Foreign investment and the environment in international law: The current state of play

Jorge E. Viñuales

C-EENRG *Working Papers, 2016-1*

March 2016

UNIVERSITY OF CAMBRIDGE

CEENRG
Cambridge Centre for Enviroment, Energy and Natural Resource Governance

Please cite this paper as:

Viñuales, J. E. 2016. "Foreign investment and the environment in international law: The current state of play". C-EENRG Working Papers, 2016-1. pp.1-42. Cambridge Centre for Environment, Energy and Natural Resource Governance, University of Cambridge.

The **Cambridge Centre for Environment, Energy and Natural Resource Governance (C-EENRG)** was established in 2014 within the Department of Land Economy in order to conduct integrative research on the governance of environmental transitions, such as the climate-driven transition from a carbon-intensive inefficient energy matrix to a decarbonised and efficient one, or the water/population-driven transformation of food production systems. The role of law and governance in such transitions is of particular importance. C-EENRG approaches law as a technology to bring, guide and/or manage environment-driven societal transformations. Whereas other research groups within the University of Cambridge cover questions relating to the environment, energy and natural resources from a natural science, engineering, conservation and policy perspective, until 2014 there was no centre concentrating on the law and governance aspects of environmental transitions. C-EENRG was established to fill this gap in the policy research cycle, in line with University's strategic research initiatives on energy, conservation, global food security and public policy.

The **C-EENRG Working Papers** provide a platform to convey research aiming to support the effective governance of such environmental transitions. The series hosts research across disciplines, including law, economics, policy, and modelling, and welcomes research on a wide range of environmental topics across the food-energy-water-land nexus.

Send your enquiries regarding the C-EENRG Working Papers to the editor:
Dr Aiora **Zabala**, az296@cam.ac.uk

GUIDELINES FOR AUTHORS

Submit your manuscript in *.odt, *.doc, *.docx, or *.rtf format, together with a *.pdf version. It should contain title, abstract, keywords, and contact details for the lead author. Email your file to the editor. The manuscript will be processed and sent to two reviewers. The editor will process the reviewers' feedback and request the scientific committee to adopt a final decision about the publication of the manuscript.

DISCLAIMER

The opinions expressed in this working paper do not necessarily reflect the position of C-EENRG, the Department of Land Economy, or the University of Cambridge as a whole.

C-EENRG, 2016, http://www.ceenrg.landecon.cam.ac.uk/

Contents

Jorge. E Viñuales
Cambridge Centre for Environment, Energy and Natural Resource Governance (C-EENRG),
University of Cambridge, The David Attenborough Building, Pembroke Street, Cambridge CB2 3QZ, UK.
jev32@cam.ac.uk

Foreign investment and the environment in international law: The current state of play

Jorge E. Viñuales

Foreign investment and the environment in international law: The current state of play

Jorge E. Viñuales

1. INTRODUCTION

Several years have passed since the relationship between the laws governing foreign investment and environmental protection started to receive well-deserved attention.[1] What was foreseeable then is clear now. The increased momentum to move from a resource-inefficient and polluting socio-economic model to one with a lower environmental footprint is resulting in significant regulatory change, and much more is coming. One major objective of such change is to harness the financial and technological strength of the

1 For book-length treatments see K. Miles, *The Origins of International Investment Law. Empire, Environment and the Safeguard of Capital* (Cambridge University Press, 2013); S. di Benedetto, *International Investment Law and the Environment* (Cheltenham: Edward Elgar, 2013); A. Romson, *Environmental Policy Space and International Investment Law* (PhD dissertation, University of Stockholm, 2012); J. E. Viñuales, *Foreign Investment and the Environment in International Law* (Cambridge University Press, 2012); S. Robert-Cuendet, *Droits de l'investisseur étranger et protection de l'environnement. Contribution à l'analyse de l'expropriation indirecte* (Leiden: Martinus Nijhoff, 2010). Some edited volumes have been devoted to this connection: P.-M. Dupuy and J. E. Viñuales (eds.), *Harnessing Foreign Investment to Promote Environmental Protection. Incentives and Safeguards* (Cambridge University Press, 2013); M.-C. Cordonier-Segger, M. W. Gehring and A. Newcombe (eds.), *Sustainable Development in World Investment Law* (The Hague: Kluwer, 2010). There are, in addition, many articles and chapters.

