CORRECTED

INTERNATIONAL CENTRE FOR SETTLEMENT OF INVESTMENT DISPUTES

In the arbitration proceeding between

LSG BUILDING SOLUTIONS GMBH, GREEN SOURCE CONSULTING GMBH, SOLLUCE ROMANIA 1 B.V., RISEN ENERGY SOLAR PROJECT GMBH, CORE VALUE INVESTMENTS GMBH & CO. KG GAMMA, CORE VALUE CAPITAL GMBH, SC LJG GREEN SOURCE ENERGY BETA S.R.L., ANINA PRO INVEST LTD., GIUST LTD., AND PRESSBURG UK GMBH

Claimants

and

ROMANIA

Respondent

ICSID CASE NO. ARB/18/19

AWARD

Members of the Tribunal
Prof. Juan Fernández-Armesto, President of the Tribunal
Judge O. Thomas Johnson, Jr., Arbitrator
Prof. Dr. Pierre-Marie Dupuy, Arbitrator

Secretary of the Tribunal
Ms. Aïssatou Diop

Assistant to the Tribunal
Ms. Sofía de Sampaio Jalles

Date of dispatch to the Parties: 20 February 2024

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GLOSSARY OF TERMS AND ABBREVIATIONS

Actual or **As Is Scenario**	Scenario in which Romania breached Art. 10(1) of the ECT
Alpha PV Facility	PV plant CEF Slobozia, belonging to the Alpha Project Company
Anina	Anina Pro Invest Ltd
ANRE	Romanian National Energy Regulatory Authority
Art(s).	Article(s)
Balancing Costs	Costs allegedly incurred to mitigate effects of GC Cap
Beta	SC LJG Green Source Energy Beta SRL
Beta PV Facility	PV plant CEF Izvoarele, belonging to Beta
C-CJMM	Claimants' comments to the Joint Model and Memorandum
Claimants	LSG Building Solutions GmbH, Green Source Consulting GmbH, Solluce Romania 1 B.V., Risen Energy Solar Project GmbH, Core Value Investments GmbH & Co KG Gamma, Core Value Capital GmbH, SC LJG Green Source Energy Beta SRL, Anina Pro Invest Ltd, Giust Ltd, and Pressburg UK GmbH
Core Value	CVC and CVI
Costs of Arbitration	Fees and expenses of the Tribunal, expenses of the Assistant to the Tribunal, ICSID's administrative fees and direct expenses
Counterfactual or But For Scenario	Hypothetical scenario in which Romania did not breach Art. 10(1) of the ECT
C-USC	Claimants' updated submission on costs
CVC	Core Value Capital GmbH
CVI	Core Value Investments GmbH & Co KG Gamma
Date of Assessment	31 December 2021
Decision	Decision on Jurisdiction, Liability and Principles of Reparation issued by the Tribunal on 11 July 2022
Defense Expenses	Expenses incurred by the Parties for their defenses
Doc. C-x / CL-x	Claimants' factual documents and legal authorities
Doc. R-x / RL-x	Respondent's factual documents and legal authorities
ECT or Treaty	Energy Charter Treaty
Edwards I and II	First and Second Expert Reports of Mr. Richard Edwards

EUR	Euro
Euribor	Euro Interbank Offered Rate
Experts	Mr. Richard Edwards and Dr. Daniel Flores
Flores I and II	First and Second Expert Reports of Dr. Daniel Flores
Forecast Period	Actual Scenario after the Date of Assessment
Frăsinet 2	PV plant CEF Frăsinet 2, belonging to Solar Frăsinet
Frăsinet 3	PV plant CEF Frăsinet 3, belonging to Solar Mostistea
Frăsinet Project Companies	Solar Frăsinet and Solar Mostistea
FTI Model	DCF model prepared by Mr. Edwards
Gamma	LJG Green Source Energy Gamma SA
Gamma PV Facility	PV plant CEF Izvoarele, belonging to the Gamma Project Company
GC	Green Certificate
GC Cap	Cap on issuance of GCs for electricity produced beyond day-ahead projections
GCPA	Green certificate purchase agreement
Generator	Producer of RES-E
Giust	Giust Ltd
Green Source	Green Source Consulting GmbH
Historical Period	Actual Scenario prior to the Date of Assessment
ICSID Convention	Convention on the Settlement of Investment Disputes between States and Nationals of Other States, which entered into force on 14 October 1966
ICSID or Centre	International Centre for Settlement of Investment Disputes
Joint Memorandum	Memorandum prepared jointly by the Experts
Joint Model	Model prepared jointly by the Experts
LSG	LSG Building Solutions GmbH
MoUs	Memoranda of Understanding signed by Beta and Gamma with Tinmar on 15 May 2013
P(p).	Page(s)
Para(s).	Paragraph(s)
Parties	Claimants and Respondent
Pressburg	Pressburg UK GmbH

PV	Photovoltaic
PV Facilities	Alpha, Beta, Gamma, Frăsinet 2 and Frăsinet 3 PV facilities
Quantum Phase	Phase of quantification of damages
R-CJMM	Respondent's comments to the Joint Model and Memorandum
RES	Renewable energy sources
RES-E	Electricity produced from renewable energy sources
Risen	Risen Energy Solar Project GmbH
Romania or Respondent	Romania
R-USC	Respondent's updated submission on costs
Solluce	Solluce Romania 1 B.V.
Tinmar	Tinmar-Ind S.A.
Tribunal's Instructions	Instructions for the Quantum Phase issued on 15 December 2022
TSO	Transmission and System Operator

I. INTRODUCTION

1. This case concerns a dispute submitted to the International Centre for Settlement of Investment Disputes ["**ICSID**" or the "**Centre**"] on the basis of the Energy Charter Treaty, which entered into force on 16 April 1998 [the "**ECT**" or "**Treaty**"], and the Convention on the Settlement of Investment Disputes between States and Nationals of Other States, which entered into force on 14 October 1966 [the "**ICSID Convention**"].

1. THE PARTIES

2. The claimants consist in four companies incorporated under the laws of Austria: LSG Building Solutions GmbH ["**LSG**"], Green Source Consulting GmbH ["**Green Source**"], Core Value Investments GmbH & Co. KG Gamma ["**CVI**"] and Core Value Capital GmbH ["**CVC**"] [CVI and CVC will be referred jointly as "**Core Value**"]; two companies incorporated under the laws of Cyprus: Anina Pro Invest Ltd. ["**Anina**"] and Giust Ltd. ["**Giust**"]; two companies incorporated under the laws of Germany: Risen Energy Solar Project GmbH ["**Risen**"] and Pressburg UK GmbH ["**Pressburg**"]; one company incorporated under the laws of Netherlands: Solluce Romania 1 B.V. ["**Solluce**"]; and one company incorporated under the laws of Romania: SC LJG Green Source Energy BETA S.R.L ["**Beta**"] [together, the "**Claimants**"].

3. The Respondent is Romania.

4. Claimants and Respondent are collectively referred to as the "**Parties**". The Parties' representatives and their addresses are listed above on page (ii) *supra*.

2. THE DISPUTE

5. The dispute arose from allegations that Romania had altered its incentive scheme put in place to encourage investments in the renewable energy sector, causing harm to Claimants' investments.

6. On 11 July 2022 the Tribunal issued its Decision on Jurisdiction, Liability and Principles of Reparation [the "**Decision**"], by which it decided Claimants' claims. The Tribunal must now establish the quantum of Claimants' damages.

II. PROCEDURAL HISTORY

7. The procedural background of this arbitration is summarized in section II of the Decision. The Decision, including the procedural history until the date it was issued, is incorporated into and forms an integral part of the present Award (see Annex)[1].

8. In the present section, the Tribunal will only refer to the procedural matters that are relevant for the present phase of the proceedings [the "**Quantum Phase**"].

1. EXPERTS' CALCULATIONS OF DAMAGES

9. Claimants retained Mr. Richard Edwards of FTI Consulting ["**Mr. Edwards**"] as their expert on damages, while Respondent designated Dr. Daniel Flores of Quadrant Economics ["**Dr. Flores**"] [together, the "**Experts**"].

10. During the first phase of the arbitration, each Expert submitted a calculation of damages in two separate expert reports ["**Edwards I**" and "**Edwards II**", and "**Flores I**" and "**Flores II**"]. Their findings are summarized in sections VII.1 and VII.2 of the Decision.

2. DECISION ON JURISDICTION, LIABILITY AND PRINCIPLES OF REPARATION

11. On 11 July 2022, the Tribunal issued the Decision in which it declared that Romania had breached Art. 10(1) of the ECT with respect to Claimants' investments[2] and explained that[3]:

> "[…] only certain specific Disputed Measures amounted to a violation of Romania's obligations under the ECT. The Tribunal is also satisfied that these Measures caused a certain damage to Claimants' investments, for which Romania is liable. But the Parties' damages valuations are unhelpful, since both Claimants' and Respondent's calculations are based on premises that are different from the findings adopted by this Tribunal."

12. Therefore, the Tribunal reserved its decision on damages (and on interest and costs)[4] and invited the Parties, assisted by their Experts, to calculate the impact of Romania's breach of its obligations under Art. 10(1) of the ECT, on the basis of the premises established by the Tribunal in the Decision[5].

3. JOINT MODEL AND MEMORANDUM OF MR. EDWARDS AND DR. FLORES

13. On 15 December 2022, after hearing the Parties, the Tribunal issued its instructions for the Quantum Phase [the "**Tribunal's Instructions**"][6]:

---

[1] Unless otherwise indicated, terms defined in the Decision shall have the same meaning when used in this Award.
[2] Decision, para. 1354(2).
[3] Decision, para. 1346.
[4] Decision, para. 1354(4).
[5] Decision, para. 1351.
[6] Tribunal's Instructions, pp. 2-3.

"1. FTI and Quadrant [the "**Experts**"] will confer to determine if they are able to agree regarding the implementation of the Tribunal's findings and resulting quantum (Decision, ¶ 1351). If the Experts are able to agree, they will submit a joint memorandum that presents the agreed quantum figure and summarizes the agreed adjustments within four weeks of the later of:

(i) The date on which the data listed in Annex A has been gathered and exchanged between the Experts, and

(ii) The date of approval by Romania of the budgets for its Expert and counsel covering the new phase of the arbitration, with any such time period running at the latest from January 31, 2023.

2. If the Experts are unable to agree regarding the implementation of the Tribunal's findings and resulting quantum:

a. The Experts will submit a joint damages model that is based on the FTI DCF model (Decision, ¶ 1330). The joint model will incorporate adjustments on which the Experts agree and "switches" allowing the Tribunal to opt between the FTI and Quadrant position on issues where the Experts disagree.

b. The Experts will submit a joint memorandum summarizing the agreed adjustments to the quantum model and setting out each Expert's position on areas of disagreement. The section on areas of disagreement should not exceed fifteen pages for each Expert, and each Expert has unilateral control regarding the content of his respective section on areas of disagreement.

c. The joint model and joint memorandum will be submitted to the Tribunal within eight weeks of the later of:

(i) the date on which the data listed in Annex A has been gathered and exchanged between the Experts, and

(ii) the date of approval by Romania of the budgets for its Expert and counsel covering the new phase of the arbitration, with any such time period running at the latest from January 31, 2023.

3. Neither Expert may introduce new arguments or evidence that was not submitted in the Expert's prior reports, except for evidence necessary to substantiate updated numbers necessitated by the Tribunal's selection of Valuation Date (December 31, 2021) (Decision, ¶ 1327).

4. Counsel will not participate in the consultations between the Experts, but may consult independently with their respective Experts.

5. The Tribunal reserves the right to determine the compensation due as a consequence of its Decision on Jurisdiction, Liability and Principles of Reparation."

14. Upon the Tribunal's Instructions, on 6 July 2023, the Experts submitted to the Tribunal a joint damages model [the "**Joint Model**"] and a joint memorandum ["the "**Joint Memorandum**"].

15. The Joint Model and Memorandum reflect the points on which the Experts agree and those on which they disagree. The Tribunal will summarize their contents in section IV *infra*.

4. COMMENTS ON THE JOINT MODEL AND MEMORANDUM

16. On 15 September 2023, both Parties submitted their comments to the Experts' Joint Model and Memorandum [Claimants' comments shall be referred to as "**C-CJMM**" and Respondent's as "**R-CJMM**"].

5. UPDATED COST SUBMISSIONS

17. On 2 October 2023, the Parties filed updated submissions on the costs of the arbitration [Claimants' updated costs submission shall be referred to as "**C-USC**" and Respondent's as "**R-USC**"].

III. RELIEF SOUGHT AND FINDINGS OF THE DECISION

1. PARTIES' REQUESTS FOR RELIEF

18. Throughout their submissions in this arbitration, Claimants requested the following relief[7]:

> "a. a declaration that the Tribunal has jurisdiction under the ICSID Convention and the Energy Charter Treaty;
>
> b. a declaration that Romania has violated the Energy Charter Treaty and international law with respect to Claimants' investments;
>
> c. compensation to Claimants for all damages they have suffered, as set forth in Claimants' submissions and as may be further developed and quantified in the course of this proceeding;
>
> d. all costs of this proceeding, including (but not limited to) Claimants' attorneys' fees and expenses, the fees and expenses of Claimants' experts, and the fees and expenses of the Tribunal and ICSID;
>
> e. pre-award and post-award compound interest at the highest lawful rate from the Date of Assessment until Romania's full and final satisfaction of the Award (including any Award on costs); and
>
> f. any other relief the Tribunal deems just and proper."

