora, expert report](#), paras 57-62; [Exhibit RER: Prognos expert report](#), para. 118.

⁷⁶³ [Exhibit RER: Aurora, expert report](#), Annex B, paras. 272-273; [Exhibit CER-0004: Second Frontier Report](#), para. 234.

⁷⁶⁴ [Exhibit CER-0004: Second Frontier Report](#), para. 231.

⁷⁶⁵ [Exhibit RER: Prognos expert report](#), para. 59-61; [Exhibit CER-0004: Second Frontier Report](#), para. 231.

⁷⁶⁶ [Exhibit CER-0004: Second Frontier Report](#), footnote 156, For the purpose of long-term projections of gross profits of a power plant, the precise dates of weather events is not material as long as the weather is largely representative of an average weather year during the projection period.

766 Accordingly, Frontier's approach to use maintenance periods during low cost periods is not only plausible and reasonable but also more realistic than maintaining fixed maintenance periods despite changing market conditions.

2. No additional increase of maintenance costs after 2019

767 In their First Report, Secretariat determined TKL's fixed operating and maintenance costs based on the historic data from 2017 to 2019 and applied these costs, adjusted for inflation, going forward.⁷⁶⁷

768 Prognos criticise that this value is too low as (i) higher maintenance costs every five years, such as those in 2020, would need to be taken into account and (ii), as the plant ages, fixed OPEX would increase due to increased maintenance needs.⁷⁶⁸ Both contentions are incorrect.

769 First, the higher 2020 maintenance costs resulted from a major damage to the generator. This was an insured damage event and the costs therefore reimbursed.⁷⁶⁹ As TKL maintains an all risk insurance, whose costs are taken into account in Secretariat's damage assessment, there is also no indication that TKL would need to bear such costs in the future. It is therefore correct, not to include them in the fixe OPEX.

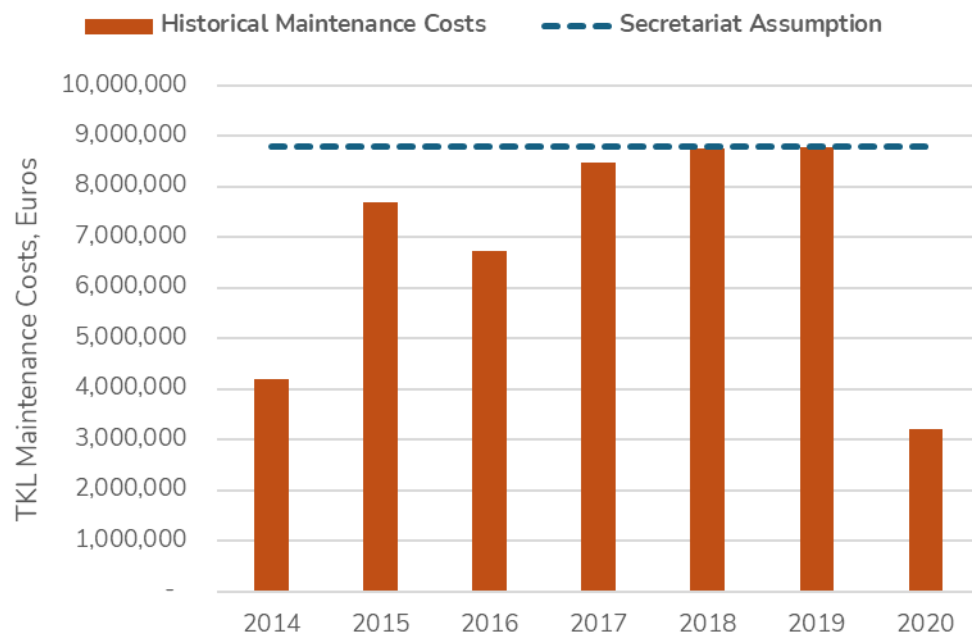
770 As Secretariat demonstrate in their Second Report, after excluding the costs of this damage event from the 2020 operation and maintenance costs, these are again far below the costs Secretariat project for the future.⁷⁷⁰

⁷⁶⁷ [Exhibit CER-0001: First Secretariat Report](#), para. 5.19,

⁷⁶⁸ Counter-Memoria, paras 686-688; [Exhibit RER: Prognos expert report](#), paras 84-87.

⁷⁶⁹ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.23.

⁷⁷⁰ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.23 with Figure 5.



771 Second, it is also not true that maintenance costs increase with age by a rate higher than inflation. As Secretariat demonstrate in their Second Report, the historic maintenance costs prior to the valuation date actually increased by less than inflation.⁷⁷¹ This is also true for TKL's maintenance costs projections as of the valuation date.⁷⁷² Considering additionally that Secretariat use the highest historic annual fixed maintenance costs (i.e. those from 2018 and 2019) for their projection of future maintenance costs, Secretariat's approach to increase maintenance costs by inflation is already conservative.⁷⁷³ Their approach thus actually already provides room for any slight increases in maintenance costs.

772 Moreover, a proper maintenance program will ensure that parts that need to be replaced, especially those particularly exposed to wear and tear, are replaced on a rolling basis.⁷⁷⁴ Finally, if there were any intermediary increases in maintenance costs (*quod non*), such increase would be counterbalanced by decreased

⁷⁷¹ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.26-5.27.

⁷⁷² [Exhibit CER-0003: Second Secretariat Report](#), para. 5.25.

⁷⁷³ [Exhibit CER-0003: Second Secretariat Report](#), , Figure 5 and paras 5.24, 5.27.

⁷⁷⁴ Cf. [Exhibit CER-0003: Second Secretariat Report](#), para. 217.

maintenance towards the end of a plant's lifetime – something which also reflected in the assessments procured by Respondent when designing the shutdown tenders.⁷⁷⁵

773 Secretariat's maintenance costs, thus, are conservative and certainly do not need to be increased.⁷⁷⁶

3. No higher variable OPEX

774 In their First Report, Frontier applied variable OPEX costs of █████ EUR/MWh_{el}, which they derived from the PPA.⁷⁷⁷

775 Respondent's expert Prognos consider these costs to be too low. They base their contention on costs from a generic case study⁷⁷⁸ albeit (i) the authors of the case study expressly state that no reliance should be placed on specific numbers⁷⁷⁹ and (ii) the cost figure has not been updated since the 2007 edition of the case study⁷⁸⁰.

776 Unlike Prognos' cost estimate, Frontier's value is based on plant-specific data, used to calculate commercial terms of an agreement between electricity producer (TKL) and off-taker (AET).⁷⁸¹

777 Hence, while, Prognos' criticism is unfounded, Frontier's figures are reliable and should be applied.

⁷⁷⁵ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.28.

⁷⁷⁶ However, Secretariat make a small adjustment of other fixed maintenance costs in their Second Report, see [Exhibit CER-0003: Second Secretariat Report](#), para. 5.24.

⁷⁷⁷ [Exhibit CER-0002: First Frontier Report](#), Annex B, para. B.7 with Table 9.

⁷⁷⁸ Counter-Memorial, para 689; [Exhibit RER: Prognos expert report](#), para. 90.

⁷⁷⁹ [Exhibit CER-0004: Second Frontier Report](#), para. 209(b).

⁷⁸⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 209(c).

⁷⁸¹ [Exhibit CER-0004: Second Frontier Report](#), paras 206-207.

4. No higher planned and unplanned unavailability

778 Prognos also criticise Frontier's conclusions regarding planned and unplanned unavailability, alleging that the annual downtime of the Lünen plant should be longer.⁷⁸² They base this contention entirely on data from ENTSO-E,⁷⁸³ although it is known that the designation of downtime as planned or unplanned is unreliable in this data⁷⁸⁴ and although part of the data was not known as of the valuation date (insofar as it relates to the time period 2020 to 2024)⁷⁸⁵.

779 As regards planned unavailability, Prognos claim that based on this historic ENTSO-E data, the Lünen plants annual planned downtime should be 12.2%.⁷⁸⁶ This value is incorrect and unreasonably high. Firstly, by using the initial years of operation, often characterised by infancy problems, Prognos introduce an upward bias in their projection.⁷⁸⁷ Secondly, this high value neglects that in 2020 and 2022 routine maintenance events – which, in any event, are inadmissible as they are *ex post* events – converged with damage events (i.e. unplanned outages).⁷⁸⁸

780 Excluding these unplanned outages, brings down the average value considered by Prognos by 4 percentage points (down to 8%).⁷⁸⁹ This is less than what Frontier apply in their dispatch modelling.

781 Also with regard to unplanned unavailability, Prognos – again relying on ENTSO-E data – allege that the duration considered by Frontier is too low.

⁷⁸² Counter-Memorial, paras 690-692.

⁷⁸³ [Exhibit RER: Prognos expert report](#), paras 94, 102.

⁷⁸⁴ [Exhibit CER-0004: Second Frontier Report](#), para. 212, 217.

⁷⁸⁵ [Exhibit CER-0004: Second Frontier Report](#), para. 222.

⁷⁸⁶ [Exhibit RER: Prognos expert report](#), para. 94.

⁷⁸⁷ [Exhibit CER-0004: Second Frontier Report](#), para. 212.

⁷⁸⁸ [Exhibit CER-0004: Second Frontier Report](#), para. 214.

⁷⁸⁹ [Exhibit CER-0004: Second Frontier Report](#), para. 216.

