

ARTICLE

# A Critical Review of the Energy Charter Treaty from an Earth System Law Perspective

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## Abstract

The Energy Charter Treaty (ECT) is one of the best-known and most controversial of the international investment treaties. The energy transition necessary to achieve the Paris Agreement climate target will require large and sustained flows of investment capital. Scholars, environmentalists, industry representatives, and governmental officials have intensively debated the modernization of the ECT. The main point of contention is whether the ECT can facilitate the energy transition or whether it entrenches fossil lock-in in unsustainable and unjust ways. This article proposes a comprehensive and integrated approach to the ECT, guided by the theoretical matrix of Earth system law scholarship. Our analysis reveals that the ECT cannot address contemporary socio-ecological challenges, but rather it remains a sectoral piece of a supranational economic constitution far removed from the most pressing exigencies of the Anthropocene.

**Keywords:** Energy Charter Treaty; Earth system law; Energy law; Earth system governance; Sustainability law; International investment law

## 1. Introduction

It has been contended that the Energy Charter Treaty (ECT)<sup>1</sup> is undergoing an existential crisis, epitomized as a genuine ‘zombie treaty’.<sup>2</sup> Notwithstanding unsuccessful attempts at reform, its enduring legal implications present significant challenges. Nevertheless, the ECT remains the world’s most acknowledged investment treaty on energy. It covers a wide range of energy-related investments, from fossil fuels to renewable resources, without distinguishing between them. For this reason, the ECT has drawn significant criticism on account of its facilitation of investor challenges against many regulatory measures that are aimed at addressing climate change.<sup>3</sup>

<sup>1</sup> Lisbon (Portugal), 17 Dec. 1994, in force 16 Apr. 1998, available at: <https://www.energycharter.org/fileadmin/DocumentsMedia/Legal/ECTC-en.pdf>.

<sup>2</sup> F. Simon, K. Taylor & V. Romano, ‘The Green Brief: Beware the Zombie Energy Charter Treaty’, *Euractiv*, 26 Oct 2022, available at: <https://www.euractiv.com/section/energy-environment/news/the-green-brief-beware-the-zombie-energy-charter-treaty>.

<sup>3</sup> K. Tienhaara & C. Downie, ‘Risky Business? The Energy Charter Treaty, Renewable Energy, and Investor-State Disputes’ (2018) 24(3) *Global Governance*, pp. 451–71.

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The roots of the ECT can be traced back to the early 1990s. The European political initiative that gave rise to the treaty emerged in a particular geostrategic setting. The end of the Cold War raised the possibility of mutually beneficial trade between energy-rich Eastern Europe and capital-rich Western Europe, which was intent upon diversifying its energy supply.<sup>4</sup> It was thought that it would be desirable to establish an open-market framework for energy cooperation.<sup>5</sup> The aim of that framework would be to protect international investments and to ensure the unimpeded flow across borders of energy-related materials, products, and equipment.<sup>6</sup> Accordingly, the Energy Charter negotiation process began, which culminated in the signing of the ECT in 1994.<sup>7</sup>

As an instrument of international economic law, the ECT has fossil resources in its DNA. By drawing upon Kjaer's examination of legal imaginaries,<sup>8</sup> the ECT is situated within an epistemic framework that accords with the dominant legal paradigm of its time. In that paradigm, the market is the fundamental unit of society, and regulatory endeavours are directed at its optimization. The law is thus a means of dismantling 'publicness' and promoting 'privateness'. In the context of the ECT, law is instrumentalized to serve specific vested interests, primarily those of investors.<sup>9</sup> The available figures corroborate this proposition: as at 1 May 2023, the Energy Charter Secretariat was aware of 158 investment arbitration cases that have been instituted under the ECT.<sup>10</sup> Article 26 ECT does not make the reporting of all existing disputes mandatory, and many remain confidential.<sup>11</sup> According to a recent study, the investor-state dispute settlement (ISDS) mechanism could serve as a basis for more than United States (US) \$340 billions' worth of legal claims by fossil fuel companies that seek to challenge national climate policies.<sup>12</sup>

The revision of investment treaties had already been mooted in several jurisdictions by 2015,<sup>13</sup> when the ECT underwent its first phase of soft modernization. In 2018, the

<sup>4</sup> A. Konoplyanik & T. Wälde, 'Energy Charter Treaty and its Role in International Energy' (2006) 24(4) *Journal of Energy & Natural Resources Law*, pp. 523–58; A. Belyi, 'The Energy Charter Process in the Face of Uncertainties' (2021) 14(5) *The Journal of World Energy Law & Business*, pp. 363–75.

<sup>5</sup> Konoplyanik & Wälde, n. 4 above, p. 524.

<sup>6</sup> R.S. Axelrod, 'The European Energy Charter Treaty: Reality or Illusion?' (1996) 24(6) *Energy Policy*, p. 497–505.

<sup>7</sup> N. 1 above.

<sup>8</sup> According to Kjaer, law develops a 'form-giving function', which gives it a central role in society. He contends that the genealogical study of how the law and legal scholars have dealt with this function reveals the existence of four imaginaries of law over time in the Western context: 'law as purpose', 'law as a tool', 'law as an obstacle', and 'law as reflexivity-initiation': P.F. Kjaer, 'What Is Transformative Law?' (2022) 1(4) *European Law Open*, pp. 760–80, at 761.

<sup>9</sup> *Ibid.*, p. 766.

<sup>10</sup> Energy Charter Secretariat, 'Statistics of ECT Cases as of 1 May 2023', available at: [https://www.energy-charter.org/fileadmin/DocumentsMedia/Disputes/20230501\\_-\\_Statistics\\_-\\_Cases\\_under\\_the\\_Energy\\_Charter\\_Treaty.pdf](https://www.energy-charter.org/fileadmin/DocumentsMedia/Disputes/20230501_-_Statistics_-_Cases_under_the_Energy_Charter_Treaty.pdf).

<sup>11</sup> The list of ISDS cases under the ECT is available at: <https://www.energychartertreaty.org/cases/list-of-cases>.

<sup>12</sup> K. Tienhaara et al., 'Investor-State Disputes Threaten the Global Green Energy Transition' (2022) 376(6594) *Science*, pp. 701–3.

<sup>13</sup> N. Bernasconi-Osterwalder, 'Rethinking Investment-Related Dispute Settlement' (2015) 6(2) *Investment Treaty News*, available at: <https://www.iisd.org/itn/en/2015/05/21/rethinking-investment-related-dispute-settlement>.

Energy Charter Conference formally approved a new phase of the modernization process whereby the list of topics that the ECT covers would be updated. Neither ISDS nor alignment with the climate objectives of the Paris Agreement<sup>14</sup> featured among the topics that would be revised, despite the generic reference to ‘sustainable development and corporate social responsibility’.<sup>15</sup> An Agreement in Principle was reached in June 2022.<sup>16</sup>

Only a few months after the announcement of this agreement, several European Union (EU) Member States, representing more than 70% of the population of the EU, announced their intention to withdraw from the ECT.<sup>17</sup> The European Parliament issued a resolution requesting the Commission to organize a coordinated withdrawal.<sup>18</sup> Modernization has now reached a standstill – an ad hoc conference that was scheduled for April 2023 disappeared from the agenda of the Energy Charter Secretariat. In July 2023, the European Commission announced the coordinated withdrawal of the EU from the ECT;<sup>19</sup> at the end of May 2024, the Council of the EU adopted the formal decision that the EU and Euratom will leave the ECT, effective one year after receipt of the notification by the depositary of the treaty.<sup>20</sup>

Until now, advocacy for ECT reform and analyses of the treaty have proceeded from the assumption of an active climate emergency. Consequently, the critical question has been whether the ECT can protect investments while supporting the energy transition<sup>21</sup> and facilitating the attainment of the United Nations (UN) Sustainable Development Goals (SDGs)<sup>22</sup> – in particular SDG 7 (‘ensure access to affordable, reliable, sustainable and modern energy for all’) and SDG 13 (‘take urgent action to combat climate change

<sup>14</sup> Paris Agreement, Paris (France), 12 Dec. 2015, in force 4 Nov. 2016, available at: [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php).

<sup>15</sup> See Energy Charter Secretariat, Decision of the Energy Charter Conference, ‘Report by the Chair of the Subgroup on Modernisation’, 27 Nov. 2018, CCDEC2018 21 NOT, available at: [https://www.energychartertreaty.org/fileadmin/DocumentsMedia/CCDECS/CCDEC201821\\_-\\_NOT\\_Report\\_by\\_the\\_Chair\\_of\\_Subgroup\\_on\\_Modernisation.pdf](https://www.energychartertreaty.org/fileadmin/DocumentsMedia/CCDECS/CCDEC201821_-_NOT_Report_by_the_Chair_of_Subgroup_on_Modernisation.pdf).

<sup>16</sup> See Public Communication Explaining the Main Changes Contained in the Agreement in Principle, Ad Hoc Meeting of the Energy Charter Conference, 24 June 2022, available at: <https://www.energy-chartertreaty.org/modernisation-of-the-treaty>.

<sup>17</sup> European Parliament, ‘Resolution on the Outcome of the Modernisation of the Energy Charter Treaty’, 2022/2934(RSP), 24 Nov. 2022, available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022IP0421>.

<sup>18</sup> Ibid.

<sup>19</sup> European Commission, ‘Proposal for a Council Decision on the Withdrawal of the Union from the Energy Charter Treaty’, 7 July 2023, COM(2023) 447 final.

<sup>20</sup> Council of the EU, ‘Energy Charter Treaty: Council Gives Final Green Light to EU’s Withdrawal’, press release, 30 May 2024, available at: <https://www.consilium.europa.eu/en/press/press-releases/2024/05/30/energy-charter-treaty-council-gives-final-green-light-to-eu-s-withdrawal>.

<sup>21</sup> N. Bernasconi-Osterwaldler & M.D. Brauch, ‘Redesigning the Energy Charter Treaty to Advance the Low-Carbon Transition’ (2019) 16(1) *Transnational Dispute Management*, available at: <https://www.transnational-dispute-management.com/article.asp?key=2632>; S. Maynard & A. Ason, ‘Is the Energy Charter Treaty Ready to Embrace Energy Transition?’ (2019) 1 *Transnational Dispute Management*, available at: <https://www.transnational-dispute-management.com/article.asp?key=2628>.

<sup>22</sup> UN General Assembly Resolution 70/1 ‘Transforming Our World: The 2030 Agenda for Sustainable Development’, 25 Sept. 2015, UN Doc. A/RES/70/1, available at: [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_RES\\_70\\_1\\_E.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf).

and its impacts') – or whether it simply perpetuates unsustainable and unjust fossil fuel dependency.

This article also speaks to this critical question, but aims to go beyond the climate lens to assess the broader suitability of the ECT for the energy transition. The climate lens, in our view, captures only one of the problems that emerge from the planetary boundaries framework.<sup>23</sup> The ECT and its modernization should be examined in a manner that accounts for the full complexities of the actual context. Planetary boundaries are deeply interconnected and interact in ways that remain poorly understood.<sup>24</sup> At the same time, co-evolution with social issues must be considered if justice is to be integrated into that framework.<sup>25</sup> This poses challenges for law and governance.<sup>26</sup> In the specific case of the ECT, those challenges have to do not only with climate law compatibility but also with the interactions between the treaty and various other international legal regimes and normative orders. The time is ripe to consider what conditions an international treaty on energy investment should satisfy to address the challenges of the Anthropocene.

