Related to Renewable Energy and Climate Change Mitigation and Adaptation

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Abstract

Sustainable development is gradually integrated into policies worldwide, meanwhile, government authorities and policymakers, alongside public and private enterprises, are signaling the growing scope and scale of investment opportunities in this field. Capital cuts and decreasing generating costs are fueling the market in renewable technologies. At the same time, bilateral and multilateral treaties are being negotiated, which set the framework for expanding sustainable solutions: treaty regimes increasingly encourage and promote trade and investment for more sustainable energy development, responding to global concerns on climate change. Investment protection litigation offers new insights into trends in jurisprudence, demonstrating how this field of law can be instrumental not only for protecting undertakings' interests, but holding countries to their commitments under international treaties for the protection of the environment.

2.1 Introduction

The risks and global impacts of climate change are gaining significance and priority throughout the world, with the majority of countries and enterprises working to redirect investment flows towards more sustainable, low-carbon development pathways, while others face a rising tide of potentially costly litigation on climate change. As reflected in

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the Paris Agreement on climate change and its new Katowice Rulebook,¹ the growing global importance of harnessing higher levels of investment and financing renewable energy and climate mitigation technologies, as well as climate adaptation and resilience, has never been clearer nor more pressing. Indeed, as specific investment needs are being defined and refined in the National Determined Contributions (NDC) that each country intends to achieve under the Paris Agreement,² many government authorities and policymakers, alongside public and private enterprises, are signaling the growing scope and scale of investment opportunities in this field.

In 2017, for the 8th year running, global investment in renewable energy exceeded USD 240 billion. Last year's total of USD 279.8 billion was 2% higher than the 2016 equivalent, but still significantly lower than the all-time high in 2015 of USD 323.4 billion. Drastic reductions in capital and generating costs for renewables have been instrumental in creating a bigger market for these technologies.³ Thus, renewable generation capacity increased by +8.3%, continuing the trend of 8-9% annual capacity growth in recent years.⁴

In its landmark report 'Investing in Climate – Investing in Growth,' the OECD noted that to meet the targets set out in the global Sustainable Development Goals (SDGs), and to achieve the high international ambition of the Paris Agreement, exponential increases are essential for investment in low-carbon green growth, including climate-smart projects and infrastructure, particularly in developing countries.⁵

2.2 Innovations in Investment Law & Policy Related to Clean Energy, Climate Change and Sustainable Development

An intriguing and observable trend of investment law innovations can be tracked in multilateral, bilateral and national policy in relation to clean energy and climate change. Moreover, several important investment awards were rendered related to renewable energy and the environment, sending key signals to markets.

Paris Agreement, signed on 12 December 2015, entry into force on 4 November 2016, Article 2.1(c).

² For the interim NDC Registry see https://unfccc.int/process/the-paris-agreement/nationally-determined-contributions-ndcs#eq-2.

³ UNDP & Bloomberg Finance and Frankfurt School, UNEP Centre Global Trends in Renewable Energy Investment 2018, at http://fs-unep-centre.org/sites/default/files/publications/gtr2018v2.pdf.

⁴ International Renewable Energy Agency (IRENA), Renewable capacity highlights, March 2018, at http://sunconnect-news.org/fileadmin/DATEIEN/Dateien/New/RE_capacity_highlights_2018.pdf.

⁵ OECD, Investing in Climate, Investing in Growth, June 2017, at https://read.oecd-ilibrary.org/eco-nomics/investing-in-climate-investing-in-growth_9789264273528-en#page3.

2.2.1 Treaty & Policy Developments

Several bilateral treaties are under negotiation and entering into force, including chapters and provisions of specific relevance to SDG 7 on access to affordable and clean energy and SDG 13 on bold action on climate change. Many other provisions in these treaties, among a growing collection of further 'next generation' regional and bilateral trade and investment treaties being crafted this decade, also seek to contribute to various other targets of the 17 SDGs.⁶

The Comprehensive Economic and Trade Agreement (CETA) between Canada and the EU provisionally entered into force in 2017, and includes a chapter linking trade and sustainable development, in which Parties

"recognize that economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development, and reaffirm their commitment to promoting the development of international trade in such a way as to contribute to the objective of sustainable development, for the welfare of present and future generations," 8

and also related chapters on trade and the environment⁹ and on trade and labor.¹⁰ Several provisions are of direct relevance to clean energy and climate change. At 22.1.3, Parties commit to

"enhance enforcement of their respective labor and environmental law and respect for labor and environmental international agreements; [and to] promote the full use of instruments, such as impact assessment and stakeholder consultations, in the regulation of trade, labor and environmental issues and encourage businesses, civil society organizations and citizens to develop and implement practices that contribute to the achievement of sustainable development goals."

⁶ Marie-Claire Cordonier Segger, Crafting Trade and Investment Agreements for Sustainable Development: Athena's Treaties, Oxford University Press, 2019 (forthcoming).

For a list of the provisions that entered into force *see* Canada Gazette, Vol. 151(1), Order Fixing 21 September 2017 as the Day on which the Act Comes into Force, other than Certain Provisions, at http://gazette.gc.ca/rp-pr/p2/2017/2017-09-07-x1/html/si-tr47-eng.html.

⁸ Canada-European Union Comprehensive Economic and Trade and Agreement (CETA) signed October 30, 2016, provisionally entered into force on 21 September 2017, Chapter 22 Trade and Sustainable Development.

⁹ CETA, Chapter 24 Trade and Environment.

¹⁰ CETA, Chapter 23 Trade and Labor.

Further, under Article 22.3.2 Parties affirm that "trade should promote sustainable development. Accordingly, each Party shall strive to promote trade and economic flows and practices that contribute to enhancing decent work and environmental protection [...]." Further, at 22.3.3, they highlight the importance of assessing the potential economic, social and environmental impacts of possible actions under the treaty, taking account of stakeholder views. Each Party "commits to review, monitor and assess the impact of the implementation of this Agreement on sustainable development in its territory in order to identify any need for action" also opening the possibility for joint assessments.¹¹

Of direct relevance, under 24.9.2, the Parties commit, consistent with their international obligations to

"pay special attention to facilitating the removal of obstacles to trade or investment in goods and services of particular relevance for climate change mitigation and in particular trade or investment in renewable energy goods and related services."