19. Respondent, in turn, requested that the Tribunal[8]:

> "i. Hold that it lacks jurisdiction over the present dispute or, in the alternative, hold that Claimants' claims are inadmissible, and dismiss all of Claimants' claims in their entirety;
>
> ii. In the event that it finds that it has jurisdiction over the present dispute, hold that it lacks jurisdiction over the two Claimants, Anina Pro Invest Ltd and Giust Ltd, and dismiss the claims of Anina Pro Invest Ltd and Giust Ltd on this basis;
>
> iii. In the event that the Tribunal finds that it has jurisdiction over the present dispute, hold that Romania has not breached its obligations under the ECT and dismiss all of Claimants' claims in their entirety on this basis;
>
> iv. In the event that the Tribunal finds that Romania has breached its obligations under the ECT, reject Claimants' damage claims for alleged lost profits in their entirety;

[7] C-II, para. 702; C-III, para. 259; C-PHB, para. 315. Claimants' request for relief in the Memorial is practically identical, save for minor wording differences (see C-I, para. 415).
[8] R-PHB, para. 444. See also R-II, para. 1113 and R-I, para. 1159. Respondent's request for relief in the Rejoinder is practically identical to that of the Post-Hearing Brief, save for minor wording differences. Respondent's prayers for relief in the Counter-Memorial are identical to the ones of the Rejoinder save for two requests regarding damages.

v. In the event that the Tribunal were to consider awarding damages for alleged lost profits to Claimants using the DCF method, reject the DCF calculations proposed by Claimants and adopt the corrected DCF calculation proposed by Romania, which further confirms that no damages are due;

vi. In the event that the Tribunal awards any damages to Claimants, reject Claimants' interest claim, as formulated by Claimants, and award only post-award, simple interest at a risk-free rate;

vii. Order Claimants, jointly and severally, to pay all of Romania's costs and fees incurred in connection with this Arbitration, including, but not limited to, the Tribunal's fees and expenses, ICSID costs, experts' fees and expenses, witnesses' expenses, and attorneys' fees and expenses; and

viii. Grant any additional remedies to the benefit of Romania that the Tribunal may consider to be appropriate."

2. FINDINGS OF THE TRIBUNAL

20. In its Decision, the Tribunal ruled on the jurisdictional objections and liability, and issued instructions on the principles of reparation.

Jurisdictional objections

21. The Tribunal rejected all three jurisdictional objections presented by Respondent, after finding that:

- Romania had consented to arbitrate the present dispute with multiple Claimants[9];
- There was jurisdiction *ratione personae* over Claimants Anina and Giust[10]; and
- There was no basis for an intra-EU objection[11].

Liability

22. Regarding the discussion on liability, the Tribunal concluded the following[12]:

> "1223. The Tribunal finds that Romania drastically altered the essential characteristics of the GC scheme and unreasonably impaired Group A Claimants' investments, in breach of its obligations under Art. 10(1) of the ECT. Romania breached its Commitments and disrupted the minimum income that Group A Claimants reasonably expected under a stable legal and regulatory framework in three ways:

[9] Decision, para. 357.
[10] Decision, para. 437.
[11] Decision, para. 769.
[12] Decision, paras. 1223-1227.

- By enacting EGO 57/2013, EGO 24/2017 and Law 184/2018, in which it deferred two out of the six GCs to which the PV Facilities were entitled;

- By adopting EGO 57/2013 and EGO 24/2017, which limited the capacity of the Operating Companies to enter into GCPAs and trade their GCs; and

- By adopting EGO 24/2017, which altered the guaranteed minimum trading value of GCs, by ceasing to index such value to European inflation.

1224. The Tribunal additionally found that the decisions to defer a number of GCs and to cease to index the minimum trade value to inflation unreasonably impaired Group A Claimants' investments.

1225. As regards the Group B Claimants, the Tribunal finds that Romania breached Art. 10(1) of the ECT *vis-à-vis* the Core Value investors:

- By enacting EGO 24/2017 and Law 184/2018, in which it extended the deferral of two out of the six GCs to which the PV Facilities were entitled from 2017 until December 2020;

- By adopting EGO 24/2017, which limited the capacity of the Operating Companies to enter into GCPAs and trade their GCs; and

- By adopting EGO 24/2017, which altered the guaranteed minimum trading value of GCs, by ceasing to index such value to European inflation.

1226. The Tribunal additionally found that EGO 24/2017 and Law 184/2018 unreasonably impaired Group B Claimants' investments.

1227. Having reached the conclusion that Romania breached Art. 10(1) of the ECT, the Tribunal finds that there is no need to address Claimants' subsidiary arguments of lack of transparency and consistency, which are subsumed in the FET standard."

Principles of reparation

23. In the Decision, the Tribunal found that, to calculate the damages suffered by and the amount of compensation owed to Claimants, the Tribunal has a degree of flexibility to define the appropriate financial methodology for the determination of a financial amount which, delivered to the investor, produces the equivalent economic value that, in all probability, the investor would have enjoyed, but for Romania's breach[13]. Among these methodologies is DCF, based on the prediction of a future stream of cash flow which an enterprise is expected to generate, which is then discounted at a given rate[14].

24. The Tribunal agreed, in principle, with Claimants' valuation methodology, which consisted in setting-off the streams of cash flows of the Operating Companies, as of the Date of Assessment, in the As Is Scenario [or "**Actual Scenario**"] and the But For Scenario [or "**Counterfactual Scenario**"]. The Tribunal established the

[13] Decision, para. 1311.
[14] Decision, para. 1312.

date of assessment of the damages at 31 December 2021, as a reasonable proxy for the date of the Decision [the "**Date of Assessment**"][15].

25. The Tribunal observed, however, that the totality of the Disputed Measures did not amount to a breach of the Treaty, and that Romania only breached its obligations when it failed to guarantee the stability of the Essential Characteristics of the GC support scheme, and thus deprived the Operating Companies of the minimum income which they were expecting[16]. Thus, the Parties' damages valuations were based on premises different from the findings of the Tribunal.

26. The necessary consequence was that Claimants' calculation of damages had to be adjusted to take into account the actual findings of the Tribunal[17]. Thus, the Tribunal established that the following principles should guide the calculation of the reparation[18]:

> "- Claimants' loss can be defined as the difference (if any) between (i) the actual value of each Claimant's equity rights in the respective Operating Company in the As Is Scenario and (ii) the hypothetical value of these equity rights in the But For Scenario, *i.e.*, assuming that Romania had not adopted those of the Disputed Measures that breached the ECT;
>
> - An accurate assessment of the As Is and But For enterprise values must consider the characteristics of each Operating Company, and the extent to which its cash flows have been impacted by Romania's failure to guarantee its Commitments; for these purposes, Group A and Group B Claimants must receive separate treatment;
>
> - In the But For Scenario the Operating Companies must be assumed (i) to have received from 2013 through 2028 the income from the sale of six GCs per MWh (with no deferral), (ii) to have been able to sell all these GCs either through GCPAs or in the GC market in the same year they obtained said GCs, (iii) at the minimum price of EUR 27/GC, adjusted yearly for European inflation since 2013 (or at a higher price, if so established in a GCPA); and
>
> - The But For Scenario should include those Disputed Measures, which, in the Tribunal's finding, did not breach Art. 10(1) of the ECT."

27. As for Claimant Beta, the Tribunal noted that, being an Operating Company, its damage should be calculated as the difference between[19]:

> "- The actual enterprise value of Beta; and
>
> - The hypothetical enterprise value Beta would have reached, had Romania not adopted the Disputed Measures that breached the ECT."

[15] Decision, para. 1327.
[16] Decision, para. 1330.
[17] Decision, para. 1331.
[18] Decision, para. 1336.
[19] Decision, para. 1337.

28. Ultimately, the Tribunal directed the Parties to attempt to reach an agreement on the quantum of damages to be paid by Romania to Claimants[20].

Dispositif

29. Considering the above, the Tribunal ruled as follows[21]:

> "1. Declares that the Tribunal has jurisdiction under the ICSID Convention and the Energy Charter Treaty over all Claimants and their claims;
>
> 2. Declares that Romania has breached Art. 10(1) of the ECT with respect to Claimants' investments;
>
> 3. Directs the Parties to attempt to reach an agreement on the quantum of damages to be paid by Romania to Claimants;
>
> 4. Reserves its decision on damages, interest and costs for a future decision."

30. The Parties have not reached a complete agreement on the quantum of damages to be paid by Romania to Claimants.

31. Therefore, the Tribunal must decide on the damages owed to Claimants, the applicable interest (if any) and the costs of the arbitration.

[20] Decision, paras. 1346 and 1354(3).
[21] Decision, para. 1354.

IV. QUANTUM

32. The Experts explain that, after conferring, they have been unable to agree on the implementation of the Tribunal's findings in the Decision and resulting quantum[22].

33. In accordance with the Tribunal's Instructions, the Experts have prepared a Joint Model that is based on the DCF model initially prepared by Mr. Edwards [the "**FTI Model**"]. The Joint Model incorporates the adjustments to the quantum calculation on which the Experts agree – taking into consideration the Tribunal's Decision – and the "switches" that allow the Tribunal to opt between Mr. Edwards' or Dr. Flores' respective positions on the points of disagreement between them[23].

34. The Joint Memorandum explains the agreed adjustments to the Joint Model and the Experts' comments on the points of contention and summarizes the Experts' conclusions[24].

Points of agreement

35. The Experts have agreed to make the following adjustments to the FTI Model[25]:

- To update the actual positions of the Alpha, Beta, Gamma, Frăsinet 2 and Frăsinet 3 PV facilities [the "**PV Facilities**"], historical GC and electricity prices, historical Euribor rates and inflation, and electricity price and inflation forecasts, all in order to reflect the Tribunal's selection of a Date of Assessment of 31 December 2021;

- To use the approach proposed by Dr. Flores in his second expert report to forecast Alpha's GC sales; and

- To remove any element of loss associated with the reduction in the ANRE fee.

36. The Experts have confirmed that the Joint Model reflects the Tribunal's findings as set out in the Decision, except for the four matters on which they disagree[26].

Quantum according to each Expert

37. Mr. Edwards avers that the quantum of Claimants' losses amounts to **EUR 65.4 million**. Opting for Dr. Flores' views on the four points of disagreement reduces the quantum of Claimants' losses by EUR 37.8 million, to **EUR 27.6 million**[27]:

[22] Joint Memorandum, para. 3.
[23] Joint Memorandum, para. 4.
[24] Joint Memorandum, para. 4.
[25] Joint Memorandum, para. 8(a) to (c).
[26] Joint Memornadum, para. 8(d).
[27] Joint Memorandum, para. 115 (in EUR million).

Claimant	Company	Mr. Edwards	Dr. Flores	Difference
LSG	Alpha	3.5	2.3	1.2
	Gamma	3.3	0.7	2.6
Green Source	Alpha	3.5	2.3	1.2
	Gamma	3.3	0.7	2.6
Solluce	Alpha	25.1	16.3	8.8
CVI	Gamma	12.0	(1.5)	13.4
CVC	Gamma	0.5	(0.1)	0.5
Anina	Frasinet 3	0.6	0.3	0.2
Giust	Frasinet 2	1.0	0.7	0.3
Pressburg	Frasinet 3	0.6	0.3	0.2
	Frasinet 2	1.0	0.7	0.3
Risen	Beta	11.0	4.7	6.3
Total		**65.4**	**27.6**	**37.8**

Points of disagreement

38. The Experts have identified four areas of disagreement[28]:

- Whether to account for the GC cap, or GCs for production in excess of forecasts and balancing costs (**IV.1**);

- How to model Beta and Gamma's GC sales in the Actual Scenario (**IV.2**);

- How to model Beta and Gamma's GC sales in the Counterfactual Scenario (**IV.3**); and

- What treatment to give to interest (**IV.4**).

39. Claimants request that the Tribunal adopt Mr. Edwards' approach to calculate damages. According to Claimants, Mr. Edwards' new calculation adds up to less than half of the damages presented in his second expert report, reflecting Mr. Edwards' careful and accurate application of the Tribunal's liability findings and instructions on quantum[29]. Romania, in turn, requests that the Tribunal reject Mr. Edwards' approach and instead apply Dr. Flores' calculations[30].

40. The Tribunal will solve each of the four points of disagreement between the Experts, and then reach its conclusion on the quantum of damages (**IV.5**).

IV.1. ISSUE 1: GC CAP / GCS FOR PRODUCTION IN EXCESS OF FORECASTS AND BALANCING COSTS

1. *PRO MEMORIA*

41. Claimants[31] are ten project developers that invested in five solar PV Facilities in southern Romania after 2010, at different points in time[32]:

[28] Joint Memorandum, Section B.
[29] C-CJMM, para. 25.
[30] R-CJMM, paras. 38-39.
[31] LSG; Green Source; Solluce; CVC; CVI; Risen; Beta; Anina; Giust; Pressburg (see Decision, para. 124).
[32] Decision, para. 123.

- The Alpha PV Facility (45 MWp);
- The Beta PV Facility (20 MWp);
- The Gamma PV Facility (50 MWp);
- Frăsinet 2 (9.5 MWp); and
- Frăsinet 3 (5.4 MWp).

42. In the Decision, the Tribunal distinguished between two groups of Claimants[33]:

    - On the one hand, those Claimants that invested for the first time prior to the enactment of EGO 57/2013, *i.e.*, all Claimants except the Core Value Claimants (so-called "**Group A Claimants**");
    - On the other, the Core Value Claimants who consciously chose to wait for the enactment of EGO 57/2013 to make their investment (so-called "**Group B Claimants**").

43. The Tribunal found that at the time Group A Claimants invested in Romania (between January 2011 and January 2013), Romania's regulatory regime provided legal certainty to prospective investors. There was a clearly defined framework, which permitted investors in the Romanian PV sector to foresee that a PV plant would be legally entitled to receive, for 15 years, two clearly defined streams of income[34]:

    - First, the PV plant would be entitled to the sale of electricity on the wholesale electricity market, at the price which would result from offer and demand, without any Government support;
    - Additionally, (and crucially) the PV plant would be entitled to receive, for 15 years, a second stream of income, equal to the sale of[35]:
        - Six GCs for each MWh of electricity produced and delivered to the grid,
        - On the centralized GC market or through GCPAs,
        - For a minimum guaranteed price of at least EUR 27/GC, adjusted for European inflation,

    [the so-called "**Essential Characteristics**" of the GC support scheme].

44. Each Group A Claimant invested up to January 2013, at a time when the legal and regulatory framework enacted in Law 220/2008 and modified by Law 139/2010 remained in force. Each of the PV Facilities owned by the Group A Claimants was put into operation and received an ANRE Accreditation in 2013, a Specific

[33] Decision, para. 1065.
[34] Decision, para. 1070.
[35] Decision, para. 1112.

Commitment by which the Romanian State confirmed to investors that their PV Facilities would benefit from the Essential Characteristics of the regulatory regime[36]. Thus, Group A Claimants could and did reasonably expect that their PV Facilities would benefit from the Essential Characteristics of the GC support scheme from the moment they started operating and for 15 years[37].