A systemic approach is needed in order to make a sustainable and just energy transition truly feasible. Given the intricately intertwined relationships and risks that typify the Anthropocene,<sup>27</sup> it is impossible to rely on fragmented sectoral solutions regarding the energy transition. The fragmentation of the global governance systems related to sustainability has been extensively studied.<sup>28</sup> The Earth system law paradigm developed by Kotzé and Kim<sup>29</sup> addresses the need for 'connectivity', as further discussed in Section 2.<sup>30</sup> This framework fosters integration not only between different branches of

<sup>23</sup> J. Rockström et al., 'A Safe Operating Space for Humanity' (2009) 461(7263) *Nature*, pp. 472–5; D. French & L.J. Kotzé, *Research Handbook on Law, Governance and Planetary Boundaries* (Edward Elgar, 2021).

<sup>24</sup> J. Rockström et al., 'Safe and Just Earth System Boundaries' (2023) 619(7968) *Nature*, pp. 102–11.

<sup>25</sup> *Ibid.*

<sup>26</sup> D. Piselli & H. van Hasselt, 'Planetary Boundaries and Regime Interaction in International Law', in D. French & L.J. Kotzé (eds), *Research Handbook on Law, Governance and Planetary Boundaries* (Edward Elgar, 2021), pp. 125–46.

<sup>27</sup> P.J. Crutzen & E.F. Stoermer, "'The Anthropocene'" (2000), in L. Robin, S. Sörlin & P. Warde (eds), *The Future of Nature: Documents of Global Change* (Yale University Press, 2013), pp. 479–90; S.L. Lewis & M.A. Maslin, 'Defining the Anthropocene' (2015) 519(7542) *Nature*, pp. 171–80; W. Steffen et al., 'The Anthropocene: Conceptual and Historical Perspectives' (2011) 369(1938) *Philosophical Transactions of the Royal Society A: Mathematical, Physical & Engineering Sciences*, pp. 842–67.

<sup>28</sup> F. Biermann et al., 'The Fragmentation of Global Governance Architectures: A Framework for Analysis' (2009) 9(4) *Global Environmental Politics*, pp. 14–40; F. Zelli & H. van Asselt, 'Introduction. The Institutional Fragmentation of Global Environmental Governance: Causes, Consequences and Responses' (2013) 13(3) *Global Environmental Politics*, pp. 1–13; R.E. Kim, 'The Nexus between International Law and the Sustainable Development Goals' (2016) 25(1) *Review of European, Comparative & International Environmental Law*, pp. 15–26; F. Biermann & R.E. Kim, 'Architectures of Earth System Governance', in F. Biermann (ed.), *Architectures of Earth System Governance: Institutional Complexity and Structural Transformation* (Cambridge University Press, 2020), pp. 1–34.

<sup>29</sup> L.J. Kotzé & R.E. Kim, 'Earth System Law: The Juridical Dimensions of Earth System Governance' (2019) 1 *Earth System Governance*, article 100003.

<sup>30</sup> This article transposes the notion of 'connectivity' on which Kjaer elaborated in the context of global law to ESL. According to Kjaer, from an intersystemic perspective, the function of connectivity norms is to increase the probability of transfers of condensed social components (*Sinnkomponente*) from one legally

law but also across the social and the natural sciences, hence providing a systematic approach. This article aims to apply this paradigm to assess the modernization of the ECT.

Our analysis is structured as follows. Section 2 introduces Earth system law (ESL). In Section 3, we explain why the ESL approach is suited to the present ends, and we apply the ESL matrix to determine whether the ECT can address the socio-ecological challenges of the Anthropocene. Specifically, we evaluate the capacity of the ECT to be able to adapt to existing conditions. Section 4 concludes.

## 2. Foundations of Earth System Law

The holistic perspective that we use in our analysis is based on the understanding of the dynamic process of planetary transformation as elucidated by Earth system science (ESS).<sup>31</sup> The Earth system governance (ESG) paradigm and its analytical lenses, which originate from the social sciences,<sup>32</sup> are designed to address these challenges and to drive ‘global stewardship for the planet’.<sup>33</sup> Since human society can now be treated as a global *polis*<sup>34</sup> as a result of the human activity on the planet, new regulatory and normative demands arise as the ecological transition unfolds. Beyond the material-ecological aspects of ‘globalness’, demand is growing for innovative norms that can meet the diverse societal challenges of ‘de-centring the Western-centric world’.<sup>35</sup> At the same time, new regulatory and governance concepts are progressively being consolidated. Within this evolving episteme, ESL has emerged as a legal paradigm with significant potential. Advances in ESG studies have revealed the need to address the ‘Anthropocene gap’,<sup>36</sup> encompassing issues such as persistent uncertainty, intergenerational and functional interdependency, and spatial interaction between humans and non-humans. In general, laws that reflect Holocene conditions, especially mainstream environmental law in both its domestic and international forms, have proven unequal to the task of accommodating the structural changes that are necessary to plug the Anthropocene gap<sup>37</sup> because they lack the requisite efficiency and normative ambition.<sup>38</sup>

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structured context to another within world society: P.F. Kjaer, ‘Constitutionalizing Connectivity: The Constitutional Grid of World Society’ (2018) 45 *Journal of Law and Society*, pp. S114–34, at S115.

<sup>31</sup> H. Schellnhuber et al., *Earth System Analysis for Sustainability* (The MIT Press, 2004); C. Hamilton, ‘The Anthropocene as Rupture’ (2016) 3(2) *The Anthropocene Review*, pp. 93–106.

<sup>32</sup> F. Biermann, ‘“Earth System Governance” as a Crosscutting Theme of Global Change Research’ (2007) 17(3–4) *Global Environmental Change*, pp. 326–37; F. Biermann, ‘“The Future of Environmental” Policy in the Anthropocene: Time for a Paradigm Shift’ (2021) 30(1–2) *Environmental Politics*, pp. 61–80; F. Biermann et al., ‘Navigating the Anthropocene: Improving Earth System Governance’ (2012) 335(6074) *Science*, pp. 13306–7.

<sup>33</sup> F. Biermann, ‘Earth System Governance: A Research Agenda’, in O.R. Young, L.A. King & H. Schroeder (eds), *Institutions and Environmental Change: Principal Findings, Applications, and Research Frontiers* (The MIT Press, 2008), pp. 277–301.

<sup>34</sup> J. Jaria-Manzano, *La Constitución del Antropoceno* (Tirant lo Blanch, Tirant Humanidades, 2020).

<sup>35</sup> Kjaer, n. 8 above, p. 778.

<sup>36</sup> V. Galaz, *Global Environmental Governance, Technology and Politics* (Edward Elgar, 2014).

<sup>37</sup> L.J. Kotzé et al., ‘Earth System Law: Exploring New Frontiers in Legal Science’ (2022) 11 *Earth System Governance*, article 100126.

<sup>38</sup> Kotzé & Kim, n. 29 above; L.J. Kotzé, ‘Earth System Law for the Anthropocene’ (2019) 11(23) *Sustainability*; L. Du Toit & L.J. Kotzé, ‘Reimagining International Environmental Law for the Anthropocene: An Earth System Law Perspective’ (2022) 11 *Earth System Governance*, article 100132.

Kim and Kotzé defined ESL as ‘an innovative legal imaginary that is rooted in the Anthropocene’s planetary context and its perceived socio-ecological crisis’.<sup>39</sup> The new paradigm is premised on the notion of a planetary system-based Earth law that would overcome two limitations of the current account of law. Firstly, it would involve a revision of the traditional approach to international law and of several more recent perspectives on global and transnational regulation. Secondly, it would also bring about a re-evaluation of mainstream and critical perspectives on environmental and ecological law. In its most mature phase, ESL would produce a conception of law that is ‘more responsible for the complexities of the Earth System’, meaning an ‘Earth-centred law for governance by and for all living beings from a planetary systems perspective’.<sup>40</sup>

ESL creates means of enabling connectivity,<sup>41</sup> of evaluating the compatibility between legal orders and the Earth system, and of formulating transformative targets the attainment of which would support the reproduction of socio-ecological processes in the future. The transdisciplinary and principles-oriented approach of ESL resonates with the global law perspective<sup>42</sup> and the transformative law episteme.<sup>43</sup> Therefore, ESL can facilitate the internalization of the limits of ecosystems and of natural physiologies into the operational code of the law. ESS has furnished evidence of the interdependence between dynamic planetary boundaries. Kim and Kotzé noted that the planetary boundaries framework provides an important rationale for attempts to remedy the misfit between the complexity of the Earth system and the fragmented regulatory frameworks that are in place at the present time.<sup>44</sup>

ESL also resonates with the new episteme of transformative law, as introduced by Kjaer.<sup>45</sup> Transformative law recognizes the existence of distinct worlds<sup>46</sup> on Earth. Transformative law reflects a multi-species approach to rights, accounting for intergenerational perspectives and diversity within its concept of justice.<sup>47</sup> The normative essence of transformative law<sup>48</sup> is to enable society to sustain itself within the planetary boundaries. Therefore, its legal core accords with the principle of sustainability.<sup>49</sup>

<sup>39</sup> R.E. Kim & L.J. Kotzé, ‘Planetary Boundaries at the Intersection of Earth System Law, Science and Governance: A State-of-the-Art Review’ (2021) 30(1) *Review of European, Comparative and International Environmental Law*, pp. 1–15, at 13.

<sup>40</sup> *Ibid.*

<sup>41</sup> Kjaer, n. 30 above.

<sup>42</sup> A. Cardesa-Salzmann & E. Cocciolo, ‘Global Governance, Sustainability and the Earth System: Critical Reflections on the Role of Global Law’ (2019) 8(3) *Transnational Environmental Law*, pp. 437–61.

<sup>43</sup> Kjaer, n. 8 above.

<sup>44</sup> Kim & Kotzé, n. 39 above, p. 6.

<sup>45</sup> Kjaer, n. 8 above.

<sup>46</sup> *Ibid.*, p. 774.

<sup>47</sup> *Ibid.*, p. 775.

<sup>48</sup> *Ibid.*, p. 776.

<sup>49</sup> On the content, context and status of the principle of sustainability in international law see V. Barral, ‘Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm’ (2012) 23(2) *European Journal of International Law*, pp. 377–400. For a critical analysis of the principle of sustainable development see J.E. Viñuales, ‘The Rise and Fall of Sustainable Development’ (2013) 22(3) *Review of European, Comparative and International Environmental Law*, pp. 3–13. On the disentanglement of the notion of sustainability from that of development see K. Bosselmann,

In addition, its governance concept focuses on the intercontextual dimensions and the interlegal arrangements that are characteristic of the Anthropocene.<sup>50</sup> In the light of these premises, the prescriptive proposal for a desirable future that emerges from ESL is situated within the transformative episteme of the emergent legal paradigm.

