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Beyond Known Worlds: Climate Change Governance by Arbitral Tribunals?

Valentina Vadi

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Beyond Known Worlds: Climate Change Governance by Arbitral Tribunals?

Valentina Vadi*

ABSTRACT

Can economic development and the fight against climate change be integrated successfully? What role, if any, does international investment law play in global climate governance? Can foreign direct investments (FDI) be tools in the struggle against climate change? What types of claims have foreign investors brought with regard to climate change-related regulatory measures before investment treaty arbitral tribunals? This Article examines the specific question as to whether foreign direct investments can mitigate and/or aggravate climate change. The interplay between climate change and foreign direct investments is largely underexplored and in need of systematization. To map this nexus, this Article proceeds as follows. First, it examines the conceptualization of climate as a global public good. Second, it considers it as an environmental issue. Third, it scrutinizes its conceptualization as a human rights issue. Fourth, it explores critical legal issues raised by the complex interplay between climate change and foreign direct investments. Fifth, it critically assesses several current case studies. Sixth, the Article will present some legal tools to achieve a balance between the different interests at stake. The conclusion will then sum up the key findings of the study.

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I. INTRODUCTION

With temperatures constantly rising since the industrial revolution, climate change has brought extreme heat waves,

decreased global food stocks, depleted ecosystems and biodiversity, and a raised sea level.¹ Originally perceived as only an environmental issue, climate change, defined as any change in climate over time (whether due to natural factors or as a result of human activity), has become a pressing global concern.² Climate change can affect diverse determinants of human well-being, such as access to water, energy supplies, and public health, and can determine social disruptions, such as migration due to drought or rising sea levels and loss of traditional livestock and habitat.³

Because climate change is a common concern of mankind⁴ and can affect populations regardless of state boundaries, a wide range of international, regional, and national regimes governs various aspects of the same. To a large extent, this multilevel regulatory framework or “regime complex”⁵ gives rise to a sort of *lex climatica*, or climate change law. Climate change law is a good example of multipolar law: national, regional, and international law address this challenge.⁶ As a complex phenomenon, climate change “is best addressed at multiple scales and levels.”⁷ Yet, while different institutions are formulating responses, much remains to be done to ensure coherent, effective, and

1. See NAOMI KLEIN, *THIS CHANGES EVERYTHING: CAPITALISM VS. THE CLIMATE* 13–14 (2014) (highlighting possible repercussions resulting from climate change, including crop depletion, droughts, flooding, wildfires, and disease).

2. See U.N. High Commissioner for Human Rights (UNHCHR), *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights*, ¶ 5, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009), <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?OpenElement> [<http://perma.cc/QLD8-RSJW>] (archived Sept. 19, 2015) (defining climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”).

3. See Sumudu Atapattu, *Climate Change, Differentiated Responsibilities and State Responsibility: Devising Novel Legal Strategies for Damage Caused by Climate Change*, in *CLIMATE LAW AND DEVELOPING COUNTRIES* 37 (Benjamin J. Richardson et al. eds., 2009); see also Ann Powers & Christopher Stucko, *Introducing the Law of the Sea and the Legal Implications of Rising Sea Levels*, in *THREATENED ISLAND NATIONS: LEGAL IMPLICATIONS OF RISING SEAS AND A CHANGING CLIMATE* 123, 123–24 (Michael B. Gerrard & Gregory E. Wannier eds., 2013) (“[R]esidents of . . . inhabited islands are abandoning their homes as rising tides continue to render more land uninhabitable.”).

4. See generally Thomas Cottier & Sofya Matteotti-Berkutova, *International Environmental Law and the Evolving Concept of Common Concern of Mankind*, in *INTERNATIONAL TRADE REGULATION AND THE MITIGATION OF CLIMATE CHANGE* 21–47 (Thomas Cottier et al. eds., 2009).

5. See Robert O. Keohane & David G. Victor, *The Regime Complex for Climate Change*, DISCUSSION PAPER 10-33 1 (2010) (defining “regime complex” as “a loosely coupled set of specific regimes”).

6. See discussion *infra* Sections III, IV (providing specific examples of regional, national, and international laws and how they function separately and together).

7. Elinor Ostrom, *A Polycentric Approach for Coping with Climate Change*, BACKGROUND PAPER TO THE 2010 WORLD DEVELOPMENT REPORT abs. (2009).

holistic approaches to the issue, and a coordinated international response is missing. Moreover, different domains of public international law govern different aspects of climate change.

Against this background, this Article examines whether economic development as spurred by foreign direct investments (FDI) can mitigate and/or exacerbate climate change. In particular, it explores the complex interplay between climate change and foreign direct investments on two critical issues. First, the Article addresses the question as to whether FDI can be a tool in the struggle against climate change.⁸ Second, it investigates the parallel question as to whether regulatory measures relating to climate change can affect investors' rights.

Consider the following scenario.⁹ The government of Ruritania, an industrialized country, adopts policies to promote investment in renewable energy sources, creating a Feed-in-Tariff Program that sets up a twenty-year fixed price to be paid for energy from renewable sources including wind, hydroelectric, solar, and other types of renewable energy. In view of this favorable regulatory environment, Windpower, a foreign company from Marmorica, plans to develop a successful offshore wind facility in the area of Planasia, an island located in the territorial waters of Ruritania. Wind assessments have shown that the wind speeds in the Planasia area are high and steady due to the lack of mountains on the island. In fact, Planasia's highest point stands 22 m (72 ft) above sea level. It is thus likely that within a century Planasia's land will become subject to increased soil salination and will be largely submerged. Ruritania and Windpower sign a contract for the development of the offshore power plant. However, local communities vigorously oppose wind turbines. On the one hand, indigenous communities contend that sacred sites lying underwater would be jeopardized by the operation of wind turbines. On the other hand, local communities contest the development of the project close to Planasia, as this island is located in an area that is listed as a UNESCO biosphere due to its unique biological and environmental features. The government of Ruritania places a moratorium on the further development of the offshore wind development on the grounds that further scientific research has to be completed before the project can proceed. The company, however, files an investor-state arbitration against Ruritania under the

8. See Andrew Newcombe, *Sustainable Development and Investment Treaty Law*, 8 J. WORLD INV. & TRADE 357, 357–360 (2007) (examining the linkage between international investment law and sustainable development). See generally BRADLEY CONDON & TAPEN SINHA, *THE ROLE OF CLIMATE CHANGE IN GLOBAL ECONOMIC GOVERNANCE* (1st ed. 2013).

9. This scenario combines different elements from various investment arbitrations. See discussion *infra* Part VI (providing an in-depth analysis of pending investment disputes).

Marmorica–Ruritania bilateral investment treaty, contending that Ruritania has indirectly expropriated its investment. Has Ruritania unlawfully expropriated Windpower's investment, thus breaching the relevant investment treaty provision? Can Ruritania legitimately adopt measures to protect the cultural and religious sites of indigenous peoples? Should the promotion of green energy be prioritized vis-à-vis other environmental concerns?

The above scenario is but one example of the complex interplay between climate change and foreign direct investments. Despite the upsurge in arbitrations at the crossroads between investment and climate change, the interplay between climate change and foreign direct investments remains underexplored and in need of systematization. Climate change has introduced a new dimension in the balancing of competing interests in international investment law and arbitration, whereby measures to address climate change are sometimes to be assessed and balanced against competing economic interests. Investigating the nexus between FDI and climate change is both timely and important because it can contribute to current debates on environmental governance. Moreover, climate change can be seen as a harbinger of broader debates and choices about the future of international investment governance. This Article aims at mapping this linkage, investigating it through the prism of international investment law and arbitration.

International investment law constitutes an important part of public international law governing foreign direct investment.¹⁰ The sources of international investment law include international investment treaties; customary rules of international law protecting the rights of aliens; general principles of law; and—as subsidiary means for the determination of rules of law—previous awards, judicial decisions and legal scholarship. As there is still no single comprehensive global treaty, investor rights are mainly defined by almost 3,000 international investment agreements (IIAs) that are signed by two or more states and are governed by public international law.¹¹ Under such treaties, state parties agree to provide a certain

10. For an historical overview, see generally ANDREAS LOWENFELD, *INTERNATIONAL ECONOMIC LAW* 469–94 (2d ed. 2008); ANDREW NEWCOMBE & LLUÍS PARADELL, *LAW AND PRACTICE OF INVESTMENT TREATIES* 1 (2009); JESWALD W. SALACUSE, *THE LAW OF INVESTMENT TREATIES* (1st ed. 2010); M. SORNARAJAH, *THE INTERNATIONAL LAW ON FOREIGN INVESTMENT* 19–28 (3d ed. 2010). See generally JOSÉ E. ALVAREZ, *THE PUBLIC INTERNATIONAL LAW REGIME GOVERNING INTERNATIONAL INVESTMENT* (2011) (arguing that the international community has only recently determined that international rules are essential for governing foreign direct investment).

11. See generally UNCTAD, *World Investment Report 2011* (2011) (explaining that the number of international investment agreements continues to grow, adding complexity to the global investment regime).

degree of protection to investors who are nationals of contracting states, including compensation in case of expropriation, fair and equitable treatment, most favored nation treatment, and full protection and security, among others. At the procedural level, most investment treaties allow foreign investors to file arbitral claims directly against the host state. This is a major novelty in international law as investors are not required to exhaust local remedies and no longer depend on diplomatic protection to defend their interests against the host state. Investment treaty arbitration is often selected as the adjudicatory model to settle investment disputes. The claims are heard by ad hoc arbitral tribunals whose arbitrators are selected by the disputing parties and/or appointing institutions. Depending on the arbitral rules chosen, the proceedings occur *in camera* and the very existence of the claim and the final award may never become public.

As climate change and foreign direct investments are governed by different legal instruments, their interplay can be examined from different analytical and legal perspectives, including international climate change law¹² and international investment law. There can be possible convergences and/or divergences between various rules governing this interaction.¹³ The Article explores the linkage between climate change and foreign direct investments from an international investment law perspective.

While some investment law scholars have addressed some aspects of the interplay between climate change and international investment law,¹⁴ no study has focused on the emerging arbitrations in which foreign investors have alleged that the host state has breached investment treaty provisions by adopting or repealing regulation to prevent climate change. These arbitrations raise a number of critical issues. How should power be allocated between national and international levels of governance? Is investor-state

12. See generally DANIEL BODANSKY ET AL., *INTERNATIONAL CLIMATE CHANGE LAW* (2014).

13. James Harrison, *The Case for Investigative Legal Pluralism in International Economic Law Linkage Debate: A Strategy for Enhancing the Value of International Legal Discourse*, 2 LONDON REV. INT'L LAW 115–45 (2014).

14. See Daniel M. Firger & Michael B. Gerrard, *Harmonizing Climate Change Policy and International Investment Law: Threats, Challenges and Opportunities*, Y.B. INT'L INV. L. & POL'Y 1 (Karl P. Sauvant ed., 2011) (discussing how national and transnational regulations often conflict with international investment laws); Stephan W. Schill, *Do Investment Treaties Chill Unilateral State Regulation to Mitigate Climate Change?*, 24 J. INT'L ARB. 469, 469–77 (2007) (discussing the question as to whether investment governance can chill unilateral state regulation to mitigate climate change); Freya Baetens, *Foreign Investment Law and Climate Change*, 6–9 (Sustainable Development Law on Climate Change Legal Working Paper Series, Paper No. 1, 2010) (analyzing the relationship between the Kyoto Protocol and foreign investments).

arbitration the best forum to adjudicate climate change-related disputes? What is the role of arbitral tribunals in global climate governance? By imposing liability for monetary damages where government actions violate international obligations, arbitral tribunals can and do have a significant impact on national legislative bodies, administrations, and courts. This study aims to feed into and inform the ongoing debate on the role of foreign direct investments in the climate change discourse. Is comprehensive regulatory change necessary in order to foster environmentally sound development and mitigate climate change?

The Article proceeds as follows. First, it conceptualizes climate as a global public good. Second, it investigates the conceptualization of climate change as an environmental issue and the relevant legal framework. Third, it examines the conceptualization of climate change as a human rights issue. Fourth, it illustrates the regime complex governing climate change. Fifth, it discusses the interplay between climate change and foreign direct investments in the light of the current international investment regime. Some relevant investor–state arbitrations will be surveyed. Sixth, the Article will examine some legal tools to achieve a balance between the different interests at stake. The conclusion will then sum up the key findings of the study.

II. CLIMATE AS A GLOBAL PUBLIC GOOD

Climate—from the ancient Greek *klima*, meaning inclination¹⁵—is commonly defined as “the average of weather over time and space.”¹⁶ It can be categorized as a global public good, given the collective benefits it provides, as well as its global character.¹⁷ Global

15. See Rolf-Bernhard Essig, *Climate, Eco and Green Technology: How Environmental Problems Are Reflected in Language*, <http://www.goethe.de/ges/umw/prj/kuk/the/kul/es11261797.htm> [<http://perma.cc/4L5U-UQJF>] (archived Sept. 19, 2015) (“When people in Ancient Greece referred to ‘klima’, they did *not* mean a combination of temperature, air pressure, wind speed, humidity and hours of sunshine: they meant the tilt of the Earth’s axis.”).

16. NASA, Administrator, *NASA—What’s the Difference Between Weather and Climate?*, NASA (Feb. 1, 2005), http://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html [<http://perma.cc/69BT-C482>] (archived Sept. 19, 2015) (defining climate as “the average of weather over time and space”).

17. See Tomer Broude, *Warming to Crisis: The Climate Change Law of Unintended Opportunity*, NETH. Y.B. INT’L LAW 111, 116 (2013) (“[C]limate change mitigation [is] deemed ‘a quintessential global public good’ that presents itself to many . . . as an almost prototypical collective action problem.”); Timothy Meyer, *Global Public Goods, Governance Risk, and International Energy*, 22 DUKE J. COMP. & INT’L L. 319, 323 (2012) (“Mitigating climate change is an example of a public good.”); Todd Sandler, *Intergenerational Public Goods*, in GLOBAL PUBLIC GOODS—INTERNATIONAL COOPERATION IN THE 21ST CENTURY 2 (Inge Kaul et al. eds., 1999) (discussing

public goods present two main features: (1) publicness, and (2) a global nature.¹⁸ With regard to the first feature, the concept of public goods traces its roots back to antiquity, originating in the writings of Plato, Aristotle, and Cicero (*res publica*).¹⁹ According to current economic literature, “public goods” indicate goods that are nonrivalrous and nonexcludable.²⁰ Nonrivalry is the ability of multiple consumers to consume the same good; and Nonexcludability means that no one can be excluded from using the good. Climate presents the features of a (global) common good as it provides collective benefits as well as inter- and intragenerational spillovers. Everybody can enjoy it without reducing the enjoyment of this good by others.²¹ Common examples of public goods include lighthouses,²² clean air, and environmental goods, among others. The second feature of global public goods, their global character, is given by the fact that their benefits are almost universal in terms of countries, peoples, and generations.²³ Certainly, climate defies traditional notions of territorial sovereignty. Climate is a common and shared environmental resource that is both within and beyond the jurisdiction of every state.

As a public good, climate cannot easily be provided by the “invisible hand” of the market. Rather, a global economic system built on resource extraction and consumption has spurred climate change. Human induced climate change has been conceived as “the biggest market failure the world has ever seen.”²⁴ Because of the key features of public goods, “the market alone is often unable to ensure their efficient provision,”²⁵ requiring some form of governmental

intergenerational public goods (i.e. assets that generate benefits for subsequent generations)). See generally SCOTT BARRETT, *WHY COOPERATE?: THE INCENTIVE TO SUPPLY GLOBAL PUBLIC GOODS* (2010) (explaining that the challenges in encouraging states to mitigate climate change are in part a result of the tragedy of the commons).

18. See Inge Kaul et al., *Defining Global Public Goods*, in *GLOBAL PUBLIC GOODS*, *supra* note 17, at 2–3 (1999).

19. See Manuel Velasquez et al., *The Common Good*, 5 *ISSUES IN ETHICS* 1, 1 (1992).

20. See Paul Samuelson, *The Pure Theory of Public Expenditure*, 36 *REV. ECON. & STATS.* 387 (1954).

21. See generally Severine Deneulin & Nicholas Townsend, *Public Goods, Global Public Goods and the Common Good*, 34 *INT'L J. SOC. ECON.* 19 (2007).

22. See Ronald H. Coase, *The Lighthouse in Economics*, 17 *J.L. & ECON.* 357, 357–76 (1974) (asserting that a lighthouse is a public good because ships do not pay for the benefit provided to them from privately-funded operation of the lighthouse).

23. See Kaul, *supra* note 18, at 3. See generally Hari M. Osofsky, *Is Climate Change 'International'? Litigation's Diagonal Regulatory Role*, 49 *VIRGINIA J. INT'L L.* 585 (2009).

24. Michèle B. Bättig & Thomas Bernauer, *National Institutions and Global Public Goods: Are Democracies More Cooperative in Climate Change Policy?*, 63 *INT'L ORG.* 281, 281 (2009).

25. U.N. Industrial Development Organization (UNIDO), *Public Goods for Economic Development*, at 6 (2008), https://www.unido.org/fileadmin/user_media/

intervention.²⁶ International regulation allows states to address the shortcomings of national regulation²⁷ because nations and regions may not fully, or sufficiently, appreciate the value of climate as a global public good.

According to mainstream economic literature, two main problems affect the provision of public goods: (1) free riding, and (2) the prisoner's dilemma.²⁸ Free riding refers to the powerful incentive to avoid contributing personal resources to common endeavors. Let us consider the following example. While a number of states have ratified the Kyoto Protocol,²⁹ other states are reluctant to do so, fearing that by ratifying it they could affect profitable industries. A state can seek to "free ride" by allowing others to commit themselves to a binding regime, and then allowing its nationals to exploit finite resources. Moreover, even if states ratified the Protocol, certain violations of the same could be "desirable from an economic standpoint." According to some scholars, "the concept of 'efficient breach' . . . has direct applicability to international law."³⁰ If the free rider problem cannot be solved, natural resources will remain unprotected and overexploited.³¹ Hardin reformulated this problem, calling it the "tragedy of the commons": if shepherds share a common pasture, they may be tempted to increase their herd without limit.³² Analogously, as the atmosphere is "a shared and open access resource . . . readily and freely available for unsustainable exploitation," states may be tempted not to reduce their greenhouse gases emissions.³³

Publications/documents/Public%20goods%20for%20economic%20development_sale.pdf [https://perma.cc/A3XR-CHTR] (archived Sept. 20, 2015).

26. See *id.* at 1.

27. See Asif Efrat, *A Theory of Internationally Regulated Goods*, 32 *FORDHAM INT'L L.J.* 1466, 1467 (2009).

28. See Kaul, *supra* note 18, at 6–9.

29. The Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) was adopted at the third session of the Conference of the Parties (COP 3) in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. Although 192 countries have ratified the protocol, the United States has not. Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, U.N. Doc. CCC/CP/1997/7/Add.1, 37 *I.L.M.* 22 (1998) [hereinafter *Kyoto Protocol*], <http://unfccc.int/resource/docs/convkp/kpeng.pdf> [http://perma.cc/W7WV-BSRR] (archived Sept. 20, 2015).

30. Eric A. Posner & Alan O. Sykes, *Efficient Breach of International Law: Optimal Remedies, "Legalized Noncompliance" and Related Issues*, 110 *MICH. L. REV.* 243, 243 (2011).

31. See generally ERIC A. POSNER & DAVID WEISBACH, *CLIMATE CHANGE JUSTICE* (2010); Tyler Cowen, *Public Goods*, in *THE CONCISE ENCYCLOPEDIA OF ECONOMICS* (Terry E. Anderson ed., 2005), <http://www.econlib.org/library/Enc/PublicGoods.html> [http://perma.cc/2WMH-5Q8W] (archived Sept. 20, 2015).

32. Garrett Hardin, *The Tragedy of the Commons*, 162 *SCI.*, Dec. 13, 1968, at 1244 (discussing the rational human tendency to exploit a common good).

33. See Brode, *supra* note 17, at 116–17 ("[T]he challenge of mobilizing the global community to reduce GHG [Greenhouse Gases] emissions represents a *classic tragedy of the commons* . . .") (internal citation omitted).

The prisoner's dilemma refers to a situation in which cooperation would lead to a better outcome, but individual players driven by self-interest prefer a less desirable outcome.³⁴ In the imagined scenario, two prisoners are held in separate cells and so are unable to agree on a common line of defense.³⁵ In the meanwhile, the prosecutors give the prisoners the following three options: (1) if both prisoners deny the charge, they will each get one year in prison; (2) if one confesses while the other denies, the one who collaborates will be rewarded with freedom, while the other will spend five years in prison; or (3) if both confess, each will spend three years in prison.³⁶ Undoubtedly, if both prisoners cooperated and denied the charge, they would each get one year in prison. Lacking the ability to communicate, they also lack the possibility to cooperate and thus to optimize their chances.³⁷ Without cooperation, the risk of spending five years in prison can lead both prisoners to confess in the attempt to minimize the higher risk.³⁸

The prisoner's dilemma illustrates that parties to a regime may have an incentive to defect from the system, unless mechanisms are established to facilitate communication and cooperation.³⁹ For instance, states may have economic incentives to defect from the Kyoto Protocol to the Framework Convention on Climate Change. For instance, Canada decided to withdraw from the Kyoto Protocol as it was certain that it would not be able to achieve its targeted emission reduction.⁴⁰ Authors have highlighted that common goods are often endangered by the same states that should keep them in custody but subordinate them to economic interests of private actors.⁴¹ However, due to mechanisms of blame and shame, a number of states have taken action to prevent climate change because of consequential loss of reputation and the desire to be perceived as a reliable partner in future negotiations.⁴²

34. See Kaul, *supra* note 18, at 7–8.

35. See *id.* at 7 (illustrating the prisoner's dilemma).

36. *Id.*

37. *Id.*

38. *Id.*

39. See *id.* at 8 (“In a national context the solution to market failures and collective action problems is often to bring the state in to improve conditions for cooperation . . .”).