45. However, on 4 June 2013, the Romanian Government issued EGO 57/2013[38] pursuant to which it, *inter alia*:

- Deferred the issuance of two out of the six GCs per MWh awarded to PV plants between 1 July 2013 and 31 March 2017; these deferred GCs were expected to be recovered gradually by PV facilities between 1 April 2017 and 31 December 2020 at the latest (ultimately, this was not the case); the measure applied to PV plants accredited by ANRE after 4 June 2013[39];

- Prohibited the issuance of GCs for electricity produced beyond the projections that Generators made to the grid operator in the day-ahead hourly forecast, for all plants above 5 MW (which was the case of all of Claimants' plants) [the "**GC Cap**"][40];

- Established that GCs could only be traded between Generators of RES-E and electricity suppliers on the centralized market managed by OPCOM – thus casting doubts on the validity of GCPAs entered into between Generators and energy traders[41].

46. All of Claimants' PV Facilities received their accreditations from ANRE on or after 21 June 2013, *i.e.*, after the Government passed EGO 57/2013, with the consequence that they each saw two of their GCs automatically deferred and were applied the GC Cap[42].

47. The Tribunal found that by adopting, *inter alia*, EGO 57/2013, Romania breached Art. 10(1) of the ECT, because it was a drastic and fundamental change of the Essential Characteristics of the regulatory regime, which unreasonably impaired Group A Claimants' investments[43]:

- The measure meant that two out of six GCs per MWh awarded to Group A's PV Facilities were deferred between 1 July 2013 and 31 March 2017[44]; and

- The measure established that GCs could only be traded between Generators of RES-E and electricity suppliers on the centralized market managed by

[36] Decision, para. 1113.
[37] Decision, para. 1114.
[38] Decision, para. 190, referring to **Doc. C-196**.
[39] Decision, para. 193.
[40] Decision, para. 194.
[41] Decision, para. 195.
[42] Decision, paras. 198-199.
[43] Decision, paras. 1157, 1172, 1204.
[44] Decision, section VI.3.4.C.a.

OPCOM – thus casting doubts on the validity of GCPAs in general, and of GCPAs signed with energy traders in particular[45].

2. EXPERTS' DISCUSSION

A. Mr. Edwards' position

48. Mr. Edwards explains that, by virtue of EGO 57/2013, between July 2013 and July 2018[46] the GC Cap affected plants with a capacity greater than 5 MW. The GC Cap worked by excluding from the GC scheme any electricity production in excess of the daily production forecast submitted by the PV plant to the Transmission and System Operator [the "**TSO**"] the day before. And because it is not possible to predict production with certainty a day in advance, this change to the system meant that not all electricity produced and delivered into the grid actually qualified for six GCs[47].

49. Mr. Edwards' interpretation of the Decision is that the Tribunal found Romania liable for this measure, when it stated (para. 1070) that the Counterfactual Scenario should assume that[48]:

> "[T]he PV plant would be entitled to six GCs for each MWh of electricity produced and delivered to the grid, which could be sold either on the GC market or through GCPAs, at a minimum price which the Law specifically said could not fall below EUR 27/GC indexed annually to European inflation." [emphasis added]

50. Furthermore, in his first expert report, Mr. Edwards explained that Claimants estimated that the GC Cap was expected to reduce the number of GCs they would receive by around 10%. Consequently, Claimants took steps to mitigate the loss of GCs resulting from the GC Cap: they did so by submitting higher forecasts to the TSO, with the consequence that actual production fell short of the forecast much of the time. This meant that although they lost fewer GCs, Claimants had to acquire the electricity production shortfall in the balancing market. This is typically more expensive than the wholesale electricity price at which they could have sold this electricity. As a result of this strategy, the PV Facilities incurred significant costs ["**Balancing Costs**"] between 2013 and 2018, while the GC Cap was in place. Based on the witness statement of Mr. Lipkovich, Mr. Edwards assumes that Balancing Costs would have been circa 15% of wholesale market revenues[49].

51. Mr. Edwards thus assumed in his Counterfactual Scenario that, for the period between 2013 and 2018, absent the GC Cap[50]:

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[45] Decision, para. 1178.
[46] The GC Cap was abolished in July 2018 (**Doc. C-199**; **Edwards I**, paras. 3.16(2), 5.24, 6.26; **Roques I**, para. 2.30; **Flores I**, fn. 297).
[47] Joint Memorandum, para. 10.
[48] Joint Memorandum, para. 10, citing to Decision, para. 1070.
[49] Joint Memorandum, paras. 11-12.
[50] Joint Memorandum, para. 12.

- The Group A Claimants' PV Facilities would have received six GCs for every MWh of electricity produced and would not have had any GCs excluded on production in excess of the daily forecasts submitted to the TSO; and

- Counterfactual Balancing Costs would have been of a scale consistent with a strategy under which forecasts submitted to the TSO were as accurate as possible.

52. Therefore, Mr. Edwards' damages calculation includes two losses related to the GC Cap[51]:

- Losses arising directly from the reduction in GC revenue due to GCs being excluded for production in excess of the daily forecasts; and

- Losses arising from higher Balancing Costs as a consequence of the forecasting strategy adopted by Claimants to mitigate the losses arising from the GC Cap.

B. Dr. Flores' position

53. Dr. Flores notes that the Decision, in its discussion of the Disputed Measures that breached Art. 10(1) of the ECT, does not refer to Generators earning GCs based only on their production forecasts. Thus, it appears that the Tribunal did not find that aspect of EGO 57/2013 to constitute a breach. Consequently, any element of loss associated with Generators earning GCs for production based only on their forecasts should be removed from the calculation of damages[52].

54. In fact, says Dr. Flores, the Decision, in addition to not including the GC Cap in its discussion of the regulatory changes that breached Art. 10(1) of the ECT, states that "guarantees regarding balancing costs" are not an Essential Characteristic of the GC scheme[53].

55. Dr. Flores further observes that, in accordance with the Decision, any Disputed Measure which the Tribunal found did not breach Art. 10(1) of the ECT should be included in the Counterfactual Scenario and, therefore, its effect should be removed from the calculation of damages[54].

56. Therefore, Dr. Flores suggests that the Tribunal remove the effect of the GC Cap from the Joint Model via two switches[55]:

- In the Counterfactual Scenario, the Group A Claimants' PV Facilities do not receive GCs for production in excess of the forecasts submitted to the TSO the day before; and

[51] Joint Memorandum, para. 13.
[52] Joint Memorandum, para. 23.
[53] Joint Memorandum, para. 26, citing to Decision, para. 1204.
[54] Joint Memorandum, para. 25.
[55] Joint Memorandum, para. 25.

- Net revenue from the sale of electricity (*i.e.*, net of Balancing Costs) is the same in the Counterfactual and Actual Scenario.

C. Switches

57. The Experts only disagree on the interpretation of the Decision, not the calculation methodology[56]. The experts agree that once the Tribunal decides whether the losses identified by Mr. Edwards should or should not be removed from the Counterfactual Scenario, the Tribunal can simply apply the necessary switches to the Joint Model[57].

a. Switch B1.1

58. The calculation assumes that in the Counterfactual Scenario, between 2013 and 2018, the PV Facilities receive GCs based on[58]:

- *FTI approach*: the amount of electricity they actually produced and delivered into the grid;

- *QE approach*: the forecasts submitted to the TSO the day before.

59. Therefore, losses arising from the reduction in GC revenues as a result of the GC Cap are only included in the estimate of loss in the *FTI approach*. The *QE approach* reduces Mr. Edwards' calculation of damages by **EUR 3 million**[59].

b. Switch B1.2

60. The calculation assumes that in the Counterfactual Scenario, the PV Facilities receive[60]:

- *FTI approach*: the market price less 15% for each MWh of electricity they produce and deliver into the grid;

- *QE approach*: the same net electricity revenue (*i.e.*, net of Balancing Costs) as in the Actual Scenario.

61. Therefore, losses arising from higher Balancing Costs incurred as a consequence of the GC Cap are only included in the estimate of loss in the *FTI approach*. The *QE approach* reduces Mr. Edwards' calculation of damages by **EUR 1.6 million**[61].

3. Claimants' position

62. Claimants argue that, according to the Decision, Romania's commitment to grant Group A Claimants' PV Facilities six GCs per MWh of electricity produced and delivered to the grid, was an Essential Characteristic of the GC scheme[62].

[56] Joint Memorandum, para. 30.
[57] Joint Memorandum, para. 20.
[58] Joint Memorandum, tables in pp. 7 and 10.
[59] Joint Memorandum, para. 25.
[60] Joint Memorandum, tables in pp. 7 and 10.
[61] Joint Memorandum, para. 25.
[62] C-CJMM, para. 3.

EGO 57/2013 changed this Essential Characteristic by limiting the issuance of GCs to the volume of electricity forecast to the TSO rather than the volume of electricity actually "produced and delivered to the grid"[63]. Consequently, Group A Claimants faced two losses[64]:

- The loss of some GCs when production exceeded the daily forecasts to the TSO; and

- Higher Balancing Costs incurred to mitigate those GC losses by submitting conservatively high production estimates to the TSO.

63. Claimants argue that Dr. Flores' interpretation, that these losses fall outside the Tribunal's liability findings, is not reasonable for three reasons[65].

64. First, the Tribunal implicitly found that the right to receive "six GCs per MWh of electricity produced and delivered to the grid" was an Essential Characteristic of the GC Scheme[66].

65. Second, Claimants do not allege that these losses are actionable because Romania included guarantees in the original GC Scheme regarding how Balancing Costs would be calculated. Rather, Claimants allege that these losses resulted from EGO 57/2013's change to the definition of what volume of electricity was entitled to receive GCs, and that is precisely the issue that the Decision found in Claimants' favour by holding that the But For Scenario "must reflect the cash flows" that would result from the receipt of "six GCs per MWh of RES-E produced…"[67].

66. Third, if Dr. Flores' findings were correct, then the Tribunal omitted to address Claimants' claim. Claimants' theory of breach for these losses does not depend on any "guarantees regarding balancing costs" in the original GC Scheme, and thus the Tribunal's finding that the Essential Characteristics of the GC Scheme did not include any such guarantee cannot dispose of that claim. If the Decision did not resolve this claim through the explicit instruction that the But For scenario must be based on six GCs per MWh produced, the Decision failed to address the Claimants' actual claim regarding the GC Cap in EGO 57/2013. Thus, the Tribunal should address this issue, pursuant to Art. 48(3) of the ICSID Convention[68].

67. Therefore, Claimants argue that the Tribunal already resolved this issue in favour of Claimants and, if it did not, it should proceed to do so in the Award[69].

4. RESPONDENT'S POSITION

68. Romania argues that Mr. Edwards' improper inclusion of the GC Cap as part of Claimants' losses leads to an increase of their damages that should be rejected by

[63] C-CJMM, para. 3.
[64] C-CJMM, para. 3.
[65] C-CJMM, para. 4.
[66] C-CJMM, para. 5.
[67] C-CJMM, para. 6, citing to Decision, para. 1332.
[68] C-CJMM, para. 7.
[69] C-CJMM, para. 8.

the Tribunal[70]. Indeed, the Tribunal can only award damages resulting from the GC Cap if such Cap is found to be in violation of the ECT ***and*** if the damages allegedly resulting therefrom are sufficiently demonstrated[71].

69. Romania explains that the GC Cap was introduced to encourage Generators to predict their supply of electricity to the grid more accurately[72]. The Tribunal did not find that Romania had breached the ECT by introducing the GC Cap. Therefore, Claimants are not entitled to any damages resulting from this Cap[73].

70. Subsidiarily, Romania argues that Claimants have failed to demonstrate that the two alleged losses were caused by the GC Cap[74]:

- First, Claimants have never demonstrated that they suffered any loss of GC revenues as a result of the GC Cap; to the contrary, Mr. Lipkovich testified that Claimants circumvented the GC Cap by overstating their day-ahead production forecasts; and

- Second, the Tribunal already found that there were no guarantees regarding Balancing Costs; in any event, Mr. Edwards' estimate of such Balancing Costs is based solely on Mr. Lipkovich's unsupported statement with no documentary evidence whatsoever.

71. Therefore, Romania argues that no damages should be allocated to Claimants in relation to the GC Cap and, instead, the Tribunal should apply the *QE approach* in switches B1.1 and B1.2 of the Joint Model[75].

5. DECISION OF THE TRIBUNAL

72. Claimants argue that the calculation of damages should account for two losses:

- The loss of the additional GCs when actual production exceeded the daily forecasts submitted by Claimants to the TSO; and

- Higher Balancing Costs incurred by Claimants to mitigate the GC losses deriving from their practice to submit conservatively high electricity production estimates to the TSO.

73. Respondent counters that the Tribunal has never found that the GC Cap constituted a breach of Art. 10(1) of the ECT and that, in any case, the damages allegedly suffered are not sufficiently demonstrated.

74. The Tribunal decides for Respondent on this point, for three reasons.

[70] R-CJMM, para. 6.
[71] R-CJMM, para. 3.
[72] R-CJMM, para. 4.
[73] R-CJMM, para. 5.
[74] R-CJMM, paras. 7-9.
[75] R-CJMM, para. 10.

75. First, the Tribunal did not find that the GC Cap introduced by EGO 57/2013 constituted a fundamental alteration of the Essential Characteristics of the GC scheme. This was a minor adjustment to the system, the goal of which was to encourage PV Facilities to better estimate their production, in order to avoid imbalances.

76. As Dr. Fabien Roques, Claimants' regulatory expert, explains[76]:

> "In any power system, there is a system operator responsible for ensuring that the output being fed into the grid from generating plants matches demand on a real-time basis. To help the system operator in this task, plants are typically required to provide forecasts of output ahead of time. When their actual production deviates from these forecasts, the operator must compensate for these deviations (imbalances), e.g., by purchasing power from some units able to adjust their level of output at very short notice. The costs of these 'balancing services' are typically recovered by charges levied on the plants that created the imbalance (balancing charges) in Europe."

77. As the Tribunal explained in the Decision, any operator in a highly regulated sector must reasonably expect that from time to time, in order to improve the efficiency of the system, technical adjustments to the support scheme will occur.

78. Second, if the introduction of the GC Cap itself did not give rise to a breach, the alleged Balancing Costs incurred by Claimants cannot be attributed to any breach by Respondent.

79. Finally, the evidence proving these alleged Balancing Costs is also limited; it consists in an estimation by Mr. Edwards[77], based solely on the witness statement of Mr. Lipkovich, who mentions *en passant* a Balancing Cost higher than the 15% of wholesale market revenues expected, without pointing the Tribunal to any other contemporaneous evidence to support it[78].

80. In view of the above, the Tribunal opts for the *QE approach* in switches B1.1 and B1.2, *i.e.*:

- The calculation assumes that in the Counterfactual Scenario, between 2013 and 2018, Group A Claimants' PV Facilities received GCs based on the forecasts submitted to the TSO the day before;

- The calculation assumes that in the Counterfactual Scenario, the PV Facilities received the same net electricity revenue (net of Balancing Costs) as in the Actual Scenario.