- 782 However, higher historical outage rates in the ENTSO-E data derives primarily from two major outages in 2015 and 2017.⁷⁹⁰ These are not relevant for forecasting unplanned unavailability as both events were covered by insurance and are therefore not indicative of future revenues.⁷⁹¹ As TKL maintains an all risk insurance, the premiums of which are accounted for in the costs applied by Secretariat,⁷⁹² insured outage events do not need to be accounted for in the unplanned unavailability.⁷⁹³
- 783 Again, excluding these outliers reduces the unplanned unavailability from 9% to 3%.⁷⁹⁴ The 4% unplanned unavailability applied by Frontier is thus not too low but even conservative.

5. No lower ramp rate

- 784 Prognos further suggest that the ramp rate applied by Frontier is too high. The ramp rate describes how fast a power plant can “ramp up”, i.e. increase, its electricity output. Frontier applied a ramp rate of 256 MW per 15min⁷⁹⁵ while Prognos suggest 105 MW per 15min.⁷⁹⁶ Prognos derive their value from ENTSO-E data of the Lünen plant.⁷⁹⁷
- 785 However, this data (again including inadmissible *ex post* information) only reflects past plant behaviour but does not describe the plant's technical capabilities.⁷⁹⁸ Lower ramp rates than technically possible may be owed to a variety of factors but

⁷⁹⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 224.

⁷⁹¹ [Exhibit CER-0004: Second Frontier Report](#), para. 225.

⁷⁹² [Exhibit CER-0003: Second Secretariat Report](#), para. 5.23-5.24.

⁷⁹³ [Exhibit CER-0004: Second Frontier Report](#), para. 224-225.

⁷⁹⁴ [Exhibit CER-0004: Second Frontier Report](#), para. 226.

⁷⁹⁵ [Exhibit CER-0001: First Secretariat Report](#), Annex B, para. B.7 with Table 9.

⁷⁹⁶ [Exhibit RER: Prognos expert report](#), para. 108.

⁷⁹⁷ [Exhibit RER: Prognos expert report](#), para. 106.

⁷⁹⁸ [Exhibit CER-0004: Second Frontier Report](#), para. 240.

do not mean that higher ramp rates for future operation are incorrect. In fact, also Frontier's ramp rate is towards the lower end of the technically possible range. However, unlike Prognos' data, Frontier's value was provided by the operator of the power plant.⁷⁹⁹

786 Frontier's rate is thus more reliable and should be used. In any event, although Prognos' ramp rate is less than half of that applied by Frontier, the impact is minimal. Applying Prognos lower ramp rate would only decrease gross profits (not damages) by only 0.02% and 0.14% in the Actual and But-For scenarios, respectively.⁸⁰⁰

6. Frontier's cold start costs are conservative

787 An additional criticism of Prognos relates to the number of cold starts and, consequently, total cold start costs.⁸⁰¹ However, this critique arises from a misunderstanding by Prognos of Frontier's modelling. Prognos incorrectly understand that Frontier would only assume one cold start per year.⁸⁰²

788 That is incorrect. Frontier's dispatch modelling results in 335.7 cold starts for the period 2020 to 2053, i.e. on average 9.9 cold starts per year.⁸⁰³ This is more than twice as much as Prognos suggest (namely, 4.4 cold starts per year) based on (once again partially *ex post*) ENTSO-E data.⁸⁰⁴ If instead, Frontier had used the 4.4 cold starts suggested by Prognos, total cold start costs would decrease by EUR

⁷⁹⁹ [Exhibit CER-0004: Second Frontier Report](#), paras 240-241.

⁸⁰⁰ [Exhibit CER-0004: Second Frontier Report](#), para. 242.

⁸⁰¹ Counter-Memorial, paras 695-696; [Exhibit RER: Prognos expert report](#), paras 109-112.

⁸⁰² Counter-Memorial, para. 696; [Exhibit RER: Prognos expert report](#), para. 110.

⁸⁰³ [Exhibit CER-0004: Second Frontier Report](#), paras 249. This includes 34 cold starts, added as post-model adjustments to account for cold starts after standstills due to annual maintenance.

⁸⁰⁴ Counter-Memorial, para. 696; [Exhibit RER: Prognos expert report](#), para. 111, see [Exhibit CER-0004: Second Frontier Report](#), para. 250.

██████████,⁸⁰⁵ not increase by EUR ██████████ as claimed by Prognos⁸⁰⁶. If Frontier were also to align the warm start costs with Prognos' suggestion, costs would further decrease by EUR ██████████ to EUR ██████████.

789 Hence, Frontier's assessment is once again rather conservative.

7. No additional degeneration of plant capacity

790 A further criticism by Prognos relates to the capacity degeneration, i.e. the loss of electrical generation capacity of the Lünen plant. Frontier consider a degeneration of 0.3% per year until 2025 in order to take into account the degeneration expected to occur in the earlier years of operation. Prognos claim that also after this initial degeneration phase, a degeneration of 0.1% per year should be applied.

791 This suggested additional degeneration must be rejected. Firstly, Prognos fail to provide any substantiation for its assumption. Secondly, there is no reason to account for further degeneration because the degeneration of the available generation capacity considered by Frontier is already significantly higher than the actual degeneration.⁸⁰⁷

792 Accordingly, Frontier's degeneration assumptions, which are based on information provided by the operator,⁸⁰⁸ not an unsupported generic assumption made by Prognos, must be applied and is moreover conservative.

⁸⁰⁵ [Exhibit CER-0004: Second Frontier Report](#), para. 252.

⁸⁰⁶ [Exhibit RER: Prognos expert report](#), para. 112, referring to EUR ██████████ in cold start costs which, however, also include EUR ██████████ in warm start costs which would need to be excluded in a like-for-like comparison.

⁸⁰⁷ See [Exhibit CER-0004: Second Frontier Report](#), para. 257.

⁸⁰⁸ [Exhibit CER-0004: Second Frontier Report](#), para. 254.

IV. Claimant did not fail to mitigate damages by not converting the Lünen Plant to a gas-fired power plant

793 Claimant argued in its Memorial that it is not obliged to convert Lünen plant to a gas-fired power plant to mitigate damages. It explained that such a conversion goes beyond the concept of damage mitigation since it would require substantial investments and, essentially, amount to building a new plant. Moreover, it reasoned that in light of the substantial regulatory and financial risks involved with such an investment, such an investment could not be expected from a reasonable investor.⁸⁰⁹

794 Respondent fails to refute this.

1. Legal Standard

795 Claimant and Respondent in principle agree that Claimant must take reasonable steps to mitigate the losses.⁸¹⁰ Respondent also concedes that it is its burden to prove that Claimant would have not taken reasonable steps to mitigate the losses.⁸¹¹

796 However, it first objects that this burden of proof for Respondent is a high one. Instead, it purports that “[m]itigation is subject to the usual standard of proof”.⁸¹² It secondly opposes that some mitigation measures could be conceptually beyond damage mitigation.⁸¹³ These assertions are misguided.

⁸⁰⁹ Memorial, Section F.IV.1-2.

⁸¹⁰ Counter-Memorial, para. 630.

⁸¹¹ Counter-Memorial, paras 630, 633-634.

⁸¹² Counter-Memorial, para. 633.

⁸¹³ Counter-Memorial, para. 633.

(a) Demonstrating a violation of damage mitigation duties is subject to a high burden of proof

797 Claimant explained in its Memorial that arbitral tribunals expect a high degree of certainty that a respective mitigation measure would have actually reduced the damage.⁸¹⁴ The reason for that is as simple as it is significant. Damage mitigation is in the own interest of investors. This particularly applies, if the investor still could have an existing business after a host state's negative interference. Respondent mistakes that any conversion would be in the very best interest of TKL and Claimant if they had found that this would be an economically viable option.

798 The tribunal in *Cairn v. India* summarized this as it follows: “A mitigation defence is difficult to prove, given that it is in a claimant's own best interest to minimise its loss.”⁸¹⁵ Respondent omits to refer to this sentence when it wrongly asserts that this decision “did not advocate a “high” burden of proof.”⁸¹⁶

799 Similarly, the tribunal in *Magyar Farming v. Hungary* outlined that a respondent will need nothing more than **compelling** reasons to demonstrate that the investor did not take mitigation opportunity that was reasonably available, precisely because damage mitigation is in the very interest of every investor:

“This is not a surprise as mitigating the loss was primarily in the Claimants' interest. Absent compelling evidence to the contrary, the Tribunal is not prepared to speculate whether the Claimants should have exercised a better business judgment [...].”⁸¹⁷ (emphasis added)

⁸¹⁴ Memorial, para. 600; [Exhibit CLA-0122: Unión Fenosa Gas S.A. v. Arab Republic of Egypt, ICSID Case No. ARB/14/4, Award, 31 August 2018](#), para. 10.128. Cf. also [Exhibit CLA-0126: Hrvatska Elektroprivreda d.d. v. Republic of Slovenia, ICSID Case No. ARB/05/24, Award, 17 December 2015](#), para. 217.

⁸¹⁵ [Exhibit CLA-0120: Cairn Energy PLC and Cairn UK Holdings Limited \(CUHL\) v. Government of India, PCA Case No. 2016-07, Award, 21 December 2020](#), para. 1888.

⁸¹⁶ Counter-Memorial, para. 634.