40. DANIEL BODANSKY, CENTER FOR CLIMATE & ENERGY SOLUTIONS, THE DURBAN PLATFORM: ISSUES AND OPTIONS FOR A 2015 AGREEMENT 5 (Dec. 2012) [hereinafter THE DURBAN PLATFORM], <http://www.c2es.org/docUploads/durban-platform-issues-and-options.pdf> [<http://perma.cc/BK2H-9XCL>] (archived Sept. 20, 2015).

41. U. MATTEI, BENI COMUNI—UN MANIFESTO viii (2011).

42. According to Ohlin, states make rational decisions regarding strategy in light of strategies selected by other states, thus generating Nash equilibria and, ultimately, a stable social contract. See Jens D. Ohlin, *Nash Equilibrium and International Law*, 96 CORNELL L. REV. 869, 876 (2011) (“A Nash equilibrium functions as a kind of focal point, where participants in the game gravitate toward a particular

Conceptualizing climate as a global common good is useful in that it emphasizes the positive spillovers and common benefits that derive from climate. The paradigm also provides useful theoretical tools to examine state and individuals' conduct in the climate domain. Should the state and the international community intervene to protect the climate? How much should be left to the private sector, allocating scarce resources through the market-based mechanisms? Clearly answers to these questions cannot be provided by economic analysis only.⁴³ Legal approaches are needed because economic analysis seems too narrow a perspective.⁴⁴

On the other hand, conceptualizing climate as a global common good presents certain drawbacks. Conceiving climate as a public good seems to imply that climate change is a "public bad." However, what constitutes a public good is a political question. Climate change might be beneficial to one social group but detrimental to another. For instance, in the Arctic countries, climate change has brought some limited benefits, including reforestation⁴⁵ and growing fish stocks.⁴⁶ Moreover, the Arctic's abundant supplies of oil, gas, and minerals are becoming newly accessible along with newly opened polar shipping routes.⁴⁷ On the other hand, "small island countries, countries with low-lying coastal . . . areas or areas liable to floods, drought and desertification . . . are particularly vulnerable to the adverse effects of climate change."⁴⁸ Coastal communities and indigenous peoples can

legal norm and choose 'compliance' as their strategy if and only if the other players in the game are also choosing compliance as their strategy.").

43. See generally *id.* (discussing how legal regulations can affect efficiency and cooperation in a Nash Equilibrium model).

44. See *id.* at 878.

45. Douglas Main, *How Iceland Is Benefiting from Climate Change*, NEWSWEEK (Nov. 2, 2014), <http://www.newsweek.com/2014/11/14/iceland-only-country-benefiting-climate-change-281540.html> [<http://perma.cc/XJG2-N3XZ>] (archived Sept. 20, 2015) (noting that "[m]uch of the growth in forestry is made possible by warming").

46. See Charlotte McDonald-Gibson, *Climate Change Prompts European 'Mackerel Wars'*, ALASKA DISPATCH, NEWS (July 30, 2013), <http://www.adn.com/article/20130730/zclimate-change-prompts-european-mackerel-wars> [<http://perma.cc/ZR49-RW79>] (archived Sept. 20, 2015) ("For a short time at least, growing fish stocks in European waters can be counted among the rare positive side effects of climate change, especially for the Icelandic fishermen . . .").

47. Elisabeth Rosenthal, *Race Is on as Ice Melt Reveals Arctic Treasures*, N.Y. TIMES (Sept. 18, 2012), http://www.nytimes.com/2012/09/19/science/earth/arctic-resources-exposed-by-warming-set-off-competition.html?_r=1 [<http://perma.cc/2X2U-43F3>] (archived Sept. 20, 2015).

48. The United Nations Framework Convention on Climate Change (UNFCCC) was adopted on May 9, 1992 in Rio de Janeiro, opened for signature on June 20, 1992, and came into force on March 21, 1994. 1771 U.N.T.S. 107, S. Treaty Doc. No. 102-38 (1992), U.N. Doc. A/AC.237/18 (Part II)/Add.1, 31 I.L.M. 849, Preamble (1992) [hereinafter UNFCCC], <http://unfccc.int/resource/docs/a/18p2a01.pdf> [<http://perma.cc/9CLT-LWLE>] (archived Sept. 20, 2015).

be disproportionately affected by climate change.⁴⁹ Furthermore, climate policies may lead to the primacy of professional elites vis-à-vis local polities, being imposed top-down on local communities and concealing state authoritarianism, if they are not coupled with human rights guarantees. For instance, reforestation policies or the construction of dams in alleged compliance with climate change law can breach the fundamental rights of indigenous peoples and other local communities by causing forced evictions,⁵⁰ affecting cultural practices and biodiversity.⁵¹

In conclusion, the conceptualization of climate as a global common good may be useful in that it highlights certain specificities of climate. Namely, it provides collective benefits and has a global character. However, this paradigm is neither the only paradigm nor the definitive one; rather, it needs to be complemented by additional conceptual paradigms.

III. CLIMATE CHANGE AS A COMMON CONCERN OF HUMANKIND

With the potential to radically transform the natural environment, “[c]limate change is one of the major challenges of our time”⁵² Climate change, meant as shifting weather patterns, has been a constant feature through the millennia.⁵³ Yet, since the 1950s,

49. See Jay Williams, *The Impact of Climate Change on Indigenous Peoples—The Implications for the Cultural, Spiritual, Economic and Legal Rights of Indigenous Peoples*, 14 INT’L J. HUM. RTS. 648 (2012).

50. See Mariya Gromilova, *Revisiting Planned Relocation as a Climate Change Adaptation Strategy: The Added Value of a Human Rights-Based Approach*, 10 UTRECHT L. REV. 76, 80–94 (2014) (discussing the impact of relocations and evictions on the rights of indigenous people to self-determination, development, adequate housing, and education).

51. See Margaux J. Hall & David C. Weiss, *Avoiding Adaptation Apartheid: Climate Change Adaptation & Human Rights Law*, 39 YALE J. INT’L L. 309, 309 (2012) (noting the obligation of states to ensure the cultural and social rights of indigenous people when implementing environment-friendly laws); Ole W. Pedersen, *The Janus-Head of Human Rights and Climate Change: Adaptation and Mitigation*, 80 NORDIC J. INT’L LAW 403, 408–09 (2011) (“[S]tates will have to take human rights provision[s] into consideration when they seek to implement specific solutions in the name of climate change.”).

52. U.N. Environmental Programme (UNEP), *Climate Change Factsheet: An Overview*, http://www.unep.org/pdf/UNEP_Profile/Climate_change.pdf [<http://perma.cc/H6RY-MFAR>] (archived Sept. 20, 2015).

53. See, e.g., NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WEATHER SERVICE, *Climate Change 1* (2007), <http://www.nws.noaa.gov/om/brochures/climate/Climatechange.pdf> [<http://perma.cc/SW9N-WGFF>] (archived Sept. 20, 2015) (“The geologic record includes significant evidence for large-scale climate changes in Earth’s past.”).

its growth has proceeded at an unmatched speed and level,⁵⁴ partly due to human activities, and mainly greenhouse gas emissions. Climate change has affected ecosystems,⁵⁵ warming the atmosphere and ocean, reducing the amounts of snow and ice, and raising the sea level.

International law instruments regard climate change as a “common concern” of humankind.⁵⁶ While common concerns indicate community interests,⁵⁷ common concerns of *humankind* constitute interests of the international community as a whole.⁵⁸ As common concerns of humanity can affect populations regardless of state boundaries, they require a delicate balance between state sovereignty and accountability to the international community.⁵⁹ With regard to such common concerns, states are not entirely free to adopt whatever policy may suit their needs; rather, common concerns require international cooperation. In fact, after affirming that climate change and its adverse effects “are a common concern of humankind,”⁶⁰ the United Nations Framework Convention on Climate Change (UNFCCC)⁶¹ acknowledges that “the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international

54. See *id.* (“The last decade of the 20th Century and the beginning of the 21st have been the warmest period in the entire global instrumental temperature record, starting in the mid-19th century.”).

55. See Gian-Reto Walther et al., *Ecological Responses to Recent Climate Change*, 416 *NATURE* 389, 389 (2002) (noting that climate change has spurred “ecological change[s] across systems”).

56. See G.A. Res. 43/53, ¶ 1, U.N. Doc. A/RES/43/53 (Dec. 6, 1988) (“[C]limate change is a common concern of mankind, since climate is an essential condition which sustains life on earth.”); Frank Biermann, “*Common Concern of Humankind: The Emergence of a New Concept of International Environmental Law*,” 34 *ARCHIV DES VÖLKERRECHTS* 426, 426 (1996) (noting that climate change and other environmental issues such as biological diversity have been regarded as a “common concern of mankind.”). See generally Jutta Brunneé, *Common Areas, Common Heritage, and Common Concerns*, in *THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW* 550–73 (2007) (Daniel Bodansky et al. eds., 2007) (“The concept of common concern of humankind . . . relates to global environmental problems, like climate change or the conservation of biological diversity, that can only be resolved if states collaborate.”).

57. See, e.g., Theodor Meron, *Common Rights of Mankind in Gentili, Grotius and Suárez*, 85 *A.J.I.L.* 110, 113–14 (1991).

58. See generally Bruno Simma, *From Bilateralism to Community Interests in International Law*, 250 *RECUEIL DES COURS* 217 (1994).

59. See PATRICIA BIRNIE ET AL., *INTERNATIONAL LAW & THE ENVIRONMENT* 130 (3d ed. 2009) (“[I]nsofar as states continue to enjoy sovereignty over their own natural resources and the freedom to determine how they will be used, this sovereignty is not unlimited or absolute, but must now be exercised within the confines of . . . global responsibilities . . .”).

60. UNFCC, *supra* note 48, preamble.

61. *Id.*

response.”⁶² Other international instruments call for the protection of global climate for present and future generations of mankind.⁶³ Therefore, as a common concern, climate change is to be governed as a sort of common good and requires international cooperation.⁶⁴

While the analytical concept of common concern does not express a general principle of law, it is not an empty political manifesto.⁶⁵ Rather, it has legal content, serving as “a catalyst for the development of binding rules on diligent conduct of States” and “prepar[ing] the ground . . . for liability.”⁶⁶ Accordingly, “it is . . . one of the most important aspects of the progressive development of international environmental law and the restriction of national sovereignty for the benefit of the community of States.”⁶⁷

The notion of common concern presents some commonalities with the concept of “common heritage” of mankind. The concept of common heritage indicates resources belonging to humanity as a whole. Both concepts of common heritage and common concern are of a legal character as they are expressly mentioned in a number of international law instruments. Both concepts refer to humanity as a whole, rather than referring to states.⁶⁸ Both concepts echo the idea of common interest. They “inevitably transcend the boundaries of a single state and require collective action in response”⁶⁹ In fact, both common heritage and common concerns cannot be managed efficiently and effectively by a given state; rather, they require collective action.⁷⁰

Yet, the concepts of common heritage and common concern diverge, having different application, function, and objectives. The concept of common heritage applies to resources in common spaces,

62. *Id.* preamble.

63. *See generally* G.A. Res. 44/228, U.N. Doc. A/RES/44/28 (Dec. 22, 1989); G.A. Res. 43/53, U.N. Doc. A/RES/43/53 (Dec. 6, 1988); G.A. Res. 44/207, U.N. Doc. A/RES/44/207 (Dec. 22, 1989); G.A. Res. 45/212, U.N. Doc. A/RES/45/212 (Dec. 21, 1990); G.A. Res. 46/169, U.N. Doc. A/RES/46/169 (Dec. 19, 1991) (all supporting the protection of global climate for present and future generations of mankind).

64. *See* Thomas Cottier, *The Emerging Principle of Common Concern: A Brief Outline* 8 (NCCR Trade Regulation, Working Paper 2012/20, 2012) (highlighting that “[t]he concept of Common Concern was introduced to foster international cooperation and shared responsibility in combating global warming and addressing the challenges of climate change.”).

65. *See* Nele Matz, *The Common Interest in International Law: Some Reflections on Its Normative Content*, 62 ZEITSCHRIFT FÜR AUSLÄNDISCHES ÖFFENTLICHES RECHT UND VÖLKERRECHT – HEIDELBERG J. INT’L L. 17, 19 (2002) (noting that “[t]he common interest, although not or not yet being a clear enough principle of law, is already more than an empty political phrase.”).

66. *Id.*

67. *Id.*

68. *See* Dinah Shelton, *Common Concern of Humanity*, 1 IUSTUM AEQUUM SALUTARE 33, 33 (2009).

69. *Id.* at 34.

70. *See id.*

notably the deep seabed and the moon.⁷¹ The concept of common heritage has also been used in some international cultural law instruments to indicate a general interest of the international community in the conservation and enjoyment of cultural resources.⁷² In the cultural sector, such concept would be akin to the concept of common concern of humankind, developed in relation to environmental goods.⁷³ By contrast, common concerns do not belong to a specific area; rather, they “can occur within or outside sovereign territory.”⁷⁴ While climate change is a paradigmatic example of a common concern of humankind, other examples include the conservation of biological diversity⁷⁵ and the prevention of desertification and drought.⁷⁶

The common heritage concept has played a revolutionary role in the making of international law. The areas that are designated as common heritage cannot be appropriated and/or be subject to claims of sovereignty. Rather, they are *res publica* (commons) governed by an international authority, and the benefits derived from the exploitation of the common heritage are to be shared equitably and for the benefit of mankind.⁷⁷ The notion of common heritage challenged the “structural relationship between rich and poor countries” and amounted to a “revolution not merely in the law of the sea, but also in international relations.”⁷⁸

71. See U.N. Convention on the Law of the Sea, art. 136 (Dec. 10, 1982) (recognizing that “[t]he Area and its resources are the common heritage of mankind”). See generally Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 1363 U.N.T.S. 3, art. 11 (Dec. 5, 1979) (proclaiming that “[t]he Moon and its natural resources are the common heritage of mankind . . .”).

72. See VALENTINA VADI, CULTURAL HERITAGE IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 22–23 (2014).

73. See Convention on the Protection and Promotion of the Diversity of Cultural Expressions, *Records of the General Conference*, UNESCO at 83, (Oct. 20, 2005) (recognizing that “cultural diversity forms a common heritage of mankind”); Francesco Francioni, *Beyond State Sovereignty: The Protection of Cultural Heritage as a Shared Interest of Humanity*, 25 MICH. J. INT’L L. 1209 (2004).

74. Shelton, *supra* note 68, at 35 (noting that “[c]ommon concerns . . . are not spatial”).

75. Convention on Biological Diversity, pmbl., June 6, 1992, 1760 UNTS 79.

76. Shelton, *supra* note 68, at 37; Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, June 17, 1994, 33 I.L.M. 1328.

77. See KEMAL BASLAR, THE CONCEPT OF THE COMMON HERITAGE OF MANKIND IN INTERNATIONAL LAW xxi (1998) (examining the notion of common heritage of humanity); Graham Nicholson, *The Common Heritage of Mankind and Mining: An Analysis of the Law as to the High Seas, Outer Space, the Antarctic and World Heritage*, 6 N.Z. J. ENVTL. L. 177, 178 (2002) (scrutinizing how the law governs the exploitation of natural resources within areas defined as “common heritage” of humanity).

78. A. Pardo, *Ocean, Space and Mankind*, 6 THIRD WORLD Q. 559 (1984) (highlighting the revolutionary nature of the notion of common heritage).

By contrast, the common concern concept is not a radical notion, but it is a suitable analytical tool expressing current challenges in international environmental law. Common concerns indicate that specific issues are “no longer in the reserved domain and under the exclusive domestic jurisdiction of states.”⁷⁹ A common concern requires “management of environmental resources at all levels of governance,” including “participation by non-state actors.”⁸⁰ When action is taken in matters of common concern, a double balance must be struck between competing objectives: (1) national and international, and (2) climate change mitigation and other legitimate policy objectives. On the one hand, the action of the international community “must be balanced with respect for national sovereignty.”⁸¹ On the other, a balance must be struck between the objectives pursued by climate change law and those pursued by other domains of international law such as international economic law. In fact, these other fields are regarded as “instrumental to achieving [other] common interest[s] of humanity.”⁸² In conclusion, while common concern is “a far from a precise term,”⁸³ it may “facilitate levelling the playing field” between different conflicting interests before different dispute settlement mechanisms.⁸⁴

IV. CLIMATE CHANGE AS A HUMAN RIGHTS ISSUE

Human rights have played a marginal role in international climate change law and politics to date.⁸⁵ However, this has started to change, and a growing number of scholars and practitioners have investigated the linkage between climate change and a range of human rights.⁸⁶ Several international instruments have also

79. Shelton, *supra* note 68, at 40.

80. *Id.*

81. *Id.* at 38.

82. *Id.*

83. Tullio Treves, *Introduction*, in *FOREIGN INVESTMENT, INTERNATIONAL LAW AND COMMON CONCERNS* 1, 3 (Tullio Treves et al. eds., 2014) (adding that the concept of common concern “permits various and sometimes surprising interpretations”).

84. *Id.* at 6 (referring to international investment law and arbitration).

85. Derek Bell, *Climate Change and Human Rights*, *CLIMATE CHANGE* 4(3) 159–70, 159 (2013) (noting that “[h]uman rights have not played a significant role in the international law and politics of climate change to date.”).

86. *Id.* (highlighting that “there has been increasing interest among legal scholars and moral and political philosophers in a human rights approach to climate change.”). See generally STEPHEN HUMPHREYS, *HUMAN RIGHTS AND CLIMATE CHANGE* (2010); Daniel Bodansky, *Introduction: Climate Change and Human Rights: Unpacking the Issues*, 38 *GA. J. INT'L & COMP. L.* 511 (2010); John H. Knox, *Linking Human Rights and Climate Change at the United Nations*, 33 *HARV. ENVTL. L. REV.* 477 (2009); Lavanya Rajamani, *The Increasing Currency and Relevance of Rights-Based Perspectives in International Negotiations on Climate Change*, 22 *J. ENVTL. L.* 391

acknowledged such a link.⁸⁷ A number of key questions arise with regard to the interplay between climate change and human rights. Is there a human right to a stable climate? Does climate change affect human rights? How do climate change policies interact with human rights? What are the limits, if any, to climate change policies? Who should bear the burden of climate policies?

There are no firm answers to these questions. *First*, whether there is a human right to a stable climate is uncertain. An additional question is whether entitlements to a stable climate constitute an element of other human rights. Certain climate change issues have been framed in terms of human rights.⁸⁸ For instance, entitlements to a stable climate could be considered to be a component of the right to a healthy environment, which is a third-generation human right.⁸⁹ Third-generation human rights include solidarity rights, namely those rights that respond to challenges that are not addressed by civil and political rights on one hand, and economic, social, and cultural rights on the other—which can be termed first- and second-generation rights respectively.⁹⁰ While the scope of third-generation rights remain debated, they are deemed to include the right to development, the right to self-determination, the right to a healthy environment,⁹¹ and other collective rights—rights held by a group qua group rather than by its members severally. A number of international instruments have recognized the right to a healthy

(2010); John Lee, *The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary International Law*, 25 COLUM. J. ENVTL. L. 283 (2000); Marc Limon, *Human Rights Obligations and Accountability in the Face of Climate Change*, 38 GA. J. INT'L & COMP. L. 50 (2010).

87. Human Rights Council Res. 7/23 (Mar. 28, 2008); Human Rights Council Res. 10/4, U.N. Doc. A/HRC/RES/10/4 (Mar. 25, 2009) (focusing specifically on human rights and climate change).

88. See James W. Nickel, *The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification*, 18 YALE J. INT'L L. 281 (1993).

89. On the right to a healthy environment, see generally Sumudu Atapattu, *The Right to a Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 TUL. ENVTL. L. J. 65 (2002); Jennifer A. Downs, *A Healthy and Ecologically Balanced Environment: An Argument for a Third Generation Right*, 3 DUKE J. COMP. & INT'L L. 351 (1993); Melissa Fung, *The Right to a Healthy Environment: Core Obligations Under the International Covenant on Economic, Social and Cultural Rights*, 14 WILLAMETTE J. INT'L L. & DISP. RESOL. 97 (2006); Iveta Hodkova, *Is There a Right to a Healthy Environment in the International Legal Order?*, 7 CONN. J. INT'L L. 65 (1991); James T. McClymonds, *The Human Right to a Healthy Environment: An International Legal Perspective*, 37 N.Y.L. SCH. L. REV. 583 (1992); Dinah Shelton, *Human Rights, Health and Environmental Protection: Linkages in Law and Practice*, 1 HUM. RTS. & INT'L LEGAL DISCOURSE 9 (2007).

90. See Philip Alston, *A Third Generation of Solidarity Rights: Progressive Development or Obfuscation of International Human Rights Law?*, 29 NETH. INT'L L. REV. 307, 307–22 (1982).

91. See Ben Saul, *In the Shadow of Human Rights: Human Duties, Obligations, and Responsibilities*, 32 COLUM. HUM. RTS. L. REV. 565, 599 (2001).

environment.⁹² In addition, several domestic courts have guaranteed the right to a healthy environment in various countries.⁹³

Second, with regard to the question as to whether climate change can affect human rights, some scholars have pinpointed that climate change can affect a broad range of human rights including the rights to life, health, food, water, property, self-determination, and subsistence.⁹⁴ Not only does climate change affect human rights in a direct fashion, exacerbating natural disasters, such as heat waves, floods, and droughts, but also it affects human rights in an indirect and cumulative way.⁹⁵ The indirect effects of climate change are evident in a number of sectors such as agriculture, food security, and water resources.⁹⁶ The very existence of some states may be jeopardized by climate change, spurring the migration of “climate refugees.”⁹⁷ There have been attempts to frame climate change as a violation of human rights before different *fora*.⁹⁸

92. See, e.g., U.N. Conference on the Human Environment, Stockholm Declaration, ¶ 1 (June 16, 1972) (“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.”).

93. *Minors Oposa v. Sec’y. of the Dep’t of Env’t. & Nat. Res.*, 33 I.L.M. 173 (S.C., July 30, 1993) (Phil.). For commentary, see BRIGIT C.A. TOEBES, *THE RIGHT TO HEALTH AS A HUMAN RIGHT IN INTERNATIONAL LAW* (1999).