[76] **Roques I**, fn. 54.
[77] **Edwards I**, para. 6.43, citing to Lipkovich I.
[78] **Lipkovich I**, para. 27.

IV.2. ISSUE 2: BETA AND GAMMA'S GC SALES IN THE ACTUAL SCENARIO

1. *PRO MEMORIA*

81. Some of the Group A Claimants invested in the Beta and Gamma PV Facilities, through the Operating Companies Beta (one the claimants in this arbitration) and LJG Green Source Energy Gamma SA ["**Gamma**"][79]. These PV Facilities were entitled to trade their GCs on the centralized GC market or through bilateral contracts (also known as GCPAs) signed with suppliers and traders of energy[80].

82. In the Decision, the Tribunal found that there is evidence that the possibility of concluding GCPAs made the GC support scheme more attractive to investors, by reducing investment risk: the more GCPAs were concluded, the more predictable the future income of the PV Facilities became, because the GCPAs fixed the number of GCs sold, the duration of the sale and the price – whilst on the open GC market all these variables were unknown[81].

83. On 15 May 2013, Beta and Gamma each signed a Memorandum of Understanding [the "**MoUs**"] with the Romanian company Tinmar-Ind S.A. ["**Tinmar**"][82]. The MoUs provided that:

- Beta, Gamma and Tinmar intended to enter into an agreement for the purchase of electricity for a period of seven years, under which Tinmar would purchase the electricity produced by the PV Facilities at the price of RON 140 per MWh[83];

- Beta, Gamma and Tinmar also intended to enter into a GCPA for a period of seven years, under which Tinmar would purchase 80% of the GCs received by Beta and Gamma, at the price traded on the OPCOM market; the company Lord Energy would act as broker and would obtain a commission paid by Beta and Gamma of 10% of the value of the GCs[84].

84. In June 2013, Beta and Gamma did each execute a GCPA with Tinmar, for the sale of their GCs[85]. Pursuant to these agreements, Tinmar committed to buy 80% of the GCs granted to Beta and Gamma for a period of seven years, at the price prevailing on the OPCOM market[86]. Beta and Gamma also each signed a commission agreement with Lord Energy, for its brokerage, in exchange for 10% of the GC price[87].

[79] Decision, paras. 131 and 177.
[80] Decision, paras. 181, 933, 1112, 1174.
[81] Decision, para. 1176.
[82] **Doc. RE-95** (Beta MoU with Tinmar); **Doc. RE-96**, (Gamma MoU with Tinmar).
[83] **Doc. RE-95**, pp. 2-3; **Doc. RE-96**, pp. 2-3.
[84] **Doc. RE-95**, p. 4; **Doc. RE-96**, p. 4.
[85] **Doc. RE-194** (Beta GCPA with Tinmar); **Doc. RE-196** (Gamma GCPA with Tinmar).
[86] **Doc. RE-194**; **Doc. RE-196**; **Tahan**, para. 13.
[87] **Doc. RE-195**; **Doc. RE-197**; **Tahan**, para. 13.

85. According to Claimants' representative, Mr. Ferry Tahan, these agreements were renegotiated by Tinmar after Romania enacted Law 23/2014[88]. Claimants' witnesses say that, thereafter, Beta and Gamma entered into alternative GCPAs, in which they sold their GCs at a certain price, but also sold electricity at a material discount to the prevailing market price[89]. Mr. Lipkovich affirms that[90]:

> "To facilitate the sale of their GCs, Beta and Gamma agreed to sell their electricity production at a discount, amounting to 30% to 35% of the floor price of the GCs sold bundled with the electricity."

86. Bundling is an alleged practice whereby a Generator agrees to sell electricity to a supplier at a discount in exchange for the supplier's agreement to purchase a certain quantity of GCs.

87. Therefore, in his first expert report, Mr. Edwards assumed that in the Actual Scenario, Beta and Gamma sold all their GCs each year at a discount to the minimum price, a discount that is assumed to be 30% in 2019 and to reduce steadily to 0% in 2025[91]. Mr. Edwards maintains the position adopted in his first report[92].

2. Background to Issue 2

88. Mr. Edwards says that the Decision discusses the Actual Scenario assumptions adopted by him in respect of Beta and Gamma (para. 1286) and recognises Respondent's position (para. 1287)[93]. Indeed, when summarizing the corrections applied by Dr. Flores' to Mr. Edwards' calculations, the Tribunal explained that[94]:

> "Third correction: Applying Mr. Edwards' spot market approach for Beta's and Gamma's GC sales
>
> 1286. Romania explains that in his modelling of the Actual Position, Mr. Edwards does not use the spot market prices to derive the "Actual" price for Beta's and Gamma's GC sales. Rather, he assumes that Beta and Gamma have been bundling GCPAs and PPAs in the actual world. Based on this alleged bundling, Mr. Edwards discounts the GC spot market price in the future period, which reduces Beta's and Gamma's revenues in the Actual Position and thus increases their alleged lost profits.
>
> 1287. Romania argues, however, that Claimants have not provided any evidence that any such bundling arrangements ever existed. Thus, Mr. Edwards' use of discounted bundled GC prices is unsupported and must be rejected. It is thus necessary to correct Claimants' DCF calculations by using the spot market approach for Beta's and Gamma's GC sales."

89. The Decision goes on to say that it accepts Claimants' valuation methodology but for certain exceptions (set out in paras. 1330 to 1332). According to Mr. Edwards,

[88] **Tahan**, para. 27.
[89] **Lipkovich I**, para. 32; **Lipkovich II**, paras. 14-15; **Tahan**, para. 25. See also **Edwards I**, para. 5.36.
[90] **Lipkovich I**, para. 32.
[91] **Edwards I**, para. 5.49.
[92] Joint Memonradum, para. 31.
[93] Joint Memorandum, para. 32.
[94] Decision, paras. 1286-1287 (footnotes omitted).

the Actual Scenario assumptions for Beta and Gamma were not one of these exceptions[95].

90. Dr. Flores, in turn, counters that an area of disagreement between the Experts has always been whether in the Actual Scenario, Beta and Gamma sold their GCs at an effective discount below the minimum price, by bundling the sale of their GCs with the sale of electricity. Dr. Flores argues that even though the Tribunal summarized Romania's position on this matter in the Decision, it never ruled on this area of disagreement[96]. Dr. Flores submits that his reading of paras. 1328 to 1332 of the Decision is that the Tribunal accepted Claimants' valuation methodology, but not the assumptions underpinning the loss calculation put forth by Mr. Edwards[97]; it follows that the issue of Beta and Gamma's GC sales in the Actual Scenario remains to be decided by the Tribunal[98].

91. The Tribunal confirms Dr. Flores' understanding.

92. In the Decision, the Tribunal did not accept each assumption made by Mr. Edwards at face value. It also took no position on the corrections suggested by Dr. Flores to Claimants' DCF calculation. In fact, the Tribunal found that the Parties' valuations were "unhelpful" because they were "based on premises that are different from the findings" of the Tribunal[99]. The Tribunal merely accepted the valuation methodology proposed by Mr. Edwards (and not refuted by Dr. Flores[100]), which consisted in setting-off[101]:

- The historical cash flows actually received by each Operating Company from 2013 through the Date of Assessment, and the future cash flows that each Operating Company will supposedly receive after the Date of Assessment, assuming that the Disputed Measures that have violated Art. 10(1) of the ECT continue to apply (the "As Is" or "Actual" Scenario);

- Against the cash flows that each Operating Company would have received or expected to receive, if Romania had guaranteed that for 15 years (2013 to 2028) Claimants' PV Facilities would benefit without interruption from:

- Six GCs per MWh of RES-E produced and delivered to the grid,

- For which a minimum price of at least EUR 27/GC, adjusted for European inflation, was guaranteed,

- Which could be sold either on the centralized GC market or through GCPAs,

  (the "But For" or "Counterfactual" Scenario).

[95] Joint Memorandum, para. 32.
[96] Joint Memorandum, para. 60.
[97] Joint Memorandum, para. 61.
[98] Joint Memorandum, para. 61.
[99] Decision, para. 1346.
[100] Decision, paras. 1328-1329.
[101] Decision, paras. 1328-1332.

93. The comparison between the cash flows in the As Is and But For Scenarios is the valuation methodology that the Tribunal accepted. The Tribunal then noted that "Claimants' calculation of damages must be adjusted to take into account the actual findings of the Tribunal"[102]. Finally, the Tribunal established certain principles that should guide the calculation of reparation[103]. But the Tribunal took no decision on the Experts' disagreement.

94. Therefore, the question of whether in the Actual Scenario, Beta and Gamma would sell all their GCs at a discount to the minimum price until 2025 has not been settled.

3. EXPERTS' DISCUSSION

A. Mr. Edwards' position

95. Mr. Edwards argues that he has not changed his Actual Scenario assumptions for Beta and Gamma. Dr. Flores disagrees with this approach because he assumes that in the Actual Scenario[104]:

- In the forecast period (*i.e.*, the Actual Scenario after the Date of Assessment ["**Forecast Period**"]), Beta and Gamma will sell all of their GCs via GCPAs at the minimum price (without any discount) until 2025;

- In the historical period (*i.e.*, the Actual Scenario prior to the Date of Assessment ["**Historical Period**"]), one-off costs relating to commercial arrangements that Beta and Gamma entered into to facilitate the sale of their GCs before expiry should not be included in the calculation of losses.

96. Mr. Edwards submits that these adjustments are inconsistent with the calculations submitted in Dr. Flores' earlier reports and are therefore new[105]. In any case, such assumptions are wrong.

a. Forecast Period

97. The main point of contention between the Experts concerns the evidence adduced by Claimants: Dr. Flores avers that the statements of Mr. Lipkovich and Mr. Tahan regarding alleged bundling practices lack any support[106], while Mr. Edwards contends that these witness statements are evidence that has not been challenged through cross-examination at the Hearing[107].

98. Furthermore, Mr. Edwards says that the financial statements of Beta and Gamma show that actual net electricity revenue is significantly lower than the revenue that would have been achieved had these companies sold their electricity at the average market price in each year. According to Mr. Edwards, this is evidence that there was bundling: the *quid pro quo* of selling the electricity at a price so far below

[102] Decision, para. 1331.
[103] Decision, para. 1336.
[104] Joint Memorandum, paras. 32-33.
[105] Joint Memorandum, para. 34.
[106] Joint Memorandum, para. 36.
[107] Joint Memorandum, para. 36.

market prices must have been that they were also selling their GCs at the minimum price[108]. In Mr. Edwards' view, it is implausible that Beta and Gamma would repeatedly enter into short term contracts that turned out to be significantly unprofitable (relative to selling electricity on the spot market) unless they were receiving something in return[109].

99. Mr. Edwards argues that bundling sales of discounted electricity with sales of GCs is economically equivalent to selling the GCs at a discount to the minimum price (because absent these arrangements the electricity generated could have been sold immediately at no discount to the market price)[110].

100. Even if the evidence of selling GCs at a discount were weak, Mr. Edwards argues that the appropriate alternative assumption for Dr. Flores to model would be the one he proposes in his original reports and supporting calculations – *i.e.*, a strategy in which GCs are sold as quickly as possible on the spot market at the minimum price. That strategy could still be assumed, but Dr. Flores has created a new calculation instead. Dr. Flores's new calculation assumes that all available GCs are sold through GCPAs until 2025, with no discount to the floor price. Mr. Edwards disagrees with Dr. Flores' approach for two reasons[111]:

- This is a departure from Dr. Flores' calculations submitted in his reports, and therefore contradicts the Tribunal's Instructions; and

- The new sales regime proposed by Dr. Flores is not consistent with the reality of the spot market or Claimants' behavior in the period up to the Date of Assessment.

b. Historical Period

101. Furthermore, Mr. Edwards observes that Dr. Flores's new calculation also assumes that, in the Historical Period, one-off costs relating to commercial arrangements that Beta and Gamma entered into to facilitate the sale of their GCs before expiry, should not be included in the losses attributable to Beta and Gamma[112].

102. Mr. Edwards explains that PV Facilities which did not have long-term GCPAs that guaranteed the sale of their GCs (like Beta and Gamma) were exposed to the risk of not being able to derive any value from their GCs through sales on the spot market. This is why Beta and Gamma entered into various agreements to facilitate the sale of their GCs, at an effective discount to the minimum price. Certain of these agreements led Beta and Gamma to incur "one-off costs" over the period from 2014-2019[113]. Mr. Edwards has included these one-off costs in his calculation of the Historical Period cash flows in the Actual Scenario but excluded them from the

[108] Joint Memorandum, paras. 37-40.
[109] Joint Memorandum, para. 45.
[110] Joint Memorandum, para. 40.
[111] Joint Memorandum, paras. 47-50.
[112] Joint Memorandum, para. 52.
[113] Joint Memorandum, paras. 53-54.

Counterfactual Scenario – with the consequence that Claimants' losses in the Historical Period includes losses related to those one-off costs[114].

103. Mr. Edwards has reflected the sale of the GCs in the Actual Scenario at a discount to the minimum price as an explicit discount, rather than as a separate cost item. Dr. Flores, in turn, considers that one-off costs incurred by Beta and Gamma should be deducted from Historical Period revenues. Mr. Edwards disagrees with this approach for two reasons[115]:

- This adjustment is a departure from Dr. Flores's earlier calculations submitted with his reports and thus contravenes the Tribunal's Instructions; and

- Costs incurred in the Actual Scenario to facilitate GC sales at a discount would play no part in the Counterfactual Scenario defined by the Tribunal in which all GCs can be sold at the minimum price.

B. <u>Dr. Flores' position</u>

104. Dr. Flores disagrees with Mr. Edwards' approach. In his first report, Dr. Flores explained that the alleged historical discount was unsubstantiated and based solely on Claimants' witness statements, which were themselves inconsistent. Furthermore, selling GCs below the minimum legal price does not comply with Law 220/2008 or its subsequent amendments[116].

105. Dr. Flores notes that Mr. Edwards' assumptions are not based on documentary evidence, but only on Claimants' witness representations[117]. Mr. Edwards has never verified independently the discounts mentioned by Mr. Lipkovich and Mr. Tahan, nor presented documents that would demonstrate the existence of such discounts. If there were agreements between Beta or Gamma and third parties to sell their electricity at discounted prices, there should be documentary evidence[118].