In addition, under 24.12.1, the Parties prioritize

"trade-related aspects of the current and future international climate change regime, as well as domestic climate policies and programs relating to mitigation and adaptation, including issues relating to carbon markets, ways to address adverse effects of trade on climate, as well as means to promote energy efficiency and the development and deployment of low-carbon and other climate-friendly technologies; [...] trade and investment in environmental goods and services, including environmental and green technologies and practices; renewable energy",

and also "promotion of life-cycle management of goods, including carbon accounting and end-of-life management..." They also undertake, under 24.10.2a,

"in a manner consistent with their international obligations to: (i) encourage trade in forest products from sustainably managed forests and harvested in accordance with the law of the country of harvest; (ii) exchange information, and if appropriate, cooperate on initiatives to promote sustainable forest management, including initiatives designed to combat illegal logging and related trade [...]",

¹¹ See Markus Gehring et al., 'Sustainability Impact Assessments as Inputs and as Interpretative Aids in International Investment Law', Journal of World Investment and Trade, Vol. 17, 2017, p. 155.

an innovation that if implemented, to incentivize investment and trade, could deliver cobenefits for climate change. They seek "improved understanding of the effects of economic activity and market forces on the environment; and exchange of views on the relationship between multilateral environmental agreements and international trade rules." Taken together, these commitments suggest CETA's potential to support the implementation of Article 2.1c of the Paris Agreement on climate change under the UN Framework Convention on Climate Change (UNFCCC) and related provisions, as well as other accords that seek to promote climate action and sustainable development of renewable energy. To encourage implementation, under Article 24.13 Parties commit to take into account the activities of relevant multilateral environmental organizations, and establish a mechanism whereby the new Committee on Trade and Sustainable Development serves as a focal institution within the organization for discussion, cooperation and implementation of these provisions.

In Chapter 22, Parties also emphasize that the rights and obligations outlined in the labor and environmental chapters are to be taken into account by the Parties as part of an integrated approach on trade and sustainable development.¹⁵ This guides interpretation, for instance in the context of future investment disputes.¹⁶ The Vienna Convention requires that treaties be interpreted in light of their object and purpose,¹⁷ and the Parties' objectives for the CETA encompass the promotion of sustainable development. In the treaty, Parties also reinforce the need for transparency,¹⁸ and commit to an ongoing dialogue on trade and sustainable development,¹⁹ creating a Committee on Trade and Sustainable Development which will oversee the implementation of the environment and labor chapters.²⁰ This Committee can refer implementation to a Panel of Experts established to examine any

¹² For further discussion *see* Marie-Claire Cordonier Segger *et al.*, 'REDD+ Instruments, International Investment Rules and Sustainable Landscapes', *in* Christina Voigt (ed.), *Research Handbook on REDD+ and International Law*, Edward Elgar, 2016, pp. 347-389.

See e.g. Marie-Claire Cordonier Segger, 'Advancing the Paris Agreement on Climate Change for Sustainable Development', Cambridge International Law Journal, Vol. 5, Issue 2, 2016, p. 202; Marie-Claire Cordonier Segger, 'Sustainable Development through the 2015 Paris Agreement', Canadian International Lawyer, Vol. 11, Issue 2, 2017, p. 124.

¹⁴ Although CETA does not explicitly mention reducing fossil fuel subsidies in the same as, for instance, the EU-Singapore FTA, Chapter 12, Section C, & Annex 12-A at Article 13.11(3). See Markus Gehring et al., Climate Change and Sustainable Energy Measures in Regional Trade Agreements (RTAs): An Overview, at www.ictsd.org/sites/default/files/downloads/2013/08/climate-change-and-sustainable-energy-measures-in-regional-trade-agreements-rtas.pdf.

¹⁵ CETA, Article 22.1(2).

¹⁶ Id. Article 29.17.

¹⁷ Vienna Convention on the Law of Treaties, entered into force 27 January 1980, see Marie-Claire Cordonier Segger, 'Inspiration for Integration: Interpreting International Trade and Investment Accords for Sustainable Development', Canadian Journal of Comparative and Contemporary Law, Vol. 3, Issue 1, 2017, p. 159.

¹⁸ CETA, Article 22.2.

¹⁹ Id. Article 22.3.

²⁰ CETA, Chapter 26, at Article 26.2.1(g).

concerns and provide recommendations for their resolution. If the final report of the Panel of Experts determines that a Party has not complied with its obligations, the Parties shall engage in discussions and shall endeavor, within three months of the delivery of the final report, to identify an appropriate measure or, if appropriate, to decide upon a mutually satisfactory action plan. Such provisions suggest that the approach of Europe and Canada has evolved from earlier trade and investment plus environment/labor, into a more nuanced focus on cooperation and integrated commitment to incentivize trade and investment that will support sustainable development, sending important signals to investors and others that the treaty seeks to encourage climate-related trade and investment. In essence, rather than staying mute or ignoring challenges, treaty regimes increasingly explicitly encourage and promote trade and investment for more sustainable energy development and are expected to respond to global concerns on climate change.

2.2.2 Investment Treaty Disputes

Several interesting investor-state awards are also being issued, including an important award in relation to European renewable energy disputes, as well as awards related to counterclaims based on human rights violations and environmental damage. Moreover, among the still pending cases, in two disputes the investors are challenging the governments' decision to introduce restrictions on offshore oil and gas activity.²¹

Investment disputes relating to European renewable energy continue to emerge, with new claims also becoming public. In these cases, claimants had invested significantly in renewable energy programs which would arguably further global SDGs related to climate change mitigation (SDG 13) and clean, affordable energy (SDG 7). When these programs were substantially changed or administered in a manner contrary to treaty standards by governments that had committed to incentivize renewables, the investors pursued their economic rights to enforce standards of conduct and government behavior.

To date there have been at least 40 cases brought against Spain in the wave of litigation by solar power and other eco-investors, ²² and with many cases of important relevance for

²¹ Rockhopper Exploration Plc, Rockhopper Italia S.p.A. and Rockhopper Mediterranean Ltd v. Italian Republic, ICSID Case No. ARB/17/14; Lone Pine Resources Inc. v. The Government of Canada, ICSID Case No. UNCT/15/2.