⁸¹⁷ [Exhibit CLA-0200: Magyar Farming Company Ltd, Kintyre Kft and Inicia Zrt v. Hungary, ICSID Case No. ARB/17/27, Award, 13 November 2019](#), para. 427; see also: [Exhibit CLA-0201: K.C. Chan and C. Fan, 'Chapter 17 The Duty to Mitigate: A Billion Dollar Mystery of](#)

800 Hence, to demonstrate a violation of Claimant's damage mitigation duties, Respondent needs compelling evidence that Claimant unreasonably refused a gas conversion. Respondent completely fails to do so as it will be shown below.

(b) Any gas conversion of the Lünen plant is already conceptually beyond damage mitigation

801 Claimant argued in its Memorial that a conversion of the Lünen plant is conceptually beyond damage mitigation. After Respondent has destroyed Claimant's existing business, it cannot be reasonably expected from Claimant to rebuild that business and make a new investment.⁸¹⁸

802 Respondent merely opposed that the standard of reasonableness would require an assessment of the facts.⁸¹⁹ Claimant agrees.

803 Yet, Respondent completely fails to address this. Instead, it tries to downplay Claimant's cited case law by contending that these would have "*also turned on their own facts rather than purporting to lay down abstract rules on what constitutes (un)reasonable post-breach behaviour.*"⁸²⁰ This is completely irrelevant. Every tribunal or court turns finally to the underlying facts, after it set out the abstract legal standard. And contrary to what Respondent indicates, tribunals do have found that the fact that the host State has just destroyed an investor's business activity, plays a crucial role in determining the scope of its damage mitigation duties:

804 The tribunal in *Middle Eastern Cement v. Egypt* held that the investor did not fail to mitigate its damage when it decided to not continue its investment activity after the ban of its business had been again lifted. Due to the initial ban of the business

[General Principles of Law](#), in Alan M. Anderson and Ben Beaumont (eds), *The Investor-State Dispute Settlement System: Reform, Replace or Status Quo?*, p. 382.

⁸¹⁸ Memorial, paras 598-600.

⁸¹⁹ Counter-Memorial, para. 636.

⁸²⁰ Counter-Memorial, para. 638.

activity, the tribunal concluded that the investor had good reasons to reject any further business activity in the host state:

“As to the Respondent's argument that Claimant could have resumed its activities after the lifting of the ban in 1992, the Tribunal does not consider this to be persuasive. An investor who has been subjected to a revocation of the essential license for its investment activity, three years earlier, has good reason to decide that, after that experience, it shall not continue with the investment activity, after the activity is again permitted.”⁸²¹

805 The same tribunal also found that an investor is not obliged to conduct certain mitigation measure if these measures are not economically feasible.⁸²²

806 Similarly, the tribunal in *AIG v. Kazakhstan* outlined that the investor did not fail to mitigate the damage when it rejected to accept an alternative site for its business, no matter whether the alternative site was suitable or not. Before, the host state had cancelled the permits of the original site. The tribunal concluded here that it would only encourage host states to violate international investment treaties if one would require from the investor to examine alternative business solutions after the same state had already once unlawfully and negatively interfered in it.

“When it comes to taking of the property of a foreign investor and to offers of an “alternative solution” more favourable to the host State, this Tribunal is of the view that once the host State decides to expropriate or to take measures tantamount to expropriation of property, it would be wrong in principle to impose on the injured party (the creditor or foreign investor) a “duty” to examine (and if reasonable, to accept) an alternative solution. Such an imposition would only encourage Governments to breach with impunity solemn provisions of an international treaty and weaken the protection of foreign investors – which such a treaty is expressly designed to safeguard.”⁸²³

⁸²¹ [Exhibit CLA-0202: Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt](#), ICSID Case No. ARB/99/6, Award, 12 April 2002, para. 169

⁸²² [Exhibit CLA-0202: Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt](#), ICSID Case No. ARB/99/6, Award, 12 April 2002, para. 168.

⁸²³ [Exhibit CLA-0121: AIG Capital Partners, Inc. and CJSC Tema Real Estate Company Ltd. v. The Republic of Kazakhstan](#), ICSID Case No. ARB/01/6, Award, 7 October 2003, para. 10.6.4(5)(a).

807 Moreover, the tribunal in *Unión Fenosa Gas v. Egypt* held that, in any event, the fact that the need to consider damage mitigation was caused by a host state's conduct informs the standard of reasonableness to be applied:

*"As already indicated, the legal test for mitigation applies a reasonable standard at the relevant time, not a multitude of second-guesses made years [later] applying an absolute standard to the Claimant's conduct with the benefit of hindsight. Moreover, it cannot be forgotten that the Claimant's predicament requiring such mitigatory conduct was caused by the Respondent's international wrong under the Treaty."*⁸²⁴

808 These decisions clearly reveal that the duty to mitigate damages does not apply limitless. They demonstrate that where a state destroys the business of an investor, rebuilding that business would be beyond damage mitigation. Moreover, it follows from the decision in *Unión Fenosa Gas v. Egypt* that even if one were to consider damage mitigation, the fact that the state destroyed the business means that there would need to be exceptional circumstances to consider an investor's decision not to rebuild its business unreasonable.

2. Contrary to Respondent's allegations, a conversion of the Lünen plant would go beyond damage mitigation

809 As already explained in the Memorial,⁸²⁵ Respondent did destroy Claimant's business in Germany. Converting the Lünen plant to a gas-fired power plant is not a continuation of the existing investment.

810 Claimant invested in a modern, highly efficient coal-fired power plant, acting in full accordance not only with Germany's energy policy at the time but even with express calls by the German government for such investment. With its Coal Ban Law, Respondent then prohibited this very activity: the electricity generation by burning coal.

⁸²⁴ [Exhibit CLA-0122: Unión Fenosa Gas S.A. v. Arab Republic of Egypt, ICSID Case No. ARB/14/4, Award, 31 August 2018](#), para. 10.132.

⁸²⁵ Memorial, Section F.IV.1.

811 Moreover a gas conversion would amount to a new investment. As Dr. Krahnefeld explains in his expert report, the Lünen plant could not continue to operate as a gas-fired power plant under the existing permit.⁸²⁶ Rather, it would have to go through lengthy and burdensome permitting processes whose prospects are uncertain.⁸²⁷ Additionally, the changes required to the Lünen plant are by no means minimal.⁸²⁸ This is also reflected in the investment costs needed which range from around one third of the initial equity investment in the plant to, according to Respondent's expert Prognos, even almost EUR 1 billion.

812 Hence, Germany destroyed Claimant's investment in Germany and now cannot expect Claimant to make further investments in order to be able to rebuild and continue its business in Germany.

3. Respondent fails to show that the non-investment in a gas conversion is unreasonable

813 Even if one would assume that converting the Lünen plant into a gas-fired power plant would fall generally in the scope of possible damage mitigation measures, Respondent failed to establish that such a conversion could be reasonably expected.

(a) A conversion would not be economically viable and face serious risks

814 Respondent appears to suggest⁸²⁹ that any – marginally – profitable conversion would amount to a reasonable damage mitigation measure and ignores any risks associated with such a conversion.

⁸²⁶ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 152.

⁸²⁷ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 146-147, 193.

⁸²⁸ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 150.

⁸²⁹ Counter Memorial, Section V.B.1.b.

815 As Claimant already explained in the Memorial, this is not the case. An investor considering such a conversion would not only look at the bare economics but also consider any additional risks such an investment involved. These are substantial:

- (i) Most importantly, as a conversion to gas would mean making a new investment in fossil fuels, an investor would have to take into account the risk of further surprise regulatory changes. The motto “once burnt, twice shy” also applies in business.
- (ii) Respondent also tries to downplay the significance of the conversion itself, considering the change from a coal- to a gas-fired power plant mere “semantics”.
 - As Dr Krahnefeld explains in his expert report, this is far from true. The converted Lünen plant could not continue operations under its existing operating permit but requires new one.⁸³⁰ This would require completing again significant – or even possibly all – parts of the permitting procedure.⁸³¹ Although gas-fired power plants generally have less emissions than coal-fired power plants, a new permit could be denied (or only granted subject to further costly modifications of the plant) since permitted emission levels or measuring techniques have changed since the Lünen plant was permitted and other projects may have been realised in the area which effect the overall permissible immissions in the area.⁸³² Moreover, the permitting procedure would involve public participation and provide an opportunity for, e.g., NGOs to file challenges against any permit issued.⁸³³
 - In addition, while a conversion to gas may be technically possible, such a conversion nonetheless involves technical risks which could affect the success or profitability of the conversion. What is more, as

⁸³⁰ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 148-149, 152.

⁸³¹ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 146-147, 165-168, 186-187.

⁸³² [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 181.

⁸³³ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 189-193.

(iii) Furthermore, there are economic risk, heightened by possible regulatory measures. In particular, the discussed conversion (exchanging the coal burner with a gas burner) results in a less efficient plant than purpose-built new gas-fired power plants, making them less competitive. This risk is augmented by Germany's new "power plant strategy" which suggests to build up to 12 GW of such new plants. These would have lower marginal costs and would therefore, based on the merit order, be dispatched before the converted Lünen plant, meaning that the Lünen plant would have less operating hours and, thus, lower revenues.

816 As Secretariat already highlighted in their First Report, they could have financially accounted for these risks, for example, by applying a risk premium. Such a premium could have also reflected, inter alia, that climate action relating to fossil-fuelled power plants had already occurred in the Actual scenario. However, in their First Report, Secretariat had not done so but concluded that, in light of the significant risk and the prospect of at best marginal profits, an investor would not have invested.