94. G.A. Res. 18/22, U.N. Doc. A/HRC/Res/18/22 at 2 (Oct. 17, 2011) (listing “the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, the right to self-determination, and the right to safe drinking water and sanitation.”); Simon Caney, *Climate Change, Human Rights and Moral Thresholds*, in *HUMAN RIGHTS AND CLIMATE CHANGE* 69–90 (Stephen Humphreys ed., 2010).

95. Navi Pillay, Opening Remarks at the Human Rights Council Seminar, *The Adverse Impacts of Climate Change on the Full Enjoyment of Human Rights* (Feb. 23, 2012) (“Slowly and incrementally, land will become too dry to till, crops will die, rising sea levels will flood coastal dwellings and spoil freshwater, species will disappear, and livelihoods will vanish.”).

96. See *id.*

97. See generally Laura Westra, *Environmental Justice and the Rights of Ecological Refugees* (2009) (noting that climate change is increasingly leading to the displacement of populations from their homelands, and that there is currently no protection in international law for people made refugees by such means).

98. Owen Cordes-Holland, *The Sinking of the Strait: The Implications of Climate Change for Torres Strait Islanders’ Human Rights Protected by the ICCPR*, 9 MELBOURNE J. INT’L L. 405, 414 (2008) (examining the impact of climate change on the human rights of Torres Strait Islanders); see also Sheila Watt-Cloutier, *Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States*, at 116, http://www.ciel.org/Publications/ICC_Petition_7Dec05.pdf [<http://perma.cc/VT4R-9NC4>] (archived Sept. 20, 2015) (discussing the petition brought by Inuit to the Inter-American Commission on Human Rights, requesting the United States to take into account the impact of GHG emissions on the Arctic Environment, and thus on their human rights including the right to food, health, culture, property and self-determination).

Third, climate change policies interact with human rights in multifold ways. On the one hand, greenhouse gases (GHGs) mitigation policies can prevent some of the most devastating effects of climate change. On the other hand, they can affect a range of human rights, including non-discrimination, due process, property rights, and others.⁹⁹ For instance, subsidies for farmers to switch from agriculture to biofuel production may affect food security, especially in developing countries.¹⁰⁰ Reforestation projects can breach the fundamental rights of indigenous peoples by causing forced evictions.¹⁰¹ In this respect, states should take human rights into consideration when developing their climate change policies.¹⁰²

Fourth, certain human rights, especially access to information and participation in decision-making processes can be regarded as essential to good climate governance.

Finally, climate justice (i.e. viewing climate change from an ethical perspective and considering how its causes and effects relate to concepts of justice) is central to human rights discourse. The issue of climate justice is twofold. On the one hand, at the international level, it seems that those states least responsible for climate change experience its greatest impacts. As the UN High Commissioner for Human Rights pointed out, “Many of the least developed countries and small island States, which have contributed least to global greenhouse gas emissions, will be worst affected by global warming.”¹⁰³ On the other hand, at the national level, “[t]he effects of climate change will be most acutely felt by those segments of the population whose rights protections are already precarious due to factors such as poverty, gender, age, minority status, migrant status and disability.”¹⁰⁴ Therefore, under human rights law, “[s]tates are

99. See Alyssa Johl & Sébastien Duyck, *Promoting Human Rights in the Future Climate Change Policy*, 15 ETHICS POL’Y & ENV’T 298 (2012).

100. Dinah Shelton, *Human Rights and Climate Change* 27 (Buffett Ctr, for Int’l and Comparative Law Studies, North Western Univ., Working Paper No. 009/2, 2009).

101. Pedersen, *supra* note 51, at 408–09.

102. Human Rights Council Res. 16/11, Human Rights and the Environment, U.N. Doc A/HRC/RES/16/11 (April 12, 2011) (urging states to take human rights into consideration when developing their environmental policies).

103. Pillay, *supra* note 95 (noting “the striking ‘climate injustice’ that many of the least developed countries and small island States, which have contributed least to global greenhouse gas emissions, will be worst affected by global warming.”); see also Human Rights Council Res. 7/23 (Mar. 28, 2008) (“[L]ow-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.”).

104. Pillay, *supra* note 95 (noting additionally that “[c]ertain groups, such as women, children, indigenous peoples and rural communities, are more exposed to climate change effects and risks.”).

legally bound to address such vulnerability in accordance with the human rights principle of equality and non-discrimination.”¹⁰⁵

More substantively, if one scrutinizes the interplay between climate change and human rights through the tripartite structure of the latter—according to which human rights provisions compel states to respect, protect, and fulfill human rights—in relation to climate change, this means that states are required to adopt measures to prevent greenhouse gas emissions, to adopt mitigation measures, inter alia regulating private corporations, and to provide remedies when breaches have occurred.¹⁰⁶ As the UN Independent Expert on human rights and the environment John Knox pointed out, “The obligation to protect human rights from environmental harm does not require States to prohibit all activities that may cause any environmental degradation.”¹⁰⁷ Rather, “[s]tates have discretion to strike a balance between environmental protection and other issues of societal importance, such as economic development and the rights of others.”¹⁰⁸ Yet, “the balance cannot be unreasonable, or result in unjustified, foreseeable infringements of human rights.”¹⁰⁹

V. CLIMATE CHANGE GOVERNANCE

After having examined the various conceptualizations of climate change, the Article now examines how climate change is governed. Climate change governance has emerged as a new frontier of study and has come to the forefront of legal debate.¹¹⁰ Climate change governance is a “regime complex”¹¹¹—a range of multilevel,

105. *Id.*

106. Siobhán McInerney-Lankford, *Climate Change and Human Rights: An Introduction to Legal Issues*, 33 HARV. ENVTL. L. REV. 431, 433, 436–37 (2009); see also John Knox, *Climate Change and Human Rights*, 33 HARV. ENVTL. L. REV. 477 (2009); Timo Koivurova et al., *Climate Change and Human Rights*, in CLIMATE CHANGE AND THE LAW 287 (Erkki J. Hollo et al. eds., 2013).

107. Human Rights Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 14, U.N. Doc., A/HRC/25/53 (Dec. 30, 2013) [hereinafter HRC Report].

108. *Id.* (referring to decisions of the European Court of Human Rights in *Hatton and Others v. United Kingdom*, No. 360022/97, 8 July 2003, ¶ 98, and African Commission Communication No. 155/96, *Social and Economic Rights Action Centre v. Nigeria* (Ogoniland case), ¶ 54)

109. HRC Report, *supra* note 107, at 14 (referring to decisions of the European Court of Human Rights and the African Commission).

110. See, e.g., Joanne Scott, *The Multi-Level Governance of Climate Change*, 2011 CARBON & CLIMATE L. REV. 25, 25.

111. Keohane & Victor, *supra* note 5, at 10–33.

“multiscalar”¹¹² and multipolar regulatory frameworks¹¹³ at times diverging and at times converging, if not overlapping. Climate change governance constitutes a good example of multilevel and multiscalar legal pluralism as multiple bodies govern climate change at national, regional, and international levels. Climate change governance is a multipolar regulatory framework as multiple actors play an important role with regard to climate change, ranging from international administrative bodies to private actors, and from national courts and tribunals to international economic *fora*.

Why are certain areas of international law, such as climate change law, characterized by an inherent fragmentation or a dispersed legal landscape, while other sectors are characterized by binding, concentrated, and robust regulatory frameworks? Political scientists suggest that “[w]here conflicts of interest are not severe and especially where power is concentrated, incentives to cooperate can lead to the construction of robust international regimes, such as the international trade regime But where interests and power are more fragmented, incentives for cooperation often lead to . . . ‘regime complexes.’”¹¹⁴ Climate change law is an area characterized by intense conflicts of interests between industrialized countries and developing countries on the one hand, and between public and private actors. On the one hand, developing countries focus on their developmental needs and argue that, historically, the bulk of greenhouse gas emissions have been produced by industrialized countries. In turn, while some industrialized countries are concerned that climate change regulatory measures could make their industries less competitive, others consider renewable energies as an opportunity to achieve energy security and a better and healthier environment. On the other hand, private actors can and have contested regulatory measures affecting their economic interests.

Therefore, three dualisms traditionally characterize climate change law: (1) the distinction between the mandatory and the voluntary, (2) the distinction between public law and private law, and (3) the division between domestic and international law.¹¹⁵ However,

112. Osofsky, *supra* note 23, at 587 (describing climate change as a “multiscalar” issue, capable of simultaneously engaging local, national, regional and international levels of governance).

113. See Kal Raustiala & David Victor, *The Regime Complex for Plant Genetic Resources*, 58 INT’L ORG. 277 (2004) (introducing the notion of “regime complex” with regard to the legal framework governing plant genetic resources).

114. Jeff D. Colgan, Robert O. Keohane & Thijs Van de Graaf, *Punctuated Equilibrium in the Energy Regime Complex*, 7 REV. INT’L ORG. 117, 117–43 (2012).

115. Issachar Rosen-Zvi, *Climate Change Governance: Mapping the Terrain*, 2011 CARBON & CLIMATE L. REV. 234, 234 (noting that the same dualisms also characterize other branches of environmental law, labour law and even for that matter international economic law itself); see Alex Mills, *The Public-Private Dualities of International Investment Law and Arbitration*, in EVOLUTION IN INTERNATIONAL

these traditional boundaries have become blurry in contemporary climate law, as both private and public traits, national and international dimensions, as well as mandatory and voluntary features constantly interact in several different ways. Climate change law has been increasingly regulated at the national and international levels by both public and private actors. Moreover, climate change law is characterized by a peculiar mixture of mandatory and voluntary approaches. The next sections will scrutinize these dichotomies and their interactions.

A. Mandatory and Voluntary Approaches

There is a sort of mimesis and dialectic between the mandatory and voluntary as well as the hard law and soft law dimensions of climate law. Binding international legal instruments include treaties, protocols, and amendments, as well as “secondary legislation,” i.e. decisions taken pursuant to a treaty if the treaty authorizes the Conference of the Parties (COP) to adopt rules on a specific matter.¹¹⁶ Such instruments are subject to the rule of *pacta sunt servanda*, and if they are violated, they give rise to international responsibility.¹¹⁷ In parallel, several subsidiary treaty-based bodies have produced influential “soft law” (i.e. instruments that do not have any legally binding force but can be morally persuasive).

Among the mandatory instruments of climate law, the 1992 United Nations Framework Convention on Climate Change (UNFCCC)¹¹⁸ has played a leading role in the making of climate law. The UNFCCC aims at “control[ing] greenhouse gas emission,”¹¹⁹ while enabling “economic development . . . in a sustainable manner.”¹²⁰ Under the UNFCCC, member states agreed upon a common but very general approach to the problems associated with global climate change. By establishing a system of governance for an issue area, framework conventions facilitate the development of cognitive and normative consensus about the relevant facts and the appropriate international response. Like other framework conventions, the UNFCCC sets out an incremental process in lawmaking. It establishes a discourse on climate change, setting

INVESTMENT LAW AND ARBITRATION 97–116 (Chester Brown & Kate Miles eds., 2011) (examining the public-private dualism in international investment law); Joel P. Trachtman, *The International Economic Law Revolution*, 17 U. PA. J. INT’L ECON. L. 33 (1996) (pointing out that the rise of international economic law has led to the breaking down of public and private international law distinctions).

116. THE DURBAN PLATFORM, *supra* note 40, at 3.

117. Vienna Convention on the Law of Treaties, art. 26, Jan. 27, 1980, 1155 U.N.T.S. 331 (“Every treaty in force is binding upon the parties to it and must be performed by them in good faith.”).

118. UNFCCC, *supra* note 48.

119. *Id.* preamble.

120. *Id.* art. 2.

general objectives and instituting a structure for further course of action. Subsequent treaties, the Protocols, then develop more specific commitments that supplement the original convention and require states to undertake specific legal obligations.¹²¹

Specific commitments on the reduction of greenhouse gases were negotiated later and led to the inception of the Kyoto Protocol.¹²² The Kyoto Protocol legally binds parties to reduce their greenhouse gas emissions. Under the concept of “common but differentiated responsibilities,” the Protocol places heavier commitments on developed nations.¹²³ Ongoing UN negotiations are developing a new international climate change agreement—the Paris Protocol—that will be adopted at the Paris climate conference in December 2015 and implemented in 2020, after the Kyoto Protocol ends.¹²⁴

The decisions of the Conference of the Parties, the supreme decision-making organ of the Convention, have further extended the scope of climate law providing additional supporting rules.¹²⁵ The legal status of COP decisions falls between the two extremes of voluntary and mandatory. While some of these decisions have been perceived as nonmandatory, others have been perceived as having a mandatory nature.

The UNFCCC, the Kyoto Protocol, and some COP decisions constitute a top-down, mandatory approach to climate change governance. They have raised awareness of the importance of climate change mitigation and spurred the development of domestic climate policies. All of these instruments channel climate concerns into the fabric of international law and influence policymaking and adjudication, due to the almost global ratification of the UNFCCC.

121. See John K. Setear, *An Iterative Perspective on Treaties: A Synthesis of International Relations Theory and International Law*, 37 HARV. INT'L L.J. 139, 217 (1996).

122. Kyoto Protocol, *supra* note 29.

123. UNFCCC, *supra* note 48, art. 3 (“[P]arties should protect the climate system for the benefit of future and present generations of human kind on the basis of equity and in accordance with their common but differentiated responsibility and respective capabilities. Accordingly, developed countries should take the lead in combating climate change and the adverse effects thereof.”).

124. European Commission, *Towards the Paris Protocol*, May 29, 2015, http://ec.europa.eu/clima/policies/international/paris_protocol/index_en.htm [<http://perma.cc/BV4Q-VEYG>] (archived Oct. 15, 2015) (“All countries that are members of the United Nations Framework Convention on Climate Change (UNFCCC)—195 nations, plus the EU—have agreed to adopt a new global climate agreement in Paris in December 2015 which will take effect in 2020.”).

125. Jutta Brunnée, *COPing with Consent: Law-Making Under Multilateral Environmental Agreements*, 15 LEIDEN J. INT'L L. 1, 4 (2002) (considering the COP as “the focal point of climate change law-making activities” and asking whether it is evolving into a “global legislature”).

In parallel, a bottom-up, facilitative approach favoring voluntary actions has emerged.¹²⁶ For instance, a voluntary framework was adopted in Cancun.¹²⁷ The Cancun Agreements took stock of the action undertaken by both developing and developed countries respectively,¹²⁸ “established a new funding mechanism (the Green Climate Fund), and incorporated an agreement on reducing emissions from deforestation and forest degradation (REDD+),”¹²⁹ Several subsidiary treaty-based bodies have produced influential soft law.¹³⁰ Soft law is a contested concept. Some scholars have pointed out the contradictory nature of the expression,¹³¹ as commitments are either legal or non-legal.¹³² Yet, others highlight the existence and even the desirability of gray areas and different degrees of normativity. In fact, while binding instruments are more difficult to achieve in areas—such as climate change—where multiple interests converge and diverge, soft law instruments, non-binding instruments, and instruments with a mixture of both legal and nonlegal approaches can catalyze consensus and have a greater influence on state behavior than their legally binding counterparts. The principle of state sovereignty, which underlies binding treaty commitments, often prevents the adoption of binding instruments to govern climate change. This does not mean, however, that nonbinding instruments have no effect whatsoever.¹³³

126. THE DURBAN PLATFORM, *supra* note 40, at 1.

127. *Id.*

128. Lavanya Rajamani, *The Warsaw Climate Negotiations: Emerging Understandings and Battle Lines on the Road to the 2015 Climate Agreement*, 63 INT'L & COMP. L.Q. 721, 725 (2014).

129. Harro van Asselt, Michael Mehling & Clarisse Kehler Siebert, *The Changing Architecture of International Climate Change Law*, in RESEARCH HANDBOOK ON CLIMATE CHANGE MITIGATION LAW 1, 10–11 (Geert van Calster et al. eds., 2015).

130. Alan Boyle, *Some Reflections on the Relationship of Treaties and Soft Law*, 48 INT'L & COMP. L. Q. 901, 901–13 (1999); Christine M. Chinkin, *The Challenge of Soft Law: Development and Change in International Law*, 38 INT'L & COMP. L. Q. 850 (1989); Matthias Goldmann, *We Need to Cut Off the Head of the King: Past, Present, and Future Approaches to International Soft Law*, 25 LEIDEN J. INT'L L. 335, 335–68 (2012); Andrew T. Guzman & Timothy L. Meyer, *International Soft Law*, 2 J. LEGAL ANALYSIS 171 (2010); Hartmut Hillgenberg, *A Fresh Look at Soft Law*, 3 EUROPEAN J. INT'L L. 499, 449–515 (1999).

131. Pierre-Marie Dupuy, *Soft Law and the International Law of the Environment*, 12 MICH. J. INT'L L. 420, 420 (“Soft law is a paradoxical term for defining an ambiguous phenomenon. Paradoxical because from a general and classical point of view, the rule of law is usually considered ‘hard’ . . . or it simply does not exist. Ambiguous because the reality thus designated, considering its legal effects as well as its manifestations, is often difficult to identify clearly.”).

132. Jan Klabbers, *The Redundancy of Soft Law*, 65 NORDIC J. INT'L L. 167, 168 (1996) (noting that “if [commitments] are not legal at all, it follows that they cannot be softly legal either.”).

133. Bruno Simma, *From Bilateralism to Community Interests*, in ACADEMIE DE DROIT INTERNATIONAL DE LA HAYE 221 (1997) (highlighting that “the principle of sovereign consent . . . stand[s] in the way of multilateral conventions being capable of

Soft law instruments present a quasi-legal nature and influence both treaty making and treaty interpretation. On the one hand, soft law can morph into hard law in two different ways. First, declarations, recommendations, and other nonbinding instruments can constitute the first step towards a treaty-making process, in which reference will be made to the principles already stated in the soft law instruments. Second, they can influence the practice of states and eventually lead to the coalescence of customary law. On the other hand, international courts and tribunals do take soft law instruments into account. For instance, in the *Texaco* arbitration, the sole arbitrator applied the General Assembly's Declaration on Permanent Sovereignty over Natural Resources.¹³⁴

While top-down, mandatory approaches address the collective action problem encompassed by climate change and solve the free rider problem, bottom-up, voluntary approaches foster local action.¹³⁵ Current negotiations for a new climate deal that will come into effect and be implemented starting in 2020 propose the increased adoption of "hybrid architectural approaches,"¹³⁶ mixing mandatory top-down and voluntary bottom-up approaches to climate change mitigation.¹³⁷ While the negotiations aim at "developing a new protocol, another legal instrument or an agreed outcome with legal force,"¹³⁸ they also consider voluntary approaches to improve states' environmental performance beyond legal requirements.¹³⁹ Voluntary approaches may be more cost-effective than "command and control" mechanisms.¹⁴⁰ Yet, as only moderate results have been achieved through voluntary approaches, the adoption of a well-articulated mix of regulatory and voluntary instruments is preferable.

B. Public and Private Dimensions of Climate Change Law

There is a sort of mimesis and dialectic between the private and public dimensions of climate change law. On the one hand, there is an increasing awareness that climate change requires public intervention due to the existence of undeniable public interests. On the other hand, the role of private actors remains crucial. While

accommodating community interests in a truly satisfactory manner" and various "endeavours to soften the edges of consent" have arisen).

134. *Texaco v. Libya*, 17 I.L.M. 1, ¶ 81 (Int'l Arb. Trib. 1978).

135. van Asselt, Mehling & Kehler Siebert, *supra* note 129, at 15.

136. Rajamani, *supra* note 128, at 725.

137. THE DURBAN PLATFORM, *supra* note 40, at 1–11.

138. *Id.* at 1.

139. ORG. FOR ECON. COOPERATION & DEV. [OECD], *Roundtable on Sustainable Development, Involving International Business: Voluntary Agreements and Competitiveness 1* (Aug. 30–31, 1999), <http://www.oecd.org/sd-roundtable/papersandpublications/39372658.pdf> [<http://perma.cc/59U7-99AU>] (archived Sept. 27, 2015).

140. *Id.* at 2.

human activities have substantially contributed to climate change,¹⁴¹ they can contribute to its mitigation.

Private actors can contribute to climate change mitigation in different ways. Not only can they fund climate change mitigation actions, but they play a role in the development of climate change law and its implementation. According to the United Nations, “nearly 90 per cent of the funds needed to address global warming will derive from the private sector.”¹⁴² Moreover, private actors have played a significant role both in the normative development of the field and in its implementation.¹⁴³ At the normative level, given the complexity of climate change and the limitations of “command and control” regulatory techniques to govern it, “regulatory tools that use market principles to achieve environmental goals” have been used.¹⁴⁴

For instance, the Kyoto Protocol calls for the involvement of private entities, such as foreign investors, to pursue its objective of limiting and reducing greenhouse emissions. Private actors can play an important role in helping states limit their emissions under two of the Kyoto Flexibility Mechanisms.¹⁴⁵ Under the joint implementation mechanism, industrialized countries can authorize legal entities, such as private investors, to participate in green investments in other industrialized countries to meet the home country’s Kyoto targets. Under the clean development mechanism (CDM), industrialized countries or their investors can participate in projects in developing countries, thus contributing to the home country’s Kyoto targets. Industrialized countries obtain certified emissions credits (CERs) that can be used to meet their targets or sold on the carbon market, and developing countries receive low carbon technology and financial flows that contribute to their sustainable growth. Foreign investments can thus represent an effective tool to mitigate climate change. Having know-how in energy-saving technology to reduce carbon emissions,¹⁴⁶ foreign investors can and do transfer technology and invest in renewable energy projects.

141. UNFCCC, *supra* note 48, preamble (acknowledging that “human activities have been substantially increasing the atmospheric concentration of greenhouse gases, thereby enhancing the natural greenhouse effect.”).

142. *Private Investment Key in Tackling Climate Change, Says Assembly President*, UN NEWS CENTRE (June 9, 2008), http://www.un.org/apps/news/story.asp?NewsID=26954#_VNEHyVhybDA [http://perma.cc/G2F4-T3DY] (archived Sept. 27, 2015).