²² OperaFund Eco-Invest SICAV PLC and Schwab Holding AG v. Kingdom of Spain, ICSID Case No. ARB/15/36; EDF ENERGIES NOUVELLES (France) v. Kingdom of Spain; FREIF Eurowind Holdings Ltd v. Kingdom of Spain SCC, Case No. 2017/060; Green Power K/S Y Obton A/S (Denmark) v. Kingdom of Spain, SCC, Case No. V2016/135; Greentech Energy System A/S, Foresight Luxembourg Solar 1 S.A.R.L., Foresight Luxembourg Solar 2 S.A.R.L., GWM Renewable Energy I S.P.A, GWM Renewable Energy II S.P.A v. Kingdom of Spain; The PV Investors v. Spain, UNCITRAL; Charanne (the Netherlands) and Construction Investments (Luxembourg) v. Spain, SCC; Isolux Infrastructure Netherlands B.V. v. Spain, SCC; Eiser Infrastructure Limited and Energia Solar Luxembourg S.à.r.l. v. Spain, ICSID Case No. ARB/13/36; CSP Equity Investment S.à.r.l. v.

the Security of renewable energy investments.²³ There are also at least seven disputes against the Czech Republic,²⁴ and at least seven disputes against Italy.²⁵ Non-legal NGO commentators suggest that such cases, were they to be resolved for the full amounts claimed, would be worth over USD 9.5 billion.²⁶ As such, these disputes are a warning for states looking to encourage foreign investment in their renewable energy sectors.²⁷ The cases suggest that even in the absence of specific representations by the state, an investor may rely on the fair and equitable treatment standard when subjected to fundamental changes in the state's

- Antaris Solar and Dr. Michael Göde v. Czech Republic, PCA; Jürgen Wirtgen, Stefan Wirtgen, Gisela Wirtgen and JSW Solar (zwei) GmbH & Co. KG v. Czech Republic, PCA Case No. 2014-03; Natland Investment Group NV, Natland Group Limited, G.I.H.G. Limited, and Radiance Energy Holding S.A.R.L. v. Czech Republic; Voltaic Network GmbH v. Czech Republic, PCA; ICW Europe Investments Limited v. Czech Republic, PCA; Photovoltaik Knopf Betriebs-GmbH v. Czech Republic, PCA; WA Investments-Europa Nova Limited v. Czech Republic, PCA.
- 25 VC Holding II S.a.r.l. and Others v. Italy, ICSID Case No. ARB/16/39; ESPF Beteilingungs GmbH, ESPF Nr. 2 Austria Beteilingungs GmbH, and InfraClass Energie 5 GmbH & Co. KG v. Italy, ICSID Case No. ARB/16/5; Eskosol S.p.A. in liquidazione v. Italy, ICSID Case No. ARB/15/50; Belenergia S.A. v. Italy, ICSID Case No. ARB/15/40; Silver Ridge power BV v. Italy, ICSID Case No. ARB/15/37; Blusun SA, Jean-Pierre Lecorcier and Nichael Stein v. Italy, ICSID Case No. ARB/14/03; Greentech Energy Systems and Novenergia v. Italy, SCC 2015.
- 26 Luke Peterson, 'As Another Spain Award Looms, Four More Previously-Confidential Renewable Cases Surface; Potential Liability For All Pending Claims Now Exceeds \$9.5 Billion', *Investment Arbitration Report*, 7 February 2018.
- 27 Richard Power & Paul Baker, 'Energy Arbitrations', The European Arbitration Review, 2018, at https://globalarbitrationreview.com/insight/the-european-arbitration-review-2018/1148943/energy-arbitrations.

Spain, SCC; RREEF Infrastructure (G.P.) Limited and RREEF Pan-European Infrastructure Two Lux S.à.r.l. v. Spain, ICSID Case No. ARB/13/30; Antin Infrastructure Services Luxembourg S.à.r.l. and Antin Energia Termosolar B.V. v. Spain, ICSID Case No. ARB/13/31; Masdar Solar & Wind Cooperatief UA v. Spain, ICSID Case No. ABR/14/01.

NextEra Energy Global Holdings B.V. and NextEra Energy Spain Holdings B.V. v. Spain, ICSID Case No. ABR/14/11; InfraRed Environmental Infrastructure GP ltd. et al. v. Spain, ICSID Case No. ABR/14/12; RENERGY S.à.r.l. v. Spain, ICSID Case No. ABR/14/18; Stadtwerke München GmbH, RWE Innogy GmbH et al. v. Spain, ICSID Case No. ARB/15/1; RWE Innogy GmbH and RWE Innogy Aersa S.A.U. v. Spain, ICSID Case No. ARB/14/34; STEAG GmbH v. Spain, ICSID Case No. ABR/15/4; 9REN Holding S.a.r.l v. Spain, ICSID Case No. ARB/15/15; BayWa r.e. Renewable Energy GmbH and BayWa r.e. Asset Holding GmbH v. Spain, ICSID Case No. ARB/15/16; Cube Infrastructure Fund SICAV and Others v. Spain ICSID Case No. ARB/15/20; Matthias Kruck and Others v. Spain, ICSID Case No. ARB/15/23; KS Invest GmbH and TLS Invest GmbH v. Spain, ICSID Case No. ARB/15/25; JGC Corporation v. Spain, ICSID Case No. ARB/15/27; Cavalum SGPS, S.A. v. Spain, ICSID Case No. ARB/15/34; E.ON SE, E.ON Finanzanlagen GmbH and E.ON Iberia Holding GmbH. v. Spain, ICSID Case No. ARB/15/35; SolEs Badajoz GmbH v. Spain, ICSID Case No. ARB/15/38; Hydro Energy 1 S.à.r.l. and Hydroxana Sweden AB v. Spain, ICSID Case No. ARB/15/42; Watkins Holdings S.à.r.l. and Others v. Spain, ICSID Case No. ARB/15/44; Landesbank Baden-Württemberg and Others v. Spain, ICSID Case No. ARB/15/45; Eurus Energy Holdings Corporation and Eurus Energy Europe B.V. v. Spain, ICSID Case No. ARB/16/4; Alten Renewable Energy Developments BV v. Spain, SCC; Sun-Flower Olmeda GmbH & Co KG and Others v. Spain, ICSID Case No. ARB/16/17; Infracapital F1 S.à.r.l. and Infracapital Solar B.V. v. Spain, ICSID Case No. ARB/16/18; Sevilla Beheer B.V. and Others v. Spain, ICSID Case No. ARB/16/27; Portigon AG v. Kingdom of Spain, ICSID Case No. ARB/17/15; Novenergia v. Spain, SCC; DCM Energy GmbH & Co. Solar 1 KG and Others v. Kingdom of Spain, ICSID Case No. ARB/17/41.

regulatory regime. Thus, states ought to be careful not to alter their regulatory landscapes in the renewable energy sectors too drastically so as not to unreasonably withdraw promised incentives or fail to provide investors with the time necessary to meet new standards.²⁸