private sector to promote environmental protection, which, despite the prevailing 'synergistic' discourse, can, unfortunately, not be achieved without some significant tensions arising from cost-internalisation or investment shifting measures that adversely affect economic operators. Yet, the transition from a brown to a green economy is in motion, and its fine print, including the regulatory and litigation risks it entails, is taking an increasingly recognisable shape.

This paper is about trends that have moved from forecast to reality. It is also about more forecasting. And it is, above all, about understanding how environmental protection is gaining ground in the international law of foreign investment and in the mindset of those whose profession is to clarify it and apply it. The analysis is structured into four sections. The first three sections chart the main developments from an empirical perspective. Based on a dataset of 114 investment claims with environmental components compiled by the author (see Annex to this paper) as well as a number of important reports issued by organisations such as the UNCTAD or the OCDE, these sections update the three trends identified in my previous work on the subject, namely (2) the increasing reference to the role of the private sector in international environmental negotiations, (3) the mirror effect that can be detected in international investment agreements (IIAs), which include more and more references to environmental protection in their wording, and (4) the surge in investment claims with environmental components. In a fourth section, I turn to the legal analysis proper and focus on the legal meaning that can be derived from the practice charted in the previous sections (5). Specifically, my purpose is to capture, through an analysis of the recent investment jurisprudence, a shy, yet sufficiently discernible, change of mindset regarding the place granted to environmental considerations in investment litigation. Such a subtle on-going mindset change is consolidating what I have called an 'upgraded' traditional approach to the relations between international investment law and environmental protection, namely one where environmental protection has to evolve within the space granted to it by international economic law but, unlike a merely 'traditional' approach, in which such space is constantly growing.[2] The conclusion of the paper summarises the current state of play regarding foreign investment and the environment in international law.

2 *See* J. E. Viñuales, 'The Environmental Regulation of Foreign Investment Schemes under International Law', in Dupuy/Viñuales, above n. 1, pp. 273-320.

2. THE ROLE OF PRIVATE INVESTMENT IN THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

By the end of 2011, the great emphasis placed by influential organisations such as the United Nations Environment Programme or the World Bank on the concept of 'green economy' suggested that the rationale for environmental protection was moving from the mere internalisation of negative environmental externalities to the spotting of green business opportunities. As I wrote then, whereas sustainable development was about doing as well in economic terms while respecting the environment, the promise of the green economy was to do better in economic terms by focusing on green business opportunities. According to some organisations, freedom of investment was to be 'harnessed' or investment (although mostly public investment) was to be shifted to promote 'green growth'.[3] This message has been echoed by some visible reports, such as the *Better Growth, Better Climate* one, which emphasised the synergies between policies aimed at both prosperity and decarbonisation.[4] At the same time, however, other organisations[5] warned that liberalising and protecting foreign investment could, in fact, thwart environmental protection at the domestic level by placing excessive bounds on the regulatory activity of States. Such warnings, which many foreign investment practitioners tended to underestimate, became more pressing in the context of the negotiation of several mega-regional agreements, and particularly the Trans-Atlantic Trade and Investment

3 *See* Organisation for Economic Co-operation and Development (OECD), *Harnessing Freedom of Investment for Green Growth*, Freedom of Investment Roundtable, 14 April 2011, available at: www.oecd.org (visited on 2 September 2015) ; United Nations Environment Programme (UNEP), *Towards a Green Economy. Pathways to Sustainable Development and Poverty Eradication* (2011), available at : www.unep.org/greeneconomy (visited on 2 September 2015).