143. van Asselt, Mehling & Kehler Siebert, *supra* note 129, at 26.

144. Rosen-Zvi, *supra* note 115, at 237.

145. See Freya Baetens, *Foreign Investment Law and Climate Change* 6–9 (Int’l Dev. Law Org. Sustainable Dev. Law on Climate Change, Working Paper No. 1, 2010).

146. See generally Elisa Morgera & Kati Kulovesi, *Public-Private Partnerships for Wider and Equitable Access to Climate Technologies*, in ENVIRONMENTAL TECHNOLOGIES, INTELLECTUAL PROPERTY AND CLIMATE CHANGE: ACCESSING,

C. Global and Local Dimensions of Climate Governance

In parallel, there is a sort of dialectic between the global and local dimensions of climate governance. Local, bottom-up approaches to climate governance are important because the change of individual and local behaviors can contribute to fighting climate change. However, local governance may emphasize local needs including those of economic growth, which, in certain cases, may sensibly diverge from international desiderata. In fact, local dimensions of climate governance can suffer from “myopia and parochialism,” prioritizing economic interests over climate concerns and eventually leading to “the tragedy of the commons.”¹⁴⁷

By contrast, international cooperation and collective action are essential to govern a global public good such as climate. Global governance of the commons can prevent the risks of a regulatory “race to the bottom”¹⁴⁸—that is state deregulation of key sectors to attract or retain economic activities in its jurisdiction. However, global governance favors experts over nonexperts. Under global governance, decision-making processes tend to be elitist and opaque. Such top-down approaches may not necessarily be responsive to local needs. Human rights bodies have advocated the need to humanize and democratize climate law and condemned the forced eviction of local communities for the construction of large dams or other energy-related infrastructures.

The global dimension of climate change governance is multipolar. While the UNFCCC constitutes a central regime governing climate change, it would be a mistake to conceive of it as the only global legal framework governing the climate. In fact, other regimes can be relevant, including other environmental regimes, international trade law, international cultural law, and international investment law.¹⁴⁹ For instance, the Montreal Protocol on Substances that Deplete the Ozone Layer,¹⁵⁰ which aims to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion, contributed to the mitigation of climate change by cutting some industrial gases that cause the depletion of the ozone layer and also contribute to climate change.¹⁵¹

OBTAINING AND PROTECTING 128–51 (Abbe E.L. Brown ed., 2013) (discussing technology cooperation under the UNFCCC).

147. Rosen-Zvi, *supra* note 115, at 237.

148. *Id.* at 236.

149. The list of international regimes that can interact with the UNFCCC is not exhaustive. See Keohane & Victor, *supra* note 5, at 5; Margaret A. Young, *Climate Change Law and Regime Interaction*, 2011 CARBON & CLIMATE L. REV. 147, 147.

150. Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, 1522 U.N.T.S. 3.

151. See generally Guus J. M. Velders et al., *Preserving Montreal Protocol Climate Benefits by Limiting HFCs*, 335 SCI. 922 (2012) (noting that the Montreal Protocol is responsible for the global phaseout of ozone-depleting substances).

Analogously, while conflicts between international trade law and climate measures can arise,¹⁵² different provisions of international trade law “could be used for climate change mitigation.”¹⁵³ Similarly, given the duty of the states parties to the World Heritage Convention (WHC)¹⁵⁴ to protect world heritage within their territories,¹⁵⁵ the World Heritage Committee has imposed site-specific mitigation obligations on them.¹⁵⁶ In parallel, the World Bank has organized a large fund to invest in reforestation projects and a fund to help countries adapt to the effects of climate change.¹⁵⁷ More importantly, the Bank has brought climate change concerns into its main lending activities.

Questions remain in those cases in which the two interests—internationalist and nationalist—diverge. Which interest should prevail in the regulation of climate: the interest of the locals or the interests of the international community? Often the two interests coincide. Both communities have an interest in the mitigation of climate change. However, when interests collide, states face the dilemma as to whether to comply with international law or to agree with the preferences of the local constituencies. Of further interest is the question of how this overlapping or collision of interests relates to the admission and operation of foreign investments. Is there any difference between using the local public interest or the global interest as a parameter in the interpretation of international (investment) law and the adjudication of the relevant disputes?

D. Conclusion

In climate change governance, the distinctions between mandatory and voluntary, between public and private, and between global and local are best understood as the ends of three continuums. The distinction between mandatory and voluntary approaches is far from being a neat one; for instance, there are COP decisions that fall in between the two extremes. The dichotomy between public and private dimensions of climate law spans over different degrees “with regard to both the tools of regulation and the identity of the

152. See generally CHRISTINA VOIGT, SUSTAINABLE DEVELOPMENT AS A PRINCIPLE OF INTERNATIONAL LAW: RESOLVING CONFLICTS BETWEEN CLIMATE MEASURES AND WTO LAW (David Freestone ed., 2009).

153. Young, *supra* note 149, at 148.

154. Convention Concerning the Protection of the World Cultural and Natural Heritage, Nov. 16, 1972, 1037 U.N.T.S. 151.

155. See *id.* art. 4.

156. See William C. G. Burns, *Belt and Suspenders? The World Heritage Convention's Role in Confronting Climate Change*, 17 SE. ENVTL. L.J. 359, 390 (2009).

157. See Keohane & Victor, *supra* note 5, at 8.

regulators.”¹⁵⁸ Finally, the question as to how power should be allocated between national and international levels of climate governance is far from being settled.

Not only are these differentiations fluid and intertwined, but they also are also dynamic.¹⁵⁹ Soft law can harden and morph into hard law while “hard law can be softened if left largely unenforced.”¹⁶⁰ What is now part of public law may become part of private law after privatization processes, while some aspects of private law can become “public” because of political contingencies. Moreover, public law looks to private law in order to learn from its arguments, dispute settlement mechanisms, and so on. Finally, like other sectors of environmental regulation, climate governance has traditionally fallen within the regulatory autonomy of the state. However, this has started to change since the inception of the UNFCCC. Certainly, “the global scope of climate change” requires “collective action” at the international level.¹⁶¹

VI. CLIMATE CHANGE IN INTERNATIONAL INVESTMENT LAW

As the international economic order has become more and more intertwined with concerns for climate change,¹⁶² the international investment regime can and has played a role in global climate governance. Corporations can play a dual role with regard to climate change. On the one hand, corporations are the main greenhouse gas producers,¹⁶³ and greenhouse gases emissions spur climate change. On the other hand, multinational corporations can play an important

158. Rosen-Zvi, *supra* note 115, at 239.

159. *Id.* at 239–40.

160. *Id.*

161. *Id.*

162. On the linkage between international trade law and international climate law, see, for example, Cinnamon Carlarne, *The Kyoto Protocol and the WTO: Reconciling Tensions Between Free Trade and Environmental Objectives*, 17 COLO. J. INT'L ENVTL. L. & POL'Y 45, 46 (2006) (discussing MEAs' reliance on trade methods to implement and enforce environmental measures); Andrew Green, *Climate Change, Regulatory Policy and the WTO: How Constraining Are Trade Rules?*, 8 J. INT'L ECON. L. 143, 178–79 (2005) (explaining how Article XX limits trading based on environmental and other non-economic factors); Patrick Messerlin, *Climate and Trade Policies: From Mutual Destruction to Mutual Support*, 11 WORLD TRADE REV. 53, 77 (2012) (highlighting that “the trade community would enormously benefit from a climate community capable of designing instruments that would support the adjustment efforts to be made by carbon-intensive firms much better than instruments such as antidumping or safeguards, which have proved to be ineffective.”).

163. See J. Von Doussa, A. Corkery & R. Chartres, *Human Rights and Climate Change*, 14 AUSTL'N INT'L L.J. 161, 170 (2007).

role in greening the economy.¹⁶⁴ For instance, investments in renewable energy projects—those projects that derive energy from resources that are naturally replenished such as sunlight, wind, rain, tides, waves, and geothermal heat—can foster climate change mitigation and sustainable development.¹⁶⁵

As mentioned, there is no comprehensive multilateral framework governing foreign direct investments. Rather, more than 3,000 bilateral investment treaties (BITs) regulate this vital area of international law.¹⁶⁶ This does not mean, however, that the system is fragmented; rather, authors have suggested that a *de facto* multilateralization of the system has taken place¹⁶⁷ due to the fact that many BITs share common and/or similar provisions, and arbitral tribunals do refer to earlier awards, despite the absence of *stare decisis* in international (investment) law.¹⁶⁸ The Energy Charter Treaty (ECT)¹⁶⁹ is a multilateral treaty governing energy investment and trade. Both bilateral investment treaties and the ECT provide a number of substantive standards of protection, including fair and equitable treatment, the prohibition of unlawful expropriation, full protection and security, non-discrimination, among others.

At the procedural level, both bilateral investment treaties and the ECT allow investors to file arbitration claims directly against host states for violations of their protections under the relevant provisions. Investor–state arbitrations can be *ad hoc* or institutionalized. In the latter case, the arbitrator can refer the dispute to a variety of fora, including the International Center for the Settlement of Investment Disputes (ICSID), the Permanent Court of Arbitration (PCA), and the Arbitration Institute of the Stockholm Chamber of Commerce. These institutions do not themselves decide disputes; rather, they administer the disputes in accordance with the applicable rules.

164. See generally PETER NEWELL & MATTHEW PATERSON, *CLIMATE CAPITALISM—GLOBAL WARMING AND THE TRANSFORMATION OF THE GLOBAL ECONOMY* (2010) (discussing the power of corporations in climate change and the need to challenge them).

165. See generally Edna Sussman, *The Energy Charter Treaty's Investor Protection Provisions: Potential to Foster Solutions to Global Warming and Promote Sustainable Development*, 14 ILSA J. INT'L & COMP. L. 391 (2008).

166. See *World Investment Report 2011*, *supra* note 11, at 100.

167. See generally STEPHAN W. SCHILL, *THE MULTILATERALIZATION OF INTERNATIONAL INVESTMENT LAW* (2009).

168. See generally Andrea K. Bjorklund, *Investment Treaty Arbitral Decisions as Jurisprudence Constante*, in *INTERNATIONAL ECONOMIC LAW: THE STATE AND FUTURE OF THE DISCIPLINE* 265, 265–80 (Colin Picker et al. eds., 2008) (explaining that awards do not have any precedential status yet later tribunals do refer to previous awards); Gabrielle Kaufmann-Kohler, *Arbitral Precedent: Dream, Necessity or Excuse?*, 23 *ARB. INT'L* 357 (2007) (noting that international arbitration lacks a doctrine of precedent yet later tribunals still refer to previous awards).

169. The Energy Charter Treaty [ECT], Dec. 17, 1994, 34 I.L.M. 360.

Do investment treaties chill and/or impede endeavors to mitigate the effects of climate change?¹⁷⁰ Investment treaties can foster investments in renewable energy, thus contributing to climate change mitigation. Yet, concerns remain that investment treaty protections can prevent regulation designed to mitigate climate change¹⁷¹ and/or that investment treaty arbitrations can affect the implementation of climate law. Foreign companies can (and have) file(d) investor–state arbitrations, contending that climate change-related regulatory measures breach the relevant investment treaty provisions.¹⁷² Climate change-related regulatory measures can affect the economic interests of private actors by requiring technological upgrades or banning specific economic activities.¹⁷³ Where the economic activities affected are owned by foreign investors, such measures can (and have) give(n) rise to investor–state arbitrations under the relevant treaties.¹⁷⁴ Foreign investors can (and have) argue(d) that these measures violate the prohibition on unlawful expropriation or the fair and equitable treatment standard, among others.¹⁷⁵ The next Part will explore how arbitral tribunals have dealt with climate change-related measures and whether such tribunals are contributing to climate change governance.

VII. BEYOND KNOWN WORLDS: CLIMATE CHANGE GOVERNANCE BY ARBITRAL TRIBUNALS?

Investment treaty arbitration has become the last frontier of climate change-related disputes. Until recently, foreign investors had not challenged climate change-related measures before arbitral tribunals.¹⁷⁶ Today, a number of investment treaty arbitrations concern regulatory measures relating to climate change. This is not to say that investment treaty tribunals are the best venues for this type

170. See, e.g., Schill, *supra* note 14, at 469–77 (assessing “the interaction between international investment law and unilateralism that endeavors to mitigate the effects of climate change.”).

171. *Id.* at 477 (noting that the investment regime “should not lead to a chill on environmental regulation nor obstruct measures that are introduced in an attempt to mitigate climate change.”).

172. See KATE MILES, *THE ORIGINS OF INTERNATIONAL INVESTMENT LAW* 187 (James Crawford & John S. Bell eds., 2013).

173. For instance, at the EU level, see *Arcelor S.A. v. Eur’n Parliament & Council*, Case T-16/04, Judgment (Mar. 2, 2010).

174. See Schill, *supra* note 14, at 470.

175. *Id.* at 471–76.

176. Rather, investors used to challenge other types of environmental measures. See, e.g., Rahim Moloo & Justin Jacinto, *Environmental and Health Regulation: Assessing Liability Under Investment Treaties*, 29 *BERKELEY J. INT’L INV. L.* 1 (2011).

of dispute, let alone the only venue.¹⁷⁷ Rather, given the importance of such disputes for climate change governance, and the fact that there is scarce, if any, literature examining this emerging jurisprudence, this Part aims to cover this gap, moving beyond the state of the art, mapping and examining the relevant arbitrations and considering investment arbitration as a tool of climate governance.

The UNFCCC does not establish a dedicated dispute settlement mechanism for climate change-related disputes. Rather, like other multilateral environmental agreements, it restates the need for parties to settle their dispute “through negotiation or any other peaceful means of their own choice.”¹⁷⁸ States can refer to adjudication or international arbitration or subject the dispute to compulsory nonbinding conciliation.¹⁷⁹ Not surprisingly, Article 14 of the UNFCCC “has not yet been relied upon as a jurisdictional basis for action, despite the significant . . . violations of obligations under the Convention.”¹⁸⁰ Most cases brought before the Compliance Committee have concerned issues of procedural compliance.¹⁸¹

Given the fact that the UNFCCC and the Kyoto Protocol offer no provision for non-state actors to initiate compliance procedures,¹⁸² not surprisingly, climate change disputes have been adjudicated *outside* the climate change regime. Private actors have pursued their claims before a variety of different courts and tribunals at the national, regional, and international level.¹⁸³ The choice of the relevant court or tribunal is of fundamental importance, as the entrenchment of the tribunal in a given institutional culture may affect the outcome of the dispute. Therefore, there is a degree of forum shopping for the most advantageous adjudicatory mechanism.¹⁸⁴

177. See Young, *supra* note 149, at 153 (noting that climate change-related disputes have been brought before other fora including the International Court of Justice, the WTO dispute settlement mechanism, the International Tribunal for the Law of the Sea, and the compliance procedures within the Kyoto Protocol).

178. UNFCCC, *supra* note 48, art. 14.

179. *Id.*

180. Duncan French & Lavanya Rajamani, *Climate Change and International Environmental Law: Musings on a Journey to Somewhere*, 25 J. ENVTL. LAW 437, 452 (2013).

181. See van Asselt, Mehling & Kehler Siebert, *supra* note 129, at 16–17.

182. See Catherine Redgwell, *Non-Compliance Procedures and the Climate Change Convention*, in INTER-LINKAGES: THE KYOTO PROTOCOL AND THE INTERNATIONAL TRADE AND INVESTMENT REGIMES 43, 43–58 (W. Bradnee Chambers ed., 2001) (discussing who is allowed to initiate compliance procedures under the UNFCCC and the Kyoto Protocol).

183. For an overview, see generally Chester Brown, *International, Mixed, and Private Disputes Arising Under the Kyoto Protocol*, 1 J. INT'L DISP. SETTLEMENT 447 (2010).

184. See Karen J. Alter & Sophie Meunier, *The Politics of International Regime Complexity*, 7 PERSP. POL. 13, 16 (2009) (“A number of . . . contributors identified *forum-shopping* strategies where actors select the international venues based on where

As mentioned, investment treaty arbitration has become the last frontier of climate change-related disputes and a steadily growing number a number of investment treaty arbitrations concern regulatory measures relating to climate change. Climate change-related investment arbitrations are varied. They can encompass a claimant filing an investment treaty claim to enforce existing climate-related laws to which the defendant is legally bound, to a claimant contending that climate change law is in breach of the relevant BIT provisions. The interests at stake may present a complexity unknown in other areas of the law, presenting a mixture of private and public interests which at times coincide (i.e., in which case, requiring climate change mitigation) and at times conflict (i.e., when the private interests clash with collective entitlements).

Arbitral tribunals are called to fill a “governance gap.” Arbitral awards—the decisions of arbitral tribunals—can become a tool of global climate governance, serving as a “*de facto* source of . . . climate policy with very real impacts on the regulatory landscape.”¹⁸⁵ At the same time, the lack of a clear path to follow in settling such issues suggests that climate-related investment disputes can constitute a “legitimacy minefield” for the arbitral tribunals.¹⁸⁶ In international (investment) law, debates over the extent of arbitral lawmaking authority are common.¹⁸⁷ There is no settled approach to the question as to whether arbitrators should conform to strict legalism and show deference to the regulatory autonomy of the state or adopt a proactive approach to fill gaps in the law. Certainly, however, the effects of a given dispute reverberate beyond the parties to the same and can shape future decision making of governments, pressure corporations to invest in (or divest themselves of) a given sector activities, and reconfigure the public discourse.¹⁸⁸ Given the multiplicity of fora

they are best able to promote specific policy preferences, with the goal of eliciting a decision that favors their interests.”).

185. See Jacqueline Peel, *Issues in Climate Change Litigation*, 5 CARBON & CLIMATE L. REV. 15, 23 (2011) (referring to climate change-related disputes more generally).

186. *Id.*

187. See generally INGO VENZKE, HOW INTERPRETATION MAKES INTERNATIONAL LAW: ON SEMANTIC CHANGE AND NORMATIVE TWISTS (2012); Armin von Bogdandy & Ingo Venzke, *In Whose Name? An Investigation of International Courts' Public Authority and Its Democratic Justification*, 23 EUR. J. INT'L L. 7 (2012) (illustrating the conflicting views on arbitral law-making authority); Armin von Bogdandy & Ingo Venzke, *On the Functions of International Courts: An Appraisal in Light of Their Burgeoning Public Authority*, 26 LEIDEN J. INT'L L. 49 (2013); Ingo Venzke, *The Role of International Courts as Interpreters and Developers of the Law: Working out the Jurisgenerative Practice of Interpretation*, 34 LOY. L.A. INT'L & COMP. L. REV. 99 (2011) (noting that international investment arbitration is decentralized and lacking in institutional structure, and that this leads to conflicting awards).

188. See Hari M. Osofsky, *The Continuing Importance of Climate Change Litigation*, 1 CLIMATE L. 3, 5 (2010) (referring to climate change-related disputes more generally).

adjudicating climate change-related disputes and the commonality of the relevant issues, there is an opportunity for transnational judicial dialogue and cross-pollination of concepts.¹⁸⁹ Yet, there is a risk that arbitral tribunals will focus on the persuasive precedents of previous arbitral awards, not necessarily dealing with climate change-related disputes. A de facto system of precedent has coalesced in investment treaty arbitration:¹⁹⁰ the persuasiveness of previous arbitral tribunal awards can overshadow the potential merits of the jurisprudence of other courts and tribunals. The selection of the persuasive precedent matters, as it can influence the outcome of the proceedings.

Not only can arbitral awards contribute significantly to the development of international investment law, but they also can contribute, albeit indirectly, to the development of climate governance. These cases will contribute to the development of international investment law as they involve the interpretation of key standards of protection, including indirect expropriation, non-discrimination, and fair and equitable treatment, among others. These cases will also contribute to the development of the climate regime. Investment treaty arbitral tribunals are of limited jurisdiction and cannot adjudicate on the eventual violation of climate change law. Yet, climate change-related arbitrations demonstrate that investor–state arbitration can constitute an unintended but effective tool for enforcing climate change law in mixed disputes (i.e., between states and non-state actors). These cases may also generate debate on the interplay, conflict, and/or mutual supportiveness between these branches of public international law, and, more generally, on the unity or fragmentation of international law.

From a climate law perspective, two types of claims have emerged. *First*, investors who have invested in renewable energy have challenged regulatory changes allegedly affecting their investments. In these cases, international investment law is being used as a legal mechanism to protect economic interests of businesses investing in renewable energy. In these cases international investment law is being used as a shield to protect climate change mitigation measures. However, it will be shown that in repealing and/or modifying climate change mitigation measures, the host state may be pursuing other fundamental objectives, including human rights. In times of austerity, cuts in public expenditure can be unavoidable and may be spread among different economic sectors. If host states could not adjust their climate energy policies to provide essential services with respect to fundamental human rights, then

189. See Peel, *supra* note 185, at 24.

190. Adrian M. Johnston & Michael J. Trebilcock, *Fragmentation in International Trade Law: Insights from the Global Investment Regime*, 12 *WORLD TRADE REV.* 621, 629 (2013).

this situation could lead to a regulatory chill, as states would be wary of adopting climate change mitigation measures in the first place.

Second, investors who have invested in polluting activities have filed investor–state arbitrations, deeming Kyoto-related measures as a violation of the host state obligations under its international investment treaties. In these cases, international investment law is being used as a sword to protect private property against climate change mitigation measures.

This Part now examines these two different facets of the relevant arbitrations. As most of these disputes have been filed only recently and are pending at the time of this writing, it is not possible to foresee whether these disputes will be settled by the parties and, if so, on which terms, or whether—and if so how—they will be adjudicated by the relevant arbitral tribunals. It is nonetheless timely and appropriate to provide a brief overview of the relevant issues that have arisen in these emerging disputes.