In the decisions in $Charanne^{29}$ and $Isolux^{30}$ in 2016, Spain was successful in defending its measures against the claims made by investors. These were followed shortly by the Eiser decision in 2017, however, in which the claimant was successful and was awarded USD 140 million in lost profits from their investment in a Concentrated Solar Power (CSP) project.³¹ The tribunal considered that the continuous regulatory changes approved by the Spanish Government, including the sudden cuts to the Feed-in Tariff regime for the photovoltaic sector introduced by the Spalma-Incentivi Decree, were in violation of Article 10(1) of the Energy Charter Treaty (ECT).³² The Tribunal noted that although the ECT did not grant Eiser the right to expect a fixed legal regime, they did have a legitimate expectation that regulatory measures would not destroy the value of their investment. The evidence showed that Spain had changed its regulatory regime in 2013/2014 in a drastic fashion. It adopted and implemented an entirely new regulatory approach, "applying it to existing investments in a manner that washed away the financial underpinnings of the claimants' investments."33 The new regime was based on different assumptions, and utilized a new and untested regulatory approach, all intended to significantly reduce subsidies to existing plants.34

Moreover, a decision was rendered for some of the claims against Czech Republic relating to its solar program. In *Jürgen Wirtgen, Stefan Wirtgen, Gisela Wirtgen and JSW Solar (zwei) GmbH & Co. KG v. Czech Republic*, the Czech Republic successfully defended its measures against further claims, despite arbitrator Gary Born's strong dissent.³⁵ In an

²⁸ See at www.wfw.com/wp-content/uploads/2017/06/Investor-succeeds-in-ECT-renewable-energy-arbitration-Eiser-v-Spain.pdf.

²⁹ Charanne B.V. and Construction Investments S.a.r.l. v. Spain, SCC Case No. 062/2012.

³⁰ Isolux Infrastructure Netherlands B.V. v. Kingdom of Spain, SCC Case No. 2013/153.

³¹ Eiser Infrastructure Limited and Energia Solar Luxembourg v. Spain, Award of 4 May 2017, Annulment Application registered 28 July 2017.

³² Eiser Infastructure Limited and Energia Solar Luxembourg S.A.R.L v. Kingdom of Spain, Award, ICSID Case No. ARB/13/36, 26 April 2017. The Award was recognized in the Southern District of New York through an ex parte procedure, although in November of 2017 the order recognizing the award in New York was challenged and vacated. Judge Lewis A. Kaplan relied on two second circuits decisions that found that the Foreign Sovereign Immunities Act did not permit the use of summary ex parte enforcement procedures, and that the Petitioners were, instead, required to file a plenary action to enforce their ICSID award; see Mobil Cerro Negro, Ltd. v. Bolivarian Republic of Venezuela, 863 F.3d 96, 2d Cir., 2017, Micula v. Government of Romania, 2d Cir., 23 October 2017.

³³ Eiser Infastructure Limited and Energia Solar Luxembourg S.A.R.L v. Kingdom of Spain, Award, ICSID Case No. ARB/13/36, 26 April 2017, para. 389.

³⁴ Id. paras. 389-393.

³⁵ Jürgen Wirtgen, Stefan Wirtgen, Gisela Wirtgen and JSW Solar (zwei) GmbH & Co. KG v. Czech Republic, PCA Case No. 2014-03.

attempt to encourage the production of electricity from renewable sources of energy, the Czech Republic issued a Support Scheme providing incentives of a guaranteed feed-in tariff (FIT), originally for 15 and later 20 years and tax incentives. According to the claimants, they made investments in solar photovoltaic plants relying on the explicit guarantees and incentives in this scheme. In 2009 and 2010 the Czech Republic amended the Support Scheme, the amendments consisted of 26 per cent solar levy and withdrawal of tax exemption. The Claimants argued that the amendments gave rise to breaches of their legitimate expectations, guaranteed inter alia under the FIT clause. The tribunal held that there could only be a violation if legitimate expectations generated by specific commitments are affected.³⁶ The majority, however, held that there was no separate guarantee of an absolute FIT price level, set independently of the guarantees of a payback of capital expenses and an annual return on investment. The tribunal held that the guarantees of return to investors as the groundwork of the renewable energy promotion regime had been complied with by the Czech Republic and as such the majority held there was no breach of legitimate expectations: the claimants continued to receive a level of revenue that ensured a payback of capital expenses and a return on investment over a period of 15 years.³⁷ In his dissent, Born rejected the majority's finding. He argued that the Czech Republic had provided a plain and unequivocal statutory guarantee for a fixed FIT for the duration of the investment and the claimants invested relying on this guarantee. The entire regime was a commitment guaranteed by the state and should therefore not be amended.

Finally, in addition to the renewable energy cases, Ecuador's successful counterclaim in *Burlington Resources v. Ecuador* for environmental damage has important implications for the consideration of climate change in investment disputes.³⁸ Burlington Resources acquired and operated the exploration and development of oilfields in Ecuador. While the jurisdiction of the counterclaim was initially challenged, it was later agreed by the parties to adjudicate the counterclaim to limit parallel proceedings and multiple decisions.³⁹ The tribunal found that domestic Ecuadorian law was applicable, notably as contained in several Ecuadorian Supreme Court decisions and that this contained a strict liability provision for environmental damage. The tribunal found damage at 40 sites across two oil fields and in its damages, analysis assessed the cost of remediation. In total Ecuador was awarded USD 41 million for infrastructure and environmental damage.⁴⁰ Notable in this case is the tribunal's willingness to engage in a substantial analysis of Ecuadorian environmental law remediation obligations.

³⁶ Id. paras. 436-437.

³⁷ Id. para. 469.

³⁸ Burlington Resources Inc. v. Republic of Ecuador, Decision on Counter-Claims, ICSID Case No. ARB/08/5, 7 February 2017.

³⁹ Id. para 6.

⁴⁰ Id.