817 That conclusion is also consistent with Dr Krahnefeld's experience from his practice which shows that even operators which have already secured a permit for constructions of new gas-fired power plants do not build them due to the regulatory and financial risks.⁸³⁴

818 Moreover, given the importance Respondent attaches to the profitability, Frontier and Secretariat have refined their initial rough calculations of the profitability.⁸³⁵

819 Frontier have applied a flat annual gas price for reasons of simplicity. In real life, gas prices fluctuate substantially throughout the year. Frontier therefore updated its calculations to reflect these realities.⁸³⁶

⁸³⁴ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 200.

⁸³⁵ [Exhibit CER-0004: Second Frontier Report](#), paras 373-379; [Exhibit CER-0003: Second Secretariat Report](#), paras 6.14-6.19, Figure 6.

⁸³⁶ [Exhibit CER-0004: Second Frontier Report](#), para. 374.

820 While Frontier's dispatch model considers the variable operating costs, Secretariat's calculations consider the fixed operating costs as these do not impact the dispatch of the power plant.

821 In the First Secretariat Report, these fixed costs failed to account for the costs associated with gas network charges and levies since these costs were based on input from TKL and TKL internally treated these charges and levies as variable costs. Therefore, Secretariat now updated the fixed cost applied in their model to account for these charges and levies.⁸³⁷

822 This refined calculation, also taking into account the above-mentioned heightened risks, clearly shows that a gas conversion would not be profitable.⁸³⁸

823 Hence, there are no – and certainly no compelling – reasons to conclude that not converting the plant to a gas-fired power plant would be an unreasonable behaviour.

(b) Respondent ignores the limits of decision making power and financial realities

824 In its Memorial, Claimant had explained that it could not be reasonably expected to convert Lünen to a gas-fired power plant because:

- (i) as a minority shareholder, it cannot decide alone whether to convert the plant;
- (ii) the costs for the conversion would amount to 31% of the equity investment in the plant; and
- (iii) banks may not finance the conversion.

825 Respondent also simply brushes aside all these – practical and financial – hurdles for a conversion, completely ignoring the standard set out above.

826 Claimant therefore recalls again that the purpose of the principle of damage mitigation is merely to ensure that an injured party acts reasonably when faced with

⁸³⁷ [Exhibit CER-0003: Second Secretariat Report](#), para. 6.18.

⁸³⁸ [Exhibit CER-0004: Second Frontier Report](#), para. 379.

an unlawful act and does not act against its own self-interest. It also highlights that it is undisputed between the Parties that Respondent bears the burden of proof to show any failure to take reasonable damage mitigation measures.

827 Respondent fails to do so.

(aa) Claimant cannot be held responsible for the actions or inactions of its co-shareholders

828 Firstly, rather than proving any irrational behaviour by Claimant, Respondent tries to make Claimant responsible – for the mere reason of being co-shareholders – for any decision of the co-shareholders' not to convert the plant. That is absurd.

829 It is moreover incorrect that the co-shareholders would have been in favour of a conversion. In support of this contention, Respondent relies on two letters by one of Claimant's 29 co-shareholders which does not even say what Respondent claims. With those letters, Trianel GmbH lobbies for financial support because, otherwise, a conversion would not be economic.⁸³⁹

830 Respondent's misconstruction of these facts is – mildly put – astonishing. Not only is Respondent of course fully aware of the content of these letters. It also produced documents to Claimant which show that Respondent knew that any construction of new gas-fired power plants or conversion to such plants would require financial incentives. Moreover, that document reveals that incentives for conversions particularly attractive for young coal-fired power plants (namely, exchanging the coal burner with a gas burner) as this could allegedly jeopardise the compromise reached regarding Respondent's power plant strategy.⁸⁴⁰ Thus, as already in the Coal Ban Law, including its tender mechanism, Respondent sacrificed the interest of young coal-fired power plants on the altar of political expediency.

⁸³⁹ [Exhibit R-0119-GER/Exhibit R-0119-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of May 2024](#); [Exhibit R-0120-GER/Exhibit R-0120-ENG: Letter from Trianel GmbH to State Secretary Dr. Nimmermann of August 2024](#).

⁸⁴⁰ Reply, Section B.V.3.b.

(bb) Respondent fails to demonstrate that banks would finance gas conversion projects

831 Secondly, Respondent contends that banks would be willing to finance gas-fire power plants but provides no proof for this. It appears to have slipped Respondent's mind that just ten paragraphs earlier it had recognised that the burden of proof is on Respondent, not Claimant (as Respondent suddenly suggests in paragraph 643).

832 Instead, Respondent indulges once more in trivial assertions. As set out in the factual background Respondent's contention that "*[g]as power plants are being built from scratch in Germany*"⁸⁴¹ is plainly wrong. They are not – and Respondent knows this, as also a document from 2021 shows.⁸⁴² Investors are waiting for clear political signals concerning the regulatory future of gas-fired power plants and incentive regimes. This is also what Dr Krahnefeld sees in his practice.⁸⁴³ Moreover, investors are considering new-builds, not conversion projects. Hence, even if plants would be built from scratch and banks would be willing to finance them, that would not mean that banks would also be willing to finance gas conversion projects which, as set out above, have additional economic risks due to their lower efficiency.

(cc) The original equity investment is the yardstick for the reasonability of any further investments (if any)

833 Thirdly, Respondent claims that it would be wrong to use Claimant's equity investment as a relevant yardstick because Claimant could not be allowed to benefit from its allegedly high debt ratio.⁸⁴⁴ That is both incorrect and irrelevant.

⁸⁴¹ Counter-Memorial, para. 643.

⁸⁴² [Exhibit C-0183-DE/Exhibit C-0183-EN: Federal Ministry for Economic Affairs and Technology, *Preparation of Meeting on Plant Modernisation*, 17 May 2021.](#)

⁸⁴³ [Exhibit CER-0005-DE/Exhibit CER-0005-EN: Expert Report by Prof Lutz Krahnefeld](#), para. 199-200.

⁸⁴⁴ Counter-Memorial, section II.B.3.

834 It is incorrect because the debt to equity ratio of the Lünen plant is not extraordinary. As already outlined,⁸⁴⁵ the International Energy Agency confirms that “*it is not unusual for debt to account for most of the funding, typically 80% of investment capital*”.⁸⁴⁶

835 In any event, that the Lünen plant was financed with a significant amount of debt is irrelevant for the assessment of whether Claimant can be reasonably expected to invest in a gas conversion. The equity contribution reflects the level of financial commitment Claimant was willing to make for the original project. That must also be the relevant yardstick to assess the reasonable level of further investments (if any) that can be expected from Claimant. An injured person that invested a certain amount cannot be expected to make further investments amount to a substantial share of its original investment – and assume significant risks – to mitigate a damage for which it is not responsible.

4. Summary

836 Claimant did not violate its damage mitigation duties. It is not required to effectively tear down its existing business and build an entirely new and hence substantially different one. This applies particularly because Respondent had just destroyed the value of the Lünen plant. Moreover, Respondent failed to establish that Claimant acted unreasonably by not converting the Lünen Plant. Germany evidently overlooks that TKL and Claimant persistently evaluated this option and - in line with Claimant's experts' assessments – concluded that a conversion would be not economically viable without the support of the Federal Government. Yet, Respondent refused to provide help and does not envisage for gas conversions in its energy strategy. It is therefore evidently contradictory that Respondent purports now that the refusal to convert the Lünen Plant would be unreasonable.

⁸⁴⁵ Reply, para. 154.

⁸⁴⁶ [Exhibit C-0147: IEA Clean Coal Centre, *International Finance for coal-fired power plants*, April 2017](#), p. 15.

V. Claimant did not fail to mitigate damages by concluding the 2023 Financing Agreement

837 Germany contends that Claimant would have failed to mitigate damages because it would not have acted with all prudence in the renegotiation of the loan agreement.⁸⁴⁷

838 This is misguided. As explained above, agreeing to the amendment of the loan agreement was a sound business decision taken after months of negotiations and legal advice.

839

VI. Benefits (if any) from an alleged portfolio are irrelevant for the damage assessment in this case

840 Respondent also attempts to evade fully compensating Claimant by alleging that alleged higher revenues from other plants due to the Coal Ban Law would need to be deducted from Claimant's damages. On that basis, Respondent demands a deduction of EUR [REDACTED] from Claimant's damages.⁸⁴⁸ However, there is already no legal basis for offsetting benefits from an alleged portfolio effect (1) and, in any event, its claim is conceptually flawed, discriminatory, and simply wrong in substance (2).

1. There is no legal basis for offsetting benefits from an alleged portfolio effect

841 Respondent's portfolio effect argument lacks any legal support. To support its argument, Respondent needs to distort legal precedents and norms. The legal

⁸⁴⁷ Counter-Memorial, paras 647-648.

⁸⁴⁸ Counter-Memorial, paras 649-673.

framework is clear: Only the effect on the investment at issue is relevant (a) and no effects outside Germany can be considered (b).

(a) Only the economic effect on the impacted investment is relevant

842 Respondent's claim fails already on a legal level, as any potential changes in the value of assets other than the Lünen plant are not relevant to the plant's FMV. This follows from the ECT itself as well as customary international law.

843 Firstly, in accordance with ECT Article 13(1), compensation does not reflect the value of a company's wider portfolio, but rather

"shall amount to the fair market value of the Investment expropriated at the time immediately before the Expropriation or impending Expropriation became known in such a way as to affect the value of the Investment"

844 The valuation standard enshrined in the ECT thus clearly focuses on the Investment expropriated, not on the overall value development on the Investor's global portfolio.