106. Dr. Flores is not convinced by Mr. Edwards' argument that the fact that Beta and Gamma's actual electricity revenue was lower than what they could have achieved had they sold their electricity at the average market price each year is proof that they were selling their GCs at a discounted price. When selling electricity under a PPA, the contracted electricity generation and price are determined at the outset; this type of contract is always subject to price and quantity risk[119]. Dr. Flores argues that Mr. Edwards' assertions are nothing more than speculation because he has not analysed any PPAs or presented documents showing bundling[120].

[114] Joint Memorandum, paras. 54-55.
[115] Joint Memorandum, paras. 56-59.
[116] Joint Memorandum, para. 63.
[117] Joint Memorandum, para. 64.
[118] Joint Memorandum, para. 65.
[119] Joint Memorandum, paras. 66-69.
[120] Joint Memorandum, para. 70

107. <u>In sum</u>, Dr. Flores considers that Mr. Edwards has never offered any evidence that GCs were sold at a discount to the minimum price or that there were any associated one-off costs in doing so[121].

108. This is why in his original reports, Dr. Flores adopted the assumption that Beta and Gamma would sell their GCs on the spot market at the prevailing market price, since this approach did not require any further assumptions[122]. Dr. Flores' current calculation removes Mr. Edwards' assumption regarding discounted GC sales via two switches[123]:

- By adding the Historical costs which Mr. Edwards attributes to GC discounts in the Actual Scenario to the Counterfactual Scenario, because there is no evidence of any bundling that would result in discounts on GC sales or additional costs;

- By adopting Mr. Edwards' assumption that future GC sales in the Actual Scenario will be sold 100% through GCPAs until 2025, without any discount; this is consistent with the evidence of Beta and Gamma, which have actually sold the majority of their GCs via GCPAs; in an effort to limit the areas of disagreement, Dr. Flores assumes that 100% of the available GCs will be sold via GCPAs until 2025, consistent with Mr. Edwards' assumption, and then at prevailing market prices.

109. Dr. Flores maintains that his calculations are consistent with the position in his previous reports and with the need to update the calculations to comply with the Decision[124].

C. <u>Switches</u>

a. Switch B2.1

110. For the Historical Period, the alleged one-off costs (incurred in connection with selling GCs at a discount to the minimum price) are[125]:

- *FTI approach*: excluded in the Counterfactual Scenario and, therefore, the losses related to such costs are included in the estimate of loss.

- *QE approach*: included in the Counterfactual Scenario and, therefore, the losses related to such costs are excluded from the estimate of loss.

111. In other words, Historical losses arising from the alleged GC discounts are only included in the estimate of loss in the *FTI approach*. The *QE approach* reduces Mr. Edwards calculation of damages by **EUR 6 million**, all else equal[126].

[121] Joint Memorandum, paras. 72 and 81.
[122] Joint Memorandum, para. 63.
[123] Joint Memorandum, paras. 73, 78, 80.
[124] Joint Memorandum, paras. 74-79.
[125] Joint Memorandum, tables in pp. 16 and 24.
[126] Joint Memorandum, para. 73(i).

b. Switch B2.2

112. For the Forecast Period of 2022 to 2025, the calculation assumes that Beta and Gamma sell all available GCs each year[127]:

- *FTI approach*: at a discount to the minimum price, with the discount reducing steadily each year to 0% by 2025. Therefore, losses arising as a consequence of commercial agreements entered into by Beta and Gamma to bundle the sale of GCs with electricity at a discount to the market price are included in the estimate of loss.

- *QE approach*: at the minimum price.

113. Therefore, future losses arising from the alleged GC discount are only included in the estimate of loss in the *FTI approach*. The *QE approach* reduces Mr. Edwards calculation of damages by **EUR 6.7 million**, all else equal[128].

4. <u>CLAIMANTS' POSITION</u>

114. Claimants argue that Beta and Gamma suffered losses as a result of selling GCs at an effective discount to the minimum price by bundling the sales of GCs with electricity priced at an artificial discount to the market price[129]. Dr. Flores does not dispute that this bundling caused Beta and Gamma losses; rather, he asserts that the losses are unsupported because there is no documentary evidence of this practice[130].

115. Claimants aver that the Decision has already settled this point because the Tribunal agreed with Claimants' valuation methodology, except in certain points which needed adjustments[131]. Claimants argue that, even if this issue remains open, Dr. Flores' arguments regarding bundling sales should be rejected because[132]:

- Claimants have presented the witness statements of Messrs. Lipkovich and Tahan to support their case;

- It is unsurprising that there is little documentary evidence on this point, given that the legality of selling GCs at a discount by bundling them with below-market electricity was highly unclear; and

- Romania has presented no evidence to rebut the testimonies of Messrs. Lipkovich and Tahan or that bundling GCs with discounted electricity was a common practice.

116. Moreover, Dr. Flores changed his approach to this issue in two ways[133]:

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[127] Joint Memorandum, tables in pp. 16 and 24.
[128] Joint Memorandum, para. 73(ii).
[129] C-CJMM, para. 9.
[130] C-CJMM, para. 9.
[131] C-CJMM, para. 10.
[132] C-CJMM, paras. 11-12.
[133] C-CJMM, para. 13.

- Initially, in the Forecast Period, Dr. Flores assumed that GCs would be sold on the spot market to the extent possible; he now assumes that all GCs will be sold through GCPAs until 2025 with no discount to the minimum price; and

- In the Historical Period, Dr. Flores now excludes the ancillary cost of the commercial arrangements which Beta and Gamma incurred in order to sell GCs through GCPAs at a discount to the minimum price.

117. Therefore, Claimants request that the Tribunal reject Dr. Flores' new calculations and arguments, since they contravene the Tribunal's Instructions that "[n]either Expert may introduce new arguments or evidence that was not submitted in the Expert's prior reports"[134].

5. RESPONDENT'S POSITION

118. Romania avers that Mr. Edwards' inclusion of damages related to alleged bundling practices should be rejected for several reasons[135].

119. First, Mr. Edwards has not identified which of the ECT breaches caused Claimants to incur such alleged bundling costs[136]. In fact, Romania says, the Tribunal did not consider bundling to be a consequence of any ECT breach nor did it find that bundling had taken place[137]. The Tribunal only agreed with the valuation methodology used by Claimants, *i.e.*, the method of comparing the PV Facilities' cash flows in the Actual and Counterfactual Scenarios – not with actual substantive valuations[138].

120. Second, Claimants have failed to demonstrate that bundling was taking place at all. The witness statements marshalled are insufficient to meet Claimants' burden of proof in the absence of further documentary evidence, because they are inconsistent and contradicted by other evidence[139].

121. Third, Mr. Edwards failed to demonstrate that the alleged "one-off costs" were caused by bundling[140]. Mr. Edwards attempts to address the lack of evidence of bundling by comparing Beta and Gamma's average electricity sale prices with the average annual market prices. Observing that Beta and Gamma achieved revenues from the sale of electricity that were lower than the average market price for electricity, Mr. Edwards concludes that this is evidence of the existence of bundling. Dr. Flores, however, argues that the lower revenues of Beta and Gamma can be caused by the operation of their PPAs, where predetermined prices may be lower than prevailing market prices[141].

[134] C-CJMM, para. 13, citing to the Tribunal's Instructions, para. 3.
[135] R-CJMM, para. 12.
[136] R-CJMM, paras. 11-13.
[137] R-CJMM, para. 14.
[138] R-CJMM, para. 15.
[139] R-CJMM, para. 16.
[140] R-CJMM, para. 17.
[141] R-CJMM, para. 18.

122. In view of the above, Romania requests that the Tribunal select the *QE approach* in switches B2.1 and B2.2 in the Joint Model[142].

6. DECISION OF THE TRIBUNAL

123. The Tribunal must determine what happened to the sale of Beta and Gamma's GCs in the Actual Scenario, *i.e.*, the scenario in which Romania did breach its obligations under the Treaty. Claimants argue that, as a result of Romania's breaches, they were forced to bundle the sale of GCs with the sale of electricity at a discount to the market price; and this has caused losses equal to the discount applied plus certain one-off costs.

124. The Tribunal is unconvinced by Claimants' arguments.

125. A proper analysis requires that the Tribunal differentiate in the Actual Scenario between the Historical Period (until the Date of Assessment) (**A.**) and the Forecast Period (after the Date of Assessment) (**B.**).

A. Historical Period

126. The evidence regarding the alleged bundling practices during the Historical Period is scarce. Claimants have not pointed the Tribunal to any contemporaneous evidence that proves that in the Actual Scenario Claimants effectively engaged in bundling practices. It is true that Claimants' witnesses refer to this practice[143], but Claimants are unable to point to any document that sustains their assertation or to provide concrete figures that allow the Tribunal to gauge the true impact of such practice.

127. The Tribunal is equally unconvinced by Mr. Edwards' averment that the financial statements of Beta and Gamma prove that there was bundling, because the actual net electricity revenue is lower than the revenue that would have been achieved had these companies sold their electricity at the average market price in each year[144].

128. There are many reasons that can explain such shortfalls and in the absence of more concrete evidence regarding the bundling practice, the Tribunal is not prepared to make such inference. Ultimately, Mr. Edwards has not pointed the Tribunal to any other evidence that allows the Tribunal to apprehend the impact of this alleged bundling (*e.g.*, a PPA contract or any other contemporaneous agreement or correspondence indicating that buyers were requiring these discounts from Claimants).

129. Accordingly, for the Historical Period, the Tribunal opts for the *QE approach* in switch B2.1, *i.e.*, the alleged one-off costs (incurred in connection with selling GCs at a discount to the minimum price) are included in the Counterfactual Scenario and, therefore, the losses related to such costs are excluded from the estimate of loss.

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[142] R-CJMM, para. 19.
[143] **Lipkovich I**, para. 32; **Tahan**, para. 25.
[144] Joint Memorandum, paras. 37-40.

B. Forecast Period

130. The Forecast Period runs from the Date of Assessment and until 2025. The Experts have endeavored to project the future cash flows which will accrue from the sale of GCs in the Actual Scenario and have come to different solutions:

- Both in his first expert report and in the Joint Memorandum, Mr. Edwards has assumed that between 2022 and 2025, Beta and Gamma will sell all their available GCs through GCPAs, bundled with the sale of electricity, at a discount to the minimum price, with the discount reducing steadily each year to 0% by 2025[145] – this is the *FTI approach* under switch B2.2.

- *Alternatively*, in his first expert report, Mr. Edwards had suggested that the Tribunal could assume that Beta and Gamma would sell a certain number of GCs on the spot market at the minimum price and bank the remaining GCs for future sale when the prices were higher[146] – this switch, however, has not been made available in the Joint Model.

- In his first expert report, Dr. Flores had found that the two scenarios proposed by Mr. Edwards were based on speculative assumptions, and therefore subject to uncertainty[147]; however, when applying corrections to the FTI Model, Dr. Flores opted to follow Mr. Edwards' alternative approach, described in the preceding paragraph[148]; according to Dr. Flores, this was the more reasonable approach.

- In the Joint Memorandum, Dr. Flores assumed a different approach: that Beta and Gamma would sell all their GCs each year at no discount to the minimum price, via GCPAs (instead of on the spot market, banking some GCs for future sale)[149].

131. Claimants aver that the Tribunal should not opt for Dr. Flores' approach because it represents a shift in the position adopted in his original expert reports, in contravention of the Tribunal's Instructions[150]. Dr. Flores, in turn, has explained that when making his calculation, he tried to align his position with that of Mr. Edwards and, thus, adopted one of the hypotheses put forward by Mr. Edwards himself: that the majority of Beta and Gamma's GCs will be sold via GCPAs in the foreseeable future (and not on the spot market)[151].

[145] See Joint Memorandum, para. 31 and table in p. 16; **Edwards I**, paras. 5.44, 5.46, 5.49. See also **Flores I**, para. 124.
[146] **Edwards I**, paras. 5.44 and 5.45. See also **Flores I**, para. 128.
[147] **Flores I**, paras. 124-128.
[148] **Flores I**, para. 155, third bullet point; **Flores II**, paras. 126, 137-138.
[149] Joint Memorandum, para. 78. After 2025, Dr. Flores accepts Mr. Edwards' assumption that 100% of Beta and Gamma's available GCs will be sold at prevailing market prices in the spot market.
[150] C-CJMM, para. 13; Joint Memorandum, paras. 56-59.
[151] Joint Memorandum, paras. 73.ii and 78.

132. The Tribunal, with one arbitrator dissenting, finds that both assumptions put forth by Mr. Edwards (the second of which was accepted by Dr. Flores in his initial reports, but merely as a correction to the FTI Model) are highly speculative:

- On the one hand, there is no evidence of bundling, as discussed in paras. 126-128 *supra*;

- On the other hand, there is also no evidence that Beta and Gamma were planning to sell certain GCs on the spot market at the minimum price and bank the remaining GCs in the hope of selling them at higher prices in the future.

133. Ultimately, whatever the Experts may have discussed in their initial reports, the Tribunal must choose the most reasonable assumption. All assumptions regarding GC sales in the future imply a degree of uncertainty, and that the proper solution to minimize this uncertainty is to opt for a conservative approach.

134. Adopting this approach, the Tribunal, with one arbitrator dissenting, finds that the assumption made by Dr. Flores in the Joint Memorandum (*i.e.*, that Beta and Gamma will sell all available GCs each year at the minimum price via GCPAs) is the most reasonable and conservative assumption; it is also the assumption that seems more consistent with the Historical Period.

135. All things considered, the Tribunal, by majority, opts for the *QE approach* in switch B2.2, *i.e.*, for the Forecast Period, the calculation assumes that between 2022 and 2025, Beta and Gamma sell all available GCs each year at the minimum price via GCPAs.

136. Arbitrator Judge O. Thomas Johnson dissents on this point, arguing that the Tribunal should opt for the alternative assumption put forward by Mr. Edwards in his first expert report. The Tribunal is unconvinced: in para. 132 *supra*, the Tribunal has already explained why both options put forth by Mr. Edwards are highly speculative. In any case, the Parties, fully cognizant of their respective cases and the Experts' positions both before and after the Decision, decided to give this Tribunal a binary option under switch B2.2: to choose between either the *FTI approach* or the *QE approach*. And the Tribunal has opted for the more convincing approach.