These renewable energy cases are emerging as a forceful reminder of the importance of an integrated and balanced approach to achieving sustainable development, indicating that investment law can act to frustrate but also to foster sustainable energy investment. Further, these cases raise questions about how to provide legal frameworks necessary to catalyze renewable energy investment, while avoiding unduly costly corporate subsidies, and allowing public policies to respond to changing circumstances in terms of government priorities, fiscal constraints, and market dynamics. They suggest that investment law is solely neither sword nor shield for measures to respond to climate change and to promote clean, renewable energy. Rather, in each dispute, there is a need to make a sound case. 41

2.3 RECENT CLIMATE LAW & POLICY TRENDS AFFECTING INVESTMENTS

The UNFCCC negotiations on modalities and guidelines for Paris Agreement implementation are important for both future development of investment law and for climate and energy policy. While the guidelines are not yet concluded and agreed by the 'Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement' (CMA), certain advances have been achieved, particularly with regards to climate mitigation, adaptation and transparency.⁴²

On transparency actions, the Paris Agreement in Article 13 requires that all Parties 'shall' provide national inventory reports and submit information that allows tracking the progress towards achievement of their Nationally Determined Contributions to the objectives of the treaty. Parties 'should' further provide information on climate change related impacts and adaptation. Parties' reports on mitigation action and support will undergo technical expert view. In Paris, the Parties accepted that "the transparency framework shall provide flexibility" to developing countries. However, in Bonn, Parties were divided as to whether the transparency framework should be a single system, with

⁴¹ For further discussion see e.g. Marie-Claire Cordonier Segger & Markus Gehring, 'Overcoming Obstacles with Opportunities: Trade and Investment Agreements for Sustainable Development', in Stephan W. Schill et al. (eds.), International Investment Law and Development: Bridging the Gap, Edward Elgar, 2015; Marie-Claire Cordonier Segger, 'Innovative Legal Solutions for Investment Law and Sustainable Development Challenges', in Yulia Levashova et al. (eds.), Bridging the Gap Between International Investment Law and the Environment, Eleven International Publishing, 2015. See also Marie-Claire Cordonier Segger & Markus Gehring, 'Climate Change and International Trade and Investment Law', in Rosemary Reyfuse & Shirley V. Scott (eds.), International Law in the Era of Climate Change, Edward Elgar, 2013. And see Marie-Claire Cordonier Segger et al., 'Conclusions: Promoting Sustainable Investment through International Law', in Marie-Claire Cordonier Segger et al. (eds.), Sustainable Development in World Investment Law, Kluwer Law International, 2012.

⁴² This analysis is due to the helpful legal research and excellent scholarly drafting work of Natalia Kubesch, researcher at CISDL.

⁴³ Paris Agreement, Article 13(2).

all countries working to meet the same standings, or whether it should be an extension of existing UNFCCC transparency arrangements, with separate rules and processes for developed and developing countries.⁴⁴ Alternatively, only some obligations could be common to all, such as those on reporting and technical review.⁴⁵ While the Parties were able to agree on one document in Bonn, they were unable to reduce the number of possible options for the future transparency framework.⁴⁶

Overall, adaption-related information has certain advantages for investors, and for public investment authorities seeking to encourage financial flows to key sectors. For instance, such transparency can help Parties understand whether international adaptation finance is effective and to learn from each other on how to increase infrastructure, agriculture, renewable energy or other investments to levels required for meeting climate mitigation and adaptation objectives. During the negotiations in Bonn in May 2017, 29 countries were undergoing peer review. These countries publicly answered questions about the steps they are taking to reduce greenhouse gas emissions and build resilience. For instance, India offered an intervention on the benefits of this "facilitative sharing of views", presenting an ambitious target to achieve renewable energy capacity of 175,000 MW by 2022 mostly solar power plants, with the Jawaharlal Nehru National Solar Mission (100,000 MW) being central to achieving this target. Developed and developing countries alike were interested in how India advanced this energy policy in a short timeframe and how the federal government was working with local governments and the private sector, including investors.

Moreover, greater transparency encourages confidence and trust among Parties to the Paris agreement enabling the learning from experiences in an open way. 49 As such, allowing for discretionary reporting may be problematic for investment in case it impedes the emergence of a clear picture of the international climate finance landscape. 50 Furthermore, greater transparency can also impact dispute settlement processes. The Paris Agreement assists states to consider and verify each other's contributions to climate change, and as

⁴⁴ Romain Weikmans & J. Timmons Roberts, *Pocket Guide to Transparency under the UNFCCC*, ECBI, 2017, p. 36.

⁴⁵ Sumit Prasad *et al.*, Enhanced Transparency Framework in the Paris Agreement: Perspective of Parties, Council on Energy, Environment and Water, New Delhi, 2017.

⁴⁶ Ad Hoc Working Group on the Paris Agreement Fourth part of the first session Bonn, 7-15 November 2017, Agenda items 3-8, FCCC/APA/2017/LA/Add.3, 15 November 2017.

⁴⁷ Weikmans & Roberts 2017, p. 36.

⁴⁸ Jennifer Huang, 'Why Transparency Makes the Paris Agreement a Good Deal', *Center for Climate and Energy Solutions July 2017*, at www.c2es.org/2017/07/why-transparency-makes-the-paris-agreement-agood-deal/.

⁴⁹ Kate Cook, 'Chapter 15', in Wendy Miles (ed.), Dispute Resolution and Climate Change: The Paris Agreement and Beyond, International Chamber of Commerce, 2017.

⁵⁰ Weikmans & Roberts 2017, p. 34.

such heightens accountability.⁵¹ State actions increasingly come under scrutiny, as the transparency framework provides countries and wider stakeholders with information on national decisions, on regulations, investments, and measures to protect local populations or the way companies are regulated. States or private entities may decide to study and rely on this information in challenging states' failure to comply with their responsibilities under the Paris Agreement, or to otherwise provide reasonable measures to address climate change. For investors, the implication is centrally one of increased risk for those still insisting on obsolete technologies and fuels. As such, greater transparency can trigger dispute settlement proceedings regarding state's non-compliance with mitigation/adaptation commitments. Indeed, there is the possibility that the transparency required under climate agreements can facilitate claims under investment treaties by private investors based on failure to abide by mitigation/adaptation-related commitments.

However, in terms of investor-state arbitration, the question arises whether this dispute settlement process will further or impede the objectives of the Paris Agreement. ⁵² Although disputes directly challenging environmental standards are rare, as the climate space continues to grow, climate related or adjacent disputes related to contract and market mechanisms may expand. One question that remains is whether disputes between states and private entities will drive fragmentation in international law, and not give sufficient weight to the importance of delivering tailored, country specific NDCs.

In addition, regarding compliance, Article 15 establishes a mechanism 'to promote compliance' with the Agreement. This mechanism should take the form of a geographically balanced twelve-member Expert Committee. Overall, Parties generally appear to agree that the compliance procedure should be "facilitative, transparent, non-adversarial and non-punitive." However, in 2017, there were conflicting views as to whether the Committee should have a more active role, should receive information directly or through other bodies or be able to define its own rules. Several Parties made it clear that they do not seek the Committee to act as a dispute resolution or judicial system and/or apply penalties or sanctions. The concern appears to be that a strong compliance mechanism could restrict national climate change policy decisions, or, for developing countries, that developed countries use such mechanisms – especially when containing the possibility of sanctions – to adversely impact their economic development and opportunities for investments that

⁵¹ Kate Cook, 'Arbitration and Climate Change – Wendy Miles QC, Kate Cook and Angeline Welsh', The Law of Nations Podcast, November 2017.