A. Renewable Energy Investors as Claimants

Renewable energy-related disputes have emerged as the new frontier of confrontation between investors and states. A number of countries have adopted incentives to attract investments in the renewable energy sector and to increase the production of clean energy. The rationales for public support of renewable energy are multifold. In general terms, public support of renewables is needed because energy production from renewables is more expensive than (and not yet competitive with) energy generated from fossil fuels. Moreover, energy security calls for the diversification of energy sources away from traditional sources. In response to the current global financial crisis, however, states have implemented unprecedented emergency measures to prevent systemic collapse and return to economic stability.¹⁹¹ These emergency measures include measures affecting the renewable energy sector. Such measures have triggered a wave of investment disputes against states for potential breaches of investment treaty provisions due to the negative impact of such measures on foreign investments.¹⁹² These investor–state

191. See generally Anne Van Aaken & Jürgen Kurtz, *Emergency Measures and International Investment Law: How far Can States Go?*, 2010 Y.B. INT'L INV. L. & POLY 505, 505–37 (Karl Sauvant ed.); Anne Van Aaken & Jürgen Kurtz, *Prudence or Discrimination? Emergency Measures, the Global Financial Crisis and International Economic Law*, 12 J. INT'L ECON. L. 859 (2009).

192. For instance, foreign investors have filed investment disputes against Argentina and Greece for their handling of the debt crisis. See, e.g., *Abaclat v. Argentina*, ICSID Case No. ARB/07/5, Decision on Jurisdiction and Admissibility (Aug. 4, 2011); *Cyprus Popular Bank Public Co. Ltd. v. Hellenic Republic*, ICSID Case No.

arbitration claims expose the state to potential liability. Investor and host state priorities tend to diverge in times of a financial crisis. Investors are concerned with the protection of their investments. The renewable energy sector is “capital intensive,” and “government subsidies are still necessary to make them economically viable.”¹⁹³ A sovereign’s priority, however, is working out a prompt and effective resolution of the crisis. Therefore, finding a balance between the right of a sovereign to respond to a debt crisis and the protection of investors’ rights under BITs is a source of international tension.

Many of the pending disputes have arisen out of the same set of facts. A number of EU countries—including Bulgaria, the Czech Republic, Spain, Italy, and Greece—have adopted incentives to attract investments in the renewable energy sector and to increase the production of clean energy.¹⁹⁴ Among these incentives was a “feed-in tariff” (FIT) (i.e., a fixed electricity purchase price set higher than market rates and of guaranteed duration).¹⁹⁵ This and other incentives made the renewable energy market particularly attractive to investors since they reduced financing costs.¹⁹⁶

After the advent of the global financial crisis, however, a number of governments realized that rapid rates of growth in the renewable energy sector could create an “unsustainable social burden”¹⁹⁷ and began to change their renewable energy policies, repealing some of these incentives, eventually reducing the FITs.¹⁹⁸ In fact, as a policy, FITs cost governments a lot, potentially contributing to the escalation of their deficits.¹⁹⁹ In a number of arbitrations, foreign investors are contending that these regulatory changes amount to a violation of the relevant investment treaties’ provisions. This section examines a number of case studies.

ARB/14/16, (July 16, 2014); Poštová banka, a.s. & Istrocapital SE v. Hellenic Republic, ICSID Case No. ARB/13/8 (May 20, 2013).

193. Gerard Marata et al., *Renewable Energy Incentives in the United States and Spain: Different Paths—Same Destination?*, 28 J. ENERGY & NAT. RESOURCES L. 481, 482 (2010).

194. Joseph Tirado & Jerry R. Bloom, *Renewable Energy Reforms in Europe: Growing Threats to International Investors*, LEXOLOGY (Winston & Strawn, LLP, Chicago, Ill.), June 9, 2014, at 1.

195. *Id.*

196. *Id.* (noting that “[r]eportedly, many foreign investors relied on the duration of these incentives.”).

197. James Prest, *The Future of Feed-in Tariffs: Capacity Caps, Scheme Closures and Looming Grid Parity*, 2012 RENEWABLE ENERGY L. & POL’Y REV. 25, 26.

198. Tirado & Bloom, *supra* note 194, at 1.

199. Prest, *supra* note 197, at 26 (noting that “if a FIT is set too high, . . . generator profits will be more than a ‘reasonable’ return on investment”, thus posing “a risk of a speculative investment bubble” and that the consumers will have to pay a too high a price for electricity; on the other hand, “if the FIT is set too low, . . . investing in renewable generation [will] not [be] made sufficiently profitable, [and] investors will invest in other energy businesses”).

Consider, for example, Bulgaria. After adopting the 2007 *Renewable and Alternative Energy Sources and Biofuels Act* (RAESBA),²⁰⁰ a new regulation governing investments in renewable energy sources, Bulgaria soon “reached its targets and the governmental authorities took measures to restrict the available incentives.”²⁰¹ As a result, the 2011 *Energy from Renewable Sources Act* (ERSA) replaced the RAESBA.²⁰² A 20 percent tax was imposed on the income of solar energy producers, many of which are foreign owned, and the preferential rates for electricity generated by wind and solar power plants were substantially reduced. Several multinational companies considered the possibility “to protect their rights before an international arbitral tribunal.”²⁰³ In 2013 EVN, an Austrian company, which had invested in the energy sector, filed an investment treaty arbitration against Bulgaria.²⁰⁴ EVN based its claim on the Energy Charter Treaty and the Austria–Bulgaria BIT. EVN acquired the privatized grid operation and electricity supply companies in the southern part of Bulgaria in the 2000s.²⁰⁵ The dispute was sparked by the reform in the renewable energy sector. EVN was under an obligation to pay a preferential tariff to the solar energy producers but, allegedly, Bulgarian authorities failed to do so.²⁰⁶ This led EVN to bring a claim against the country after a three-month “cooling-off” negotiation period provided for by the Energy Charter Treaty.²⁰⁷ While the notice of arbitration is not publicly available, potential breaches, which may be alleged by the foreign investors, include breach of fair and equitable treatment due to lack of a predictable and stable legal framework, breach of legitimate expectations, and indirect expropriation of the investor’s asset value.

200. DANIELA MINEVA ET AL., EUROPEAN COMM’N DIR.-GEN. REG’L POL’Y, POLICY PAPER ON RENEWABLE ENERGY AND ENERGY EFFICIENCY OF RESIDENTIAL HOUSING-BULGARIA 5 (2011), http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/eval2007/expert_innovation/2011_synt_rep_bg.pdf [<http://perma.cc/2RJE-7AEP>] (archived Sept. 20, 2015).

201. DEYAN DRAGUIEV, YOUNG INT’L ARB. GRP., BULGARIA-INVESTMENT TREATY ARBITRATION AGAINST BULGARIA LOOMING LARGE IN THE ENERGY SECTOR (2014), <http://www.google.co.uk/url?sa=t&rc=tj&q=&esrc=s&source=web&cd=8&ved=0CE0QFjAH&url=http%3A%2F%2Fwww.lcia.org%2Fmedia%2FDownload.aspx%3FMediaId%3D347&ei=jBTRVL-4HdfvaI27glAP&usg=AFQjCNFIWtQL5k1bW2-2B1LgCCa4tOWsew&bvm=bv.85076809,d.d2s> [<http://perma.cc/W74E-RK8K>] (archived Sept. 20, 2015).

202. MINEVA ET AL., *supra* note 200, at 5.

203. Jarrod Hepburn, *Bulgaria May Face BIT and Human Rights Claims over Renewable Energy Measures*, INV. ARB. REP., June 4, 2014.

204. EVN AG v. Republic of Bulgaria, ICSID Case No. ARB/13/17, (Dec. 2, 2013), <https://icsid.worldbank.org/apps/ICSIDWEB/Lists/Cases/DispForm.aspx?ID=5&ContentTypeId=0x010072BB0AF096F3E943AAA1E857604384AC> [<http://perma.cc/L8X8-3DHB>] (archived Sept. 20, 2015).

205. DRAGUIEV, *supra* note 201, at 1.

206. *Id.*

207. *Id.*

In parallel, reportedly, more than fifty solar companies have lodged a complaint against the state's measures at the European Court of Human Rights, alleging violations of the right to property in breach of Article 1 Protocol 1 of the European Convention on Human Rights.²⁰⁸

The Czech Republic is also facing several claims in relation to its repealing favorable treatment of solar-generated energy.²⁰⁹ In 2005, it had adopted a generous FIT payable to "solar generators who fed electricity into the grid."²¹⁰ In 2010, however, the FIT was reduced.²¹¹ A bloc of ten foreign investors filed a joint request for arbitration in May 2013, complaining of various measures allegedly affecting their investments in the Czech Republic's photovoltaic (pv) sector.²¹² The claimants relied on a number of treaties in their joint request, including the Energy Charter Treaty and Czech BITs with the Netherlands, Germany, Cyprus, Luxembourg, and the United Kingdom.²¹³ The claimants contended that these rollbacks constitute an indirect expropriation of their investments and a breach of the fair and equitable treatment standard.²¹⁴ The Czech Republic, however, objected to the claimants' efforts to join in a single arbitration.²¹⁵ It treated the arbitration request as a request to consolidate all of the claims and indicated which claims it would consent to arbitrate together—"because certain claimants were alleged affiliates and/or invested in a common investment in the Czech Republic."²¹⁶ Therefore, six arbitral tribunals have been constituted out of the joint claim.²¹⁷ In addition, some German investors have filed an investor-state arbitration under the United Nations Commission on International Trade Law (UNCITRAL) Rules and the Germany-Czech

208. Hepburn, *supra* note 203.

209. Antaris Solar & Dr. Michael Göde v. Czech Republic (2013); ICW Europe Investments Limited v. Czech Republic (May 8, 2013); Natland Investment Group NV, Natland Group Limited, G.I.H.G. Limited, and Radiance Energy Holding S.A.R.L. v. Czech Republic (May 8, 2013); Photovoltaik Knopf Betriebs-GmbH v. Czech Republic (May 8, 2013); Voltaic Network GmbH v. Czech Republic (May 8, 2013); WA Investments-Europa Nova Limited v. Czech Republic (May 8, 2013), all under UNCITRAL Rules.

210. Luke Eric Peterson, *Brussels' Latest Intervention Casts Shadow over Investment Treaty Arbitrations Brought by Jilted Solar Energy Investors*, INV. ARB. REP., Sept. 8, 2014, at 1.

211. *Id.*

212. Luke Eric Peterson, *Following PCA Decision, Czech Republic Thwarts Move by Solar Investors to Sue in Single Arbitral Proceeding; Meanwhile Spain Sees New Solar Claim at ICSID*, INV. ARB. REP., Jan. 1, 2014.

213. *Id.*

214. *Id.*

215. *Id.*

216. *Id.*

217. *Id.*

Republic BIT.²¹⁸ The latter claim differs from the previous claims because it does not rely on the Energy Charter Treaty.²¹⁹ The reasons for the failure to invoke the protections of the treaty are not clear. However, “one explanation could lie in the ECT’s Article 21, which places important limits on the claims that can be raised in relation to taxation measures.”²²⁰

Spain is facing a steadily lengthening number of investment treaty claims in relation to its own reductions of incentives that it offered previously to investors in renewable energy production.²²¹ Reportedly, Spain reduced these incentives which constituted “a significant drag on the Spanish economy.”²²² In *InfraRed Environmental Infrastructure GP Limited and others v. Spain*,²²³ the claimant, a UK-based investment fund, which had acquired equity participation in solar projects in Spain, alleges that legal reforms affecting the renewable energy sector constitute violations of the Energy Charter Treaty.²²⁴ A number of companies have brought analogous cases against Spain before the International Center for the Settlement of Investment Disputes (ICSID),²²⁵ the Arbitration

218. JSW Solar (zwei) v. Czech Republic (June 2013), UNCITRAL ad hoc.

219. Luke Eric Peterson, *In Shadow of Mass Solar Claims, Another UNCITRAL BIT Arbitration Quietly Moves Forward Against Czech Republic*, INV. ARB. REP., Jan. 10, 2014.

220. *Id.*

221. See Tirado & Bloom, *supra* note 194, at 1 (“The Spanish Government has indicated that . . . the amount of incentives paid to renewable, co-generation and waste energy sources is to be cut in 2014 by approximately Euro 1.7 billion.”).

222. Kyriaki Karadelis, *Spain Faces More Claims from Renewables Investors*, GLOBAL ARB. REV., Nov. 29, 2013 (noting “an electricity tariff deficit in the country’s energy market that the International Monetary Fund and the European Commission have highlighted as a significant drag on the Spanish economy.”).

223. *InfraRed Envtl. Infrastructure GP Limited v. Kingdom of Spain*, ICSID Case No. ABR/14/12, (June 3, 2014).

224. Luke Peterson, *Another Week, Another Arbitration Claim Against Spain: Infrared Environmental Infrastructure Sues at ICSID*, INV. ARB. REP. (June 4, 2014).

225. SolEs Badajoz GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/38, (August 24, 2015); OperaFund Eco-Invest SICAV PLC and Schwab Holding AG v. Kingdom of Spain, ICSID Case No. ARB/15/36, (August 11, 2015); E.ON SE, E.ON Finanzanlagen GmbH and E.ON Iberia Holding GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/35, (August 10, 2015); Cavalum SGPS, S.A. v. Kingdom of Spain, ICSID Case No. ARB/15/34, (August 4, 2015); JGC Corporation v. Kingdom of Spain, ICSID Case No. ARB/15/27, (June 22, 2015); KS Invest GmbH and TLS Invest GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/25, (June 16, 2015); Mathias Kruck and others v. Kingdom of Spain, ICSID Case No. ARB/15/23, (June 4, 2015); Cube Infrastructure Fund SICAV v. Kingdom of Spain, ICSID Case No. ARB/15/20, (June 1, 2015); BayWa r.e. Renewable Energy GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/16, (May 8, 2015); 9REN Holding S.a.r.l. v. Kingdom of Spain, ICSID Case No. ARB/15/15, (April 21, 2015); STEAG GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/4, (Jan. 21, 2015); Stadtwerke München GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/1, (Jan. 7, 2015); RWE Innogy GmbH v. Kingdom of Spain, ICSID Case No. ARB/14/34, (Dec. 23, 2014); RENERGY S.à r.l. v. Kingdom of Spain, ICSID Case No. ARB/14/18, (Aug. 1, 2014); NextEra Energy Global Holdings B.V. v. Kingdom

Institute of the Stockholm Chamber of Commerce,²²⁶ or ad hoc arbitral tribunals pursuant to the UNCITRAL rules.²²⁷

Other member states of the European Union are facing similar challenges. On February 21, 2014, the ICSID registered the first known claim filed against Italy for alleged violations of the ECT.²²⁸ The claimants are investors in a photovoltaic energy generation project.²²⁹ The claim is related to the notorious “spalmaincentivi,” the decision taken by the government to decrease incentives granted in the past to renewable energy producers. Italy has recently withdrawn from the ECT because of cost-cutting efforts.²³⁰ Under Article 47 of the ECT, the withdrawal will take effect one year after the date of notification.²³¹ However, the ECT will continue to apply to investments made before such date for a period of further twenty

of Spain, ICSID Case No. ARB/14/11, (May 23, 2014); Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain, ICSID Case No. ARB/14/1, (Feb. 11, 2014); Eiser Infrastructure Ltd. v. Kingdom of Spain, ICSID Case No. ARB/13/36, (Dec. 23, 2013); Antin Infrastructure Services Luxembourg S.à.r.l. v. Kingdom of Spain, ICSID Case No. ARB/13/31, (Nov. 22, 2013); RREEF Infrastructure (G.P.) Limited v. Kingdom of Spain, ICSID Case No. ARB/13/30, (Nov. 22, 2013).

226. Isolux Infrastructure Netherlands B.V. v Spain, SCC (2013); Charanne (the Netherlands) & Construction Investments (Luxembourg) v. Spain, SCC (2013); CSP Equity Investment S.à.r.l. v. Spain, SCC (June 2013).

227. The PV Investors v. Spain, ad hoc, UNCITRAL Arb. Rules, (Nov. 17, 2011); Luke Eric Peterson, *Tribunals Finalized in UNCITRAL and SCC Claims Arising out of Solar-Power Controversies*, INV. ARB. REP. (Apr. 16, 2014).

228. Blusun S.A. v. Italian Republic, ICSID Case No. ARB/14/3 (Feb. 21, 2014).

229. Kyriaki Karadelis, *Italy Risks Claims over Solar Subsidies*, GLOBAL ARB. REV. (Dec. 8, 2014), <http://globalarbitrationreview.com/news/article/33231/> (subscription required) [<http://perma.cc/TFA5-Z58R>] (archived Oct. 15, 2015); see Request of Consultation by China, European Union & Certain Member States—*Certain Measures Affecting the Renewable Energy Generation Sector*, WT/DS452/1 (Nov. 5, 2012), https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds452_e.htm [<http://perma.cc/25HS-KLAX>] (archived Sept. 18, 2015); see also Matthew D’Orsi, *Heated Skirmishes in the Solar Sector: Do Solar-PV Feed-In Tariffs Constitute Trade-Related Investment Measures and Subsidies Prohibited Under the WTO Regime?*, 29 AM. U. INT’L L. REV. 673, 674 (2013).

230. Legge 23 Dicembre 2014, n. 190, Disposizioni per la Formazione del Bilancio Annuale e Pluriennale dello Stato (legge di stabilita’ 2015), Allegato 8, GU Serie Generale n. 300 del 29-12-2014 - Suppl. Ordinario n. 99, <http://www.gazzettaufficiale.it/eli/id/2014/12/29/14G00203/sg>. [<http://perma.cc/U8AN-FKZW>] (archived Sept. 18, 2015); see Carsten Steinhauer, *Italy Withdraws from Energy Charter Treaty*, NAT’L L. REV. (April 21, 2015), <http://www.natlawreview.com/article/italy-withdraws-energy-charter-treaty> [<http://perma.cc/YG5A-MKCX>] (archived Sept. 18, 2015); see also Jarrod Hepburn & Luke Eric Peterson, *Italy is the EU’s Model Citizen, When It Comes to Following European Commission Demands to Terminate Intra-EU Investment Treaties*, INV. ARB. REP. (June 2, 2015) (noting that Italy has also terminated intra-EU BITs “due to their no longer being deemed necessary in the context of an expanded EU”).

231. See Energy Charter Treaty, *supra* note 169, art. 47(2).

years.²³² Greece has also reduced the supposedly guaranteed prices.²³³

Analogous investment disputes are arising under Chapter 11 of the North American Free Trade Agreement (NAFTA).²³⁴ In *Mesa Power v. Canada*,²³⁵ a Texas-based energy company has brought an arbitral claim against Canada in relation to the province of Ontario's renewable energy program.²³⁶ The investor, which owns four wind farms in Ontario, contends that the province changed the rules by which renewable energy producers can obtain power purchase

232. *Id.* art. 47(3).

233. See Noradèle Radjai & Lorraine de Germiny, *Recent Developments in Solar Energy Sector Across Europe*, INT'L LAW OFFICE (Feb. 9, 2015), <http://www.internationallawoffice.com/newsletters/detail.aspx?g=c4885d6f-08eb-4c6f-9a89-913040b6b21c> [<http://perma.cc/SUW5-XS8Z>] (archived Sept. 18, 2015) (“[O]n March 30 2014 Greece enacted a law that retroactively cut solar feed-in tariffs by approximately 30%.”).

234. See generally North American Free Trade Agreement, 32 I.L.M. 289 prmb1. pts. 1–3 (1993), 32 I.L.M. 605, pts. 4–7, annex (1993), pts. 4–7, annexes, <https://www.nafta-sec-alena.org/Home/Legal-Texts/North-American-Free-Trade-Agreement?mvid=2> [<http://perma.cc/2SYN-G6FT>] (archived Sept. 18, 2015).

235. See generally Notice of Intent to Submit a Claim to Arbitration, *Mesa Power Grp. LLC v. Canada*, (July 6, 2011), <http://www.italaw.com/sites/default/files/case-documents/italaw1168.pdf> [<http://perma.cc/AWE7-FWY3>] (archived Sept. 18, 2015).

236. The Ontario FIT Program was also the subject of two WTO disputes initiated by Japan and the European Union against Canada, regarding Canada's domestic content requirements for equipment in order for solar and wind power generators to participate in the FIT program. Japan and the European Union challenged the program on two grounds. First, they argued that the domestic content requirement discriminated against imported goods thus being inconsistent inter alia with the national treatment provisions of the GATT and the TRIMS. Second, the claimants argued that the program constituted an unlawful subsidy, contrary to the Subsidies and Countervailing Measures (SCM) Agreement. The Panel ruled in favor of Japan and the European Union with regard to the first claim. The Appellate Body upheld that the Minimum Required Domestic Content Levels prescribed under the FIT Programme are inconsistent with Article 2.1 of the TRIMS Agreement and Article III:4 of the GATT 1994. With regard to the second claim, the Panel did not consider the FIT itself to be a subsidy. The Appellate Body reversed this finding that the complainants had failed to establish a FIT-based benefit for electricity producers. However, it could not confirm the fact of unlawful subsidization. Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector, Canada—Measures Relating to the Feed-In Tariff Program*, WTO Doc. WT/DS412/AB/R, WT/DS426/AB/R, (May 6, 2013), https://www.wto.org/english/tratop_e/dispu_e/412_426abr_e.pdf [<https://perma.cc/YV3Q-GQLZ>] (archived Sept. 18, 2015); *Canada—Certain Measures Affecting the Renewable Energy Generation Sector; Canada—Measures Relating to the Feed-In Tariff Program*, WTO Doc. WT/DS412/R, WT/DS426/R, (Dec. 19, 2012); see Aaron Cosbey & Petros C. Mavroidis, *A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO*, 11–47, 12 (RSCAS, Working Paper No. 17, 2014), (pointing out that the AB “engaged in legal acrobatics” when it avoided an explicit standing on the [il]legitimacy of clean energy subsidies under existing WTO Agreement on Subsidies and Countervailing Measures); see also Sherzod Shadikhodjaev, *First WTO Judicial Review of Climate Change Subsidy Issues*, 107 AM. J. INT'L L. 864, 867 (2013).

agreements, favoring other investors. Ontario's 2009 *Green Energy Act* is a climate change-related measure aimed at promoting renewable energy production and economic growth. Under the Act's Feed-In Tariff Program (FIT Program), the Ontario Power Authority secures renewable energy through long-term purchase contracts with producers of this energy. Under the program, companies benefit from a preferential tariff rate fixed for twenty years. In Ontario, the *Green Energy Act* has been controversial because of the preferential treatment granted to renewable energy producers vis-à-vis producers of non-renewable energy. When the relevant authorities introduced some changes to the rules for awarding FIT program contracts, the investor filed a notice of arbitration, contending that these regulatory changes violated the fair and equitable treatment standard. The investor also contended that a green energy investment agreement with a Korean-based company discriminated against other energy producers thus amounting to a breach of the national treatment and most favored nation treatment clauses. Finally, the company alleges that Ontario is imposing a number of local content requirements that amount to prohibited performance requirements under NAFTA Article 1106.