IV.3. ISSUE 3: BETA AND GAMMA'S GC SALES IN THE COUNTERFACTUAL SCENARIO

1. *PRO MEMORIA*

137. As previously noted, on 25 June 2013 (21 days after EGO 57/2013 was passed), Beta and Gamma each executed a GCPA with Tinmar for the sale of their GCs[152]. Pursuant to these agreements, Tinmar would buy 80% of the GCs issued and granted to Beta and Gamma for a period of seven years, at the price prevailing on the OPCOM market[153].

138. Simultaneously, Beta and Gamma also each signed a "commission agreement" with the company Lord Energy, which would act as GC broker in return for 10% of the GC price[154].

2. EXPERTS' DISCUSSION

A. Mr. Edwards' position

139. Mr. Edwards explains that in the Counterfactual Scenario revenue calculations made in his expert reports, he had assumed that Beta and Gamma would have entered into GCPAs for the sale of 80% of their GCs, for a period of seven years, at a price 10% below the Counterfactual market price[155].

140. To account for the Tribunal's Decision regarding the minimum price at which Claimants would have been able to sell their GCs (EUR 27/GC, adjusted yearly for European inflation, or at a higher price if so established in a GCPA), Mr. Edwards has adjusted the Joint Model to reflect the assumption that Beta and Gamma would have sold *all* of their GCs at the *minimum price* in the Counterfactual Scenario, without any discount[156].

141. Dr. Flores, in contrast, has continued to model Counterfactual GC revenues as Mr. Edwards had done initially in his reports. Mr. Edwards disagrees with this approach, because it contravenes the Tribunal's directions[157], which consisted in assuming that in the Counterfactual Scenario, GCs are sold at the minimum price of EUR 27/GC, adjusted yearly for inflation[158].

142. Mr. Edwards explains that the MoU signed by Beta and Gamma with Tinmar demonstrates that the company Lord Energy, as broker, would charge a 10% fee out of the value of the GCs, to be paid by Beta or Gamma. But this was an integral part of the GCPAs they signed[159]. According to Mr. Edwards, it is not sensible to

[152] **Doc. RE-194** (Beta GCPA with Tinmar); **Doc. RE-196** (Gamma GCPA with Tinmar).
[153] **Doc. RE-194**; **Doc. RE-196**; **Tahan**, para. 13.
[154] **Doc. RE-195**; **Doc. RE-197**; **Tahan**, para. 13.
[155] Joint Memorandum, para. 83.
[156] Joint Memorandum, paras. 84-85.
[157] Joint Memorandum, paras. 86-87.
[158] Joint Memorandum, para. 88.
[159] Joint Memorandum, para. 87.

assume in a Counterfactual Scenario in which GCs could be sold on the spot market for a minimum price of EUR 27/GC (adjusted yearly for inflation) that Beta and Gamma would have accepted to sell their GCs at a 10% discount to that minimum price (whether in the form of a "commission" or otherwise)[160].

B. **Dr. Flores' position**

143. Dr. Flores notes that Mr. Edwards assumes that for the first seven years of the Counterfactual Scenario, Beta and Gamma would sell 80% of their GCs via GCPAs and the remaining 20% on the spot market. Furthermore, in accordance with the terms of the GCPAs with Tinmar, Mr. Edwards assumed in his original expert reports that Beta and Gamma[161]:

- Would sell the GCs under GCPAs at the Counterfactual market price; and
- Would incur a cost of 10% of this price for each GC sold under the GCPAs, in accordance with the commission agreements with Lord Energy; to model this cost, Mr. Edwards applied a 10% discount to the GCPA price.

144. Dr. Flores disagrees with the two changes that Mr. Edwards now makes to his initial approach, *i.e.*[162]:

- Defining the Counterfactual market price as the minimum price; and
- Abandoning the 10% cost related to the commission agreements with Lord Energy.

145. According to Dr. Flores, this mischaracterizes both the Beta and Gamma GCPAs with Tinmar and the commission agreements with Lord Energy. For every GC sold to Tinmar, Beta and Gamma were obligated to pay Lord Energy a 10% commission. But this is not a discount to the GCPA price that would cause the Counterfactual GC price to fall below the minimum price. Therefore, Dr. Flores disagrees with Mr. Edwards that this cost needs to be removed from the Counterfactual Scenario[163].

146. In fact, Dr. Flores notes that in his second report, Mr. Edwards' "low case" scenario already assumed that the 10% commission would apply *even when the GC price was at the minimum*. Likewise, neither the Tinmar GCPAs nor the Lord Energy commission agreements state that the 10% commission cost would not apply if the GCPA price was equal to the minimum price[164].

[160] Joint Memorandum, para. 88.
[161] Joint Memorandum, paras. 89-90.
[162] Joint Memorandum, paras. 91-92.
[163] Joint Memorandum, para. 92.
[164] Joint Memorandum, para. 93.

C. Switch B3

147. The calculation assumes that in the Counterfactual Scenario, Beta and Gamma[165]:

- *FTI approach*: would have sold all their GCs at the minimum price, without a discount.
- *QE approach*: would see their GC sales affected by a 10% commission cost to Lord Energy.

148. According to the Experts, the *QE approach* adds back the 10% commission cost that Mr. Edwards removes from his calculation and thus reduces Mr. Edwards calculation by **EUR 8 million**, all else equal[166].

3. Claimants' position

149. In the Decision, the Tribunal instructed Claimants to assume that in the Counterfactual Scenario the operating companies would be[167]:

> "[…] able to sell all these GCs either through GCPAs or in the GC market in the same year they obtained said GCs, (iii) at the minimum price of EUR 27/GC, adjusted yearly for European inflation since 2013 (or at a higher price, if so established in a GCPA)."

150. Therefore, Mr. Edwards' assumption that all GCs are sold at the minimum price, without applying any commissions or discounts required to sell GCs through CGPAs bundled with electricity sales, is a direct application of the Tribunal's directions[168].

151. Dr. Flores argues that the 10% commission should have been included and that, since the commission was paid to a different entity (Lord Energy) than the one that bought the GCs (Tinmar), it should not be considered a discount[169]. Claimants aver that including these costs under the Counterfactual Scenario is unnecessary and illogical since, under this Scenario, Beta and Gamma could sell all their GCs at a minimum price on the spot market, *unless* a higher price was available under the GCPA. Therefore, it is irrelevant whom those costs were paid to, and whether those costs were a commission or an implicit discount, because those costs would have been unnecessary to start with[170].

4. Respondent's position

152. Romania argues that the 10% fee paid by Beta and Gamma to Lord Energy should be deducted from their revenues in the Counterfactual Scenario[171]. Romania avers that said fee is not a discount to the GC price, but rather a separate cost which Beta

[165] Joint Memorandum, tables in pp. 26-27.
[166] Joint Memorandum, para. 94.
[167] C-CJMM, para. 14, citing to Decision, para. 1336.
[168] C-CJMM, para. 14.
[169] C-CJMM, para. 15.
[170] C-CJMM, para. 15.
[171] R-CJMM, para. 21.

and Gamma voluntarily incurred for having a third-party negotiate and manage their CGPAs. Thus, contrary to Mr. Edwards' claims, deducting the fee would not contradict the Tribunal's directions[172].

153. Moreover, Beta and Gamma's GCPAs do not exclude the payment of the 10% fee if the GC price is at the minimum; it follows that the payment of such fee is unrelated to whether the GC price is above or below the minimum[173]. Additionally, since the Counterfactual Scenario required Claimants to sell their GCs pursuant to the GCPAs they had entered into, they would have still been required to pay the 10% fee[174].

154. In sum, Romania argues that the Tribunal should deduct the 10% fee from Beta and Gamma's revenues in the Counterfactual Scenario and apply the *QE approach* in switch B3[175].

5. DECISION OF THE TRIBUNAL

155. The Tribunal must now determine what would have happened to Beta and Gamma's GC sales in the Counterfactual Scenario, *i.e.*, in the hypothetical scenario in which Romania had not breached its obligations under the Treaty. According to Mr. Edwards, in the Counterfactual Scenario, in which Claimants could sell their GCs at the minimum price, it would make no sense for Beta and Gamma to pay a commission to Lord Energy; therefore, this commission cost must be taken out of the calculation of cash flows in the Counterfactual Scenario.

156. The Tribunal finds that Mr. Edwards' proposed approach accurately reflects what would have happened in a hypothetical scenario with no breach.

157. The facts show that Beta and Gamma signed GCPAs with Tinmar on 25 June 2013[176] – *i.e.*, after EGO 57/2013 had been passed, at a time when Romania had already cast doubts on the validity of GCPAs and had already deferred two out of six GCs until 2017[177]. Pursuant to these GCPAs, Tinmar committed to buy 80% of the GCs granted to Beta and Gamma, at the price prevailing on the OPCOM market[178]. At the same time, Beta and Gamma each entered into a "commission agreement" with Lord Energy, which would act as GC broker, in return for a commission equal to 10% of the GC price[179]. All of these contracts had a duration of seven years.

158. The Tribunal must determine what would have happened if Romania had not breached its obligations; in particular, if instead of having two of their six GCs deferred under EGO 57/2013, Beta and Gamma had known that they had a right not only to earn six GCs for every MWh they produced, but also had a right to sell those

[172] R-CJMM, paras. 21-23.
[173] R-CJMM, para. 24.
[174] R-CJMM, para. 25.
[175] R-CJMM, para. 26.
[176] **Doc. RE-194**; **Doc. RE-196**; **Tahan**, para. 13.
[177] See Decision, paras. 1162 and 1178.
[178] **Doc. RE-194**, Arts. 3(2), 4(1) and Annex 3; **Doc. RE-196**; Arts. 3(2), 4(1) and Annex 3; **Tahan**, para. 13.
[179] **Doc. RE-195**; **Doc. RE-197**.

GCs for the minimum price; in this scenario, would they have entered into these agreements?

159. The Tribunal cannot see why Claimants would have agreed to pay a (very high) 10% commission to Lord Energy to provide a service for which they would have had no need in this scenario. Accordingly, the calculation must assume that in the Counterfactual Scenario, Beta and Gamma would not see their GC sales affected by a 10% commission cost to Lord Energy.

160. <u>In view of the above</u>, the Tribunal opts for the *FTI approach* in switch B3, *i.e.*, the calculation must assume that in the Counterfactual Scenario, Beta and Gamma would have sold all their GCs at the minimum price, without a discount.

IV.4. ISSUE 4: INTEREST

1. *PRO MEMORIA*

161. In their submissions, Claimants ask for pre-award and post-award compound interest at the highest lawful rate from the Date of Assessment until Romania's full and final satisfaction of the Award (including any Award on costs)[180].

162. In the Decision, further to its decision on quantum, the Tribunal reserved its decisions on interest and costs of the arbitration[181].

2. EXPERTS' DISCUSSION

A. Mr. Edwards' position

163. Mr. Edwards argues that but for the Disputed Measures, the PV Facilities would have earned higher profits from the middle of 2013 onwards. As a result, in each year prior to the Date of Assessment, their surplus cash would have been higher (or their net debt lower) than it was in the Actual Scenario. Therefore, Mr. Edwards has assumed that the additional cash that the Operating Companies would have earned in the Counterfactual Scenario would have been used to pay down third-party debt[182].

164. Mr. Edwards notes that there are two points of disagreement between the Experts[183]:

- Whether the value of incremental cash flows prior to the Date of Assessment should be calculated as of the Date of Assessment or treated as a matter of pre-award interest; and

- The interest rate that should apply (under either approach).

165. As to the first point, Mr. Edwards avers that, since the Tribunal has instructed the Experts to quantify the losses at the Date of Assessment of 31 December 2021, losses incurred prior to said Date need to be brought forward to the Date of Assessment[184]. Mr. Edwards understands that when the Tribunal reserved the decision on interest, it intended that reservation to apply only to the interest rate, and that the Tribunal would calculate the present value of all losses as of the Date of Assessment and then apply a pre-award interest rate from that date forward[185].

166. As for the second point, Mr. Edwards argues that the actual rate on third party debt is a commercial rate of interest, because it was freely agreed between Claimants and the lenders. The rate is risk free because Claimants were contractually obliged

[180] C-II, para. 702(e); C-III, para. 259(e); C-PHB, para. 315(e).
[181] Decision, para. 1353.
[182] Joint Memorandum, para. 95.
[183] Joint Memorandum, para. 97.
[184] Joint Memorandum, para. 98.
[185] Joint Memorandum, para. 98.

to make the interest payments and would incur no risk or cost using incremental cash flows to retire debt early. The rate thus represents a risk-free opportunity cost of Claimants not having access to that incremental cash over time[186].

B. Dr. Flores' position

167. Dr. Flores understands that the fact that the Tribunal decided to reserve its decision on interest means that the Tribunal has yet to decide on[187]:

- Whether pre-award interest is due;
- The interest rate;
- The calculation method (compounding vs. simple);
- The frequency of calculation (*e.g.*, semi-annual, annual);
- The accrual start date;
- The accrual end date.

168. Dr. Flores considers that it is not possible for the Joint Model to include all possible permutations of the elements necessary for a determination of interest. His preference would have been to not include any interest calculations in the Joint Model, and to carry out any necessary calculations after the Tribunal makes its decision on interest. However, since Mr. Edwards has included certain interest calculations, Dr. Flores has done the same, while recognizing that it is possible that none of the calculations will be responsive to the eventual decision on interest of the Tribunal[188].

C. Switches

a. Switch B4.1

169. Under switch B4.1 there are five options[189]:

- *FTI approach #1*: the calculation assumes that additional cash earned in the Counterfactual Position would have been used to pay down third-party debt.
- *FTI approach #2*: Mr. Edwards gives the option to the Tribunal to choose a different basis on which to calculate interest, using the switches at B4.2.1, B4.2.2 and B4.2.3.
- *QE no interest approach*: the calculation removes pre-award interest from the loss calculation (meaning that any interest calculations will be performed

[186] Joint Memorandum, para. 100.
[187] Joint Memorandum, para. 104.
[188] Joint Memorandum, paras. 105-106.
[189] Joint Memorandum, tables in pp. 30 and 32.

after the Tribunal makes the necessary decisions); this approach reduces Mr. Edwards' calculation of damages by **EUR 14.8 million**, all else equal[190].

- *QE approach #1*: the calculation assumes that interest accrues until the Date of Assessment as simple interest at the risk-free rate of one-year Euribor; this approach reduces Mr. Edwards' calculation of damages by **EUR 14.7 million**, all else equal[191].

- *QE approach #2*: the calculation assumes that interest accrues until the Date of Assessment as compound interest at the risk-free rate of one-year Euribor; this approach reduces Mr. Edwards' calculation of damages by **EUR 14.7 million**, all else equal[192].