In brief, the Anthropocene has heralded the emergence of a new legal principle that is global in scope – namely, planetary integrity.<sup>51</sup> ESL is instrumental in advancing the governance of sustainability, by providing the foundation for a ‘transformation towards global sustainability [that] must occur across coupled social-technological-ecological systems’.<sup>52</sup>

### 3. The ECT from the Perspective of Earth System Law

Broadly speaking, legal scholars critical of the ECT adopt one of two positions. Some subscribe to a reformist approach and view the ongoing process of modernization as an opportunity to thoroughly reassess the ECT.<sup>53</sup> They argue that the ECT should be aligned with the international climate change regime and the SDGs that are associated with it. These scholars seek to identify legal mechanisms and frameworks that promote a low-carbon energy transition.

Other scholars advocate an abolitionist perspective, claiming that the proposed reforms are insufficient to address the inherent flaws of the ECT.<sup>54</sup> However, within this latter stance there exists a vigorous debate on the ‘how’ of withdrawing from the ECT, encompassing a dual inquiry. The first pertains to the means through which the contracting parties to the ECT may agree to exclude the application of the

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*The Principle of Sustainability: Transforming Law and Governance* (Ashgate, 2008); D. French, ‘Sustainable Development and the Instinctive Imperative of Justice in the Global Order’, in D. French (ed.), *Global Justice and Sustainable Development* (Martinus Nijhoff, 2010), pp. 3–35.

<sup>50</sup> Kjaer, n. 8 above, p. 776

<sup>51</sup> L.J. Kotzé et al., ‘Planetary Integrity’, in F. Biermann, T. Hickmann & C.A. Sénit (eds), *The Political Impact of the Sustainable Development Goals: Transforming Governance Through Global Goals?* (Cambridge University Press, 2022), pp. 140–71.

<sup>52</sup> T.M. Lenton et al., ‘Operationalising Positive Tipping Points Towards Global Sustainability’ (2022) 5(1) *Global Sustainability*, pp. 1–16.

<sup>53</sup> J. Tropper & K. Wagner, ‘The European Union Proposal for the Modernisation of the Energy Charter Treaty: A Model for Climate-Friendly Investment Treaties?’ (2022) 23(5–6) *The Journal of World Investment & Trade*, pp. 813–48; S. Keay-Bright, ‘ECT Investment Protection Provisions Are Designed for Fossil-Based, Centralised Energy Supply: Reform the ECT or Better Alternatives for a Sustainable Energy Future?’ (2019) 1 *Transnational Dispute Management*; K. Roiger-Simek, ‘The Modernization of the Energy Charter Treaty: Dead in the Water?’ (2023) 26(1) *Austrian Review of International and European Law*, pp. 121–45; N. Czerniak, ‘The Role of Low-Carbon Gases in the Clean Energy Transition: Proposals for the Modernisation of the Energy Charter Treaty’ (2020) 4 *OGEL Energy Law Journal*.

<sup>54</sup> N. Bernasconi-Osterwalder, L. Schaugg & A. Van den Berghe, ‘Energy Charter Treaty Reform: Why Withdrawal Is an Option’ (2021) 12(2) *Investment Treaty News*, pp. 16–20; M. Colli Vignarelli, ‘Making the Energy Charter Treaty Climate-Friendly: An (Almost) Impossible Leap’, in J. Bäumler et al. (eds), *European Yearbook of International Economic Law 2022* (Springer, 2023), pp. 267–93. Other scholars in favour of withdrawal from the ECT are mentioned in the following passage.

termination clause *inter se*.<sup>55</sup> The second revolves around whether a contracting party to the ECT can withdraw from the treaty, including its sunset clause, based on the doctrine of *rebus sic stantibus*,<sup>56</sup> as codified in Article 62 of the Vienna Convention on the Law of Treaties.<sup>57</sup> Therefore, while acknowledging the legal complexities of withdrawing from the ECT, the scholars in this second group contend that these are outweighed by the benefits of eliminating present and future financial risks.<sup>58</sup> These risks jeopardize the measures that may be taken by the contracting parties to combat climate change.<sup>59</sup> They also argue that terminating the ECT would dismantle a system that confers extraordinary rights and competencies on foreign investors and opaque arbitration tribunals. The unresolved conflicts of interest within those tribunals and the perceived threats that they pose to human rights are thought to strengthen the case for the abolitionist approach.<sup>60</sup>

This article presents a novel and holistic approach to the analysis of the ECT by drawing on ESL scholarship. This approach has not been applied to the ECT previously. By adopting this framework, we aim to arrive at a deeper understanding of the repercussions of the ECT in the Anthropocene. In the following subsections we conduct a series of assessments directed at translating the theoretical agenda of ESL into practical insights for transformative changes to an international investment law instrument currently in force. This analysis touches on normative and analytical considerations. It analyzes the current state of the ECT by reference to regulatory content, governance, justice, and the structural and epistemic changes that the ESL paradigm necessitates. We then account for a range of normative desiderata that have to do with socio-ecological, intragenerational, intergenerational, and interspecies justice, and we inquire how the normative concept of sustainability can be incorporated effectively into the ECT in a manner that ensures conformity with the fundamental values that underlie the structures and processes of the Earth system.

We apply to the ECT the five research lenses and the four contextual dimensions of Kotzé and Kim's analytical matrix (see [Table 1](#)).<sup>61</sup> This matrix is derived from the Science and Implementation Plan of the Earth System Governance project.<sup>62</sup> The combination of lenses and contexts provides the framework for conceptualizing and organizing ESG research.

<sup>55</sup> A convincing overview of the problematic issues raised by the withdrawal and of the possible way out of them can be found in T. Morgandi & L. Bartels, 'Exiting the Energy Charter Treaty under the Law of Treaties' (2023) 34(1) *King's Law Journal*, pp. 145–69.

<sup>56</sup> *Ibid.*

<sup>57</sup> Vienna (Austria), 23 May 1969, in force 27 Jan. 1980, available at: [https://legal.un.org/ilc/texts/instruments/english/conventions/1\\_1\\_1969.pdf](https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf).

<sup>58</sup> Tienhaara et al., n. 12 above.

<sup>59</sup> *Ibid.*

<sup>60</sup> A. Arcuri & F. Violi, 'Human Rights and Investor-State Dispute Settlement: Changing (Almost) Everything, so that Everything Stays the Same' (2019) 13(3) *Diritti umani e diritto internazionale*, pp. 579–96.

<sup>61</sup> Kotzé & Kim, n. 29 above.

<sup>62</sup> For a more in-depth look at the framework see Earth System Governance Project, Science and Implementation Plan of the Earth System Governance Project, 2018, available at: <https://www.earthsystemgovernance.org/wp-content/uploads/2018/11/Earth-System-Governance-Science-Plan-2018.pdf>.

**Table 1.** ESL-Based ECT Analysis Matrix

		Contextual Conditions			
		Anthropocene	Diversity	Inequality	Transformations
<b>Research Lenses</b>	Architecture and Agency	The ECT and the fragmentation of law for addressing networked risks (AAA)	The ECT and the implications of legal pluralism for environmental outcomes (AAD)	The role of the ECT in entrenching or disrupting patterns of inequality between agents (AAI)	The pathways through which the ECT guides, shapes or blocks transformations (AAT)
	Democracy and Power	The role of the ECT in new forms of democratic practice in the Anthropocene (DPA)	The ECT and the law for mitigating the misuse of power that marginalizes minorities (DPD)	The ECT for Earth system democracy and for addressing unequal decision-making power (DPI)	The ECT in ensuring democracy and participation in transformation processes (DPT)
	Justice and Allocation	The ECT on allocation of resources and responsibilities where causality is complex (JAA)	Harnessing the ECT to advance intergenerational and interspecies justice (JAD)	The effectiveness of the ECT provisions to ensure everyone has equal access to justice (JAI)	The role of the ECT in addressing equity concerns in sustainability transformations (JAT)
	Adaptiveness and Reflexivity	Reforming the ECT to become more adaptive and reflexive to cope with uncertainty (ARA)	The relationship between adaptiveness and diversity of legal institutions based on the ECT (ARD)	Adapting the ECT to address changing patterns of inequality (ARI)	Balancing stability and flexibility of the ECT for triggering and governing transformation (ART)
	Anticipation and Imagination	The role of the ECT in the governance of anticipation that generates social imaginaries of the future (AIA)	The role of the ECT in ensuring that diversity is reflected in processes of anticipation and imagination (AID)	The role of the ECT accounting for inequalities in and resulting from foresight processes (AII)	Designing future-oriented law for the governance of transformation that is based on the ECT (AIT)

Source Adapted from Kotzé & Kim, n. 29 above.

The five research lenses are: (i) architecture and agency, (ii) democracy and power, (iii) justice and allocation, (iv) adaptiveness and reflexivity, and (v) anticipation and imagination. These lenses provide a varied perspective on ESG, each connecting with established or emerging research fields in social science. They were deliberately paired to deepen analysis, highlighting both similarities and tensions between concepts.<sup>63</sup> Each lens can be combined in various ways, leading to new research questions. These pairs represent dynamic clusters in social scientific research, inviting engagement across disciplines and traditions.<sup>64</sup>

The four contextual conditions are: (i) the Anthropocene, (ii) diversity, (iii) inequality, and (iv) transformations. In the intricate fabric of global dynamics, these contextual conditions emerge as pivotal meta-level conditions that delineate the contours of the research terrain. These four conceptual pillars serve to distil and encapsulate overarching trends. They establish a shared framework within the ESG project, fostering research inquiries when integrated with lenses.<sup>65</sup>

Drawing upon the ESG analytical framework, Kotzé and Kim have constructed a compelling thematic matrix for legal inquiry within the broad scope of ESL.<sup>66</sup> To maintain methodological rigour, our analysis remains anchored in the original ESL research questions without alteration, but focuses exclusively on scrutinizing the ECT.

### 3.1. Architecture and Agency

Adopting the research lens of architecture and agency, with a focus on the contextual dimension of the Anthropocene (AAA), one needs to focus on Article 19 ECT. This provision is key for environmental protection and sustainability. It recognizes the precautionary principle and the polluter pays principle, but it does not impute direct obligations to foreign investors.<sup>67</sup> The contracting parties must conduct strategic environmental assessments of their energy policies,<sup>68</sup> and environmental impact assessments of ‘significant’ energy investment projects.<sup>69</sup> The term ‘significant’, however, is left undefined. Not all aspects of the Article are mandatory: parties are obliged only to take into account their international commitments (for example, to the UN Framework Convention on Climate Change (UNFCCC))<sup>70</sup> and to minimize harm to the environment with a view to ensuring economic efficiency. There are, however, some expressions of optimism in the literature by scholars who interpret this way of referring to the UNFCCC as a ‘cooperative approach as well as the

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>66</sup> Kotzé & Kim, n. 29 above, p. 9.

<sup>67</sup> T. Hunter, ‘Article 18 Sovereignty over Natural Resources’, in R. Leal-Arcas (ed.), *Commentary on the Energy Charter Treaty* (Edward Elgar, 2018), pp. 279–81, at para. 19.22.

<sup>68</sup> Art. 19(1(a) ECT.

<sup>69</sup> Art. 19(1)(i) ECT; see further P. Vaida & V. Aleksic, ‘Article 19 Environmental Aspects’, in Leal-Arcas, n. 67 above, pp. 269–79, at para. 19.06.