845 Secondly, contrary to Respondent's allegations, nothing different follows from customary international law. In its Counter-Memorial, Respondent tries to turn the well-known statement from the *Chorzów Factory* case that "reparation must wipe out all of the consequences of the illegal act" on its head. While the statement makes clear that an injured person is entitled to compensation for all – not just some – of its damages, Respondent suggests that the statement should be read so as to reduce the compensation where the illegal measure caused also some positive effects.

846 However, the PCIJ in its *Chorzów Factory* even says the exact opposite of what Respondent claims: Not all assets of an injured person are to be taken into account but only the value of the specifically affected asset:

"On approaching this question, it should first be observed that, in estimating the damage caused by an unlawful act, only the value of property, rights and interests which have been affected and the owner of which is the person on whose behalf compensation is claimed, or the damage done to whom is to

serve as a means of gauging the reparation claimed, must be taken into account."⁸⁴⁹

847 Since "only" the affected asset is relevant for assessing damages, distant factors relating to an investor's entire line of business are not.

848 Respondent also attempted to substantiate its claim by misinterpreting Article 36 of the ILC Articles.⁸⁵⁰ In reality, the provision does not contain any statement on that matter. Not even the ILC's own commentary speaks of it. On the contrary, *Professor Crawford* notes therein that:

*"[c]ompensation reflecting the capital value of property taken or destroyed as the result of an internationally wrongful act is generally assessed on the basis of the "fair market value" of the property lost."*⁸⁵¹

849 As Claimant' expert Secretariat explains, the value of other power plants plays no role in assessing the fair market value of Claimant's investment in the Lünen plant:

*"Clearly, none of this alleged "portfolio effect" has anything to do with the FMV of Claimant's investment in TKL, including the German wind investments which we understand are completely separate investments that are unrelated to TKL."*⁸⁵²

850 Thirdly, also the cases relied on by Germany do not show what it claims.

851 Germany's reliance on the UNCITRAL case of *GAMI v. Mexico*⁸⁵³ does not offer any added value to the present dispute. There, the tribunal dismissed GAMI's case already on the merits because the investor had failed to demonstrate that the harm it suffered resulted from the challenged Mexican measure and not from the bad industry situation.

⁸⁴⁹ [Exhibit CLA-0106: Factory at Chórzow, 1928 PCIJ Series A No 17](#), p. 31

⁸⁵⁰ Counter-Memorial, paras 650-651.

⁸⁵¹ [Exhibit CLA-0165: J. Crawford, The International Law Commission's Articles on State Responsibility – Introduction, Text and Commentaries, 2002](#), p. 225.

⁸⁵² [Exhibit CER-0003: Second Secretariat Report](#), para. 7.21.

⁸⁵³ Counter-Memorial, para. 657.

852 Likewise, the case *HEP v. Slovenia* did not concern any revenues from other assets but whether HEP suffered any damage in the first place or could pass on the higher costs to its customers.

853 Fourthly, case law confirms that international law does not recognize a portfolio effect. In *Elliot v. Korea* the arbitral tribunal was confronted with arguments about how to treat the claimant's broader trading positions in assessing loss. In essence, the tribunal's damages approach is consistent with the principle that compensation must be based on the value of the investment in dispute, and that other positions or trades in the claimant's wider portfolio are, as a rule, irrelevant unless they form part of a mitigation strategy.⁸⁵⁴ This is comparable to the situation in the present dispute: AET's investments in Switzerland and France were not trades or investments made to mitigate losses from the German Coal Ban Law, but separate, independently motivated investments. As such, Respondent cannot rely on them to dilute compensation for the specific expropriated asset.

(b) In any event, any portfolio effect would need to be limited to Germany

854 Even if one were to recognize a portfolio effect (*quod non*), at best only revenues from other assets located in Germany could be taken into account. Impacts on Claimant's French or Swiss assets cannot, as a matter of law, be considered in the calculation of damages.

855 Firstly, this follows directly from Article 26(1) of the ECT. This limits arbitral jurisdiction to

"Disputes between a Contracting Party and an Investor of another Contracting Party relating to an Investment of the latter in the Area of the former which concern an alleged breach of an obligation of the former under Part III"

856 Alleged value changes in Claimant's investments located outside Germany – such as in Switzerland or France – do not form part of the "*Investment [...] in the Area*" of Germany and are therefore legally irrelevant for both jurisdiction and quantum.

⁸⁵⁴ [Exhibit CLA-0203: Elliott Associates, L.P. \(U.S.A.\) v. Republic of Korea, PCA Case No. 2018-51, Award, 20 June 2023](#), paras 943-946.

The Coal Ban Law cannot have legally relevant consequences in countries outside Germany.

857 Secondly, the exclusion of extra-territorial effects is also confirmed in by investment treaty jurisprudence.

858 For example, in *ADM v. Mexico*, the tribunal held that, while it had jurisdiction to award damages including loss of profit suffered by the Mexican investment vehicle ALMEX, “it does not accept the claims of ADM and TLIA for the profits they claim to have lost on the sale of HFCS produced outside the territory of the Respondent State.”⁸⁵⁵ It concluded that it had “jurisdiction only to award compensation for the injury caused to Claimants in their investment made in Mexico” and that claimants were “not entitled to recover the lost profits on HFCS they would have produced in the United States and exported to Mexico ‘but for’ the Tax, as these losses were not suffered in their capacity as investors in Mexico.”⁸⁵⁶

859 The decision in *Cargill v. Mexico* confirms and nuances this territorial limitation. There, by contrast, the tribunal expressly accepted certain extra-territorial losses only because it found that, on the specific facts, the relevant activities in both Mexico and the US formed part of a single Mexican “investment”.⁸⁵⁷ The logic of *ADM*, not *Cargill*, applies here: Germany’s alleged “portfolio effect” relates to completely separate investments in Switzerland and France that are legally and factually distinct from Claimant’s investment in Lünen. They are not part of a single German investment and, even less so, could be labelled as part of the same “Investment” in TKL. Therefore, they fall outside what is relevant for damages under Article 13 ECT.

⁸⁵⁵ [Exhibit CLA-0204: Archer Daniels Midland Company and Tate and Lyle Ingredients Americas, Inc. v. The United Mexican States](#), ICSID Case No. ARB (AF) 04/5, Award, 21 November 2007, para. 270.

⁸⁵⁶ [Exhibit CLA-0204: Archer Daniels Midland Company and Tate and Lyle Ingredients Americas, Inc. v. The United Mexican States](#), ICSID Case No. ARB (AF) 04/5, Award, 21 November 2007, para. 274.

⁸⁵⁷ [Exhibit CLA-0205: Cargill, Incorporated v. United Mexican States](#), ICSID Case No. ARB(AF) 05/2, Award, 18 September 2009, paras 521-526.

860 Thirdly, any potential offsets would require a close causal nexus to the same wrongful act and the same investment. International practice excludes the deduction of indirect or third-party benefits that are causally separate from the wrongful act, even if they exist, because these benefits are not a source of over-compensation.⁸⁵⁸

861 By the same logic, Germany cannot rely on Claimant's independent decision to make unrelated investments in Switzerland or France - which are based on separate business rationales, technologies, markets, regulatory settings, and legal frameworks and to which Germany is not a party - to reduce its own liability for the damage it caused to Claimant's investment in Lünen.

862 Any alleged windfall profit or loss in other, non-expropriated assets, and in particular assets located outside of Germany, is thus not part of the FMV calculation for damage assessment under the ECT. Respondent cannot rely on an alleged "offset of benefits" to evade fully compensating Claimant for the losses suffered in relation to the Lünen plant.

2. In any event, the portfolio effect claimed by Respondent does not exist

863 Even if there were a legal basis for Respondent's claim, it would need to be rejected at the outset since it is conceptually flawed and wholly inconsistent, unreasonable, and discriminatory (a). Moreover, there are no legally relevant benefits to be offset (b) and Respondent's calculation of the alleged benefits is flawed for various reasons (c).

(a) Respondent's portfolio argument is conceptually flawed, discriminatory, and unreasonable

864 Already conceptually, there cannot be any portfolio effect. Moreover, by reclaiming these alleged benefits only from Claimant, Respondent singles out Claimant while

⁸⁵⁸ [Exhibit CLA-0206: C.Tietje E. Sipiorski, *Offset of Benefits in Damages Calculation in International Investment Arbitration*, JIA 2012, 545, 545, \(554, 565\).](#)

the alleged benefits exit for all operators in the market, including those receiving compensation for their lignite-fired power plants.

- 865 Firstly, there is conceptually no reason to consider any alleged profits from a portfolio effect. What Claimant is challenging in this Arbitration is not the Coal Ban Law itself but that Respondent failed to provide compensation for the Coal Ban Law. Merely in order to be able to determine what the effect of the Coal Ban Law is on the Lünen Plant, the But-For scenario excludes the Coal Ban Law. Conceptually, however, the Coal Ban Law exists in both scenarios (Actual and But-For). Accordingly, also any alleged effect on other plants (in and outside Germany) would exist in both scenarios and cancel each other out. Therefore, there is no basis for taking into account any portfolio effects.
- 866 Secondly, if additional revenues from other investments would be benefits to be offset, Germany would also have to take this into account when determining the compensation due to the lignite-fired power plants. However, neither Annex 4 of the Coal Ban Law (addressing the compensation of lignite-fired power plants) nor the EU decision concerning the compensation for RWE makes any mention of such revenues although RWE has a sizeable portfolio of power plants in Germany and surrounding states.⁸⁵⁹
- 867 Thirdly, if electricity price increases due to the Coal Ban Law were a benefit, it would be benefit from which all market participants benefit, also those not being negatively affected at all by the Coal Ban Law. By offsetting this benefit against Claimant's damage claim, Respondent is effectively claiming repayment of this alleged benefit. Yet, it does not reclaim this benefit from any other market participant. Hence, Respondent is once again trying to treat Claimant less favourably than other market participants, especially less favourably than Germany's lignite sector.