B. Challenges to Climate Change-Related Regulatory Measures

Investors who have invested in polluting activities can bring a second type of investment dispute, challenging climate change-related regulatory measures. Foreign investors can and have argued that Kyoto-related measures violate host state obligations under its international investment treaties, including non-discrimination, the fair and equitable treatment standard, and the prohibition on unlawful expropriation.²³⁷ Reportedly, investors have threatened to file investor-state arbitrations if climate change regulation did not include compensation mechanisms for their alleged losses for reducing carbon emissions.²³⁸ In addition, foreign companies could contend that moratoria on polluting activities amount to breaches of investment treaty provisions. The subsections below examine the types of claims that can and have been brought.

237. See, e.g., *Vattenfall AB v. Germany*, ICSID Case No. ARB/09/6, Request for Arbitration, ¶ 54 (March 30, 2009), <http://www.italaw.com/sites/default/files/case-documents/ita0889.pdf> [<http://perma.cc/AP6Q-PLLL>] (archived Sept. 18, 2015).

238. Luke Eric Peterson, *Coal-Fired Power Plant Investors Reportedly Threaten Australia with BIT Claims*, INV. ARB.REP. (Dec. 28, 2009).

1. Expropriation

Foreign investors could (and have) contend(ed) that moratoria on polluting activities amount to a form of expropriation and require compensation. For instance, an oil and gas firm has filed an investment arbitration against Canada over a moratorium on drilling techniques (“fracking”) in Quebec under Chapter 11 of the NAFTA.²³⁹ Although the prohibition of fracking is not a climate change-related measure, similar cases can and have arisen with other moratoria related to climate change.

For instance, in *Vattenfall v. Germany*, a Swedish company sued Germany under the ECT, challenging a regulation requiring the installation of GHG emissions controls on a proposed coal-fired power plant.²⁴⁰ According to Vattenfall, local opposition to the plant due to climate change concerns²⁴¹ delayed the issuance of the required permits for emissions control and water use. In August 2010, the parties settled the dispute, and the proceedings before the ICSID were suspended. The Government agreed that it would issue the relevant permits and relieved the company of its earlier commitments to the Hamburg Government that aimed to reduce the plant’s environmental impact on the Elbe River.

Although the case was settled, this section proposes a solution that may help adjudicating similar expropriation claims in the future. In this regard, it argues that the “police powers” doctrine should apply to this type of climate change-related investment dispute claim.²⁴² According to this doctrine, general regulation, adopted bona fide and in a non-discriminatory manner to protect public health or safety, or to prevent a public nuisance, does not amount to expropriation and cannot be compensated.²⁴³ In fact, states do have

239. See *Lone Pine Resources Inc. v. Canada*, Notice of Intent to Submit a Claim to Arbitration, UNCITRAL (Nov. 8, 2012).

240. *Vattenfall v. Germany*, ICSID Case No. ARB/09/6, Request for Arbitration, (Mar. 30, 2009), <http://www.italaw.com/sites/default/files/case-documents/ita0889.pdf> [<http://perma.cc/AP6Q-PLLL>] (archived Sept. 18, 2015).

241. See *Greenpeace Germany v. Vattenfall*, Rejected, (Oct. 29, 2009), http://oecdwatch.org/cases/Case_170 [<http://perma.cc/RW2G-M4EQ>] (archived Sept. 18, 2015) (stating that Greenpeace filed a complaint against Vattenfall, alleging that its planned power plant violated the OECD Guidelines on environmental policies and consumer protection; the German National Contact Point, however, dismissed the claim).

242. See Stephen W. Schill, *supra* note 14, at 472–73 (“Under [the] police power exception, host states have the power to restrict private property rights without compensation in pursuance of a legitimate purpose for as long as this purpose is reasonably balanced in relation to the regulation’s effect of the investment.”).

243. See *Saluka Inv. B.V. v. Czech Republic*, UNCITRAL, Partial Award, ¶ 262 (March 17, 2006), <http://www.italaw.com/sites/default/files/case-documents/ita0740.pdf> [<http://perma.cc/E6UH-2AZS>] (archived Sept. 18, 2015) (“In the opinion of the Tribunal, the principle that a State does not commit an expropriation and is thus not liable to

the right—and, some would argue, the duty—to restrict private property to prevent a public nuisance.²⁴⁴ Few would contest that climate change is a severe type of nuisance or common concern of humankind and that states have the duty to prevent and/or mitigate its effects. The legitimate purpose of climate change-related measures can also be inferred by the fact that they are based on scientific evidence²⁴⁵ as recognized by several international law instruments ratified by the overwhelming majority of states.

The police powers doctrine allows states to adopt measures to prevent a public nuisance such as climate change. It also allows arbitral tribunals to strike a balance between the objectives pursued by climate change law and those pursued by international investment law. Climate change is a common concern of humankind; there seems to be little question about the need to adopt climate change policies. The protection of foreign direct investment is also an important interest of states, as it can lead to the economic development of the host state. The key issue will be applying international investment law while taking into account climate change law.

At the same time, the concept of police powers is not unlimited. Concepts such as reasonableness and proportionality may help the arbitrators to assess whether the modalities of state regulation are suitable and appropriate to achieve the state objective of climate change mitigation and do not constitute a camouflaged indirect expropriation of the given foreign investment. For instance, in a recent arbitration, *Servier v. Poland*,²⁴⁶ concerning the denial of marketing authorizations to certain medicines in the exercise of its police powers to regulate public health, the Tribunal held that while it should “accord due deference to the decisions of specialized . . . administrators,” it “w[ould] also consider the manner in which those decisions were taken and their effect on the Claimants’

pay compensation to a dispossessed alien investor when it adopts general regulations that are ‘commonly accepted as within the police power of the States’ forms part of customary international law today.”); see also *Methanex Corp. v. United States*, Final Award of the Tribunal on Jurisdiction & Merits, pt. IV, ch. D, ¶ 7 (Aug. 3, 2005), <http://www.italaw.com/sites/default/files/case-documents/ita0529.pdf> [<http://perma.cc/7MVJ-HTHC>] (archived Sept. 18, 2015) (“[A]s a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects, inter alios, a foreign investor or investment is not deemed to be expropriatory and compensable . . .”).

244. See *Chemtura Corp. v. Canada*, UNCITRAL, Award (Aug. 2, 2010), http://www.italaw.com/sites/default/files/case-documents/ita0149_0.pdf [<http://perma.cc/P95B-MKL9>] (archived Sept. 18, 2015) (holding that it is Canada’s duty to ensure pesticide use would be safe).

245. On the role of science in international investment law and arbitration, see VALENTINA VADI, PUBLIC HEALTH IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 153–55 (2012).

246. *Les Laboratoires Servier, S.A.S., Biofarma, S.A.S., Arts et Techniques du Progrès v. Poland*, Award (Feb. 14, 2012), <http://www.italaw.com/cases/1179> [<http://perma.cc/K8PV-Z8JS>] (archived Sept. 18, 2015).

investments.”²⁴⁷ In particular, the Tribunal found the denial of marketing authorization to be discriminatory and disproportionate, thus amounting to an unlawful expropriation.

2. Discrimination

Foreign investors (in particular those coming from states outside the Kyoto system) could bring discrimination claims against host states’ regulatory measures to promote investments under the Kyoto system.²⁴⁸ This seems a remote hypothesis, given the almost universal ratification of the UNFCCC and, albeit to a much lesser extent, the Kyoto Protocol. Yet, incentives offered by a state for renewable energy projects could be perceived as discriminatory against carbon intensive businesses.

In this respect, a critical issue will distinguish the climate-friendly and carbon-intensive projects in light of the host state’s Kyoto commitments. Arguably, the Kyoto requirements constitute a legitimate ground for distinguishing different economic activities. In an earlier arbitration concerning the construction of a parking area in the proximity of a World Heritage Site, the Arbitral Tribunal distinguished two projects on the basis of their different impacts on the conservation of the site, in light of the host state’s commitments under the World Heritage Convention.²⁴⁹ Similarly, one could argue that carbon-intensive investments and climate-friendly economic activities are not “like investments” because they have different impacts on climate change. Therefore, the host state would be able to defend its regulatory measures on the ground that no discrimination is at issue since there is a legitimate distinction between economic activities, which have different impacts on climate change.

Even *prima facie* discriminatory measures may be found to be justified because of the novelty and complexity of climate change regulation. For instance, a major steel producer, Arcelor, took action before the (then) European Court of Justice (ECJ),²⁵⁰ alleging discrimination in the design of the EU Emission Trading Scheme (ETS).²⁵¹ The company contended that its emission allocation

247. Id. ¶ 568.

248. See Baetens, *supra* note 14, at 10.

249. See generally *Parkerings Compagniet AS v. Lithuania*, Award, ICSID Case No. ARB/05/8, (Sept. 11, 2007), <http://www.italaw.com/sites/default/files/case-documents/ita0619.pdf> [<http://perma.cc/5KLD-QRZV>] (archived Sept. 19, 2015) (providing an analogous consideration in the light of the of the World Heritage Convention).

250. See generally *Case T-16/04, Arcelor S.A. v. European Parliament*, 2004 E.C.R.

251. See generally *Council Directive 2003/87 of the European Parliament and of the Council of 13 Oct. 2003 on Establishing a Scheme for Greenhouse Gas Emission Allowance Trading with the Community & Amending Council Directive 96/61/EC*, 1996

discriminated against its investment as compared to other competing sectors,²⁵² requested the partial annulment of the European legislation, and claimed damages.²⁵³ The (now) General Court of the European Union,²⁵⁴ however, dismissed the claim, supporting the scheme's incremental approach of including some sectors while excluding others.²⁵⁵ The court acknowledged that the various industrial sectors were comparable polluters and that all carbon emissions affect the global climate. However, the court held that the differential treatment was justified because of the novelty and complexity of the scheme.²⁵⁶ According to the court, these features allowed a step-by-step approach.²⁵⁷ In contrast, discrimination based on nationality may be found to be unjustifiable. For instance, in *Nykomb v. Latvia*, a foreign investor successfully argued that Latvia had discriminated against its investment, supporting domestic operators while withdrawing its support to foreigners.²⁵⁸

3. Stabilization Clause

Other claims could be raised in relation to stabilization clauses in contracts between host states and foreign investors. In general terms, stabilization clauses aim to insulate the project from adverse regulatory changes. While stabilization clauses take different forms, they aim to immunize the investment from political risks, freezing the law applicable to the investment to that which was in force when

O.J. (L 275) 32, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:275:0032:0046:en:PDF> [<http://perma.cc/RZ5H-MDQU>] (archived Sept. 19, 2015) (amending Council Directive 96/61/EC and establishing a framework for greenhouse gas emission allowance trading).

252. See generally Case T-16/04, *Arcelor S.A. v. European Parliament*, 2004 E.C.R.

253. See Marjan Peeters, *The EU ETS and the Role of the Courts: Emerging Contours in the Case of Arcelor*, 2 CLIMATE L. 19, 19 (2011).

254. See *id.* at 20 (noting that since the inception of the Treaty of Lisbon on 1 December 2009, the entire judicial system of the European Union is referred to as the Court of Justice of the European Union, which consists of three judicial bodies: the Court of Justice, the General Court and the Civil Service Tribunal, and highlighting that Case T-16/04 was decided by the General Court)

255. See Case T-16/04, *Arcelor S.A. v. European Parliament*, 2010 E.C.R. 140 (dismissing Arcelor's action entirely). The European Court of Justice, now called Court of Justice, gave an earlier preliminary ruling on a question posed by a French administrative court in another earlier case started by Arcelor. See generally Case C-127/07, *Société Arcelor Atlantique et Lorraine et al. v. Premier Ministre et al.*, 2008. E.C.R. I-09895, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62007CJ0127> [<http://perma.cc/9K3D-QCW7>] (archived Sept. 19, 2015).

256. For commentary, see Kate Miles, *Arbitrating Climate Change*, 1 CLIMATE L. 63, 87-88 (2010).

257. See Case T-16/04, *Arcelor S.S. v. European Parliament*, 2010 E.C.R. ¶ 168.

258. See *Nykomb Synergetics Tech. Holding AB v. Latvia*, Arb. SCC, Award, at 34 (Dec. 16, 2003), <http://www.italaw.com/sites/default/files/case-documents/ita0570.pdf> [<http://perma.cc/HGP8-XBME>] (archived Sept. 19, 2015).

the parties signed the contract. Authors have cautioned that public welfare regulation may be accommodated through appropriate drafting²⁵⁹ or interpretation of stabilization clauses.²⁶⁰

4. Fair and Equitable Treatment

In addition to the mentioned claims of expropriation, discrimination and lack of stability, foreign investors could contend that changes in the regulatory framework of the host state amounts to a violation of the fair and equitable treatment (FET) standard. A number of arbitral tribunals have interpreted the FET standard extensively so as to include the obligation on the part of the state to protect an investor's legitimate expectations and provide a stable legal environment. For instance, in an ECT arbitration, a company won a case against the host state for a change of government policy, which altered an incentive system for green investment.²⁶¹

Although the FET standard seems particularly vague, it does not protect foreign investors against every type of regulatory change. Is it legitimate for the investor to expect host state not/never to take climate change mitigation measures if they are contradictory to statements made or the legal framework in existence? In broad brushstrokes, protected legitimate expectations stem from specific statements by the relevant state authorities, or can arise from the host state regulatory framework in the event that the state in question has induced a given investor's confidence that the legal framework would remain unchanged for some time. On the one hand, it may be difficult to argue that climate change mitigation measures are not foreseeable, as climate change has made headlines. On the other, as Schill points out, "[T]he protection of the investor's legitimate expectations does not make the domestic legal framework unchangeable or subject every change to a compensation requirement."²⁶² In this regard, the *Saluka* Tribunal held that ascertaining whether fair and equitable treatment was breached required "a weighing of the Claimant's legitimate and reasonable

259. See generally Antony Crockett, *Stabilisation Clauses and Sustainable Development: Drafting for the Future*, in *EVOLUTION IN INVESTMENT TREATY LAW AND ARBITRATION* 516, 516–38 (Chester Brown & Kate Miles eds., 2011) ("When drafting stabilisation clauses, lawyers should focus on ensuring that the contract is able to adapt to and survive the evolution of environmental and social standards . . .").

260. Lorenzo Cotula, *Reconciling Regulatory Stability and Evolution of Environmental Standards in Investment Contracts: Towards a Rethink of Stabilization Clauses*, 1 J. WORLD ENERGY & BUS. 158 (2008).

261. See *Nykomb Synergistics Tech. Holding AB v. Latvia*, Arb. SCC, Award, (Dec. 16, 2003), <http://www.italaw.com/sites/default/files/case-documents/ita0570.pdf> [<http://perma.cc/HGP8-XBME>] (archived Sept. 19, 2015).

262. Schill, *supra* note 14, at 476.

expectations on the one hand and the Respondent's legitimate regulatory interests on the other."²⁶³

VIII. CHALLENGES AND PROSPECTS

What are the main challenges posed by climate change-related investment arbitrations? This Part highlights the main issues that can facilitate and/or impede consideration of the public interest in investment treaty arbitration.

A. Lack of Transparency

From a procedural perspective, the general lack of transparency of investment treaty arbitration is of particular concern. Due to the particular features of investment arbitration and the fact that none of the mentioned disputes have been settled yet, very little information is available. While the number of investment disputes relating to renewable energy is growing steadily as reported by the news, very little is known about the claims and arguments of the parties.

The Energy Charter Secretariat regularly compiles and updates a list of the relevant investor–state disputes related to energy—and thus also renewable energy.²⁶⁴ However, under the Energy Charter Treaty (ECT) “there is no requirement that such disputes be notified to the Secretariat,” nor is the Secretariat involved in the administration of investment disputes. Therefore, the information available on the Energy Charter's website “relies on various public sources . . . and includes links to publicly available documents” but “completeness cannot be guaranteed.”²⁶⁵

The ICSID website lists all of the cases that are registered at the Center.²⁶⁶ Yet, the list provides very little information, generally mentioning the sector of investors' activity, the date of registration, and details about the constitution of the arbitral tribunals.²⁶⁷ Moreover, the ICSID website does not generally publish the notice of claim let alone the statement of defense and subsequent documents

263. *Saluka Inv. B.V. v. Czech Republic*, UNCITRAL, Partial Award, ¶ 306 (March 17, 2006), <http://www.italaw.com/sites/default/files/case-documents/ita0740.pdf> [<http://perma.cc/E6UH-2AZS>] (archived Sept. 18, 2015).

264. See Energy Charter, Investor–State Dispute Settlement Cases, <http://www.energycharter.org/what-we-do/dispute-settlement/investment-dispute-settlement-cases/> [<http://perma.cc/QC9J-BPTF>] (archived Nov. 3, 2015).

265. *Id.*

266. The list of the cases that are registered at the Center is available at the ICSID website. See ICSID, <https://icsid.worldbank.org/apps/ICSIDWEB/cases/Pages/AdvancedSearch.aspx> (last visited Feb. 2, 2015) [<https://perma.cc/R36L-8HZL>] (archived Sept. 19, 2015).

267. See *id.*

submitted by the parties.²⁶⁸ If the parties so agree, the ICSID publishes the award on jurisdiction and the final award.²⁶⁹ The parties, however, may also opt for confidentiality or request the redaction of specific parts of the awards to protect personal data, business information, and the like. The Stockholm Chamber of Commerce and the International Chamber of Commerce provide even less information.

B. *Inconsistent Awards*

Procedurally, questions arise as to whether the multiplicity of claims and the diversity of arbitral tribunals can lead to divergent awards on the interpretation of recurring legal and factual issues, as happened most notably in the many claims arising against Argentina in the aftermath of that country's earlier financial crisis. Inconsistent awards can impede the harmonious development of international investment law and jeopardize the coherence and predictability of the same. At the same time, however, inconsistent awards can also promote fruitful dialectics within the system, and improve the ultimate quality of the awards. In fact, if one looks at the jurisprudence related to Argentina's financial crisis, an initial stream of awards consistently holding Argentina liable and awarding damages has been partially annulled by Annulment Committees, and another stream of awards have emerged, which has considered Argentina's response to the financial crisis a legitimate response in light of the public interest.²⁷⁰

C. *Multiparty Arbitration*

Another interesting procedural issue characterizing some climate change-related disputes is the possibility of recourse to multiparty arbitrations. The Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID

268. *Id.*

269. See ICSID Convention art. 48(5), https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR_English-final.pdf [<http://perma.cc/EF9E-J6VL>] (archived Sept. 19, 2015) ("The Centre shall not publish the award without the consent of the parties.").

270. See, e.g., *LG&E Energy Corp. et al. v. Argentine Republic*, ICSID Case No. ARB/02/1, Award, ¶ 3 (July 25, 2007), <http://www.italaw.com/sites/default/files/case-documents/ita0462.pdf> [<http://perma.cc/H8E6-CYJQ>] (archived Sept. 20, 2015) (holding Argentina liable for damages to the claimants "for breaches of the treaty, except during the period of the State of Necessity"); see also *Continental Casualty v. Argentine Republic*, ICSID Case No. ARB/03/9, Award, ¶ 320 (Sept. 5, 2008), <http://www.italaw.com/documents/ContinentalCasualtyAward.pdf> [<http://perma.cc/J7ZA-U5JK>] (archived Sept. 20, 2015).

Convention)²⁷¹ and BITs are silent on the issue of mass claims.²⁷² However, arbitral tribunals have allowed such claims. Given the fact that several disputes can arise out of the same set of facts and regulatory changes, several non-affiliated investors have attempted to bring their claims in a single proceeding. Mass claims concern different investments, albeit of an analogous type, and arise out of the same background facts and legal issues. From the investors' perspective, multiparty arbitrations can promote procedural efficiency, coherent results and the participation of smaller investors who otherwise could not afford to file any claim. In fact, because investment arbitration can be very expensive,²⁷³ mass claims can provide access to justice for individuals who otherwise could not afford to obtain legal representation before arbitral tribunals. From the state's perspective, mass claims can be cost-effective, avoid duplicate efforts to resolve common issues, and prevent inconsistent awards. However, the same advantages can also constitute disadvantages for the host state. In fact, mass claims prevent the state from improving and adapting its litigation strategies. Since even small investors can join the proceedings, these risk overburdening the competent authorities. Moreover, the existence of parallel disputes allows the state to diversify the risk of losing or winning claims. In other words, the state can make good use of inconsistent awards, filing claims for annulment against those awards that ruled in favor of the investor (at least within the ICSID system). Because of these considerations, generally states have opposed collective proceedings.

271. Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention or Washington Convention), Washington, 18 March 1965, in force 14 October 1966, 575 UNTS 159.

272. No provision of the ICSID convention addresses the issue of mass claims. However, Article 44 of the Convention states, inter alia, that "[i]f any question of procedure arises which is not covered by this Section or the Arbitration Rules or any rules agreed by the parties, the Tribunal shall decide the question." Therefore, arbitral tribunals have relied on this provision to allow mass claims. See *Abaclat v. Argentine Republic*, ICSID Case No. ARB/07/5, Decision on Jurisdiction and Admissibility, ¶¶ 517–19 (Aug. 4, 2011) (considering the silence of the ICSID Convention on the issue of mass claims as allowing such proceedings. However, one of the arbitrators, Judge Georges Abi-Saab, issued a dissenting opinion); see also *Alemanni v. Argentine Republic*, ICSID Case No. ARB/07/8, Decision on Jurisdiction and Admissibility, ¶¶ 323–25 (Nov. 17, 2014), <http://www.italaw.com/sites/default/files/case-documents/italaw4061.pdf> [<http://perma.cc/9LUR-MCQM>] (archived Sept. 20, 2015) (deeming collective proceedings compatible with the ICSID Convention and allowing the mass proceedings to continue).