170. Mr. Edwards has a preference for *FTI approach #1*, while Dr. Flores has a preference for the *QE no interest approach*[193].

b. Switches B4.2.1 to B4.2.3

171. Switches B4.2.1, B4.2.2 and B4.2.3 are only required if the Tribunal were to select the *FTI Approach #2* in B4.1. This option gives the Tribunal the possibility to modify the capitalization and interest rate, as well as its benchmark and margin[194].

3. CLAIMANTS' POSITION

172. Claimants argue that the Experts' disagreements concern the treatment of the additional cash flows that the Operating Companies would have received in the Historical Period of the Counterfactual Scenario (*i.e.*, between June 2013, when EGO 57/2013 was enacted, and 31 December 2021, the Date of Assessment). Regarding the applicable interest rate, there are two main disagreements between the Parties:

- The applicable interest rate methodology; and

- The applicable interest rate.

a. Methodology for interest calculation

173. Regarding the applicable methodology, the Parties disagree on the calculation of a lump sum of damages. Even though the Tribunal reserved its decision on interest, Claimants argue that it did not specify the applicable calculation to the lump sum of damages necessary to compensate Claimants for their losses as of the Date of Assessment[195].

[190] Joint Memorandum, para. 107(i).
[191] Joint Memorandum, para. 107(ii).
[192] Joint Memorandum, para. 107(iii).
[193] Joint Memorandum, para. 115.
[194] Joint Memorandum, table in p. 30.
[195] C-CJMM, para. 17.

174. Claimants argue that the Tribunal should apply Mr. Edwards' approach which calculates the damages as of the Date of Assessment[196]. Dr. Flores' approach should be rejected for the following reasons.

175. First, in order to apply Dr. Flores' methodology and correctly calculate the interest rate, the Tribunal would need to identify the date and amount of the different losses of each of the Operating Companies. This would be extremely cumbersome[197].

176. Second, Claimants argue that, because this issue concerns a Historical Period, the terms of the debt that the Operating Companies could have prepaid is known with certainty, contrary to Dr. Flores' assertion that it would not be possible to include all possible permutations of the elements necessary to calculate the interest. Thus, Mr. Edwards' approach precisely calculates the actual economic impact on Claimants not having those incremental cash flows at each interval in time based on actual terms of the debt[198].

177. Therefore, Claimants request that the applicable methodology to calculate the interest should be Mr. Edwards' methodology which corresponds to the reduction of the value of the additional Historical cash flows to a lump sum as of the Date of Assessment[199].

b. Applicable interest rate

178. Regarding the applicable interest rate, Claimants argue that the terms of their actual debt reflect the appropriate way to value earlier access to those incremental cash flows[200]. Claimants object to Dr. Flores' proposal to calculate the pre-award interest at a risk-free rate, which would be significantly lower than the effective interest rate that the Companies would have achieved by prepaying their debt[201]. The Tribunal should apply Mr. Edwards' interest rate for three reasons.

179. First, Mr. Edwards' approach precisely calculates the value of the ability to use incremental cash flows in the Counterfactual Scenario since the calculations are based on a Historical Period; the terms of the Operating Companies' actual debt are certain. This will ensure that Claimants are provided full compensation[202].

180. Second, a risk-free interest rate would not fully compensate Claimants since it does not consider Claimants' actual opportunity cost of having the incremental funds earlier[203].

181. Third, it is improbable that Claimants would have invested the incremental cash flows in an account earning a risk-free rate. Therefore, it would not make sense to apply Dr. Flores' proposal and award a risk-free rate. On the contrary, the Tribunal

[196] C-CJMM, paras. 16-17.
[197] C-CJMM, para. 18.
[198] C-CJMM, para. 19.
[199] C-CJMM, paras. 20-21.
[200] C-CJMM, para. 21.
[201] C-CJMM, para. 16.
[202] C-CJMM, para. 22.
[203] C-CJMM, para. 23.

should award interest at a rate commensurate with the return that Claimants could have achieved on other projects[204].

182. Therefore, Claimants request that the Tribunal apply Mr. Edwards' rate of interest in the historical period because it would properly compensate Claimants for the damages. If the Tribunal disagrees with this proposal, Claimants argue that the Joint Model allows the Tribunal to set a different interest rate[205].

4. RESPONDENT'S POSITION

183. Romania argues that calculating the interest rate prior to the Tribunal's decision is speculative, since the Tribunal reserved the right to decide whether any pre-award interest should be awarded and, if so, how it would be calculated[206].

184. Romania argues that no pre-award interest should be awarded because Claimants' damages will only be determined in the Final Award[207]. Nonetheless, if the Tribunal decides that pre-award interest is applicable, it should apply the *restitutio in integrum* principle so that no Claimant is overcompensated or compensated for a loss that it did not suffer[208].

185. Regarding the applicable methodology, Romania avers that the Tribunal should determine the date in which the ECT breach began to affect each Claimant, since they were affected at different moments in time; thus, each damage should be calculated individually[209].

186. Regarding the applicable interest rate, Romania argues that both of FTI's approaches should be rejected:

- *FTI approach #1* assumes the risk that Claimants would default, and if applied, it would overcompensate Claimants[210];

- *FTI approach #2* only includes the possibility of applying simple or compound interest, a fixed or variable rate plus a margin, the one-year Euribor, or the Romanian bond yield as the variable rate; since it does not offer a specific calculation, it should also be rejected[211].

187. As a consequence, the Tribunal should apply the *QE no interest approach* in switch B4.1. In case the Tribunal decides to award pre-award interest, it should be a risk-free interest rate such as the one-year Euribor, calculated for each Claimant with respect to the effect of each breach over time[212].

[204] C-CJMM, para. 24.
[205] C-CJMM, paras. 21-24.
[206] R-CJMM, para. 27.
[207] R-CJMM, para. 28.
[208] R-CJMM, para. 31.
[209] R-CJMM, para. 30.
[210] R-CJMM, para. 34.
[211] R-CJMM, para. 35.
[212] R-CJMM, para. 37.

5. <u>**DECISION OF THE TRIBUNAL**</u>

188. The Tribunal has already determined that:

- Claimants are entitled to reparation for Romania's breaches of its obligations under the ECT[213]; and

- Any such reparation must be a monetary amount which, delivered to Claimants, produces the equivalent economic value which, in all probability, Claimants would have enjoyed, but for the State's breach[214].

189. As noted in the Decision, the ECT does not provide any rule regarding the redress which an investor can seek in case of a breach under Art. 10(1) – only in cases of expropriation, in breach of Art. 13[215]. Art. 13(1) contains a rule on the payment of interest, which provides that[216]:

> "[…] Compensation shall also include interest at a commercial rate established on a market basis from the date of Expropriation until the date of payment."

190. Although no equivalent rule exists for Art. 10(1), the same underlying reasoning requires that compensation in this case also include interest, to compensate Claimants for the time value of money. In the absence of any specific provision, it seems reasonable to extend Art. 13(1) by analogy to violations of the treaty other than expropriation. Consequently, the Tribunal must select an interest rate which meets two requirements:

- It must be "established on a market basis"; and

- It must represent a "commercial rate".

191. The interest rate must be applied:

- Between the successive annual dates when the losses were incurred and the Date of Assessment ["**Pre-Award Interest**"] (**A.**); and

- Between the Date of Assessment and the date of actual payment by Romania ["**Post-Award Interest**"] (**B.**).

A. <u>Pre-Award Interest</u>

192. What interest rate meets the two requirements identified by the Tribunal?

193. The Experts have proposed various alternatives:

- Dr. Flores' preferred alternative is that there should be no discussion of interest at this stage, and that the Tribunal should first issue a decision on the

[213] Decision, para. 1347.
[214] Decision, para. 1311.
[215] Decision, paras. 1303-1305.
[216] **Doc. CL-1**, Art. 13(1).

amount of compensation, and only then the Parties should discuss interest; this "*no interest" approach* (which reduces Mr. Edwards' calculation of damages by **EUR 14.8 million**) suggested by Dr. Flores is not reasonable; the Parties have had ample opportunity to make submissions on interest and they also instructed their Experts on the matter; therefore, the Tribunal dismisses the *QE no interest approach*;

- Mr. Edwards, in turn, has a preference for its *FTI approach #1*, which assumes that any additional cash flows that the PV Facilities would have earned in the Historical Period in the Counterfactual Scenario would have been used to pay down third-party debt; but the Tribunal is unconvinced: Mr. Edwards recognizes that this is merely an assumption, which in his view is "reasonable"[217], but has not pointed to contemporaneous evidence proving that any of the Claimants had the intention of using the incremental cash flows to pay third-party debt or that this equates to a commercial rate established on a market basis.

194. The Experts have also proposed subsidiary alternatives, in case the Tribunal did not accept their preferred options: *FTI approach #2* and *QE approaches #1* and *#2*:

- *QE approach #1*: the calculation assumes that interest accrues until the Date of Assessment as simple interest at the risk-free rate of one-year Euribor; this approach reduces Mr. Edwards' calculation of damages by **EUR 14.7 million**, all else equal[218];

- *QE approach #2*: the calculation assumes that interest accrues until the Date of Assessment as compound interest at the risk-free rate of one-year Euribor; this approach reduces Mr. Edwards' calculation of damages by **EUR 14.7 million**, all else equal[219].

195. The Tribunal dismisses both these approaches, which are nearly equivalent to the *QE no interest approach*, because they do not conform to the requirements of Art. 13(1) of the ECT and fail to adequately compensate Claimants for their losses.

196. The Tribunal opts, instead, for *FTI approach #2*, which allows the Tribunal to apply the requirements of Art. 13(1) and to apply a "commercial rate established on a market basis". The factors in the *FTI approach #2* are as follows:

Fixed or variable rate

197. Switch B4.2.1 requires the Tribunal to determine if interest applicable to Historical losses is fixed or variable.

198. Here the Tribunal decides that interest should be variable: financial markets are volatile, and it is a historic fact that interest rates rise and fall depending on the monetary policy applied by the relevant central bank. A fixed rate creates the risk of unjustified enrichment either in favor of Claimants (if rates fall) or of the

[217] Joint Memorandum, para. 95.
[218] Joint Memorandum, para. 107(ii).
[219] Joint Memorandum, para. 107(iii).

Respondent (if they rise). In the present case, the application of a variable interest rate is especially appropriate, because of the long timespan between the events which caused the damage and the actual payment of compensation.

Benchmark rate and margin

199. Switch B4.2.3 requires the Tribunal to answer the following question:

> "If it is appropriate to apply a variable rate of interest, what is the appropriate benchmark rate and what (if any) is the appropriate margin over the benchmark rate?"

200. The Tribunal finds that the most appropriate benchmark rate is the one-year Euribor, an interest rate frequently used in lending between banks in the European Union, published by the European Money Market Institute. If one-year Euribor is a negative rate in any relevant period, then 0% shall be used as the benchmark rate. This rate meets the requirement set forth in Art. 13(1) that the rate should be "established on a market basis".

201. The Treaty provision adds that the rate must be a "commercial rate"; to comply with this proviso, an adequate margin must be added to the Euribor rate, which represents lending among banks. In the Tribunal's estimation, a margin of 3% would seem appropriate.

Simple or compounded interest

202. Switch B4.2.1 allows the Tribunal to opt between simple or annually compounded interest.

203. In its submissions, Romania averred that Claimants should only be entitled to simple interest, as there is no uniform practice on awarding simple or compound interest in international investment law, and both arbitral tribunals and commentators have repeatedly found that simple interest provides appropriate compensation[220].

204. The Tribunal disagrees. In the *Lemire* case, the tribunal noted that the question whether interest should be accumulated periodically to the principal has been the subject of diverging decisions[221]. While older case law tended to repudiate this possibility, recent case law tends to accept annual or semi-annual capitalization of unpaid interest[222].

205. The Tribunal prefers the more recent approach of awarding compound interest, which is especially appropriate in cases where the interest is calculated applying a variable rate based on Euribor, due to the market practice of capitalizing unpaid

[220] R-II, paras. 1102 *et seq*.
[221] **Doc. RL-304**, *Lemire*, para. 359.
[222] See, e.g., **Doc. CL-111**, *Wena*, para. 129; **Doc. RL-194**, *Crystallex*, para. 935; **Doc. CL-116**, *Rumeli*, para. 818; **Doc. QE-44**, *Occidental*, paras. 834-840; **Doc. QE-43**, *OI European*, paras. 948-949; **Doc. RL-191**, *Rusoro*, paras. 841-842.

interest. Interest should thus be capitalized at the end of each twelve-month interest period (annually).

* * *

206. Applying the above switches, the result is that an amount of **EUR 7.5 million** in Pre-Award Interest must be added to the compensation[223], which in total amounts to **EUR 42.2 million**[224].

B. Post-Award Interest

207. Claimants have also asked for Post-Award Interest[225].

208. The amount of compensation due on the Date of Assessment is **EUR 42.2 million** (including Pre-Award Interest). This amount should accrue Post-Award Interest, from the Date of Assessment until Romania's full and final satisfaction of the Award.

209. The same interest rate shall apply to Pre- and Post-Award Interest, since Claimants have not asked that Post-Award Interest accrue at a different rate – *i.e.*, a variable interest rate of one-year Euribor not below 0%, plus a margin of 3%, annually compounded.

[223] EUR 34.7 million + EUR 7.5 million = EUR 42.2 million.
[224] See para. 210 *infra*.
[225] C-II, para. 702(e); C-III, para. 259(e); C-PHB, para. 315(e).

IV.5. CONCLUSION

210. Following the Tribunal's decisions on the points of disagreement, and using the Joint Model prepared by the Experts, the Tribunal concludes that the damages owed to Claimants amount to **EUR 42.2 million** (including Pre-Award Interest), as follows[226]:

Total losses by Claimant (in million euros)				
Claimant	**Company**	**Value of investments in the Counterfactual Position**	**Value of investments in the Actual Position**	**Loss**
LSG	Alpha	10,3	7,6	2,8
	Gamma	8,3	6,7	1,6
Green Source	Alpha	9,1	6,3	2,8
	Gamma	8,2	6,6	1,6
Solluce	Alpha	64,4	44,6	19,8
CVI	Gamma	57,8	54,2	3,6
CVC	Gamma	1,7	1,6	0,1
Anina	Frasinet 3	3,9	3,4	0,5
Giust	Frasinet 2	6,4	5,5	0,9
Pressburg	Frasinet 3	3,8	3,3	0,5
	Frasinet 2	6,5	5,5	0,9
Risen	Beta			7,1
Total				**42,2**

211. This is the result of applying the *QE approach* in switches B1.1, B1.2, B2.1 and B2.2, the *FTI approach* in switch B3 and the *FTI approach #2* in switch B4.1, opting for:

- Annual compounding (B4.2.1);
- A variable rate of interest (B4.2.1);
- A benchmark rate of one-year Euribor not below 0% (B4.2.3);
- Plus a margin of 3% (B4.2.3).