⁸⁵⁹ [Exhibit CER-0004: Second Frontier Report](#), para. 351.

(b) There are no legally relevant benefits to be offset

868 Based on the legal standard set out above, there are no legally relevant benefits to be offset against Claimant's damage claim.

869 Firstly, in order to be a legally relevant benefit, the benefit obtained would need to result in overcompensation of Claimant. That, however, is not the case since the "benefit" at issue is not a "benefit" at all but simply a general market effect, applicable to all market participants. As such, it cannot overcompensate Claimant. Quite to the contrary, any demand for (re-) payment of the "benefit" from Claimant, would place Claimant at a disadvantage to other market participants. Put, differently, the "benefit" could not be (re-) claimed from Claimant without discriminating Claimant. This shows that this alleged "benefit" is nothing that can constitute a legally relevant "benefit" to be offset.

870 Secondly, any "benefits" do not relate to the investment being valued and, therefore, are irrelevant. A hypothetical buyer valuing Lünen at the Valuation Date would look at Lünen's own expected cash flows and risks. It would not take into account any external "benefits" from other assets.

871 Thirdly, Respondent's proposed "portfolio effect" primarily refers to alleged gains in other markets than Germany, rendering them equally legally irrelevant.⁸⁶⁰ Secretariat shows that the vast majority of Germany's claimed EUR [REDACTED] lies in Switzerland and France, with only about EUR [REDACTED] linked to German wind,⁸⁶¹ underscoring that the construct does not concern the expropriated investment:

⁸⁶⁰ Counter-Memorial, para. 669, referring to assets in Germany (wind power plants), and particularly France and Switzerland (nuclear power plants).

⁸⁶¹ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.22 and Table 4.

Country	Technology Group	2019 Generation (GWh)	Portfolio Effect (€ million)
Switzerland			
Switzerland			
France			
France			
Germany			
Total			

Second Secretariat Expert Report, Table 1: Alleged "Portfolio Effect" from Claimant's other Investments

(c) Respondent's calculation is flawed

872 Finally, Respondent's calculation is flawed for various reasons.

873 Firstly, for its assessment, Respondent's expert Compass assumes that electricity generation of Claimant's assets would remain unchanged at 2019 levels until 2053 (!).⁸⁶² That, evidently, is entirely unrealistic already in normal circumstances. Considering, however, that the energy sector is currently undergoing significant changes, renders such an assumption completely unsustainable.

874 Secondly, Compass' calculations is based on the similarly unrealistic assumption that all of Claimant's power plants would operate until 2053, while, for example, for wind power plants is entirely implausible.⁸⁶³

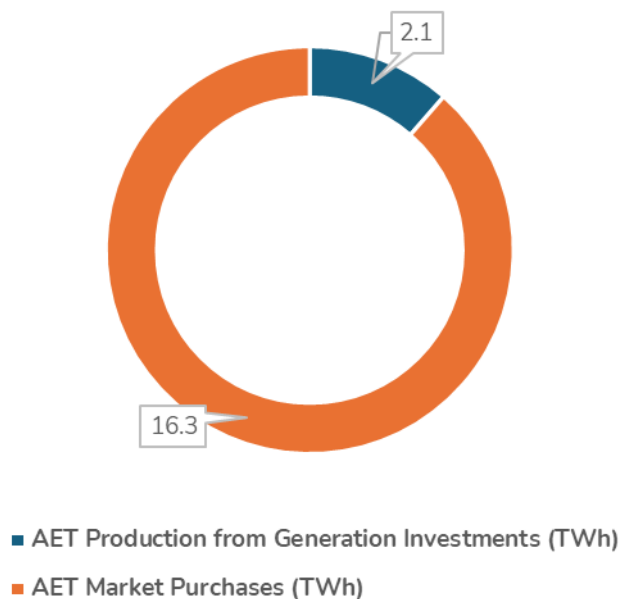
875 Thirdly, Compass take an overly simplistic approach by looking only at the generation side of Claimant's portfolio.⁸⁶⁴ Unsurprisingly, Claimant's portfolio and business is more complex than this. For example, AET only generated 2.1 TWh of electricity in 2019 while purchasing 16.3 TWh and selling 17.2 TWh of electricity on

⁸⁶² [Exhibit CER-0003: Second Secretariat Report](#), para. 7.23.

⁸⁶³ [Exhibit CER-0003: Second Secretariat Report](#), paras. 7.25-7.26.

⁸⁶⁴ [Exhibit CER-0003: Second Secretariat Report](#), paras 7.23-7.24; [Exhibit CER-0004: Second Frontier Report](#), paras 354-355.

the market, showing that it was involved in significant trading activities.⁸⁶⁵ Secretariat therefore concludes that “[d]etermining the overall impact on AET’s profits from a relatively small increase in the market price of electricity is therefore far more complex than Compass’s analysis (and indeed is likely not possible given the significant trading activity).”⁸⁶⁶



Source: Second Secretariat Report, Figure 2

876 Fourthly, Compass’ calculation is based on the incorrect premise that Claimant would benefit from increases in market prices for the electricity generated by its other assets. However, already today a large share of these assets supply electricity based on “cost plus” contracts and, thus, independent of market prices. Talking future sales revenues into account would require to speculate as to what type of supply agreements will be entered in to in the future.

877 Respondent’s experts hence did not offer a credible basis to quantify any offset of alleged benefits and the instrumentalisation of Claimant’s wider portfolio to curb damages relating to the Lünen plant remains wishful thinking.

⁸⁶⁵ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.24.

⁸⁶⁶ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.24.

VII. Also the other reductions of Claimant's damages suggested by Germany must be discarded

1. Ticino hard coal levy is not to be taken into account

878 In yet another attempt to reduce Claimant's damages, Respondent contends that Claimant's experts "ignored" a benefit of the Coal Ban Law by not deducting a Ticino levy of 0.6 cEUR/kWh (6 EUR/MWh) allegedly payable by AET on hard-coal based revenues.⁸⁶⁷ This is demonstrably incorrect on both legal and economic grounds.

879 First, under the fair market value standard, the asset is valued based on a transaction between hypothetical, willing, and informed market participants. Owner-specific burdens are not priced unless they are inherent to the asset and bind any owner.⁸⁶⁸ The Ticino levy is an AET-specific charge under Swiss cantonal law⁸⁶⁹ – a hypothetical buyer of AET's Lünen interest would not incur it. It therefore has no place in an FMV deduction.⁸⁷⁰

880 Second, even if considered *arguendo*, Respondent's computation is fundamentally flawed. It aggregates future electricity generation up to 2035 at 6 EUR/MWh without discounting to the valuation date, thereby disregarding the fundamental and elementary concept of time value of money. It requires that all future cash flows –

⁸⁶⁷ Counter-Memorial, paras 674-675.

⁸⁶⁸ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.8.

⁸⁶⁹ [Exhibit R-0171-ITA/Exhibit R-0171-ENG: Law amending the Cantonal Energy Law of 8 February 1994 and the Law establishing the Azienda Elettrica Ticinese of 25 June 1958 and Legislative Decree concerning the definition of the levy on the production and consumption of electricity to be used to finance the cantonal fund to encourage the construction of new renewable energy installations pursuant to the Federal Energy Act of 26 June 1998 \(LEne\), 19 December 2013 in: Official Sheet 103-104/2013](#), Article 8b (new): "For each kWh of the expected average annual production of electricity from shares already acquired by AET in coal-fired power plants, the company shall pay an amount determined every four years by the Grand Council, not less than 0.6 cts/kWh and not exceeding the maximum share established by the relevant federal provisions (production levy);" (emphasis added).

⁸⁷⁰ [Exhibit CER-0003: Second Secretariat Report](#), para. 3.8.

costs and revenues – are discounted to the present value.⁸⁷¹ Failing to do so inflates any present-day effect, as the calculation erroneously assumes that AET would pay the levy already at the valuation date for the next 15 years.⁸⁷²

881 Hence, the Ticino hard-coal levy cannot support any deduction and Respondent's arguments must be dismissed.

2. Claimant's discount factor of future cash-flows is correct

882 Respondent further alleges that Secretariat's discount rate of 6.0% would be understated.⁸⁷³

883 To recall, in their First Expert Report, Secretariat discounted the annual cash flows to the valuation date, i.e. to their present value, and assessed that the appropriate discount rate is the cost of equity.⁸⁷⁴ The cost of equity reflects the rate of return investors require in order to induce them to take on the risks associated with an investment in equity of an asset (here: the risks associated with Claimant's investment in TKL).⁸⁷⁵ Under the appropriate formula, Secretariat determined a discount rate of 6.0% in the But-For scenario.⁸⁷⁶

884 Relying on the Compass Lexecon Expert Report, Germany now claims that Secretariat's discount rate (i) would suffer from "internal inconsistencies", (ii) would be "backward looking" and thus would not capture forward-looking energy transition risks, (iii) would rely on "non-comparable" companies, and (iv) would be

⁸⁷¹ [Exhibit CER-0003: Second Secretariat Report](#), footnote 14.