273. See *Counting the Costs of Investment Treaty Arbitration*, GLOBAL ARB. REV., 1, 2 (Mar. 24, 2014), <http://globalarbitrationreview.com/news/article/32513/> (subscription required) [<http://perma.cc/T2TK-MQKM>] (archived Oct. 15, 2015) ("[T]he average party costs were quite similar, at \$4,437,000 for claimants and \$4,559,000 for respondents.").

For instance, in *PV Investors v. Spain*, several investors filed an investor–state arbitration against Spain due to the recent regulatory changes in the renewable energy sector. Although Spain agreed to constitute a single arbitral tribunal, it then raised a jurisdictional objection to the claimants’ bid to have their claims heard in a “consolidated” fashion.²⁷⁴ The UNCITRAL Tribunal, however, rejected its objections and affirmed its jurisdiction.²⁷⁵ Other arbitral tribunals have heard consolidated claims. For instance, the *Abaclat* Tribunal accepted the first mass claim arbitration consisting of 60,000 Italian bondholders.²⁷⁶ Argentina argued that consent to arbitration does not extend to mass claims.²⁷⁷ In debating whether express consent was required or whether general consent in BITs would suffice, the ICSID tribunal took a pragmatic approach. It held that mass claims would be an efficient means of dispute settlement as opposed to considering the investor claims individually.²⁷⁸ The Tribunal reasoned that it would be contrary to the ICSID and BITs’ objective to deny the investors an efficient remedy to the dispute. Subsequent arbitral tribunals have adopted the same approach.²⁷⁹ As the *Alemanni* Tribunal puts it, “[C]onsent is not more valid by being given twice, any more than it is less valid for having been given only once.”²⁸⁰

D. *Private v. Public Interest*

More substantively, these cases show that climate policies may have a varied impact on different actors. Generally, climate policies benefit the public at large because they reduce greenhouse gases,

274. See Peterson, *supra* note 219.

275. See Luke E. Peterson, *Intra-EU Treaty Claims Controversy: New Decisions and Developments in Claims Brought by EU Investors vs. Spain and Hungary*, IAR (Dec. 24, 2014).

276. See *Abaclat v. Argentine Republic*, ICSID Case No. ARB/07/5, Award on Jurisdiction and Admissibility, ¶ 216 (Aug. 4, 2011).

277. See *id.* ¶ 467.

278. See *id.* ¶ 545(ii) (“The measures that Argentina would need to take to face 60,000 [separate] proceedings would be a much bigger challenge to Argentina’s effective defense rights . . .”).

279. See *Ambiente Ufficio S.P.A. v. Argentine Republic*, ICSID Case No. ARB/08/9, Decision on Jurisdiction and Admissibility, ¶¶ 119–22 (Feb. 8, 2013), <http://www.italaw.com/sites/default/files/case-documents/italaw1276.pdf> [<http://perma.cc/V9DG-WKEH>] (archived Sept. 20, 2015) (embracing the essence of *Abaclat*’s “mass claim” through a “multi-party” approach for a 90 claimant action); see also *Alemanni v. Argentine Republic*, ICSID Case No. ARB/07/8, Decision on Jurisdiction and Admissibility, ¶¶ 261–67 (Nov. 17, 2014), <http://www.italaw.com/sites/default/files/case-documents/italaw4061.pdf> [<http://perma.cc/9LUR-MCQM>] (archived Sept. 20, 2015).

280. *Alemanni*, ICSID Case No. ARB/08/9, Decision on Jurisdiction and Admissibility, ¶ 269.

which not only worsen people's quality of life but can also determine drought, famine, and rising sea levels. In specific cases, there may be mutual supportiveness among climate change-related measures, the economic interests of businesses, and the human rights of local communities. This scenario is enhanced by the recent establishment of state incentives for the promotion of renewable energy and the acknowledged linkage between the green economy and sustainable development.²⁸¹

Yet, climate policies can affect the economic interests of corporations, which need to invest in technological upgrades or even convert a given business to a more eco-friendly economic activity. Even investments in the renewable energy sector entail significant economic risks. In fact, the profitability of clean energy projects often depends on subsidies and feed-in tariffs. There is a risk that "once investments are made, public authorities will be tempted to reconsider their commitments."²⁸² Cuts in subsidies for renewable energy have been criticized by both investors and environmentalists. These cuts may prevent other investors from investing in a renewable energy sector.

However, cuts in subsidies for renewable energy may be indispensable to prevent a financial crisis with foreseeable impact on the polity of the host state. In this context, the arbitrators will have to take into account the various circumstances—financial crisis, state of necessity, and even human rights considerations—that may eventually justify a change in the relevant regulatory measures.

These cases will contribute to the development of the investment and climate regimes; at the same time, it would be advisable that practitioners and adjudicators take their impact into account. Given the fact that arbitral tribunals often adjudicate issues related to the public interest, an equilibrated approach to interpretation seems demanded by the need to balance the interests of the state and those of the investor. In this regard, some scholars have argued that "preference for one interpretation over another should be based on a comparison of the consequences that would be likely to follow from

281. See U.N. Conference on Sustainable Development, *The Future We Want*, U.N. Doc. A/CONF.216/16 (June 20–21, 2012), <http://www.uncsd2012.org/content/documents/814UNCSD%20REPORT%20final%20revs.pdf> [<http://perma.cc/93EM-NUQZ>] (archived Sept. 20, 2015) (promoting sustainable development through social and economic growth); see also *The Future We Want*, G. A. Res. 66/288, annex, ¶ 12 (July 27, 2012), http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E [<http://perma.cc/Y8PJ-7JQQ>] (archived Sept. 20, 2015) (recognizing a commitment to sustainable development).

282. Anatole Boute, *The Potential Contribution of International Investment Protection Law to Combat Climate Change*, 27 J. ENERGY & NAT. RESOURCES L. 333, 342 (2009).

each interpretation.”²⁸³ Among these consequences, the authors include both the flows of foreign direct investment and the realization of human rights and environmental conservation into host states.²⁸⁴

For instance, in *Continental Casualty v. Argentina*, a case arose from measures taken by the state in the wake of its economic crisis in 2001–2002.²⁸⁵ The Tribunal determined that the non-precluded measures clause²⁸⁶ should be interpreted as absolving the host state from liability and considered that:

[T]he Government’s efforts struck an appropriate balance between th[e] aim of respecting its international obligations and the responsibility of any government towards the country’s population: it is self-evident that not every sacrifice can properly be imposed on a country’s people in order to safeguard a certain policy that would ensure full respect towards international obligations in the financial sphere, before a breach of those obligations can be considered justified as being necessary under this BIT. The standard of reasonableness and proportionality do not require as much.²⁸⁷

E. *The Evolving Role of the European Commission in Investor–State Arbitration*

The evolving role of the European Commission in energy-related investor–state arbitrations is part of a larger series of ongoing “thematic dialogues” (on monetary policy, human rights, criminal justice, and security) between public international law and European Union (EU) Law. Whether EU law is just a component of public international law being embedded in and interdependent with the same, or whether it constitutes an autonomous legal order of a quasi-constitutional nature remains a debated issue.

With regard to energy-related disputes, the European Union has played an active and ambitious, albeit controversial, role, seeking permission to intervene as *amicus curiae* in a number of

283. Jonathan Bonnitcha, *Outline of a Normative Framework for Evaluating Interpretations of Investment Treaty Protections*, in *EVOLUTION IN INVESTMENT TREATY ARBITRATION* 117, 118 (Chester Brown & Kate Miles eds., 2011).

284. *See id.*

285. *Continental Casualty Co. v. Argentine Republic*, ICSID Case ARB/03/9, Award, ¶ 100 (Sept. 5, 2008), <http://www.italaw.com/documents/ContinentalCasualtyAward.pdf> [<http://perma.cc/J7ZA-U5JK>] (archived Sept. 20, 2015).

286. “Non-precluded measures” include “measures necessary for the maintenance of public order” whose adoption is allowed under the relevant BITs. *See, e.g.*, Article XI of the US–Argentina BIT (providing that “[t]his treaty shall not preclude the application by either Party of measures necessary for the maintenance of public order, the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.”); The Reciprocal Encouragement and Protection of Investment, U.S.–Arg., art. XI, Nov. 14, 1991, <http://investmentpolicyhub.unctad.org/Download/TreatyFile/127> [<http://perma.cc/V8SN-NXEK>] (archived Sept. 20, 2015).

287. *Continental Casualty*, ICSID Case ARB/03/9, Award, ¶ 227.

arbitrations.²⁸⁸ *Amicus curiae* briefs create “possibilities for regime interaction.”²⁸⁹ Arbitral tribunals can accept non-party submissions if they consider that such briefs “would assist the tribunal in the determination of a factual or legal issue . . . by bringing a perspective, particular knowledge or insight that is different from that of the disputing parties” or “would address a matter within the scope of the dispute.”²⁹⁰

The move of the European Commission is grounded in two converging recent developments of EU governance. In recent years, the European Commission has “centralize[d] power in the hands of the [European Union]” in matters related to both climate change and foreign direct investments and has moved towards a greater harmonization in both areas.²⁹¹ On the one hand, the European Union has “consciously positioned itself as ‘leading global action against climate change to 2020 and beyond.’”²⁹² The renewable energy directive, Directive 2009/28,²⁹³ “establishes a common framework for the promotion of energy from renewable sources and targets for 2020.”²⁹⁴ The directive aims at increasing the percentage share of energy from renewable sources in the European Union’s final consumption of energy to 20 percent by 2020.²⁹⁵ Key drivers of the renewable energy policy include economic competitiveness, climate change mitigation, and energy security.²⁹⁶ Under the framework, “mandatory national targets have been adopted,”²⁹⁷ and there is “a clear incentive for member states to create the necessary stable policy

288. See, e.g., *AES Summit Generation Limited v. Hungary*, ICSID Case No. ARB/07/22; *Electrabel S.A. v. Hungary*, ICSID Case No. ARB/07/19; *Antin Infrastructure Servs. Luxembourg S.à.r.l. v. Spain*, ICSID Case No. ARB/13/31; *Eiser Infrastructure Limited v. Spain*, ICSID Case No. ARB/13/36; *RENERGY S.à.r.l. v. Spain*, ICSID Case No. ARB/14/18.

289. Young, *supra* note 149, at 153.

290. ICSID Rules of Procedure for Arbitration Proceedings (Arbitration Rules) Rule 37, <https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/partF.htm> [<https://perma.cc/2FGC-HUAB>] (archived Nov. 3, 2015).

291. Scott, *supra* note 110, at 25–26.

292. *Id.* at 28.

293. See European Parliament and the Council on the Promotion of the Use of Energy from Renewable Sources and Amending and Subsequently Repealing Directives 2001/177/EC and 2003/30/EC., 2009, 2009/28/EC, <http://faolex.fao.org/docs/pdf/eur88009.pdf> [<http://perma.cc/3VGZ-JRKX>] (archived Sept. 20, 2015).

294. Philip Lowe, *Regulating Renewable Energy in the European Union*, 1 RENEWABLE ENERGY L. & POL’Y REV. 17, 17 (2010).

295. Arno Behrens, *The Role of Renewables in the Interaction Between Climate Change Policy and Energy Security in Europe*, 1 RENEWABLE ENERGY L. & POL’Y REV. 5, 12 (2010).

296. See *id.* at 5, 12 (“[I]ncreasing deployment of renewable energy technologies can benefit the security of European energy supplies in several ways. Being largely domestically available . . . they have the potential to replace imported fossil . . . energy carriers, thus reducing import dependency.”).

297. Lowe, *supra* note 294, at 17.

framework.”²⁹⁸ The Commission can bring infringement proceedings against a member state, if it fails to implement the directive or falls below its target.²⁹⁹ To meet the targets, the Union acknowledges that investments are necessary.³⁰⁰ The European Commission has confirmed that “it remains opposed to retroactive changes to renewable energy support schemes, while acknowledging that several Member States like Greece need to reduce their support to renewables in line with . . . cost-efficient levels to stabilize the system.”³⁰¹

On the other hand, since the 2007 Lisbon Treaty, the European Union has acquired exclusive competence over foreign direct investment.³⁰² In addition, the European Union and its member states are parties to the ECT.³⁰³ The participation of the European Union in a number of proceedings between EU member states and third countries is required by Regulation (EU) No. 1219/2012 of the European Parliament and of the Council of 12 December 2012, establishing transitional arrangements for BITS between Member States and third countries.³⁰⁴ Although the European Union does not enjoy a “special procedural status” in investment arbitration, it is clear that it “is not a mere third party to proceedings concerning EU Member States and EU law.”³⁰⁵ In fact, while the European Union

298. *Id.* at 17–18.

299. *Id.* at 18.

300. *Id.* at 19.

301. European Parliament: Notices From European Union Institutions, Bodies, Offices and Agencies: Written Questions with Answers, Question for Written Answer E-004041/14, 2014 O.J. (C 367) 1, 101, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2014:367:TOC> (last visited Feb. 4, 2015) [<http://perma.cc/N3BB-DVZP>] (archived Sept. 18, 2015) (addressing the Commission Nikolaos Chountis (GUE/NGL) and inquiring into the breach of contractual obligations in the new retroactive changes to renewable energy support schemes; answer given by Mr. Oettinger on behalf of the Commission).

302. See August Reinisch, *The EU on the Investment Path—Quo Vadis Europe? The Future of EU BITs and Other Investment Agreements*, 12 SANTA CLARA J. INT’L L. 111, 138 (2014).

303. See Graham Coop, *Energy Charter Treaty and the European Union: Is Conflict Inevitable?*, 27 J. ENERGY & NAT. RESOURCES L. 404, 415 (2009).

304. See Council and Parliament Regulation 1219/2012 Art. 13(b), 2012 J.O. (351) 40, 44 (EU), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=L:2012:351:0040:0046:En:PDF> [<http://perma.cc/R6Z6-N697>] (archived Sept. 18, 2015) (requiring Member States to “immediately inform the Commission of any request for dispute settlement lodged under the auspices of the bilateral investment agreement as soon as the Member State becomes aware of such a request,” and adding that “[t]he Member State and the Commission shall fully cooperate and take all necessary measures to ensure an effective defence which may include, where appropriate, the participation in the procedure by the Commission.”).

305. Carlos Gonzalez-Bueno & Laura Lozano, *More than a Friend of the Court: The Evolving Role of the European Commission in Investor–State Arbitration*, KLUWER ARB. BLOG (Jan. 26, 2015), <http://kluwerarbitrationblog.com/blog/2015/01/26/more->

can be acting in furtherance of the public interest and a desire of transparency, it has “direct legal interest in the outcome of the dispute.”³⁰⁶

The European Commission has intervened in a number of intra-EU investor–state arbitrations as *amicus curiae*, challenging either the arbitral tribunal’s jurisdiction or the enforcement of its award. For instance, in *Electrabel SA (Belgium) v. Hungary*, the Commission intervened as *amicus curiae* and challenged the Tribunal’s jurisdiction under the ECT. The Commission argued that Electrabel, in its capacity as an EU investor challenging an EU measure, should have brought its case before EU courts. The Tribunal dismissed the EU Commission’s argument that questions of interpretation of EU law fell exclusively under the jurisdiction of EU courts. It acknowledged that EU member states had agreed to submit questions of interpretation of EU law to the European Court of Justice (ECJ), now the CJEU. The Tribunal concluded, however, that this was not relevant to the case at hand as the claim was brought for a breach of the ECT, not of EU law.³⁰⁷ So far, arbitral tribunals have generally upheld their jurisdiction, despite the doctrinal debate over the interplay between ECT and EU law.³⁰⁸

Against this background, the European Commission has formally sought leave to present arguments in six parallel claims against the Czech Republic being arbitrated under the UNCITRAL procedural rules.³⁰⁹ These proceedings are brought by investors from the European Union and are based on the ECT and various intra–EU BITs.³¹⁰ The Commission has raised “the possibility that these arbitrations may touch upon questions of EU law, and that former benefits and incentives accorded to solar investors could constitute . . . state aid that needed to be eliminated in order for the Czech

than-a-friend-of-the-court-the-evolving-role-of-the-european-commission-in-investor-state-arbitration/ [http://perma.cc/F8F8-98HX] (archived Sept. 18, 2015).

306. *Id.*

307. *See Electrabel S.A. v. Republic of Hungary*, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, 30 November 2012, ¶ 5.32–35 (“[T]here exists no relevant inconsistency between EU law, the ECT and the ICSID Convention in the present case, as regards both the merits of the Parties’ dispute and the Tribunal’s jurisdiction.”).

308. *See Peterson, supra* note 275 (explaining that in the case *EDF v. Hungary*, an UNCITRAL Tribunal has affirmed its jurisdiction in relation to intra-EU claims concerning the violation of the ECT, despite the Commission’s intervention and opposition to the Tribunal’s jurisdiction).

309. The six proceedings are: *Antaris Solar & Dr. Michael Göde v. Czech Republic*; *Natland Investment Group NV, Natland Group Limited, G.I.H.G. Limited & Radiance Energy Holding S.A.R.L. v. Czech Republic*; *Voltaic Network GmbH v. Czech Republic*; *ICW Europe Investments Limited v. Czech Republic*; *Photovoltaik Knopf Betriebs-GmbH v. Czech Republic*; *WA Investments-Europa Nova Limited v. Czech Republic*. *See Peterson, supra* note 210.

310. *Id.*

Republic to remain in compliance with EU law.”³¹¹ In other words, the measures challenged by foreign investors as breaches of the relevant BIT, could, according to the Commission, be measures that were in furtherance of the country’s EU law obligations. Accordingly, concerns arise that “any arbitral award compensating solar investors for losses arising out of the recent rollback of the earlier series of incentives could itself constitute state aid.”³¹² The move to intervene in the Czech cases forestalled other interventions in subsequent investment arbitrations.³¹³ In fact, in November 2014, the Commission sought leave to intervene in *Charanne and Construction Investments v. Spain* and *Isolux Infrastructure v. Spain*, both under the SCC rules.³¹⁴ Non-disputing parties’ applications have been filed to intervene in other energy-related ICSID cases against Spain;³¹⁵ yet it remains unclear whether these applications have been filed by the Commission.

In an earlier ICSID arbitration, *Micula and Others v. Romania*, the EU Commission intervened to support Romania’s defense stating that “any payment of compensation arising out of this award would constitute illegal state aid under EU law and render the award unenforceable within the EU.”³¹⁶ However, the Tribunal dismissed the argument, pinpointing that any ICSID award is binding and should be recognized and enforced without review by national courts.³¹⁷

311. *Id.* at 2.

312. *Id.*

313. *See id.*

314. *See* Luke Eric Peterson, *European Commission Wades into Solar Arbitrations Against Spain, Intervening in One Case a Week Before Final Hearing*, INV. ARB. REP. 17 (2014).

315. *See, e.g.*, *RENERGY S.à r.l. v. Kingdom of Spain*, ICSID Case No. ARB/14/18, registered on Aug. 1, 2014; *NextEra Energy Global Holdings B.V. & NextEra Energy Spain Holdings B.V. v. Kingdom of Spain*, ICSID Case No. ARB/14/11, registered on May 23, 2014; *Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain*, ICSID Case No. ARB/14/1, registered on Feb. 11, 2014; *Eiser Infrastructure Limited & Energía Solar Luxembourg S.à r.l. v. Kingdom of Spain*, ICSID Case No. ARB/13/36, Dec. 23, 2013; *InfraRed Environmental Infrastructure GP Ltd. & others v. Spain*, ICSID Case No. ABR/14/12, registered on June 3, 2014; *Antin Infrastructure Services Luxembourg S.à.r.l. & Antin Energia Termosolar B.V. v. Kingdom of Spain*, ICSID Case No. ARB/13/31, registered on Nov. 23, 2013; *RREEF Infrastructure (G.P.) Ltd. & RREEF Pan-European Infrastructure Two Lux S.à r.l. v. Kingdom of Spain*, ICSID Case No. ARB/13/30, registered on Nov. 22, 2013. All of these cases are listed on the ICSID website, at <https://icsid.worldbank.org/apps/ICSIDWEB/cases/Pages/ViewRecentUpdates.aspx?view=RECREGISTERED> [<https://perma.cc/TE35-3U5S>] (archived Sept. 20, 2015).

316. *Ioan Micula, Viorel Micula, S.C. European Food S.A., S.C. Starmill S.R.L. and S.C. Multipack S.R.L. v. Romania*, ICSID Case No. ARB/05/20, Final Award, ¶ 330 (2013), <http://www.italaw.com/sites/default/files/case-documents/italaw3036.pdf> [<http://perma.cc/A4GM-SBFR>] (archived Sept. 20, 2015).

317. *See id.* ¶ 340.

While the Commission has never published any of its applications to intervene or briefs themselves, it considers intra-EU investor–state arbitration incompatible with the EU legal order. According to the Commission the ECT cannot provide a basis for arbitration of intra-EU disputes because such disputes should be brought before the EU courts and tribunals.³¹⁸ Rather, in the Commission’s view, the ECT would create obligations “only between the Union and its Member States on the one hand and each of the other non-EU countries on the other.”³¹⁹

The ECT, however, “contains no explicit disconnection provision.”³²⁰ Therefore, the question is whether there may be an *implicit* disconnection clause—a disconnection clause that should be inferred in the ECT based on treaty interpretation. While both EU member states and the European Union have ratified the ECT, the Commission seems to suggest that this was due to the fact that, at the time, the European Union did not have competence in the field of foreign direct investment. According to the Commission, the ratification of the ECT does not relieve member states from the obligations of EU law and from the jurisdiction of EU courts in settling energy disputes arising within the European Union.³²¹

The argument of an implicit disconnection clause has not persuaded arbitral tribunals. For instance, in *Electricité de France (EDF) v. Hungary*, a still-unpublished award, the Tribunal reportedly “affirmed jurisdiction over and awarded damages in relation to alleged violations of the ECT . . . notwithstanding an intervention by the European Commission that had contested the tribunal’s jurisdiction over the claims.”³²² In parallel, reportedly, “a pair of arbitral tribunals [has] deemed it premature for the European Commission to present written arguments in two [renewable energy-related] pending arbitrations.”³²³ In another case, after failing to persuade arbitral tribunals to decline jurisdiction over intra-EU claims, the Commission enjoined the host state from paying the relevant arbitral award.³²⁴

318. Luke Eric Peterson, *Investigation: In Recent Briefs, European Commission Casts Doubt on Application of Energy Charter Treaty to Any Intra-EU Dispute*, INV. ARB. REP., Sept. 8, 2014 at 3.