<sup>70</sup> New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: <https://unfccc.int>.

development of renewable energy sources, cleaner fuels and technologies reducing pollution'.<sup>71</sup> Further terms such as 'cost-effectiveness', 'public interest' and 'economic efficiency' are vague,<sup>72</sup> which makes the provisions appear aspirational rather than obligatory.<sup>73</sup> As such, the provision requires parties to 'balance the importance and value of economic benefit and investment with the principles of environmental law'<sup>74</sup> and encompasses 'a number of actions to be taken into account'<sup>75</sup> in this respect. Hence, the provision does not really integrate environmental and sustainability concerns into decision making, and promotes a rather conflicting (or old fashioned) view of the role of environmental protection and economic development. This approach fails to foster an integrated and mutually beneficial relationship between sustainability and growth, hindering the pursuit of sustainable growth. The phrasing of the provision was criticized extensively by the Council of the EU during the attempt to modernize the treaty.<sup>76</sup> Hence, Article 19 is an illustration of the inability of the treaty to transcend the challenges posed by the fragmentation of regulatory frameworks governing various environmental aspects. The ECT does not integrate different international environmental regimes. In this way, it perpetuates the risk of problem shifting; for example, the protection of fossil investments under the ECT may lead to an increase in the production of plastics.<sup>77</sup> Petrochemical facilities are typically situated close to petroleum extraction sites on account of the usefulness of fossil fuels as feedstock material and as process energy. These facilities operate in interconnected clusters, where mutually reliant companies exchange resources. These dynamics are highly relevant to the forthcoming global and legally binding agreement on plastics pollution. Expected to be adopted in 2024,<sup>78</sup> the agreement regulates the entire lifecycle of plastics.<sup>79</sup>

Risks of regulatory fragmentation are particularly pronounced in the EU legal order.<sup>80</sup> The ECT jeopardizes EU principles such as mutual trust, equal treatment and effectiveness, and the functioning of the internal market,<sup>81</sup> as well as the operation

<sup>71</sup> O. Quirico, *Investment Governance between the Energy Charter Treaty and the European Union: Resolving Regulatory Conflicts* (Brill Nijhoff, 2021), p. 74.

<sup>72</sup> C. Shine, 'Environmental Protection under the Energy Charter Treaty', in T. Waelde (ed.), *The Energy Charter Treaty: An East-West Gateway for Investment and Trade* (Kluwer Law International, 1996), pp. 520–5.

<sup>73</sup> Vaida & Aleksic, n. 69 above, para. 19.19.

<sup>74</sup> Hunter, n. 67 above, para. 19.25.

<sup>75</sup> *Ibid.*

<sup>76</sup> Quirico, n. 71 above, p. 75.

<sup>77</sup> H. Johnson et al., 'Conceptualizing the Transnational Regulation of Plastics: Moving Towards a Preventative and Just Agenda for Plastics' (2022) 11(2) *Transnational Environmental Law*, pp. 325–55.

<sup>78</sup> S. Wang, 'International Law-Making Process of Combating Plastic Pollution: Status Quo, Debates and Prospects' (2023) 147 *Marine Policy*, pp. 2–6.

<sup>79</sup> UN Environment Assembly Resolution 5/14, 'End Plastic Pollution: Towards an International Legally Binding Instrument', 2 Mar. 2022, UN Doc. UNEP/EA.5/Res.14.

<sup>80</sup> C. Verburg, 'Modernising the Energy Charter Treaty: An Opportunity to Enhance Legal Certainty in Investor-State Dispute Settlement' (2019) 20(2–3) *The Journal of World Investment & Trade*, pp. 425–54.

<sup>81</sup> Included respectively Arts 4, 9 and 13 of the Treaty on the European Union (TEU), Lisbon (Portugal), 13 Dec. 2007, in force 1 Dec. 2009, available at: <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A12012M%2FTXT>; as well as Arts 26 and 114 of the Treaty on the Functioning of

of the EU Charter of Fundamental Rights.<sup>82</sup> The ECT obstructs the implementation of environmental policy,<sup>83</sup> as recently exemplified by the award in *Rockhopper v. Italy*.<sup>84</sup> The case could be considered outside the realm of the climate change issue, yet it is central to the fossil fuel economy. The significance of the fossil fuel economy extends beyond its impact on the climate, as it also serves as a fundamental catalyst for various effects on the Earth system during the socio-environmental polycrisis.<sup>85</sup> As Arcuri has compellingly argued, the ECT plays a crucial role within a broader legal structure incorporating ISDS mechanisms.<sup>86</sup> Through these mechanisms the fossil fuel industry actively opposes measures adopted for the ecological transition by bolstering the property rights fundamental to the fossil-based economy.<sup>87</sup> The ECT is the most popular basis for claims by fossil fuel investors against states, accounting for approximately 17% of such proceedings,<sup>88</sup> which attests to its contribution to regulatory fragmentation.

Turning to the contextual dimension of diversity (AAD), the ECT does not account for the implications of legal pluralism for environmental outcomes. Social processes are articulated in pluralistic legal structures, both horizontally through international sectoral regimes and vertically through the interweaving of multi-level governance systems and dynamic normative regimes of different scales. This pluralism leads to numerous conflicts between norms and makes consistent environmental outputs contingent on interactions between different epistemic communities. The norms of the original ECT proved to be insufficiently dynamic to account for legal pluralism and for efforts to rejuvenate international investment law. International investment law is trapped in a dilemma: on the one hand, it must facilitate the flow of capital to foster sustainable development; yet, on the other hand, international investment treaties have

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the European Union (TFEU), Lisbon (Portugal), 13 Dec. 2007, in force 1 Dec. 2009 [2012] OJ C 326/47, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:326:FULL:EN:PDF>. For a more elaborate explanation of these principles see C. Eckes & L. Ankersmit, 'The Compatibility of the Energy Charter Treaty with EU Law', Apr. 2022, study commissioned by ClientEarth, available at: <https://www.clientearth.org/latest/documents/the-compatibility-of-the-energy-charter-treaty-with-eu-law>.

<sup>82</sup> Nice (France), 7 Dec. 2000, in force 1 Dec 2009, available at: [https://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](https://www.europarl.europa.eu/charter/pdf/text_en.pdf). See Eckes & Ankersmit, n. 81 above, p. 4.

<sup>83</sup> A. Arcuri, 'Panel 1: Climate Change Mitigation and the (Modernised) ECT', Amsterdam Centre for European Law and Governance (ACELG) Annual Conference 'The Energy Charter Treaty: An EU (Law) Perspective', 4 Nov. 2022, University of Amsterdam (The Netherlands), available at: <https://acelg.uva.nl/content/events/2022/11/acelg-annual-conference.html>.

<sup>84</sup> *Rockhopper Italia S.p.A., Rockhopper Mediterranean Ltd and Rockhopper Exploration Plc v. Italian Republic*, International Centre for Settlement of Investment Disputes (ICSID), Case No. ARB/17/14, Final Award, 23 Aug. 2022, available at: <https://www.italaw.com/cases/5788>.

<sup>85</sup> A. Arcuri, 'On How the ECT Fuels the Fossil Fuel Economy: *Rockhopper v Italy* as a Case Study' (2023) 7(1) *Europe and the World: A Law Review*, pp. 1–20, at 3; M. Lawrence et al., 'Global Polycrisis: The Causal Mechanisms of Crisis Entanglement' (2024) 7 *Global Sustainability*, article e7.

<sup>86</sup> Arcuri, n. 85 above.

<sup>87</sup> *Ibid.*, p. 4.

<sup>88</sup> L. Di Salvatore, 'Investor–State Disputes in the Fossil Fuel Industry', International Institute for Sustainable Development (IISD) Report, 31 Dec. 2021, available at: <https://www.iisd.org/publications/report/investor-state-disputes-fossil-fuel-industry>.

the potential to ‘frustrate’ sustainable development.<sup>89</sup> The international community has striven to address this dilemma by incorporating provisions on sustainable development in international investment agreements.<sup>90</sup> Its efforts have resulted in the abandonment of the conventional practice of promoting investment, whatever its form and object.<sup>91</sup> The ECT refers to the environment and sustainability, but it creates few binding obligations in those domains. Firstly, the Preamble mentions the UNFCCC as well as other energy-related international environmental agreements, and recognizes ‘the increasingly urgent need for measures to protect the environment, including the decommissioning of energy installations and waste disposal, and for internationally agreed objectives and criteria for these purposes’.<sup>92</sup> It is, therefore, intended to align with the agenda of the international community more broadly,<sup>93</sup> and specifically the 2/1.5 degrees Celsius (°C) target of the Paris Agreement.<sup>94</sup> However, the provision, as being part of the Preamble, does not generate any binding commitments.

The new provision on climate change and the energy transition, which is to be added after Article 19 ECT, includes a commitment to implement the UNFCCC and the Paris Agreement, as well as to enhance coordination between investment and climate policy to accelerate progress. Obstacles to trade and investment in low-carbon energy technologies and to international cooperation in this domain are also suggested to be dismantled. These suggested commitments are not ambitious or novel, and they do not represent an improvement of the current state of affairs.<sup>95</sup> Similar to most of the provisions on climate change and sustainable development, the new suggested provision is broadly framed and highly general, affording a wide margin of discretion to the arbitrators who are expected to interpret it. In the suggested text, Article 19 is now focusing on ‘sustainable development’ rather than ‘environmental aspects’, reaffirming the ‘respective rights and obligations under the multilateral environmental and labour agreements to which [a signatory state] is a party’.<sup>96</sup>

The suggested modernization of the right to regulate, which was part of the effort to ‘Paris-proof’ the ECT, supplies another salient example. Article 18 ECT reasserts the sovereignty of states over natural resources.<sup>97</sup> This provision also includes the right to regulate the environmental and safety aspects of energy exploration and development (Article 18(3)), which previously had been questioned.<sup>98</sup> It had been argued that such a rule would generate legal uncertainty and undermine investment protection, which

<sup>89</sup> M.-C. Cordonier Segger, ‘Innovative Legal Solutions for Investment Law and Sustainable Development Challenges’, in Y. Levashova, T. Lambooy & I. Dekker (eds), *Bridging the Gap between International Investment Law and the Environment* (Eleven International, 2016), pp. 3–29.

<sup>90</sup> *Ibid.*

<sup>91</sup> *Ibid.*

<sup>92</sup> Last Recital of the Preamble to the ECT.

<sup>93</sup> Morelli refers to the ‘general goals and priorities of the international agenda, both in the UN and the EU context’: A. Morelli, ‘Preamble’, in Lean-Arcas, n. 67 above, pp. 6–12, at paras 11–13.

<sup>94</sup> N. 14 above.

<sup>95</sup> Morelli, n. 93 above.

<sup>96</sup> Art. 19(2) ECT and suggested reformed text.

<sup>97</sup> T. Waelde & A. Kolo, ‘Environmental Regulation, Investment Protection and “Regulatory Taking” in International Law’ (2001) 50(4) *International and Comparative Law Quarterly*, pp. 811–48.