⁵² Id.

⁵³ Paris Agreement, Article 15(2).

⁵⁴ Wolfgang Obergassel et al., An Assessment of the 23rd Climate Conference COP23 in Bonn, Wuppertal Institut für Klima, Energie GmbH, February 2018, p. 7.

⁵⁵ Id.

would negatively impact on the world's climate.⁵⁶ The lack of compliance mechanisms and as such the voluntary non-binding nature of NDCS, arguably allows for the rapid scaling up of commitments over time as compared to binding, enforceable obligations.⁵⁷

Finally, in Bonn in 2017, certain Parties seemed comfortable with the idea of a self-trigger, *i.e.* Parties initiating cases with respect to themselves, but less so with allowing Parties to bring one another before the Committee. Thus, the questions of if and how this Committee will respond to cases of non-compliance remain still unsettled. The negotiation rounds indicate that the Committee will lack compulsion except through reputational costs arising from its reports. As such, the Committee does not provide a forum for conflict resolution, either for state-state or investor-state disputes. To some, such a compliance mechanism coupled with a self-trigger and discretionary transparency obligations raises the concern that Parties may be able to evade their obligations under the Paris Agreement.

Further, other international treaty regimes and institutions continued to foster climate friendly investment. For example, the Kigali Amendment to the Montreal Protocol, which directly seeks to discourage investments in ozone-depleting substances that are also likely to have serious effects on global climate change, ⁵⁹ passed its ratification threshold in 2017. The accord, which seeks to phase down climate-warming hydrofluorocarbons (HFCs) under the Montreal Protocol on Substances that Deplete the Ozone Layer, will enter into force on 1 January 2019. Firms that produce and use coolants in their products will need to develop alternative technologies in order to gain access to a new global market for replacement coolants and continue to participate in the growing market for refrigerators and air conditioning. States committed to phase out HFCs gradually by more than 80 percent over a 30-year period, along four tracks of 'Article 5 Parties' which reflect nuanced differences between nations, particularly their varying economic circumstances, reliance on HFC technologies, and the cost of alternative technologies. Many high-income countries will cut HFCs from 2019, consuming no more than 15 percent of their 2011-2013 averaged baseline emissions by the year 2036. States will receive support through the Montreal Protocol's Multilateral Fund. Montreal Protocol transitions from controlled substances to new alternatives have often been completed ahead of schedule. The incentive for countries to ratify and comply with the Kigali Amendment is strong. Following the Montreal Proto-

⁵⁶ Peter Lawrence & Daryl Wong, 'Soft Law in the Paris Climate Agreement: Strength or Weakness', Review of European, Comparative & International Environmental Law, November 2017.

⁵⁷ Id.

⁵⁸ Centre for Climate and Energy Solutions, 'Outcomes of the U.N. Climate Change Conference in Bonn', December 2017, at www.c2es.org/site/assets/uploads/2017/11/outcomes-of-the-u-n-climate-change-conference-in-bonn.pdf.

⁵⁹ Kigali Amendment, Montreal Protocol to the Vienna Convention on Substances that Deplete the Ozone Layer.

col's practice of restricting trade in controlled substances between parties and non-parties, the amendment foresees implementing trade restrictions on HFCs with non-parties by 2030, provided that at least 70 countries have ratified the deal. The protocol's trade element is an innovative feature that has ensured very broad support for the accord and all its amendments, as ICTSD has noted.⁶⁰ The Kigali Amendment is estimated to prevent up to 0.5 degrees Celsius in global warming above pre-industrial levels by the end of the century.

As an additional note, the International Civil Aviation Organization (ICAO) further progressed in its climate investment policy. This included advances in the negotiation and refinement of a new Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which has the potential to raise important revenues for climate finance, and to change the direction of future investments in aviation towards the adoption of renewable fuels and practices.⁶¹

2.4 RECENT TRENDS IN CLIMATE CHANGE LITIGATION

Of potential relevance to investors, and international law on investment, several major climate change litigations are being advanced, with the first few 'wins' in a growing flood of lawsuits. Indeed, some 884 climate change cases had been filed by March 2017 in 24 countries in Africa, Asia, Pacific, Europe and the Americas. The US had the highest number of cases (654) according to the survey carried out by the UN Environment Programme and the University of Columbia Law School's Sabin Center for Climate Change Law. 62

A new wave of cases is emerging which query the roles of states, as well as public and private enterprise, in implementing climate change laws and policies to prevent dangerous impacts.⁶³ The judicial decisions and court filings reveal several trends with implications for investment policies.

First, a tendency to focus claims on the failures of institutions and nations to respond adequately to climate change can be observed.⁶⁴ The Paris Agreement is emerging as a novel anchorage for lawsuits of this kind, giving shape and legal significance to national

⁶⁰ ICTSD reporting, 'Montreal Protocol Celebrates Another Milestone as Agreement to Reduce Climate-Warming Gases Is Set to Enter into Force in 2019', UN Environment, 20 November 2017; 'McKenna Says Amendment Signed to Montreal Protocol', CBC News, 20 November 2017; 'Treaty to Phase Out 'Greenhouse Gasses on Steroids' to Enter Force', The New York Times, 17 November 2017; 'Kigali Amendment to the Montreal Protocol Enters into Force in 2019', The New York Times, 19 November 2017.

⁶¹ ICAO, CORSIA, at www.icao.int/environmental-protection/Pages/market-based-measures.aspx.

⁶² Sabin Center for Climate Change Law, Climate Change Database: US and Non-US Climate Change Litigation.

⁶³ Wendy J. Miles QC & Nicola K. Swan, 'Climate Change and Dispute Resolution', Dispute Resolution International, Vol. 11, Issue 2, 2017, pp. 117-132.

⁶⁴ Jacqueline Peel, 'Issues in Climate Change Litigation', Carbon & Climate Law Review, Vol. 5, 2011, pp. 15-24.

mitigation commitments.⁶⁵ Moreover, the Agreement seems to provide momentum within a growing climate law and governance community.⁶⁶ Examples of cases falling within this category include the *Vienna Schwechat Airport Expansion*⁶⁷ case, where several NGOs persuaded the Austrian Administrative Court that the expansion of the Vienna airport would jeopardize the emission reductions targets set forth *inter alia* in the Paris Agreement.