319. *Id.*

320. *Id.*

321. See Nikolaos Lavranos, *The MOX Plant Judgment of the ECJ: How Exclusive is the Jurisdiction of the ECJ?*, 15 EUR. ENERGY & ENVTL. L. REV. 291, 292 (2006) (discussing the possibility of parallel disputes brought before different international fora).

322. Peterson, *supra* note 283.

323. *Id.*

324. See Christian Tjetje & Clemens Wackernagel, *Outlawing Compliance? The Enforcement of Intra-EU Investment Awards and EU State Aid Law*, 41 POL’Y PAPERS TRANSNAT’L ECON. L. 1, 8 (2014), <http://tietje.jura.uni-halle.de/sites/default/files/>

IX. DEALING WITH FRAGMENTATION

Climate change and foreign direct investments have traditionally been dealt with through separate subfields of international law. Rules belonging to different legal frameworks can conflict. Is international law a fragmented system where norms produced in one of its subfield can be neglected in another? How can arbitral tribunals address conflicts of norms? Is there a way to find a suitable balance between the public interest and investors' entitlements? This Part examines these questions by adopting a two-fold approach. *First*, this Part will consider the steps that can be adopted *de lege ferenda* (the law as it should be in the future) for improving the synergy between international investment law and climate change law. *Second*, this Part will consider the panoply of options that adjudicators may take into account *de lege lata* (the law as it currently exists) when settling climate change-related investment disputes.

A. De Lege Ferenda

Is there a need for specific amendments to BITs to accommodate environmental concerns, including climate change? In abstract terms, there is a general compatibility between different international law instruments, and many apparent conflicts of norms can be solved via treaty interpretation. Most investment treaties do not include reference to environmental concerns in general or climate change in particular; they tend to be short treaties that include the standards of treatment and a clause on dispute settlement. This does not mean that environmental concerns are completely irrelevant to international investment law and arbitration.

Although not strictly indispensable, some steps can be adopted *de lege ferenda* for improving the mutual supportiveness between international investment law and climate change law. In recent years, international investment law has gone through a phase of rebalancing aimed at re-empowering states and aligning investment protection with other policy objectives.³²⁵ Recent investment treaties have expressly included reference to climate change in their preambles³²⁶ or have included environmental measures in carve-outs.

PolicyPaper/PolicyPaper_No41.pdf [http://perma.cc/Z97C-7CGZ] (archived Sept. 20, 2015) (explaining that in *Micula v. Romania* the European Commission warned that “[t]he execution of such award can thus not take place if it would contradict the rules of EU State aid policy”).

325. See José E. Alvarez, *The Return of the State*, 20 MINN. J. INT’L L. 223, 231 (2011) (pinpointing that “[t]he regime most criticized for ignoring the will of states has become the foremost example of their persistent power.”).

326. See, e.g., Agreement on Free Trade and Economic Partnership Between Japan and the Swiss Confederation, Japan-Switz., preamble, Feb. 19, 2009, 2642 U.N.T.S. 3 (reaffirming “their commitment to democracy, the rule of law, human

General carve outs clarify that bona fide regulation designed and applied to protect public welfare objectives, such as protecting the environment, does not amount to indirect expropriation.³²⁷ The inclusion of a provision on general exceptions can allow states to adopt, *inter alia*, environmental measures.³²⁸ Certainly climate change is an environmental concern. More specific provisions exclude environmental measures from the scope of the dispute settlement mechanism under the treaty.³²⁹ The Energy Charter Treaty adopts a something-in-between approach as it refers to climate change in its preamble³³⁰ and other provisions.³³¹ Reference to common concerns such as climate change and/or multilateral environmental agreements in the preambles of international investment agreements is a welcome move as it can foster cross-pollination of ideas and an increased coherence between different branches of international law. The same is true for carve outs and general exceptions.

rights” and their “determin[ation], in implementing this Agreement, to seek to preserve and protect the environment, to promote the optimal use of natural resources in accordance with the objective of sustainable development and to adequately address the challenges of climate change.”).

327. *See, e.g.*, Norway Model BIT Treaty, draft version 130515, art. 12, May 13 2015, <https://www.regjeringen.no/contentassets/e47326b61f424d4c9c3d470896492623/draft-model-agreement-english.pdf> [<https://perma.cc/H8YF-C6MK>] (archived Sept. 20, 2015) (“Nothing in this Agreement shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Agreement that it considers appropriate to ensure that investment activity is undertaken in a manner sensitive to health, safety, human rights, labour rights, resource management or environmental concerns.”).

328. *See id.* art. 24 (“Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between investments or between investors, or a disguised restriction on international [trade or] investment, nothing in this Agreement shall be construed to prevent a Party from adopting or enforcing measures necessary: i. to protect public morals or to maintain public order; ii. to protect human, animal or plant life or health; iii. to secure compliance with laws and regulations that are not inconsistent with the provisions of this Agreement; iv. for the protection of national treasures of artistic, historic or archaeological value; or v. for the protection of the environment.”).

329. *See, e.g.*, Agreement Between Belgium-Luxembourg Economic Union and Barbados for the Reciprocal Promotion and Protection of Investments, Belg.-Barb., art. 11, May 19, 2009, http://arbitration.org/sites/default/files/bit/belgium_barbados_english.pdf [<http://perma.cc/T7SK-37MY>] (archived Sept. 20, 2015) (recognizing the “right of each Contracting Party to establish its own levels of domestic environmental regulation”).

330. *See* Energy Charter Treaty, Annex 1 to the Final Act of the Conference on the European Energy Charter, preamble, Dec. 17, 1994, 34 I.L.M. 360 (1995) (“[R]ecalling the United Nations Framework Convention on Climate Change, the Convention on Long-Range Transboundary Air Pollution and its protocols, and other international environmental agreements with energy-related aspects; and Recognizing 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.”).

331. *See id.* art. 19(3)(b) (defining “Environmental Impact” as any effect caused by a given activity on the environment, including “human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monument”).

Given the fact that renegotiating investment treaties is a lengthy process, however, some scholars and practitioners have proposed the adoption of a multilateral declaration to enhance the coherence between international investment law and the climate change regime.³³² According to these authors, the multilateral declaration would clarify that international investment treaties do not constrain climate change measures enacted in good faith. As is well known, at the World Trade Organization, a similar declaration was adopted—the Doha Declaration on the TRIPS Agreement and Public Health³³³—to clarify the interplay between the protection of intellectual property and public health. Yet, this has not prevented states from bringing a number of disputes on different aspects of that interplay. Therefore, it may be more appropriate for states—which are the masters of their treaties—to issue binding interpretations.³³⁴ For instance, this has already been done in the context of NAFTA with regard to the interpretation of the fair and equitable treatment clause.³³⁵

B. De Lege Lata

This section examines the legal mechanisms that can help arbitrators adjudicate climate change-related disputes. While existing investment rules often do not explicitly address the complexities of climate change, they can be interpreted to take climate concerns into account in their operation. The section first addresses the question as to whether security exceptions could be interpreted in an evolutive manner so as to justify climate policies affecting investors' rights. It then assesses whether general treaty rules on hierarchy—namely *lex*

332. See Wolfgang Alschner & Elisabeth Tuerk, *The Role of International Investment Agreements in Fostering Sustainable Development*, in INVESTMENT LAW WITHIN INTERNATIONAL LAW—INTEGRATIONIST PERSPECTIVE (2013) (providing a brief overview of recent UNCTAD research on the relation between international investment treaties and sustainable development).

333. See World Trade Organization, Ministerial Conference of 9–14 November 2001, WTO Doc. WT/MIN(01)/DEC/2 (2001).

334. See generally Anthea Roberts, *Power and Persuasion in Investment Treaty Interpretation: The Dual Role of States*, 104 AM. J. OF INT'L L. 179–225 (2010) (arguing that an overemphasis on states as respondents in investor–state disputes has diminished the states' interpretive power in their capacity as treaty parties).

335. See North American Free Trade Agreement Free Trade Commission, Notes of Interpretation of Certain Chapter 11 Provisions, ¶ 2, July 31, 2001, http://www.dfait-maeci.gc.ca/tna-nac/NAFTA_interpr-en.asp [<http://perma.cc/L6FB-PBT2>] (archived Sept. 20, 2015) (stating, *inter alia*, that “the concepts of ‘fair and equitable treatment’ and ‘full protection and security’ do not require treatment in addition to or beyond that which is required by the customary international law minimum standard of treatment of aliens.”).

*posterior derogat priori*³³⁶ and *lex specialis derogat generali*³³⁷ may be adequate to govern the interplay between climate change law and international investment law. It concludes considering how customary rules of treaty interpretation as restated by the Vienna Convention on Law of Treaties (VCLT) allow arbitrators to take other international law norms into account when interpreting investment treaties.

While most BITs do not have a general exception clause, some include security exceptions to protect the public order and essential security interests. Although some such clauses adopt an expressly military framing, and therefore would be inapposite to shield climate change measures,³³⁸ others adopt a looser wording, which may be susceptible of evolutionary interpretation. In other words, the term “security” could be interpreted in an evolutionary manner so as to include “climate security.” While some tribunals have interpreted the security exceptions in a restrictive fashion by relying on customary law,³³⁹ other tribunals have expanded the meaning of security to include phenomena in addition to and beyond military threats. Therefore, one may wonder whether such security exceptions may be interpreted to include climate security.

Is climate change a security issue? Admittedly, “the language of calamity, urgency [and crisis] . . . has pervaded discussions of climate change for . . . decades.”³⁴⁰ The Security Council expressed its concern that “possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security.”³⁴¹ Climate change has been viewed as a “threat multiplier

336. See, e.g., Vienna Convention on the Law of Treaties, *supra* note 117, art. 30 (governing “the rights and obligations of States parties to successive treaties relating to the same subject-matter” and, “subject to Article 103 of the Charter of the United Nations”, generally providing that newer treaties will prevail over older ones).

337. See Rep. of the Study Group of the International Law Commission: Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, adopted by the International Law Commission at its Fifty-eighth Session and Submitted to the General Assembly as a part of the Commission’s Report Covering the Work of that Session, U.N. doc A/CN.4/L.682 (2006), at 2 (explaining that the concept *lex specialis derogat legi generali* is “a generally accepted technique of interpretation and conflict resolution in international law,” which indicates that “whenever two or more norms deal with the same subject matter, priority should be given to the norm that is more specific”).

338. See, NAFTA art. 2012.

339. See, e.g., CMS Gas Transmission Company v. The Republic of Argentina, ICSID Case No. ARB/01/8, Award (May 12, 2005).

340. Tomer Broude, *Warming to Crisis: The Climate Change Law of Unintended Opportunity*, INT’L L. FORUM, HEBREW U. JERUSALEM, 7 (2013).

341. See Statement by the President of the Security Council, U.N. Security Council, July 20, 2011, S/PRST/2011/15, <http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3CF6E4FF96FF9%7D/CC%20SPRST%202011%205.pdf> [<http://perma.cc/TJ84-QNTN>] (archived Oct. 15, 2015) (also expressing concern that

which exacerbates existing . . . tensions and instability . . . threaten[ing] to overburden states and regions which are already fragile and conflict prone.”³⁴² Global water wars and climate refugees are depicted as “security threats.”³⁴³ The President of the UN General Assembly recently described climate change as a threat “rivaled in its cataclysmic effects only by thermonuclear conflict.”³⁴⁴ However, while climate change is a “potentially disastrous” “long-term problem and process,” its “prospective and impending” nature,³⁴⁵ rightly or wrongly, could not be perceived as requiring an immediate action.

Certainly, in some cases, security exceptions have been interpreted extensively to include financial crisis. For instance in *LG&E v. Argentina*,³⁴⁶ the Arbitral Tribunal rejected the argument of the claimants that Article XI of the US–Argentina BIT should be interpreted narrowly.³⁴⁷ Article XI of the US–Argentina BIT provides: “This Treaty shall not preclude the application by either Party of measures necessary for the maintenance of public order, the fulfilment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.”³⁴⁸ While the claimant contended that “Article XI is not applicable in the case of an economic crisis because the public order and essential security interests elements are intentionally narrow in scope, limited to security threats of a physical nature,”³⁴⁹ Argentina defended the measures it implemented “as necessary to maintain public order and protect its essential security interests,” contending that the financial crisis “constitute[d] a national emergency sufficient to invoke the protections of Article XI.”³⁵⁰ In particular, Argentina contended that the measures it had implemented were necessary to protect public order by pointing to “numerous reports of waves of sudden economic catastrophe, massive strikes involving millions of workers, fatal shootings, the shutdown of

“possible security implications of loss of territory of some States caused by sea-level-rise may arise, in particular in small low-lying island States”).

342. *Climate Change and International Security*, Paper from the High Representative and the European Commission to the European Council, S113/08, Mar. 14, 2008, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf [<http://perma.cc/9UUV-9HAX>] (archived Oct. 15, 2015).

343. See Broude, *supra* note 340, at 19–20.

344. Vuk Jeremic, Address by President of the United Nations General Assembly to the Opening Ceremony of the High Level Segment of COP18/CMP8/ (Dec. 4, 2012), https://unfccc.int/files/meetings/doha_nov_2012/statements/application/pdf/04122012_cop18_hls_president_un_general_assembly.pdf [<https://perma.cc/3447-AL82>] (archived Oct. 15, 2015).

345. Broude, *supra* note 340, at 4–5.

346. *LG&E Energy Corp. v. Argentine Republic*, ICSID Case No. ARB/02/1, Decision on Liability (October 3, 2006).

347. See *id.* ¶ 226.

348. *Id.* ¶ 204.

349. *Id.* ¶ 203.

350. *Id.* ¶ 215.

schools, businesses, transportation, energy, banking and health services, demonstrations across the country, and a plummeting stock market, culminating in a 'final massive social explosion' in which five presidential administrations resigned within a month."³⁵¹

De lege lata, the International Law Commission (ILC) recommends a toolbox of techniques to deal with conflicting norms.³⁵² General treaty rules on hierarchy—namely *lex posterior derogat priori*³⁵³ and *lex specialis derogat generali*³⁵⁴—may not be wholly adequate to govern the interplay between treaty regimes because the given bodies of law do not exactly overlap; rather, they have different scopes, aims, and objectives.³⁵⁵

However, this does not mean that climate law considerations are irrelevant. If the applicable law is domestic law that incorporates climate law, climate law considerations can be taken into account. Moreover, when interpreting a treaty, arbitrators can take account of other international obligations of the parties according to customary rules of treaty interpretation as restated by the Vienna Convention on Law of Treaties (VCLT).³⁵⁶ Pursuant to Article 31(3)(b) of the Vienna Convention on the Law of Treaties, treaty interpretation should take into account "any subsequent practice in the application of the treaty." Moreover, pursuant to Article 31(3)(c) of the same Convention, "[t]here shall be taken into account, together with the context: [...] any relevant rules of international law applicable in the relations between the parties." Therefore, this provision properly expresses the principle of *systemic* integration within the international legal system, indicating that treaty regimes are themselves creatures of international law.³⁵⁷ That is how the climate change international obligations of states can be considered in the adjudication of disputes before investment arbitral tribunals.

Multilateral Environmental Agreements' (MEAs) provisions have been used to interpret specific investment treaty standards. For instance, in the *Chemtura v. Canada* case,³⁵⁸ the Arbitral Tribunal

351. *Id.* ¶ 216.

352. See Rep. of the Study Group of the International Law Commission, *supra* note 337.

353. See, e.g., Vienna Convention on the Law of Treaties, *supra* note 118, art. 30 (governing "the rights and obligations of States parties to successive treaties relating to the same subject-matter" and, "subject to Article 103 of the Charter of the United Nations", generally providing that newer treaties will prevail over older ones).

354. See Rep. of the Study Group of the International Law Commission, *supra* note 337, at 2.

355. See Donald McRae, *International Economic Law and Public International Law: The Past and the Future*, 17 J. INT'L ECON. L. 627, 635 (2014).

356. See Vienna Convention on the Law of Treaties, *supra* note 118, art. 31.

357. See Campbell McLachlan, *The Principles of Systematic Integration and Article 31(3)(c) of the Vienna Convention*, 54 INT'L COMP. L.Q. 279, 280 (2005).

358. See *Chemtura Corp. v. Canada*, UNCITRAL, Award, ¶ 135 (Aug. 2, 2010).

expressly referred to a number of environmental treaties to evaluate the toxicity of a given chemical. In *Parkerings v. Lithuania*, the fact that the investment would have affected a World Heritage Site protected under the World Heritage Convention was a sufficient condition for distinguishing the project from another, thus precluding the claim of discrimination.³⁵⁹ The Tribunal took the relevant MEA into account to deny state liability for an alleged discrimination.³⁶⁰

In other cases, however, fragmentation and increasingly narrow specialization sometimes produced awards that suffered from failing to situate their analyses within the wider legal or contextual frame of reference. For instance, in *Myers v. Canada*, Myers, a U.S. company engaged in Polychlorinated Biphenyl (PCB) waste disposal brought an investment treaty arbitration against Canada for its ban on exports of hazardous PCB waste from Canada to the United States. The Arbitral Tribunal held that Canada's export ban was designed to favor Canadian waste companies and did not sufficiently take into account the fact that Canada was a party to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.³⁶¹ The Basel Convention prohibits the import and export of hazardous wastes from and to countries that are not a party to the Convention. The United States was not a party to the Convention at the time of Canada's ban. Therefore, this should have been taken into account by the Arbitral Tribunal when considering the legitimacy of the export ban.

The interaction between international investment law and other sets of law raises the question as to whether the former is a "self-contained regime." The increased proliferation of treaties and specialization of different branches of international law make some overlapping between the latter unavoidable. However, "international investment law has its roots in general international law, despite its undeniable specificity,"³⁶² and

[it] is not a self-contained closed legal system limited to provide for substantive material rules of direct applicability, but it has to be envisaged within a wider juridical context in which rules from other sources are integrated through

359. See *Parkerings-Compagniet v. Lithuania*, ICSID Case No. ARB/05/08, Award, ¶ 369 (Sept. 11, 2007).

360. See *id.* ¶ 392 ("The historical and archaeological preservation and environmental protection could be and in this case were a justification for the refusal of the [claimant's] Project.")

361. See generally Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, adopted Mar. 22, 1989, 1673 U.N.T.S. 126, 28 I.L.M. 657 (1989).

362. Alain Pellet, *The Case Law of the ICJ in Investment Arbitration*, 28 ICSID FOREIGN INV. L. REV. 223, 240 (2014).

implied incorporation methods, or by direct reference to certain supplementary rules, whether of international law character or of domestic law nature.³⁶³

X. CONCLUSION

Climate is a global public good that defies traditional notions of territorial sovereignty. Climate is a common and shared resource that is both beyond and within the jurisdiction of every state. Because climate change is a common concern of mankind and can affect populations regardless of state boundaries, a regime complex governs various aspects of the same. To a large extent, various institutions are recognizing the linkages between climate mitigation and the promotion of foreign direct investments and beginning to formulate responses; and this development is encouraging.

What effect can international investment law have on the current efforts to mitigate climate change? The answer to this question is double-edged. On the one hand, international investment law and arbitration may have a positive effect, encouraging investments in renewable technologies and preventing governments from retreating from previous commitments. On the other hand, international investment law and arbitration may have a negative effect on climate mitigation, especially if the state adopts stricter environmental regulations, which can affect investments in the energy sector. In fact, foreign investors can challenge such regulatory measures before arbitral tribunals claiming that they violate investment treaty provisions.

This Article has contributed to mapping the interplay between foreign direct investment and climate change, exploring the recent boom of investment treaty arbitrations in the field. Foreign investors can and have filed claims against the host state alleging that energy policies adopted by the latter amount to a disguised discrimination against their investment or other breaches of investment treaty provisions. Two types of disputes have emerged: the first type concerns the dramatic regulatory change governing renewable energy in the aftermath of the financial crisis. The emergency measures undertaken in response to the global financial crisis have triggered a wave of investment disputes against states for potential breaches of investment treaty provisions, due to the negative impact of emergency measures on investments in the renewable energy sector. The second type of disputes relates to the adoption of climate change mitigation measures, which can be perceived as affecting the economic value of foreign investments in other sectors. The Article

363. *Asian Agricultural Products Ltd v. Democratic Socialist Republic of Sri Lanka*, ICSID Case No. ARB/87/3, Award, ¶ 21 (June 27, 1990).

has also offered some legal tools for reconciling energy policies with other economic and noneconomic interests.

While arbitral tribunals are not the best forum to adjudicate climate-related disputes, due to their limited mandate and their uneven consideration of environmental concerns in the past, they can contribute to global climate governance. Investment treaty arbitration can provide private actors a useful tool to access justice at the international level and to obtain compensation in case of mistreatment by the host state. At the same time, investment treaty arbitration should not be perceived as a tool to enforce other treaty regimes, as this was not the intention of its founders and could raise more legitimacy concerns than it helps to solve.

Investing in clean energy can mitigate climate change, bring significant economic benefits, and contribute to the commonwealth. Yet, this Article has shown that while foreign direct investment and climate change mitigation are capable of mutually reinforcing each other, the different branches of international law governing this interplay have different underlying philosophies and priorities. Therefore, equilibrium should be sought between climate change mitigation and foreign direct investments in order to reinforce possible synergies in each of these regimes. Whether this is possible in international investment law and arbitration remains to be seen. Certainly, some redrafting and appropriate interpretation of the relevant investment treaties would allow for the consideration of the public interest.