<sup>98</sup> Hunter, n. 67 above, para. 18.10.

was considered risky<sup>99</sup> because ‘no limit is imposed on the exercise of this right, [and] the contracting parties can derogate from their obligations ... through claiming sovereignty and the fact that the “public interest” so necessitated’.<sup>100</sup> However, the right to regulate may also be considered insufficient to guarantee carbon neutrality, as its current formulation does not go ‘far enough’ and restricts the ability of the contracting parties to implement a carbon-neutral climate policy. The suggested modernization text reaffirms that the contracting parties are free to pursue various policy objectives, as well as confirming the rights and obligations that stem from the environmental treaties that those parties have concluded.<sup>101</sup> These reaffirmations have no concrete legal implications – international investment law can hardly be said to have been reborn.<sup>102</sup> At most, states can use the new provisions to defend fair and equitable treatment (FET) standard claims.<sup>103</sup> Likewise, the suggested flexibility mechanism does not create a level playing field, as it would ensure the protection of fossil fuel investments for over a decade. Evidently, little diversity is introduced into the existing normative architecture.

Regarding the contextual dimension of inequality (AAI), it can be concluded that even the suggested ECT modernized text enhances patterns of inequality. For example, the suggested Article 19 *bis* contains no commitment to a just transition and makes no reference to the interests of those who are likely to be most affected by the transition.<sup>104</sup> In addition, Article 8 ECT, which regulates the transfer of technologies, remains unamended, and no attempt is made to establish new cooperation mechanisms.<sup>105</sup>

Within the transformations contextual condition (AAT), since the ECT revolves around energy and is therefore closely linked to the climate change-environment nexus, its ISDS provisions cannot be disregarded. A pro-environmental approach to ISDS would have it operate as both sword and shield: investors would be able to challenge failure to comply with environmental laws, and states would be able to justify interference or takings.<sup>106</sup> The ECT has served as the basis for arbitral proceedings in at least 46 disputes about changes to renewable energy incentives in countries such as

<sup>99</sup> Ibid., para. 18.22.

<sup>100</sup> S.S. Haghighi, *Energy Security: The External Legal Relations of the European Union with Major Oil- and Gas-Supplying Countries* (Hart 2007), p. 210.

<sup>101</sup> Art. 19(2) of the suggested reformed text. See also S. Maynard & M. Kalinin, ‘ECT Modernisation Perspectives: Unpacking the Impact of the Revised ECT Text on Dispute Resolution’, *Kluwer Arbitration Blog*, 6 Nov. 2022, available at: <https://arbitrationblog.kluwerarbitration.com/2022/11/06/ect-modernisation-perspectives-unpacking-the-impact-of-the-revised-ect-text-on-dispute-resolution>.

<sup>102</sup> M. Finnemore & K. Sikkink, ‘International Norm Dynamics and Political Change’ (1998) 52(4) *International Organization*, pp. 887–917.

<sup>103</sup> T. Fisher, ‘The Modernised Energy Charter Treaty: The New Text’, *Kluwer Arbitration Blog*, 15 Oct. 2022, available at: <http://arbitrationblog.kluwerarbitration.com/2022/10/15/the-modernised-energy-charter-treaty-the-new-text>.

<sup>104</sup> M.D. Brauch, ‘The Agreement in Principle on ECT “Modernization”: A Botched Reform Attempt that Undermines Climate Action’, *Kluwer Arbitration Blog*, 17 Oct. 2022, available at: <http://arbitrationblog.kluwerarbitration.com/2022/10/17/the-agreement-in-principle-on-ect-modernization-a-botched-reform-attempt-that-undermines-climate-action>.

<sup>105</sup> Ibid.

<sup>106</sup> Ibid.

Spain,<sup>107</sup> often referred to as the ‘renewable energy saga’.<sup>108</sup> It has also been invoked in the context of attempts to phase out coal.<sup>109</sup> The argument that the ECT could enhance investment in renewable energy by offering additional protection to investors and states has recently been challenged because extensive research has failed to identify any causal relationship between legal protection and investment flows.<sup>110</sup>

Furthermore, in the discussion regarding AAT, the unaltered nature of the sunset clause outlined in Article 47 ECT warrants attention. This clause mandates the continued application of the ECT to a contracting party for 20 years following its withdrawal. Given its association with fossil fuels, this provision might impede progress in energy transition and sustainability transformations.<sup>111</sup> Importantly, there has been no endeavour to re-evaluate the ISDS mechanism within this context,<sup>112</sup> despite the widely acknowledged detrimental role in achieving a low-carbon economy.<sup>113</sup>

Additionally, the timelines of the transitions and entry into force are too lax to enable compliance with various international and national obligations, such as the EU commitment to achieve climate neutrality by 2050.<sup>114</sup> The adoption of the modernization package was planned for the Energy Charter Conference on 22 November 2022. However, as at the time of writing, it has not taken place.<sup>115</sup> Even if it occurs in the future, the new ECT will only enter into force 90 days after it is ratified by three-quarters of the contracting parties, and it will apply only to those who ratify it. Therefore, entry into force is likely not to occur until the late 2020s at the earliest.<sup>116</sup>

<sup>107</sup> E.g., *RWE Innogy and RWE Innogy Aersa SAU v. Spain*, ICSID, Case No. ARB/14/34, Award of Tribunal, 18 Dec. 2020, available at: <https://www.italaw.com/cases/7743>; *AES Solar and Others (PV Investors) v. Spain*, Permanent Court of Arbitration (PCA), Case No. 2012-14, Final Award, 28 Feb. 2020, available at: <https://www.italaw.com/cases/9887>.

<sup>108</sup> For an in-depth analysis see M. Fermeglia, ‘Cashing-In on the Energy Transition? Assessing Damage Evaluation Practices in Renewable Energy Investment Disputes’ (2022) 23(5–6) *Journal of World Investment & Trade*, pp. 982–1019.

<sup>109</sup> E.g., *Uniper v. The Netherlands*, ICSID, Case No. ARB/21/22 (withdrawn), available at: <https://www.italaw.com/cases/9146>; *RWE AG and RWE Eemshaven Holding II BV v. The Netherlands*, ICSID, Case No. ARB/21/4, withdrawn on 12 Jan. 2024, available at: <https://www.italaw.com/cases/9156>.

<sup>110</sup> L. Mehranvar & S. Sasmal, ‘The Role of Investment Treaties and Investor-State Dispute Settlement in Renewable Energy Investments’, Columbia Center on Sustainable Investment, 12 Jan. 2023, available at: <https://academiccommons.columbia.edu/doi/10.7916/62m7-6v66>; M.T. Aydos et al., ‘Scaling Investment in Renewable Energy Generation to Achieve Sustainable Development Goals 7 (Affordable and Clean Energy) and 13 (Climate Action) and the Paris Agreement: Roadblocks and Drivers’, Columbia Center on Sustainable Investment, Dec. 2022, available at: [https://scholarship.law.columbia.edu/sustainable\\_investment/6](https://scholarship.law.columbia.edu/sustainable_investment/6).

<sup>111</sup> Maynard & Kalinin, n. 101 above.

<sup>112</sup> Brauch, n. 104 above.

<sup>113</sup> The Intergovernmental Panel on Climate Change (IPCC), in its Apr. 2022 Working Group III report, underscored the risks posed by ISDS to climate change mitigation efforts, including state phase-outs of fossil fuel energy sources: A. Patt et al., ‘International Cooperation’, in IPCC (P.R. Shukla et al. (eds)), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2022), pp. 1451–545, at 1505–6.

<sup>114</sup> Art. 2 of Regulation (EU) 2021/1119 establishing the Framework for Achieving Climate Neutrality and Amending Regulations (EC) No 401/2009 and (EU) 2018/1999 [2021] OJ L 243/1 (European Climate Law).

<sup>115</sup> June 2024.

<sup>116</sup> Brauch, n. 104 above.

The singular carve-out suggested by the EU, its Member States, and the United Kingdom (UK) during the modernization agreement, with the aim of excluding specific investments in fossil energy from the protection provided by the ECT, also appears unsatisfactory.<sup>117</sup> Scholars have noted the problematic nature of amending the ECT and applying a carve-out.<sup>118</sup> Additionally, while, if adopted, it would be a territorially limited solution, the protection of fossil fuels would remain in force indefinitely for all other contracting parties. However, given the urgency of managing ongoing socio-environmental transformations and protecting mitigation efforts from the chilling effect resulting from investor-state claims, some scholars have pointed out that waiting for comprehensive multilateral agreements is not feasible.<sup>119</sup> For this reason, the parties to the ECT could have considered a climate change carve-out from the entire treaty, or at least from ISDS (leaving state-to-state settlement as an option), as a provision covering measures aimed at reducing or stabilizing greenhouse gas emissions.<sup>120</sup> According to Pain and Sheargold, the viability of this formula depends on its design and application.<sup>121</sup> It would be necessary to prevent abuse by states, to use the carve-out in good faith, and to provide for referral of the application of the carve-out to the designated environmental authorities of states.<sup>122</sup>

In sum, the treaty is not transformative when viewed through the lens of architecture and agency.

### 3.2. Democracy and Power

The second research lens is that of democracy and power. The ISDS mechanism and the powers of arbitrators are the main sources of criticism from the democracy and power lens.<sup>123</sup> In the context of the Anthropocene (DPA) and given the problem of inequality (DPI), the undemocratic and non-transparent ISDS mechanism and the evolution of the original *raison d'être* of the ECT pose grave concerns. The *Rockhopper v. Italy*<sup>124</sup> award illustrates how the ECT, through the ISDS mechanism, undermines legitimate environmental regulation amid the climate emergency and the ecological crisis of the Anthropocene. This occurs despite civil society's effort to resist fossil fuel dominance and the rulings of national courts.<sup>125</sup> As Arcuri has pointed out, the *Rockhopper*

<sup>117</sup> J. Paine & E. Sheargold, 'A Climate Change Carve-Out for Investment Treaties' (2023) 26(2) *Journal of International Economic Law*, pp. 285–304, at 291.

<sup>118</sup> L. Schaugg & S. Brewin, 'Uncertain Climate Impact and Several Open Questions: An Analysis of the Proposed Reform of the Energy Charter Treaty', IISD Report, 10 Oct. 2022, pp. 5–8, 13–17, 41, available at: <https://www.iisd.org/publications/report/energy-charter-treaty-agreement-analysis>.

<sup>119</sup> Paine & Sheargold, n. 117 above, p. 304.

<sup>120</sup> *Ibid.*, p. 299.

<sup>121</sup> *Ibid.*, pp. 300–3.

<sup>122</sup> *Ibid.*

<sup>123</sup> Belyi, n. 4 above; Verburg, n. 80 above.

<sup>124</sup> *Rockhopper Italia S.p.A. and Others v. Italian Republic*, n. 84 above.