This case illustrates how domestic lawsuits may be used as 'climate swords' to promote more progressive climate law and regulation. These domestic legal actions, whatever their outcomes, can provide certainty and predictability on domestic climate frameworks on which investors may base investment decisions. If successfully challenged, states are obligated a further honor international obligation towards climate change mitigation and may, as a result, incentivize investments into renewable energy or discourage or even ban investment activities that prove to be harmful to the environment. While concerns may be raised that domestic climate lawsuits could trigger investment claims if judicial decisions generate legal changes that disadvantage fossil fuel industry players, since a successful outcome could oblige a government to suspend guarantees or promises made to investors, there are questions about whether a carbon-intensive investment, in light of the Paris Agreement and other discussions above, is truly in 'like circumstances' to investment which supports renewables and other low-carbon pathways.⁶⁸

Second, cases are increasingly focusing on constitutional rights to a clean and healthy environment, seeking to hold authorities accountable for violation of universal values of human rights, and more specifically, domestic climate policies. ⁶⁹ Thus, recent lawsuits on climate change have not only provided a judicial forum to further greater 'physical and social understanding of climate change', ⁷⁰ but also indicate a trend towards a human rights framework and approach. ⁷¹ However, the success rate of these cases has been mixed. While

⁶⁵ Id.

⁶⁶ The Status of Climate Change Litigation – A Global Review, UNEP, May 2017, p. 10.

⁶⁷ Vienna Airport Expansion, W109 2000179-1/291E, Federal Administrative Court, Austria, 2 February 2017.

⁶⁸ For further discussion, see e.g. Cordonier Segger & Gehring 2013; Marie-Claire Cordonier Segger & Markus Gehring, 'Making Progress? Climate Change, Sustainable Development and International Trade and Investment Law', in David Freestone & Charlotte Streck (eds.), Legal Aspects of Carbon Trading: Kyoto, Copenhagen and Beyond, Oxford University Press, 2009, and Marie-Claire Cordonier Segger, 'Sistemas de inversión y comercio para economías bajas en emisiones de carbono más sustentables', in Pilar Moraga Sariego (ed.), Nuevo Marco Legal para el Cambio Climático, LOM, Santiago, 2009.

⁶⁹ Climate Law & Governance Initiative (CLGI), in partnership with the UN Framework Convention on Climate Change (UNFCCC), at www.climatelawgovernance.org/. See also Policy Brief: Global Trends in Climate Change Legislation and Litigation 2017, Grantham Research Institute on Climate Change and the Environment, March 2017. This repository of climate litigations worldwide pegs the number of cases globally at 250 across 25 different jurisdictions.

⁷⁰ Elizabeth Fisher, 'Climate Change Litigation, Obsession and Expertise: Reflecting on the Scholarly Response to Massachusetts v. EPA', Law and Policy, Vol. 35, Issue 3, 2013, pp. 236-260.

⁷¹ Jacqueline Peel and Hari M. Osofsky, 'A Rights Turn in Climate Change Litigation?', *Transnational Environmental Law*, Vol. 7, Issue 1, 2018, pp. 37-67.

national courts may find for the climate and for peoples' rights in accordance with the local law, some remain reluctant to find violations by governments. This trend, of course, could be directly relevant to risk analysis among investors already facing concerns and reputational losses in relation to their human rights records. For instance, in March 2017 an Irish environmental charity challenged a council's decision to issue a five-year extension to the Dublin Airport Authority for their planning permission to construct a new runway.⁷² While the Court recognized "a personal constitutional right to an environment under the Irish Constitution", it did not find any violation of this right. It was observed that the exercise of powers in the present case did not constitute any departure from the objectives set out in the Climate Action and Low Carbon Development Act 2015, which the petitioners had alleged to be breached by the impugned conduct. Similarly, in *Greenpeace Norway v*. Government of Norway, the Oslo District Court rejected the NGO's argument that Norway's oil and gas exploration in the Arctic violates citizens' right to a clean environment, despite finding that such right was protected by the Constitution.⁷³ In contrast, South Africa's High Court accepted the claimants' argument that in failing to consider climate changerelated impacts when approving the building of a coal plant, the government had violated fundamental rights. It therefore invalidated the plant's approval.⁷⁴ This sends a message to governments and developers/investors proposing projects, especially in the fossil fuel sector, with potentially significant climate change impacts in South Africa, that permission for such projects is contingent upon proper climate change impact assessments.

Overall, these cases raise questions as to the extent to which relying on rights-based approaches is becoming more common among those challenging governments' failure to mitigate climate change, the impact of which may even be exacerbated by state decisions to allow private entities to conduct environmentally harmful activities. Significantly, these cases reveal a potential tension between state's constitutional obligations towards their citizens as interpreted by domestic courts, and their investment treaty commitments towards international investors.

Third, claimants have brought cases against individual emitters, alleging that their environmentally harmful activities have caused them particular injuries. This category encompasses cases brought by private individuals and by state authorities against private corporations. In *Lliuya v. RWE*, a Peruvian farmer sued the German energy firm RWE, seeking USD 21,000 towards flood damage prevention from glacial melt caused by the company's contribution to climate change. On appeal in November 2017, his demand was held "admissible", allowing the case to proceed into the evidentiary phase.⁷⁵ The case sug-

⁷² Friends of the Irish Environment CLG v. Fingal County Council, 21 November 2017, No. 201 JR.

⁷³ Föreningen Greenpeace Norden & Natur og Ungdom v. The Government of Norway through the Ministry of Petroleum and Energy, Case No. 16-166674TVI-OTIR/06.

⁷⁴ Earthlife Africa Johannesburg v. Minister of Environmental Affairs and Others, ZAGPPHC (2017) 65662/16.

⁷⁵ Beschluss des 5. Zivilsenats des Oberlandesgerichts Hamm vom 01.02.2018 in dem Rechtsstreit Lliuya.

gests that private companies can be held liable for climate change-related damages of their greenhouse gas emissions. This recognition may prove to be significant to a number of recently filed climate litigation cases in the US. In these cases municipalities and state or provincial governments are suing private enterprises for their contribution to climate change, or non-governmental organizations or individuals sue governments or public enterprises for failing to fulfill climate obligations under national and international laws and conventions respectively. 76 Notable cases include New York City suing Shell, Exxon Mobil Corporation and others, claiming that they are responsible for damage caused due to flooding during storm Sandy;⁷⁷ and County of San Mateo v. Chevron Corp involving an action by Californian local governments seeking damage and other relief from fossil fuel companies for sea level rise, focusing on Chevron⁷⁸ and British Petroleum.⁷⁹ Such cases generated high interest during the UNFCC 23rd Conference of the Parties in 2017, presided by Fiji in Bonn, Germany, including the Climate Law and Governance Day symposium, where negotiators and senior officials from highly climate vulnerable countries and legal advisors to investors and the climate finance community, debated the implications for investment flows in relation to risk, liability and due diligence.