212. Post-Award Interest shall apply to the amount of EUR 42.2 million, at a variable interest rate of one-year Euribor not below 0%, plus a margin of 3%, annually compounded, from 1 January 2022 until Romania's full and final satisfaction of the Award.

213. The Tribunal sincerely appreciates the Experts' efforts to reach agreement and to put together the Joint Model. It is an impressive piece of financial engineering, which has been extremely helpful in the Tribunal's calculation of damages. Work of this quality represents the best that international arbitration has to offer.

[226] Tribunal's calculation using the Experts' Joint Model, tab "Control Panel".

V. COSTS

214. Both Parties have requested an award on costs[227]. The Parties first made submissions on costs after their post-Hearing briefs. However, in the Decision, the Tribunal "[r]eserve[d] its decision on […] costs for a future decision"[228]. Therefore, the Tribunal invited the Parties to file an updated statement of costs after their comments to the Joint Model and Memorandum.

215. The Tribunal will start by summarizing the Parties' positions and requests (**1.** and **2.**) and will then make its decision (**3.**).

1. CLAIMANTS' POSITION

A. Criteria for cost allocation

216. Claimants argue that, according to Art. 61(2) of the ICSID Convention and Art. 28(1) of the ICSID Arbitration Rules, the Tribunal enjoys wide discretion to allocate costs between the Parties. The allocation of costs is usually based on several factors such as a party's success on its claims[229].

217. Claimants aver that they have prevailed on jurisdiction and liability, and the Tribunal held that Romania breached Art. 10(1) of the ECT. Thus, the Tribunal should award Claimants the entirety of their costs in both phases of the proceedings[230].

218. Moreover, Claimants argue that the costs are a direct consequence of the damage inflicted by Romania. Therefore, an award on costs is necessary to restore Claimants to the position they would have been in but for Respondent's breach of Art. 10(1) of the ECT[231].

B. Request for costs

219. Claimants argue that the costs they have incurred in this arbitration are entirely reasonable considering the length of the proceeding, the complexity of the case, the amount in dispute, and the efficiency with which they presented their case[232]. Claimants request the following amounts[233]:

Category	Amount
King & Spalding's Legal Fees	USD 5,125,506.50
Expert Fees & Expenses • FTI Consulting • Compass Lexecon	 EUR 535,000.00 EUR 340,000.00
Consultant Fees & Expenses	

[227] C-PHB, para. 315; R-PHB, para. 444(vi-vii).
[228] Decision, para. 1354(3).
[229] C-USC, para. 3.
[230] C-USC, para. 4.
[231] C-USC, paras. 4-5.
[232] C-USC, para. 8.
[233] C-USC, para. 9.

• Glodeanu + Partners	USD 153,639.49
Claimants' Costs & Expenses	USD 122,600.10
ICSID Payments	USD 600,000.00
Total	USD 6,001,746.09 EUR 875,000.00

2. RESPONDENT'S POSITION

A. Criteria for cost allocation

220. Romania contends that the Parties are in agreement that, pursuant to Art. 61(2) of the ICSID Convention and Art. 28(1) of the ICSID Arbitration Rules, the Tribunal has wide discretion in the allocation of costs and that the factors to consider for the calculation of the allocation of costs are[234]:

- The relative success of the Parties' claims and defenses;
- The conduct of the Parties in the proceedings; and
- The circumstances of the case.

221. Regarding the relative success of the Parties' claims and defenses, Romania argues that the majority of Claimants' claims were rejected by the Tribunal, since only three of the 12 Disputed Measures were found to have breached the ECT. Moreover, Romania's main jurisdictional defense should not be considered when deciding the allocation of costs because, even though it was rejected by the Tribunal, it was supported by the European Commission and the European Court of Justice[235].

222. As to the conduct of the Parties in the proceedings, Romania avers that Claimants persistently failed to quantify the damages allegedly caused to each of them. This led to the bifurcation of the proceedings, which significantly increased the time and cost thereof[236].

223. Finally, turning to the circumstances of the case, Romania argues that it did not engage in any egregious, arbitrary, or discriminatory behaviour, and consistently acted in good faith[237].

224. In view of the above, Romania argues that it should not be ordered to pay any of Claimants' costs; instead, Claimants should be ordered, jointly and severally, to reimburse 50% of Romania's costs. Alternatively, Romania submits that each of the Parties should bear its own costs[238].

[234] R-USC, paras. 5-6.
[235] R-USC, paras. 7, 10.
[236] R-USC, para. 11.
[237] R-USC, para. 12.
[238] R-USC, para. 13.

B. Request for costs

225. Romania requests the following amounts[239]:

Submission on Bifurcation	
Counsel fees	USD 256,601.56
Total	USD 256,601.56
Jurisdiction, merits, and quantum	
Counsel fees	USD 5,834,383.22
Disbursements	USD 11,181.64
Expert witnesses	USD 1,706,844.00
Total	USD 7,552,408.86
Document Production Phase	
Incurred in preparation of DPS	USD 227,296.51
Incurred in preparation of objections to DPS	USD 361,959.94
Total	USD 589,256.45
Hearing	
Counsel fees	USD 1,457,564.23
Expert witnesses	USD 353,885.00
Total	USD 1,811,449.23
Post-Decision and quantum phase	
Counsel fees	USD 605,793.46
Expert witnesses	USD 120,297.50
Total	USD 726,090.96
Tribunal and ICSID Administrative Costs	
ICSID Advance (January 25, 2019)	USD 149,970.00
ICSID Advance (July 29, 2020)	USD 149,954.00
ICSID Advance (September 21, 2021)	USD 100,000.00
ICSID Advance (July 12, 2022)	USD 50,000.00
ICSID Advance (September 19, 2023 – to be paid)	USD 125,000.00
Total	USD 574,924.00
Grand Total	USD 11,510,731.06

3. Decision of the Arbitral Tribunal

226. Art. 61(2) of the ICSID Convention provides that:

> "In the case of arbitration proceedings the Tribunal shall, except as the parties otherwise agree, assess the expenses incurred by the parties in connection with the proceedings, and shall decide how and by whom those expenses, the fees and expenses of the members of the Tribunal and the charges for the use of the facilities of the Centre shall be paid. Such decision shall form part of the award."

227. The ECT contains no provisions on the allocation of costs, and the Parties have not reached an agreement on the costs. Therefore, the Tribunal must define the criteria for the allocation of costs (**A.**) and decide how such allocation will be made (**B.**). The Tribunal will also determine whether interest is due (**C.**).

[239] R-USC, para. 3.

A. Criteria for cost allocation

228. Neither the ICSID Arbitration Rules, nor the ECT contain any guidelines for the apportionment of costs. Therefore, the Tribunal enjoys broad discretion to decide how to allocate the costs of the proceedings.

229. The Parties agree that the allocation of costs is generally based on the relative success of the Parties' claims and defenses – the so-called principle of "costs follow the event". The Tribunal is nevertheless free to take into account other factors, such as the conduct of the Parties or the particular complexity of the case.

B. Allocation of costs

a. Costs of Arbitration

230. The fees and expenses of the Tribunal and ICSID's administrative fees and direct expenses ["**Costs of Arbitration**"], amount to:

Arbitrator's fees and expenses Prof. Juan Fernández-Armesto Judge O. Thomas Johnson, Jr. Prof. Dr. Pierre-Marie Dupuy	 USD 415,179.82 USD 137,087.75 USD 110,000.00
ICSID's administrative fees	USD 252,000.00
Direct expenses (estimated)	USD 58,386.39
Total	USD 972,653.96

231. The above Costs of Arbitration have been paid out of the advances made by the Parties in equal parts[240].

232. The Tribunal decides that the Costs of Arbitration should be borne entirely by Romania for two reasons:

- <u>First</u>, applying the principle of "costs follow the event", Claimants have prevailed in the case;

- <u>Second</u>, and more importantly, Claimants had a legitimate reason to resort to arbitration: to see their rights redressed in view of Romania's violation of its obligations under the ECT; there is thus a direct causation link between the Costs of Arbitration incurred by Claimants and the conduct of the State.

233. <u>Therefore</u>, the Tribunal decides that Romania should bear Claimants' Costs of Arbitration.

b. Defense Expenses

234. Beyond the Costs of Arbitration, the Parties have incurred multiple categories of expenses for their defenses ["**Defense Expenses**"]. These include costs incurred with counsel, experts, and other disbursements, when preparing the Parties'

[240] The remaining balance will be reimbursed to the Parties in proportion to the payments that they advanced to ICSID.

submissions on bifurcation, jurisdiction, liability, document production and quantum.

235. Here too, Claimants have prevailed in the case; indeed:

- The Tribunal has upheld their position in the bifurcation procedure;
- The Tribunal has upheld their position on the three jurisdictional objections submitted by Romania;
- The Tribunal has upheld their general claim on liability; and
- The Tribunal has awarded them damages for Romania's breaches of the Treaty.

236. Nevertheless, the Tribunal must also take into account that not all of the Disputed Measures invoked by Claimants have been found to have been adopted by Romania in violation of the ECT[241] and that the amount of damages actually awarded is less than a third of that initially claimed by Claimants[242].

237. The Tribunal finds that Claimants' Defense Expenses are reasonable considering the duration of the case and complexity of the issues put before this Tribunal. But it would not be fair to place the entire burden of these Expenses on Romania, considering that Claimants have been the overall – but not absolute – winners of the case.

238. In the exercise of its broad discretion powers on cost allocation, the Tribunal decides to award Claimants 60% of their Defense Expenses, *i.e.*, USD 3,241,048[243] and EUR 525,000[244].

C. <u>Interest</u>

239. Claimants have requested that Romania be ordered to pay post-award interest on the foregoing sums, at a compound rate of interest to be determined by the Tribunal, until the date of Romania's full satisfaction of the Tribunal's award[245].

240. The Tribunal has already determined that the amount of compensation due by Romania should accrue Post-Award Interest, from the Date of Assessment until Romania's full and final satisfaction of the Award, at a variable interest rate of one-year Euribor not below 0%, plus a margin of 3%, annually compounded[246].

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[241] Decision, para. 1330.
[242] Claimants initially claimed EUR 142.7 million, plus pre- and post-award interest (C-II, para. 701). The Tribunal has awarded them EUR 42.2 million, including pre-award interest, *i.e.*, less than a third of their initial claim.
[243] USD 5,401,746 x 60% = USD 3,241,048.
[244] EUR 875,000 x 60% = EUR 525,000.
[245] CUSC-II, para. 12.
[246] See para. 208-209 *supra*.

241. Considering that Claimants have not asked for a specific rate applicable to their cost claims, the Tribunal decides to apply the same Post-Award Interest rate to the cost award as to the damages award to ensure consistency[247].

242. Nevertheless, the Tribunal establishes the *dies a quo* at 30 days after the issuance of the present Award, to give Romania the opportunity to voluntarily comply with the payment. Interest shall accrue until Romania's full and final satisfaction of the Award.

[247] The Tribunal notes that the amounts claimed by Claimants as Costs of Arbitration, as well as a significant portion of its Defense Expenses, are quantified in United States Dollar and not in Euros. The Euro and the United States Dollar being both strongly correlated currencies, the Tribunal see no obstacle in applying a rate established for amounts in Euros (Euribor) to the outstanding amounts quantified in United States Dollars.

VI. DECISION

243. For the reasons set forth above, the Arbitral Tribunal rules as follows:

1. Orders Romania to pay EUR 42,200,000 in compensation to Claimants for the damages they have suffered as a result of Romania's breach of Art. 10(1) of the ECT, including Pre-Award Interest;

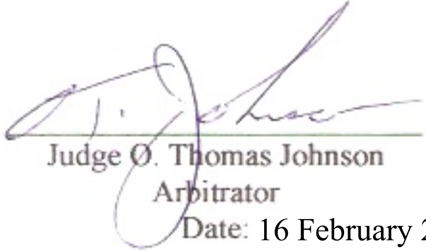
2. Orders Romania to pay Post-Award Interest over the sum of EUR 42,200,000 at a variable interest rate of one-year Euribor not below 0%, plus a margin of 3%, annually compounded, from 1 January 2022 until Romania's full and final satisfaction of the Award;

3. Orders Romania to pay to Claimants USD 503,610.17 in Costs of Arbitration and USD 3,241,048 and EUR 525,000 in Defense Expenses;

4. Orders Romania to pay Post-Award Interest over the sums of USD 3,241,048 and EUR 525,000 at a variable interest rate of one-year Euribor not below 0%, plus a margin of 3%, annually compounded, from 30 days after the issuance of the present Award until Romania's full and final satisfaction of the Award; and

5. Dismisses any other prayers for relief.

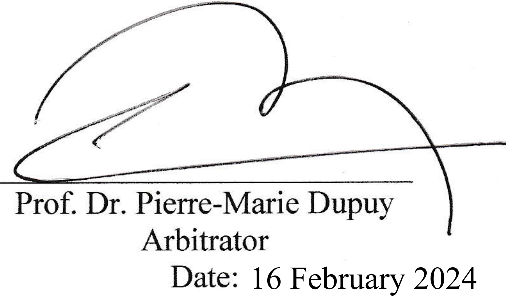
244. Arbitrator Judge O. Thomas Johnson disagrees with one part of the determination of Claimants' damages and has formalized his position in a Dissenting Opinion which is attached to this Award.



Judge Ø. Thomas Johnson
Arbitrator
Date: 16 February 2024

Prof. Dr. Pierre-Marie Dupuy
Arbitrator
Date:

Prof. Juan Fernández-Armesto
President of the Tribunal
Date:



Judge O. Thomas Johnson
Arbitrator
Date:

Prof. Dr. Pierre-Marie Dupuy
Arbitrator
Date: 16 February 2024

Prof. Juan Fernández-Armesto
President of the Tribunal
Date:

Judge O. Thomas Johnson Arbitrator Date:	Prof. Dr. Pierre-Marie Dupuy Arbitrator Date:

Prof. Juan Fernández-Armesto
President of the Tribunal
Date: 16 February 2024