<sup>125</sup> In several cases, national courts have ruled against the claims of international investors. For these cases and their analysis see A. Arcuri, K. Tienhaara & L. Pellegrini, 'Investment Law v. Supply-Side Climate Policies: Insights from *Rockhopper v. Italy* and *Lone Pine v. Canada*' (2024) 24 *International Environmental Agreements: Politics, Law and Economics*, pp. 193–216.

award marked a turning point, not only by awarding substantial compensation but also by strengthening *contra legem* property rights of the fossil fuel industry, diluting national legal provisions, and disregarding environmental risks and public health considerations.<sup>126</sup> This serves as a warning to countries considering membership of the ECT and urges current members to reconsider its potential to hinder ecological democratic progress.<sup>127</sup>

The ISDS mechanism in itself is increasingly subject to criticism about whether it is a legitimate forum to settle disputes, especially whether ‘privately appointed arbitrators appropriately can resolve environmental-related disputes’.<sup>128</sup> A complete overhaul of the system has been proposed,<sup>129</sup> as has reform that strikes a more accurate balance between legitimacy and operability.<sup>130</sup> Proposals for reform of the ISDS provisions of the ECT are part of a more general global backlash against the mechanism.<sup>131</sup> This backlash gained considerable momentum after the attempt to include ISDS provisions into mega-regional trade agreements such as the Transatlantic Trade and Investment Partnership (TTIP) being negotiated between the US and the EU and the Comprehensive Economic and Trade Agreement (CETA) between the EU and Canada.<sup>132</sup> In the early 2010s, significant vocal opposition emerged in academic and political circles, both in the EU and elsewhere.<sup>133</sup> Conceptually, the ISDS mechanism falls short of the good governance and rule of law standards that it purports to promote.<sup>134</sup>

That being said, the ECT claims to strengthen the rule of law and to create an international legal framework for energy investment in developing economies, which are evidently democratic objectives.<sup>135</sup> Furthermore, the ECT was once lauded for emphasizing environmental protection in its trade and investment provisions,<sup>136</sup> albeit representing a compromise between environmental protection and the ‘economic logic of global energy markets’.<sup>137</sup> However, most of the bilateral investment treaties

<sup>126</sup> Arcuri n. 85 above, pp. 13–17.

<sup>127</sup> *Ibid.*, p. 19.

<sup>128</sup> C. Baltag & Y. Dautaj, ‘Investors, States, and Arbitrators in the Crosshairs of International Investment Law and Environmental Protection’ (2019) 3(1) *Brill Research Perspectives in International Investment Law and Arbitration*, pp. 1–77.

<sup>129</sup> A. Arcuri & F. Violi, ‘Public Interest and International Investment Law: A Critical Perspective on Three Mainstream Narratives’, in J. Chaisse, L. Choukroune & S. Jusoh (eds), *Handbook of International Investment Law and Policy* (Springer Nature, 2021), pp. 2185–220.

<sup>130</sup> Baltag & Dautaj, n. 128 above.

<sup>131</sup> Arcuri & Violi, n. 60 above.

<sup>132</sup> Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union and its Member States, Brussels (Belgium), 30 Oct. 2016, partially in force 21 Sept. 2017, [2017] OJ L 11/23, available at: <http://data.consilium.europa.eu/doc/document/ST-10973-2016-INIT/en/pdf>.

<sup>133</sup> Arcuri & Violi, n. 60 above; M. Sattorova, *The Impact of Investment Treaty Law on Host States: Enabling Good Governance?* (Hart, 2018), pp. 1–20.

<sup>134</sup> Sattorova, *ibid.*; C. Tan, ‘Reviving the Emperor’s Old Clothes: The Good Governance Agenda, Development and International Investment Law’, in S.W. Schill, C.J. Tams & R. Hofman (eds), *International Investment Law and Development: Bridging the Gap* (Edward Elgar, 2015), pp. 147–79.

<sup>135</sup> N. Georgiou, ‘A Modernised ECT Reflecting EU Values and Objectives: Promoting Energy Investment in a Sustainable Way?’, ACELG Annual Conference, n. 83 above.

<sup>136</sup> Shine, n. 72 above.

<sup>137</sup> *Ibid.*

(BITS)<sup>138</sup> that the EU has concluded reflect a more advanced policy compared with the ECT.<sup>139</sup> Moreover, it is regrettable that the alternative dispute settlement mechanisms that feature in the investment chapters of the free-trade agreements of the EU and in the Dutch Model BIT of 2019 were not considered alternatives to ISDS.<sup>140</sup>

We now turn to diversity (DPD) and the potential of the ECT to mitigate misuses of power that marginalize minorities. Beyond ISDS, during the modernization process the contracting parties also neglected the review of allocation of costs and the calculation of damages.<sup>141</sup> They thus did nothing to address inequality (DPI).<sup>142</sup> The vast interpretive powers that the vague language of the ECT confers on arbitrators carry the risk that ‘key decisions on climate mitigation [shift] from governments to the discretion of arbitral tribunals’,<sup>143</sup> which may be particularly harmful for minorities.<sup>144</sup> The suggestion that arbitrators should be required to consider climate-related issues in applying the rules of international law<sup>145</sup> was never formally taken up.

Moving to the dimension of transformations (DPT), we consider that the ECT modernization effort was not transformative but cosmetic. The opportunity for comprehensive reform was missed. Instead, the privileges of foreign investors were strengthened and expanded.<sup>146</sup> The core norms, governance mechanisms, legal instruments, and conceptions of justice remained unchanged. While the suggested modernization of the ECT integrates some recent trends in international treaty making, such as the definition of FET resembling that found in the CETA, it falls short of the demands of the Paris Agreement. The term ‘modernization’ has been said to be a misnomer, as the update would still allow tribunals to reassess climate measures and potentially allow private interests to prevail over public ones.<sup>147</sup> Therefore, the ECT is not fit for the social transformation that the holistic ESL approach requires.

<sup>138</sup> The UN Trade and Development (UNCTAD) International Investment Agreements Navigator defines a BIT as ‘an agreement between two countries regarding promotion and protection of investments made by investors from respective countries in each other’s territory’, available at: <https://investmentpolicy.unctad.org/international-investment-agreements/countries/148/netherlands>.

<sup>139</sup> Quirico, n. 71 above, p. 74.

<sup>140</sup> M. Magnarelli, A. Monti & M. Fermeglia, ‘Expert Roundtable: The Energy Charter Treaty at a Crossroads’, *Kluwer Arbitration Blog*, 18 Nov. 2022, available at: <http://arbitrationblog.kluwerarbitration.com/2022/11/18/expert-roundtable-the-energy-charter-treaty-at-a-crossroads>. See also the analysis developed in relation to the intersection of the lenses ‘democracy and power’ with the contextual condition ‘transformation’ (DPT).

<sup>141</sup> Ibid.

<sup>142</sup> Verburg, n. 80 above.

<sup>143</sup> Magnarelli, Monti & Fermeglia, n. 140 above.

<sup>144</sup> As explained in Section 3.3, ISDS creates an asymmetrical dispute settlement system in which affected communities and minorities have no recourse to national courts; see L. Pellegrini et al., ‘International Investment Agreements, Human Rights, and Environmental Justice: The Texaco/Chevron Case from the Ecuadorian Amazon’ (2020) 23(2) *Journal of International Economic Law*, pp. 455–68, at 457.

<sup>145</sup> Ibid.

<sup>146</sup> Brauch, n. 104 above.

<sup>147</sup> Ibid.

### 3.3. Justice and Allocation

When examined through a justice and allocation lens (JAA), the Anthropocene poses a challenge not only for governance and law<sup>148</sup> but also for justice.<sup>149</sup> The causal relationships that matter in the Anthropocene are complex and non-linear. At the same time, the relationship between society and nature is such that patterns of extraction, production, distribution, and consumption must be reshaped.<sup>150</sup> The case of climate justice is paradigmatic in this respect,<sup>151</sup> as climate change is being considered a super-wicked problem.<sup>152</sup> Against this backdrop, legal experts in international energy law have noted that ‘the Treaty should include provisions on the States’ right to regulate that are as specific as possible and make compliance with clear obligations for investors a mandatory precondition for treaty protection’.<sup>153</sup> The unrevised ECT appears to allocate resources and responsibilities in a manner that does not address the emerging inequalities of the Anthropocene.

In the context of diversity (JAD), it is evident that the ECT does not guarantee ‘planetary justice’<sup>154</sup> between different generations and species, explicitly or implicitly. The foundational rationale of the ECT is essentially developmentalist. The notion of diversity manifests solely as a prohibition on discriminatory treatment, which is operationalized by the FET clause. It may be possible to interpret the phrase ‘environmental impact’ (Article 19(3)(b)) in an ecologically responsible manner. However, such an interpretation would require the introduction of novel definitions and principles that were not considered during the modernization process. Such a development therefore seems implausible.

Regarding the condition of inequality (JAI), we contend that the ECT hinders equal access to justice in a number of ways: firstly, by failing to facilitate state-to-state dispute resolution where the issue in dispute concerns environmental matters. Specifically, Article 27, which outlines the dispute-resolution mechanisms that are applicable to disputes between the contracting parties, is not applicable to Article 19 on environmental aspects (or the provision on climate change included within the Agreement in Principle on the modernization of the ECT). Instead, Article 28 *bis* stipulates that disputes between contracting parties should be resolved through diplomatic channels. If those efforts fail, then the dispute must be referred for conciliation.<sup>155</sup> Secondly, scholarly research

<sup>148</sup> Kim & Kotzé, n. 39 above, pp. 3–15; R.E. Kim & H. van Hasselt, ‘Global Governance: Problem Shifting in the Anthropocene and the Limits of International Law’, in E. Morgera & K. Kulovesi (eds), *Research Handbook on International Law and Natural Resources* (Edward Elgar, 2016), pp. 473–95.

<sup>149</sup> Jaria-Manzano, n. 34 above, p. 40.

<sup>150</sup> J. Baskin, ‘Global Justice and the Anthropocene: Reproducing a Development Story’, in F. Biermann & E. Lövbrand (eds), *Anthropocene Encounters: New Directions in Green Political Thinking* (Cambridge University Press, 2019), pp. 150–68, at 165.

<sup>151</sup> S. Adelman, ‘A Legal Paradigm Shift Towards Climate Justice in the Anthropocene’ (2021) 11(1) *Oñati Socio-Legal Series*, pp. 44–68.

<sup>152</sup> K. Levin, et al., ‘Overcoming the Tragedy of Super Wicked Problems: Constraining Our Future Selves to Ameliorate Global Climate Change’ (2012) 45(2) *Policy Sciences*, pp. 123–52.

<sup>153</sup> Magnarelli, Monti & Fermeglia, n. 140 above.

<sup>154</sup> F. Biermann & A. Kalfagianni, ‘Planetary Justice: A Research Framework’ (2020) 6 *Earth System Governance*, article 100049.