⁸⁷² [Exhibit CER-0003: Second Secretariat Report](#), para. 3.8.

⁸⁷³ [Exhibit RER: Compass Lexecon expert report](#), paras 698-700.

⁸⁷⁴ [Exhibit CER-0001: First Secretariat Report](#), Section 5.C. and Claimant's Memorial, paras 578-585.

⁸⁷⁵ [Exhibit CER-0001: First Secretariat Report](#), para. 5.34.

⁸⁷⁶ Claimant's Memorial, para. 585; [Exhibit CER-0001: First Secretariat Report](#), para. 5.39.

contradicted by market evidence.⁸⁷⁷ Secretariat's Second Expert Report rebuts all of these accusations and exposes them as unfounded.

885 First, Compass' "backward-looking" allegation is inconsistent with its own narrative. Secretariat estimated the cost of equity as of 30 January 2020 in line with standard practice, using the Capital Asset Pricing Model ("CAPM") formula.⁸⁷⁸ Compass Lexecon then essentially accepted Secretariat's methodology and inputs, but decided to add an unwarranted "*coal risk premium*" on top of CAPM.⁸⁷⁹

886 This is wrong since Secretariat *already capture* the systemic risk: Secretariat's beta is assessed over the years leading up the valuation date and based on industry data.⁸⁸⁰ Respondent's experts state that the market had already priced in deteriorating conditions for coal after the Paris Agreement in the years before 2020. Thus, if – as claimed by Compass – those risks had already materialised by the Valuation Date, the market data used to estimate the beta necessarily captures them already. In other words, Secretariat's discount rate already reflects the risks that the market had priced at the Valuation Date. Respondent's blanket addition of a premium for "coal" is thus superfluous and double counts the risks.⁸⁸¹

887 Second, also Compass' comparability objection to including Polish utilities does not hold. Poland – like Germany – is an EU Member State and signatory to the Paris Agreement. The listed companies hence provide useful evidence on the market's assessment of coal-sector risks in the relevant time period, which is precisely the risk Respondent's experts say must be reflected.

888 Third, while Secretariat's discount rate is fully consistent with other contemporaneous benchmarks, it is the discount rate provided by Compass that is unreliable. Respondent's experts offer no alternative beta methodology in place of

⁸⁷⁷ Counter-Memorial, para. 699.

⁸⁷⁸ [Exhibit CER-0001: First Secretariat Report](#), para. 5.34; [Exhibit CER-0003: Second Secretariat Report](#), para. 5.32.

⁸⁷⁹ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.32.

⁸⁸⁰ [Exhibit CER-0003: Second Secretariat Report](#), para. 5.38.

⁸⁸¹ [Exhibit CER-0003: Second Secretariat Report](#), paras 5.28.

the standard CAPM approach and simply adopts Respondent's internal calculations without explaining their underlying assumptions.⁸⁸² This makes it impossible for Secretariat to review the data, let alone draw any conclusions from it.

889 Claimant refers to Section 5.B. of Secretariat's Second Expert Report for further details.

3. No minority discount to be applied

890 In another attempt to reduce Claimant's damages, Respondent wants the Tribunal to apply a 19% "minority discount" to AET's 15.84% shareholding in TKL, on the premise that a hypothetical willing buyer pays less for a minority stake than for controlling shares.⁸⁸³ That contention is once again incorrect as a matter of economic logic and the facts of the case.

891 First, Compass' minority discount argument already fails on the conceptual level since its application has been broadly rejected by valuation experts, in particular, where – as in the present case – a blanket application of an "implicit minority discount" is at issue. This has been widely questioned by leading valuation practitioners. Even early proponents of a minority discount approach have since changed their position.⁸⁸⁴

892 Second, conceptually, any application of a minority discount would require the existence of a mismanaged company or the possibility of the majority shareholder to extract value at the minority's expense. Only if a company is mismanaged, a new majority shareholder could hope to achieve a higher value of the company by improving. Therefore, even, authorities that Respondent's experts themselves rely on refuse a blanket assumption of a minority discount absent any evidence of mismanagement by controlling shareholders.⁸⁸⁵ Yet, neither Respondent nor its

⁸⁸² [Exhibit CER-0003: Second Secretariat Report](#), para. 5.37.

⁸⁸³ Counter-Memorial, para. 701; [Exhibit RER: Compass Lexecon expert report](#), paras 139-150.

⁸⁸⁴ See [Exhibit CER-0003: Second Secretariat Report](#), para. 7.4-7.5.

⁸⁸⁵ See [Exhibit CER-0003: Second Secretariat Report](#), para. 7.6.

expert even allege any mismanagement of TKL apart from other – wrongfully made – discounts for other alleged defects.

893 Third, in the present case, there is no room for a minority discount as the minority discount conceptually requires the existence of a majority. However, TKL is comprised of around 30 shareholders, none of which have a controlling share. Moreover, among these minority shareholders, Claimant is actually the one with the largest shareholding and, thus, with the largest weight.⁸⁸⁶

894 Fourth, tribunals and courts have generally declined to apply minority discounts in contexts comparable to the present case. The *Crystallex v. Venezuela* tribunal rejected applying a minority discount / control premium in valuing expropriated interests.⁸⁸⁷ U.S. courts assessing fair value in forced sales have done likewise, to avoid unfairly penalising the “forced-out” shareholder and incentivising oppressive conduct of the majority.⁸⁸⁸ Those principles apply here: the valuation exercise assumes a hypothetical transaction at the valuation date to determine FMV for purposes of compensation, not a negotiated minority sale at a discount to a controlling buyer.

895 Fifth, Compass Lexecon's 19% figure lacks a credible foundation. As Secretariat explain, the underlying study Respondent's experts invoke

“is highly flawed and not useful for imputing any control premium/IMD, even if one should be considered given the specific attributes of a unique investment. In particular, this is because the studies calculate a control premium (and corresponding IMD) by comparing the acquisition premium paid when an investor acquires a controlling interest in a publicly traded company. However, such acquisition premiums reflect a variety of motivations and circumstances, and do not provide useful evidence of the value of control (or discount for lack of control).”⁸⁸⁹

⁸⁸⁶ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.7.

⁸⁸⁷ [Exhibit CLA-0198: Crystallex International Corporation v. Bolivarian Republic of Venezuela, ICSID Case No. ARB\(AF\) 11/2, Award, 4 April 2016](#), para. 893.

⁸⁸⁸ [Exhibit CER-0003: Second Secretariat Report](#), paras 7.10-7.12.

⁸⁸⁹ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.13

896 Finally, Respondent's experts' proposal to apply a minority discount to Claimant's damages is internally inconsistent with the damages framework in the case. As shown in the first round of written submissions, Claimant's loss equals the But-For value minus the Actual value as of the Valuation Date. Secretariat shows that the Actual value of TKL is significantly negative, because liabilities exceed asset value. Applying a 19% minority discount to damages implicitly assumes that the Actual value becomes "19% less negative" because AET holds a minority interest – an economically nonsensical result because, no hypothetical buyer of Claimant's interest in TKL would reduce outstanding liabilities by 19% merely because they purchased a minority stake.⁸⁹⁰

897 The Tribunal should therefore reject any minority discount in assessing compensation.

4. No trade tax must be accounted for

898 In their First Expert Report, Secretariat concluded that no trade tax (*Gewerbesteuer*) payments need to be accounted for in the damage calculation because TKL would operate as a break-even company, i.e. there would be no profits on which a trade tax could accrue.⁸⁹¹

899 Respondent and its expert Compass Lexecon contend that trade tax would accrue after 2035. Firstly, they argue that from that moment on TKL would make a taxable profit since the bank loan would be repaid.⁸⁹² Secondly, they claim that, even if the PPA would be extended beyond 2035 and, therefore, TKL continue to operate as a break-even company, it would still have to pay trade tax on the difference between price paid under the PPA and the market price of electricity.⁸⁹³ That is not the case.

⁸⁹⁰ [Exhibit CER-0003: Second Secretariat Report](#), para. 7.19.

⁸⁹¹ [Exhibit CER-0001: First Secretariat Report](#), para. 5.26.

⁸⁹² Counter-Memorial, para. 704; [Exhibit RER: Compass Lexecon expert report](#), para. 136.

⁸⁹³ Counter-Memorial, para. 705.

900 Firstly, also once the bank loan is repaid, the general concept of the project does not change: The plant was constructed so that each shareholder could effectively operate its own power plant slice. The repayment of the bank loan does not change this. Hence, also after 2035, this mode of operation would continue under a PPA with essentially similar terms. Accordingly, TKL would continue to operate as a breakeven company.

901 Secondly, it is incorrect that TKL would have to pay any trade tax on the difference between the price obtained under the PPA and the market prices.