Overall, the willingness of domestic courts to hear cases against corporations causing climate-related damage adds pressure for change in industry practices and implicates investment decision-makers. Indeed, as a result of growing pressure from civil society, governments and the judiciary, investment and capital markets have begun to feature climate change as a significant risk factor. Certain enterprises and analysts characterize the systemic nature of climate risk by exploring multiple avenues through which risk or threat of climate change materializes, highlighting 'litigation risks' in particular.⁸⁰ While some might posit that markets shall simply adjust themselves or make necessary amends to accommodate the new pressures and risk categories, for instance deciding liability for fiduciary duties owed to investments,⁸¹ more research is needed to uncover the influence of climate litigation on investment decision-making. Both public and private enterprises

⁷⁶ Dena P. Adler, U.S. Climate Change Litigation in the Age of Trump: Year One, Sabin Center for Climate Change Law, Columbia Law School, 2018.

⁷⁷ New York City Sues Shell, ExxonMobil and Other Oil Companies Over Climate Change, at www.washington-post.com/news/energy-environment/wp/2018/01/10/new-york-city-sues-shell-exxonmobil-and-other-oil-majors-over-climate-change/?utm_term=.95770433c1d8.

⁷⁸ County of San Mateo v. Chevron Corp and Others, Case No. 17 CIV 03222, Cal, filed 17 July 2017.

⁷⁹ People of the State of California v. BP PLc and Others, Case No. 3:17-cv-06012-WHA.

⁸⁰ Cf. Navigating Climate Risk, CERES, September 2013, at https://static1.squarespace.com/static/57c0a650197aea879e3a81ef/t/58261ad3e6f2e16e929e1130/1478892253649/Navigating+Climate+Risk+Ceres'+Primer+for+Family+Offices.pdf; Climate Change Scenarios – Implications for Strategic Asset Allocation, Mercer, 2011, at www.ifc.org/wps/wcm/connect/6b85a6804885569fba64fa6a6515bb18/ClimateChangeSurvey_Report.pdf?MOD=AJPERES.

⁸¹ Sarah Barker *et al.*, 'Climate Change and the Fiduciary Duties of Pension Fund Trustees – Lessons from the Australian Law', *Journal of Sustainable Finance and Investment*, Vol. 6, Issue 3, 2016, p. 211.

and institutional investors among others, are placing priority on understanding and responding to climate litigation risks, including through changes in investment decisions. For example, the Task Force on Climate related Financial Disclosure, set up by the G20, post-Paris Agreement, recommended that corporations should disclose their climate-related financial risk alongside other financial and securities risks. This recommendation has been seconded by the EU High Level Expert Group on Sustainable Finance, and the UK Green Finance Task Force to the which are looking to bring these recommendations into law in the next few years. In addition, shareholder activism, including shareholder resolutions requiring enterprise to reduce greenhouse gas emissions, to divest from fossil fuels, or to switch to clean energy, may be further shaping investment decision-making.

State actions ranging from the introduction of climate laws, to the promotion of collaborative policies to decelerate investment in obsolete fossil fuels such as coal, suggest states' growing interest in decoupling economic development from emissions, with more participation from the private sector, including investors. Such polices include encouraging investments in renewables, providing subsidies and scaling up funding for innovation in clean energy technologies, and other actions.⁸⁷ A twenty-fold increase in legislation on climate change is reflective that the public in many countries supports, indeed is driving this trend.⁸⁸ While some may accuse courts of judicial overreach, the vast increase in climate litigation on all continents suggests that citizens and consumers in many countries expect the judiciary to hold governments, private and public enterprises accountable, in the absence of any other mechanism.

2.5 Conclusions

Certain sustainable development progress is being made in international investment law, as international law and policy further prioritized the need to make finance flows consistent with a pathway towards low greenhouse gas emissions and climate- resilient development,

⁸² Sarah Barker & Kurt Winter, 'Temperatures Rise in the Boardroom: Climate Litigation in the Commercial Arena', *Australian Environment Review*, Vol. 32, Issue 3, 2017, p. 62.

⁸³ See at www.fsb-tcfd.org/.

 $^{84 \}quad \textit{See} \ at \ https://ec.europa.eu/info/publications/180131-sustainable-finance-report_en.$

⁸⁵ See at http://greenfinanceinitiative.org/workstreams/green-finance-taskforce/.

⁸⁶ Mark Allen *et al.*, *Climate Change and Capital Markets*, The Steyer-Taylor Center for Energy Policy and Finance, 2015, pp. 22-23.

⁸⁷ Cf. Investment Grade Climate Change Policy: Financing the Transition to the Low Carbon Economy, UNEP Finance Initiative, 2011, at www.unepfi.org/fileadmin/documents/Investment-GradeClimateChangePolicy.pdf; Briefing Paper Submitted to G7 and G20: 'Governments Urged to Maintain Momentum on Climate Action', CERES, July 2017, at www.ceres.org/sites/default/files/Briefing-Paper-for-G20.pdf.

⁸⁸ Policy Brief: Global Trends in Climate Change Legislation and Litigation 2017, Grantham Research Institute on Climate Change and the Environment, March 2017.

as per the UNFCCC Paris Agreement, and to take bold action on climate change, as outlined in the global Sustainable Development Goals. New investment-related developments in trade, climate change, ozone and aviation instruments, also renewables and climate related investment arbitrations and domestic litigations, illustrate both progress and remaining gaps in climate law and governance.

More broadly, recent developments suggest that the world has reached the crossroads. All sectors of society can either contribute to the solutions, or become obsolete and increasingly, face litigation for the harm that they cause. International law and policy have the power and the potential to either foster or frustrate prompt and effective action on climate change. There is an important opportunity to strengthen and bolster investment in climate, renewable energy, and as such, to support sustainable development. In this regard, it is critical to continually update international and domestic legal regimes to ensure that they are supportive of renewable, green and sustainable development in a carbon-constrained world. With multiple sustainable developments in international investment law and policy, as well as in climate law and policy, there is an opportunity to bolster investment in renewable energy, and climate mitigation and adaptation. It is hoped, taking the risks and urgency emphasized by the IPCC in its recent Report on the need to keep warming below 1.5 degrees worldwide, that nations will seize the day.