<sup>155</sup> Maynard & Kalinin, n. 101 above.

has outlined how corporations strategically use ISDS mechanisms to reduce the few opportunities available for affected individuals and communities to seek legal redress for corporate rights abuses.<sup>156</sup> The case of *Chevron v. Ecuador* is a compelling example of where the outcome of the arbitration adversely affected the rights of Ecuadorian claimants who were not parties to the arbitration.<sup>157</sup> This outcome has left these claimants without a legal platform to defend their interests and has impeded their access to justice.<sup>158</sup> Thirdly, inequality in the context of justice and allocation is also apparent in how the ECT approaches environmental impact assessments and public participation. Article 19 specifies the requirements that apply to the environmental impact assessment which must be carried out prior to authorizing energy investment projects. These requirements pertain to the protection of human populations and their health, biodiversity, land, soil, water, air, the climate, cultural heritage, and the natural landscape. Public participation requirements are introduced, but no reference is made to the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters,<sup>159</sup> or its requirements, as such. In the modernized version of the ECT, the suggested Article 17 *bis* does not limit or prohibit fossil fuel subsidies or contain guidelines for the phasing out of those fuels, but it limits the arbitrability of subsidies.<sup>160</sup> Ultimately, within the context of inequality, additional disadvantages emerge when considering the specific groups who reap the rewards of the ISDS system – namely arbitrators, legal firms, and academics.<sup>161</sup> These groups benefit from the specialized knowledge and expertise essential for leveraging these dispute resolution mechanisms.<sup>162</sup>

When it comes to the transformations' contextual condition (JAT), reference should be made to the massive ongoing processes of the (planetary) just energy transition.<sup>163</sup> However, under the ECT, many awards balance various objectives, yet environmental and sustainability considerations seldom feature in these assessments.<sup>164</sup> This is confirmed through awards such as *Rockhopper v. Italy*,<sup>165</sup> where environmental questions were treated in a reductionist way.<sup>166</sup> The energy transition can be recast as an energy transformation, which would underscore the magnitude and urgency of

<sup>156</sup> Pellegrini et al., n. 144 above, p. 466.

<sup>157</sup> Ibid.

<sup>158</sup> Ibid. Also, for more information Pellegrini and co-authors explain that 'the decision [they were awarded around USD 9.5 billion for environmental remediation] is enforceable under Ecuadorian law, but Chevron refused to disburse the funds and, since the company has no assets left in Ecuador, the plaintiffs have had to initiate new legal proceedings in other countries to access the funds', e.g., in Canada, where the outcome was not favourable for the plaintiffs: *ibid.*, p. 461.

<sup>159</sup> Aarhus (Denmark), 25 June 1988, in force 30 Oct. 2001, available at: <https://unece.org/DAM/env/pp/documents/cep43e.pdf>.

<sup>160</sup> Brauch, n. 104 above.

<sup>161</sup> Pellegrini et al., n. 144 above, p. 467.

<sup>162</sup> Ibid.

<sup>163</sup> D. Stevis & R. Felli, 'Planetary Just Transition? How Inclusive and How Just?' (2020) 6 *Earth System Governance*, article 100065.

<sup>164</sup> L. Reins, 'Article 2 Purpose of the Treaty', in Leal-Arcas, n. 67 above, pp. 49–58.

<sup>165</sup> N. 84 above.

<sup>166</sup> Arcuri, n. 85 above, pp. 13–9.

the necessary changes to achieve contemporary climate, security, and equity goals.<sup>167</sup> The 2022 report of the Intergovernmental Panel on Climate Change (IPCC) on climate mitigation emphasizes that ‘ambitious mitigation pathways imply large and sometimes disruptive changes in economic structure with significant distributional consequences within and between countries’.<sup>168</sup> Decarbonization will necessitate the replacement of jobs in high-emission industries. International and domestic legal frameworks will shape the energy transition by determining the distribution of costs and benefits.

The ECT bestows privileges upon fossil fuel asset owners. Brauch, Merrill and Arnold argue that international legal frameworks should guarantee that all states have sufficient resources to invest in climate mitigation and adaptation and to cover their rising costs.<sup>169</sup> Therefore, wealth transfers to fossil fuel companies should be accompanied by explicit prohibitions on reinvestment in fossil fuel projects or related infrastructure, as well as with enforceable just transition obligations that benefit employees. Rather than placing private arbitrators in control of issues related to the valuation of fossil fuel assets and compensation, discussions on compensation should be brought to a state-led decision-making forum that establishes principles and criteria.<sup>170</sup> Furthermore, at present, the size of arbitral awards is such that the mere threat of a claim is enough to dissuade governments from taking climate action.<sup>171</sup> Awards such as that in *Chevron v. Ecuador* have arguably left the victims of oil pollution uncompensated.<sup>172</sup> Against this backdrop, reconfiguring ISDS mechanisms into symmetric tools could be a promising avenue to cope with the transformations’ contextual conditions. As exposed by Pellegrini and co-authors, the reconversion of arbitration mechanisms on symmetrical terms could enable states and third parties to use arbitration tribunals to obtain redress for the impacts of investors’ operations or as ‘a venue for starting litigation in countries whose institutions, especially the judiciary, are irresponsive to the citizens’ rights’.<sup>173</sup>

From an ESL perspective, the ECT seems unsuitable for addressing the justice and allocation concerns that sustainability transformations engender.

### 3.4. Adaptiveness and Reflexivity

The adaptiveness and reflexivity lens of ESG elucidates the mechanisms through which societies can effectively navigate the multifaceted challenges of global sustainability.

<sup>167</sup> J. Paterson, ‘Energy Law and Energy Transformation’, in R. Fleming et al. (eds), *A Force of Energy: Essays in Energy Law in Honour of Professor Martha Roggenkamp* (University of Groningen Press, 2022), pp. 20–7.

<sup>168</sup> P.R. Shukla et al., ‘Summary for Policymakers’, in IPCC, n. 113 above, pp. 1–48, at 43, para. D.3.2.

<sup>169</sup> M.D. Brauch, E. Merrill & J. Arnold, ‘Event Highlights: Compensation for a Just Energy Transition in International Investment Law and Domestic Law’, Columbia Center on Sustainable Investment, 19 May 2022, available at: <https://ccsi.columbia.edu/content/event-highlights-compensation-just-energy-transition-international-investment-law-domestic-law>.

<sup>170</sup> Ibid.

<sup>171</sup> K. Tienhaara, ‘Regulatory Chill in a Warming World: The Threat to Climate Policy Posed by Investor-State Dispute Settlement’ (2018) 7(2) *Transnational Environmental Law*, pp. 229–50.

<sup>172</sup> Pellegrini et al., n. 144 above, p. 465.

<sup>173</sup> Ibid., p. 467.

The intersection between this lens and the context of the Anthropocene (ARA) reveals that the new geological era poses a significant onto-epistemic challenge.<sup>174</sup> The advent of the Anthropocene calls for new modes of thinking. From an epistemological standpoint, extending arguments about the climate emergency to the numerous similar crises that result from the transgression of planetary boundaries indicates that achieving sustainability depends on the accumulation of multidisciplinary and multiscale knowledge that is not reductionist.<sup>175</sup> The ECT is reductionist, as its treatment of complex phenomena reflects a narrow understanding of reality. This deficiency is evident in, among other aspects, the references to economic efficiency and cost efficiency in the provisions that regulate climate mitigation and environmental impacts. Consequently, the ECT does not facilitate the epistemic change that is necessary for actors and institutions to reshape their values, actions, and objectives.<sup>176</sup>

The modernization of the ECT would have had limited implications for diversity (ARD). Under the modernized ECT, the list of ‘energy materials and products’ would be reviewed every five years in accordance with the Review Mechanism.<sup>177</sup> Currently, a very wide range of activities are covered by the ECT – such as ‘exploration, extraction, refining, production, storage, land transport, transmission, distribution, trade, marketing, or sale of energy materials and products’,<sup>178</sup> as well as the generation, production, and sale of ‘electrical energy’.<sup>179</sup> Reference is made to ‘energy materials and products’, a term that refers mainly to fossil fuel-related products such as nuclear energy, coal, and natural gas; petroleum, petroleum products, and electrical energy; and other materials and products such as fuel wood and wood charcoal.<sup>180</sup> As part of the modernization process, the list of ‘energy materials and products’ is suggested to be updated to include sustainable fuels such as hydrogen, anhydrous ammonia, biomass, biogas, and synthetic fuels.<sup>181</sup> Despite being less fossil fuel-centric, it has been argued that this extension would ‘not represent an improvement. Rather, it further constrains governments’ regulatory space to adopt energy transition policies and increases their costs and liability as they take steps to do so’.<sup>182</sup> It would have been

<sup>174</sup> M. Arias-Maldonado, ‘The “Anthropocene” in Philosophy: The Neo-material Turn and the Question of Nature’, in Biermann & Löwbrand, n. 150 above, pp. 50–66; D. Maggs & J. Robinson, ‘Recalibrating the Anthropocene: Sustainability in an Imaginary World’ (2016) 13(2) *Environmental Philosophy*, pp. 175–94.

<sup>175</sup> M. Carducci, *Le Basi Epistemologiche dell’Emergenza Climatica e dell’Health Equity* (Rapporto a cura del CEDEUAM dell’Università del Salento, 2022), p. 6.

<sup>176</sup> Earth System Governance Project, n. 62 above, p. 68.

<sup>177</sup> Energy Charter Secretariat, Decision of the Energy Charter Conference, ‘Public Communication Explaining the Main Changes Contained in the Agreement in Principle’, 24 June 2022, CCDEC2022 10 GEN, Pillar 3, p. 3, available at: <https://www.energycharter.org/fileadmin/DocumentsMedia/CCDECS/2022/CCDEC202210.pdf>.

<sup>178</sup> Art. 1(5) ECT.

<sup>179</sup> *Electrabel S.A. v. Republic of Hungary*, ICSID, Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 Nov. 2012, para. 5.50, available at: <https://www.italaw.com/cases/380>.

<sup>180</sup> ECT Annex EM I based on the Harmonised System of the World Customs Organization and the Combined Nomenclature of the European Communities.

<sup>181</sup> Energy Charter Secretariat, n. 177 above, Pillar 3, p. 3, as well as Art. 34(8) of the suggested modernized text.

<sup>182</sup> Brauch, n. 104 above.

more desirable to ‘provide arbitral tribunals with more interpretative guidance’ and to differentiate between energy transition and fossil fuel investments.<sup>183</sup> With that said, if the revised version of the ECT is adopted, the list is expected to be reviewed at least every five years, which means that fossil fuels may come to be excluded from it in the future. Therefore, it is at least arguable that the ECT does not apply to new developments such as carbon-neutral energy, means of improving energy efficiency, and digitalization.<sup>184</sup> The suggested review process would enable the parties to respond to technological and political developments. Therefore, in the ECT framework, the notion of diversity appears to be associated with technological and political change rather than with a pluralist epistemology of interacting variables and elements, such as socio-bio-geo-physical interactions.

Turning to the capacity of the ECT to address changing patterns of inequality (ARI), the treaty expressly prohibits the less favourable treatment of contracting parties, undertakings, and signatory state nationals. This provision applies to the movement of capital, energy-related materials and products, and technology. The ECT thus operates as a sectoral piece of a supranational ‘functionally delineated economic constitution’ decoupled from nature.<sup>185</sup>

Finally, if the Agreement in Principle were to be ratified, the flexibility mechanism would play a crucial role regarding transformation conditions (ART). The new flexibility mechanism would allow the parties to refuse to protect fossil fuel investments by treating them as being outside the meaning of the phrase ‘economic activity in the energy sector’ for the purposes of Part III of the treaty. Existing fossil fuel investments can be phased out after 10 years instead of the current 20. Notably, the mechanism is not the standard for all contracting parties, and it is envisaged that only the EU and the UK will make use of it.<sup>186</sup> The other parties agreed to extend investment protection to fossil fuels indefinitely, a decision that has been described as ‘climate madness’.<sup>187</sup> Even the EU and the UK are expected to protect fossil fuel investments well into the 2030s.<sup>188</sup> The withdrawal of the EU and the failure of the modernization process means that it is highly unlikely that a superior flexibility mechanism will be adopted in the future.