902 Respondent's position would require that the provision of electricity under the PPA were to be treated as a disbursement.⁸⁹⁴ However, as has been clarified by German courts and guidelines from German tax authorities, that is not the case.⁸⁹⁵ Providing electricity at below market prices does not automatically mean that no arm's length transaction exists. In particular, there is no indication that the provision of electricity under the PPA in the present case occurs for personal or otherwise external (*betriebsfremde*) reasons rather than operational reasons (*betriebliche Gründe*). In the absence of external reasons, operational reasons (*betriebliche Gründe*) are presumed.⁸⁹⁶ Moreover, the inability of a shareholder to decide on the pricing as well as the obligation to take electricity, which also exist in the present case,⁸⁹⁷ are considered to confirm the motivation through operational rather than external

⁸⁹⁴ [Exhibit C-0192-DE/Exhibit C-0192-EN: German Trade Tax Law](#), Section 7, in conjunction with [Exhibit C-0193-DE/Exhibit C-0193-EN: German Income Tax Law](#), Section 4(1).

⁸⁹⁵ [Exhibit C-0194-DE/Exhibit C-0194-EN: Fiscal Court of Lower Saxony, judgment of 15 December 2022, 1 K 88/19](#); [Exhibit C-0195-DE/Exhibit C-0195-EN: Bavarian State Office for Taxation, Administrative Instruction, 09.10.2020 - S 2135.2.1-15 5 St32](#).

⁸⁹⁶ [Exhibit C-0195-DE/Exhibit C-0195-EN: Bavarian State Office for Taxation, Administrative Instruction, 09.10.2020 - S 2135.2.1-15 5 St32](#), Section I.3.1.

⁸⁹⁷ [Exhibit C-0075-DE/Exhibit C-0075-EN: Power Purchase Agreement between AET and TKL, 8 May 2008](#), Section 1(2); [Exhibit C-0074-DE/Exhibit C-0074-EN: TKL 2006 Consortium Agreement, 9 August 2006](#)

reasons.⁸⁹⁸ Only such external reasons could indicate the lack of an arm's length transaction.

903 Finally, even if a supply of electricity were considered a disbursement (quod non), this disbursement is be evaluated at production cost, not market prices.⁸⁹⁹ Accordingly, also in this case no trade tax would accrue since there would be no difference between price paid under the PPA and the value to be assigned to the disbursement.

904 Accordingly, no trade tax accrues in the present case.

VIII. Claimant is entitled to a tax gross-up

905 In its Memorial, Claimant had made a declaratory request for to compensation also for damages resulting from additional taxes on the award.⁹⁰⁰ Germany attempts to reject this request for declaratory relief on the level of legal principles. It relies on the tribunal in *Mobil v. Canada*, which explained that it was “*not aware of a requirement under international law to gross up compensation as a result of tax considerations*.”⁹⁰¹ However, this is statement is misguided. Claimant's request has its basis in Germany's liability for its unlawful acts and the overarching principle of

⁸⁹⁸ [Exhibit C-0194-DE/Exhibit C-0194-EN: Fiscal Court of Lower Saxony, judgment of 15 December 2022, 1 K 88/19](#), paras 83-84, 90, 93-95, referring, inter alia, to the obligation to take electricity produced and the inability of a shareholder to decide on the lower prices itself; See also [Exhibit C-0195-DE/Exhibit C-0195-EN: Bavarian State Office for Taxation, Administrative Instruction, 09.10.2020 - S 2135.2.1-15 5 St322](#), Section I.

⁸⁹⁹ [Exhibit C-0196-DE/Exhibit C-0196-EN: Federal Ministry of Finance, Instruction, 11.04.2022 – IV C 7-S22362110001002](#); [Exhibit C-0195-DE/Exhibit C-0195-EN: Bavarian State Office for Taxation, Administrative Instruction, 09.10.2020 - S 2135.2.1-15 5 St32](#); [Exhibit C-0197-DE/Exhibit C-0197-EN: German Federal Fiscal Court, Judgment, 12.03.2020, IV 917](#).

⁹⁰⁰ Memorial, paras 593-594.

⁹⁰¹ Counter-Memorial, para. 708, with reference to [Exhibit RL-0112: Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada \(I\), ICSID Case No. ARB\(AF\)/07/4, Decision on Liability and Principles of Quantum, 22 May 2012](#), para. 485.

full compensation under international law.⁹⁰² This makes a specific international law requirement to grant a tax gross-up superfluous.

906 On the level of proof, Germany solely criticizes Claimant for not providing proof that any award may be subject to taxation in Switzerland. Germany is entirely silent on whether or not an award may or may not be taxed by its authorities. This silence is telling. If there was no risk of taxation of any award by Germany's own authorities, it could simply say so. Otherwise, Germany's silence confirms that a taxation risk exists.

907 Moreover, should an award in favour of Claimant be issued but not be taxed, Claimant's requested declaratory relief means no harm to Germany. However, should the Tribunal deny Claimant's request for declaratory relief, and the award be taxed, Claimant would be unable to reclaim these additional damages.

908 Claimant consequently maintains its request for declaratory relief.

IX. The appropriate interest rate is Euribor + 4%

909 In its Memorial, Claimant explained that interest forms an integral part of compensation under the ECT and customary international law and must be awarded "*at a commercial rate established on a market basis*" so as to place Claimant, as far as possible, in the financial position it would have occupied but for Germany's wrongful conduct.⁹⁰³ Claimant therefore proposed interest at Euribor + 4%, compounded annually from the valuation date to the date of payment, consistent with Article 13(1) ECT and the practice of investment tribunals.⁹⁰⁴

⁹⁰² See already Claimant's Memorial, para. 593.

⁹⁰³ Memorial, paras 625-626; [Exhibit CER-0001: First Secretariat Report](#), para. 7.4

⁹⁰⁴ Memorial, paras 629-631; [Exhibit CER-0001: First Secretariat Report](#), para. 7.5.

- 910 In the Counter-Memorial, Respondent, relying on Compass Lexecon's Report, alleges that Claimant's interest rate would be "exaggerated" and proposes a generic Euribor + 1% rate as the maximum acceptable interest.⁹⁰⁵
- 911 Germany's proposal is already inconsistent with the ECT. Article 13(1) ECT expressly provides that expropriation compensation "*shall also include interest at a commercial rate established on a market basis from the date of expropriation until the date of payment.*"⁹⁰⁶ There is no principled basis to deny the same type of commercial, market-based interest for other ECT breaches, since in all cases the standard remains full reparation.⁹⁰⁷ Euribor + 4% meets that test, whereas Euribor + 1% does not.
- 912 Secretariat explain that Euribor + 4% not only reflects realistic commercial borrowing cost for an investor in the Lünen plant at the valuation date, but is also broadly in line with the hedged interest rate actually paid by TKL under its project finance facility.⁹⁰⁸ Even Respondent's own experts confirm this.⁹⁰⁹ It is therefore a realistic commercial rate "established on a market basis" for this specific investment.
- 913 By contrast, a generic Euribor + 1% is underrated and does not correspond to a commercial rate. Respondent's proposal would fail to compensate Claimant for the time value of money, inflation, and the opportunity cost of capital,⁹¹⁰ resulting in Claimant receiving less than the full economic value of its asset. Accepting Germany's proposal would therefore reward the wrongful State for the passage of

⁹⁰⁵ Counter-Memorial, paras 712-713.

⁹⁰⁶ Emphasis added.

⁹⁰⁷ Memorial, para. 625; [Exhibit C-0127-DE/Exhibit C-0127-EN: Project Financing Agreement TKL, 8 August 2017 \(excerpts\)](#), para. 102.

⁹⁰⁸ [Exhibit CER-0001: First Secretariat Report](#), para. 7.5

⁹⁰⁹ [Exhibit RER: Compass Lexecon expert report](#), para. 181.

⁹¹⁰ [Exhibit CER-0001: First Secretariat Report](#), paras 7.5-7.5; **SD-0026**: TKL Annual Report 2019, p. 25; [Exhibit CER-0003: Second Secretariat Report](#), para. 8.7.

time and shift risks of delay from Respondent to Claimant, hence falling short of the ECT's compensation standard.

- 914 The Tribunal should therefore reject Germany's Euribor + 1% proposal and confirm Euribor + 4% as the appropriate interest rate to remedy Claimant in this case.

X. Conclusion

- 915 In brief, Claimant's damage assessment is sound. As of the valuation date, their experts arrive at a But-For value of EUR [REDACTED] and an Actual value of negative EUR [REDACTED] for Claimant's investment, resulting in total damages of **EUR [REDACTED]**. Including pre-award interest from the valuation date until today at the 12-month EURIBOR rate plus 400bps, Claimant's damage total at **EUR [REDACTED]1**.

F. PRAYER FOR RELIEF

916 Claimant respectfully requests the Arbitral Tribunal to

- (A) DECLARE that the Respondent has breached its obligations towards Claimant under Part III of the Energy Charter Treaty;
- (B) ORDER the Respondent to pay to Claimant damages in the amount of EUR [REDACTED], together with interest thereon as from 30 January 2020 until the date of full payment, at a rate corresponding to the 12-month EURIBOR rate plus 4 percentage points and compounded annually;
- (C) DECLARE that the Respondent shall compensate Claimant for any and all tax that may be levied on Claimant by German or Swiss tax authorities as a consequence of any damages being awarded by the Tribunal to the Claimant; and
- (D) ORDER the Respondent to compensate Claimant for its costs of arbitration in an amount to be specified later together with interest thereon at the rate specified in (B) above and, as between the parties, alone to bear all costs for the arbitration, including compensation, fees and costs of the Tribunal and ICSID.

Claimant reserves the right to subsequently amend or supplement the relief sought in this arbitration.

Hamburg, 16 January 2026

Luther Rechtsanwaltsgesellschaft mbH