### 3.5. Anticipation and Imagination

The general need to govern anticipation processes through modelling, integrated assessments, foresight, and scenario building is relevant to the ECT modernization

<sup>183</sup> Magnarelli, Monti & Fermeglia, n. 140 above.

<sup>184</sup> Quirico, n. 71 above, p. 75.

<sup>185</sup> E. Cocciolo, ‘Capitalocene, Thermocene and the Earth System: Global Law and Connectivity in the Anthropocene Age’, in J. Jaria-Manzano & S. Borrás (eds), *Research Handbook on Global Constitutionalism* (Edward Elgar, 2019), pp. 277–301, at 288. On the concept of ‘functionally delineated economic constitution’ see P.F. Kjaer, ‘The Under-Complexity of Democracy’, in G.P. Calliess et al. (eds), *Soziologische Jurisprudenz. Festschrift für Gunther Teubner zum 65. Geburtstag am 30 April 2009* (De Gruyter, 2009), pp. 531–42, at 539.

<sup>186</sup> Energy Charter Secretariat, n. 177 above, Pillar 2, p. 3.

<sup>187</sup> Fisher, n. 103 above.

<sup>188</sup> Brauch, n. 104 above.

effort. The treaty can be updated only if the future of the energy sector is imagined and anticipated. This analytical lens emphasizes the relationship between anticipation and governance and the manner in which governance instruments such as the ECT can shape and be shaped by diverse futures.

The ECT, even in its supposed modernized version, is based on the concept of sustainable development, which was shaped by the stable conditions of the Holocene. According to Kotzé and co-authors, sustainable development is a quasi-constitutional principle entrenched in international environmental law and associated with neoliberalism.<sup>189</sup> Jaria-Manzano's critique of sustainable development is pertinent to anticipation and imagination in the context of the Anthropocene (AIA).<sup>190</sup> According to that critique, sustainable development entails an implicit denial of the planetary transformation and disregard for the escalating uncertainty of planetary phenomena.<sup>191</sup> This uncertainty arises from the intricate interplay between human agency and planetary evolution in the Anthropocene. Non-linear chains of events are fundamentally unmanageable under a political and legal system that is premised on the notions of permanence and the guaranteed availability of technological solutions to ecological crises.<sup>192</sup> The ECT is based on an imaginary future that could only have been produced by conditions that no longer obtain, and its implications for governance reflect that vision.

The arguments developed under the other analytical lenses are also valid in the context of diversity (AID). The foresight processes that are based on the ECT are characterized not by inclusion and diversity but by exclusion and congruity. The notion of formal equality before the law is used as a vehicle to create a homogeneous space for trade and to liberalize the international energy market. As an element of the global economic constitution, the ECT persists in imagining a future detached from the multiform conditions of socio-ecological systems.

We draw on Baskin's work to formulate an analytical approach to inequality (AII); such an approach can be synthesized into two questions. In the processes of anticipation and imagination that are based on the ECT, what account of justice is integrated into the treaty, and for whom? Which subjects are affected by this account of justice?<sup>193</sup> In brief, the subjects whose expectations the ECT protects are investors and states. Consequently, the ECT is not connected to any conception of global justice; it is intended to project a legally stable and predictable framework of trade liberalization and competition. Unlike the International Energy Charter,<sup>194</sup> the ECT does not refer to poverty, and its text is animated by a conception of justice that revolves around market value and the

<sup>189</sup> L.J. Kotzé, S. Adelman & F. Dube, 'The Problem with Sustainable Development in the Anthropocene Epoch', in P.D. Burdon & J. Martel (eds), *The Routledge Handbook of Law and the Anthropocene* (Routledge, 2023), pp. 3–17.

<sup>190</sup> J. Jaria-Manzano, 'Beyond Sustainability: Challenges for Environmental Law in the Era of Uncertainty' (2022) 52(2) *Environmental Policy and Law*, pp. 93–104.

<sup>191</sup> *Ibid.*

<sup>192</sup> *Ibid.*

<sup>193</sup> Baskin, n. 150 above.

<sup>194</sup> The Hague (The Netherlands), 20 May 2015, in force 20 May 2015, available at: [https://www.energycharter.org/fileadmin/DocumentsMedia/Legal/IEC\\_Certified\\_Adopted\\_Copy.pdf](https://www.energycharter.org/fileadmin/DocumentsMedia/Legal/IEC_Certified_Adopted_Copy.pdf).

FET standard. Its anticipation processes are therefore based on the mainstream developmentalist conception, which precludes consideration of justice-based alternatives.

These findings indicate that, from the perspective of the transformations for which the Anthropocene calls (AIT), the ECT is not a future-oriented instrument and is not aligned with the ESL paradigm. So much is evident from the withdrawal of the EU, which appears to have been spurred by a concern that arbitration would remain a means of vitiating ambitious climate policies.<sup>195</sup> Instead, what is needed is a regime that has planetary boundaries and international cooperation at its core.

#### 4. Conclusion

We have analyzed the ECT and its modernization through the lens of Earth system law. ESL is a legal paradigm that promotes connectivity, enables the sustainable transformation of social processes, and assesses the compatibility between legal orders and the Earth system. Our application of the ESL theoretical matrix that Kotzé and Kim developed revealed that the ECT cannot meet contemporary socio-ecological challenges. Furthermore, the output of the modernization process is not consistent with the transformative law for which the current episteme calls. This assessment is based on reading the ECT through five analytical lenses, and led us to the following conclusions.

Firstly, we have examined the ECT from the perspective of institutional and regulatory frameworks and actors implicated in Earth system governance. We have focused on how these institutions and actors resist or respond to change and evolve. This analysis has underscored the ECT's enduring adherence to international investment law principles, an approach that inadequately addresses the complexities of the Anthropocene epoch. Specifically, Article 19 ECT and the treaty's modernized provision on climate change and the energy transition illustrate its failure to adapt to the fragmented regulatory landscapes governing environmental concerns. This perpetuates the risk of problem shifting while neglecting the implications of legal pluralism. The static nature of the ECT precludes its capacity to accommodate legal pluralism and to respond to the interests of those likely to be most affected by the energy transition. Moreover, despite endeavours towards modernization, discernible patterns of inequality persist within the treaty, with its provisions potentially obstructing progress in energy transition and sustainability endeavours. Consequently, when assessed through the architecture and agency lens, the ECT remains conspicuously non-transformative, emphasizing the imperative for substantive reforms to align with contemporary environmental exigencies.

Secondly, when viewed through the lens of democracy and power, the ISDS mechanism and the role of the arbitrators emerge as primary targets of criticism. Corporations exploit the ISDS mechanisms to consolidate the power granted to them under international investment law. In the context of the Anthropocene and the pressing issue of inequality, the opaque and undemocratic nature of the ISDS mechanism, coupled with the rationale behind the ECT, raises significant concerns. Arbitral decisions based on the ECT serve as a

<sup>195</sup> IISD, 'Energy Charter Treaty Withdrawal Announcements Reflect Reform Outcome is Insufficient for Climate Ambition', 7 Nov. 2022, available at: <https://www.iisd.org/articles/statement/energy-charter-treaty-withdrawal-announcements>.

cautionary tale for states considering membership of the ECT, and for existing members to reconsider its potential to impede environmental democratic progress and perpetuate inequality against the most vulnerable subjects and communities. The purported modernization efforts of the ECT remain superficial, failing to achieve substantive reform while strengthening foreign investor privileges. Despite incorporating certain trends in international treaty making, such as the CETA-resembling definition of FET, the update falls short of aligning with the imperatives of the Paris Agreement. As a result, the term ‘modernization’ proves misleading, as the proposed changes still allow tribunals to undermine climate action and potentially prioritize private interests over those of a public nature. In essence, the ECT is ill-equipped to facilitate the societal transformation required by ecological democracy.

Thirdly, examining the ECT through the lens of justice and allocation reveals significant shortcomings in addressing the challenges of the Anthropocene. The inability of the ECT to adapt to the complex and non-linear causal relationships inherent in this era – particularly concerning the transformation of extraction patterns, production, distribution, and consumption – underscores its limitations. Additionally, the ECT fails to ensure intergenerational and interspecies planetary justice, largely because of its developmentalist underpinnings and lack of explicit provisions to address such concerns. The ECT perpetuates inequality by failing to facilitate equal access to justice and by neglecting environmental impact assessments and public participation requirements. The approach of the treaty to environmental impact assessments does not align with internationally recognized standards such as the Aarhus Convention. Furthermore, the ECT fails to adequately integrate sustainability and environmental considerations, as evidenced by cases such as *Rockhopper v. Italy*.<sup>196</sup> The ECT’s privileging of fossil fuel asset owners exacerbates these problems and hinders the imperative of a just energy transition in the Anthropocene. To address these challenges, reconfiguring ISDS mechanisms into symmetrical instruments may offer a promising way forward. Ultimately, the ECT appears ill-equipped to address the justice and distributional concerns inherent in sustainability transitions.

Fourthly, under the adaptiveness and reflexivity lens, the ECT falls short of facilitating the necessary epistemic shift as a result of its reductionist treatment of complex phenomena, as evidenced by its narrow focus on economic and cost efficiency in regulating climate change mitigation and environmental impacts. The modernization of the ECT, while including sustainable fuels within its scope, does little to address this shortcoming and may even limit the regulatory discretion for governments to pursue energy transition policies. Moreover, the treaty’s provisions on inequality primarily prohibit less favourable treatment without adequately addressing the wider socio-economic inequalities exacerbated by fossil fuel dependency. While the flexibility mechanism proposed in the Agreement in Principle could potentially address changing patterns of inequality and facilitate transition conditions by allowing for the phasing out of fossil fuel investments, its limited uptake and the failure of the modernization process raise doubts about its effectiveness in promoting a sustainable energy transition.

<sup>196</sup> N. 84 above.

Thus, the current ECT framework remains inadequate for addressing the evolving sustainability challenges of the Anthropocene.

Fifthly, the ECT both shapes and is shaped by anticipation processes. It was originally formulated to generate governance mechanisms for the international energy sector, and its provisions embody a particular vision of that industry. Since the world has begun its transition to a net zero carbon economy, and the importance of a safe and equitable approach to the boundaries of the Earth system is increasingly being recognized, the ECT has become divorced from the anticipated future of the energy sector. This mismatch between anticipation and governance can be seen as a site of politics, as different actors seek to shape the future of energy governance in a way that reflects their vision of the future. Yet, it is a site where law plays a key transformative role in line with the aims of ESL.

Lastly, it can be concluded that if such an ESL perspective had been adopted, at least in theory (leaving aside the political dimension of the modernization negotiations), the ECT modernization would have led to different results. An ECT aligned with the normative and governance idea of ESL would not only have effectively addressed the prevailing concerns surrounding modernization but also transformed the ECT into an instrument for facilitating a just energy transition. Such an alignment would also produce a conceptual framework that reflects the imperatives of ecological integrity, facilitates harmonious interactions between legal instruments, and promotes synergies among epistemic communities.

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