4 *See* e.g. Global Commission on the Economy and Climate, *Better Growth, Better Climate. The New Climate Economy Report* (2014), available at: http://2014.newclimateeconomy.report/ (visited on 2 September 2015).

5 *See* United Nations Commission on Trade and Development (UNCTAD), *World Investment Report. Towards a New Generation of Investment Policies* (2012), chapter IV (Investment Policy Framework for Sustainable Development). See also the report specifically on the IPFSD available at: http://unctad.org/en/PublicationsLibrary/diaepcb2012d5_en.pdf (visited on 2 September 2015).; International Institute for Sustainable Development (IISD), *IISD Draft Model International Agreement on Investment for Sustainable Development* (2005), available at : www.iisd.org (visited on 2 September 2015).

Partnership (TTIP), between the United States and the EU. This is the mixed context that must be kept in mind when assessing the role envisioned for foreign investment in the main outcome of sustainable development negotiations, namely the document entitled *Transforming our World: The 2030 Agenda for Sustainable Development* (the '2030 Agenda').[6] Let me briefly describe this instrument before focusing on the role of foreign investment.

In its current form (which will be discussed by the UN General Assembly in September 2015), the 2030 Agenda has four main components, namely a short preamble, followed by a 'Declaration', a set of 17 'Sustainable Development Goals' (SDGs) and a set of observations on implementation (both through means of implementation and a review system). The preamble states the core components of the 2030 Agenda, which are remarkably similar to those of the Rio Declaration on Environment and Development, namely an overall framework given by 'peace' and 'partnership' (cooperation), within which social development ('people'), environmental protection ('planet'), and economic growth and development ('prosperity') are to be pursued. The Declaration further spells out these core components. Importantly, in its section devoted to 'Our shared principles and commitments', the Declaration emphasises the role of international law[7] and of the principles of the Rio Declaration (referred to twice), particularly the *common but differentiated responsibilities* principle.[8] There would be a lot to say about this rather long Declaration but, for present purposes, I shall add only two points. First, the Declaration specifically highlights what has become the main use of international public finance in the environmental arena, namely 'to catalyse additional resource mobilization from other sources, public and private'.[9] Second, the Declaration provides the context to the main component of the 2030 Agenda, namely the SDGs. There are 17 SDGs overall, 16 of which are of a substantive nature whereas the latter, SDG 17, focuses on implementation. Each SDG is broken down into a number of targets, with a total number of 169 targets which are expected to be further clarified through specific indicators for measuring performance. Broadly speaking, SDGs have five main characteristics: (i) they are expressly presented as integrated and indivisible, thus no hierarchy must be derived from the order in which different issues are addressed; (ii) they are country-based, which means that, while

6 *See* United Nations, *Transforming our World: The 2030 Agenda for Sustainable Development*, available at: https://sustainabledevelopment.un.org/post2015/transformingourworld (visited on 2 September 2015).

7 *Ibid.*, Declaration, para 10.

8 *Ibid.*, Declaration, para 12.

9 *Ibid.*, Declaration, para 43.

recognising the importance of global, regional and sub-regional efforts, they place the essential responsibility at the national level; (iii) they concern all countries, not just developing countries (which introduces an important difference with the Millennium Development Goals or MDGs); (iv) they emphasise the different positions of countries and the ensuing need for differentiation; and (iv) they emerge from a truly inclusive and open process (which, again, introduces an important difference with the top-down approach followed to draw the MDGs). Finally, the 2030 Agenda specifically addresses the means of implementation, including finance, technology transfer, and performance review. The latter two are provided institutional solutions in the form of a Technology Facilitation Mechanism[10] and system of performance review featuring the High Level Political Forum created at the Rio 2012 Summit.[11] The financial component is particularly important to understand the role envisioned for private investment.

In this regard, one can generally identify three main aspects of this role. The first, as noted above, is the recognition of private finance leveraged by international public funds.[12] Most of the funds mobilised by the Global Environmental Facility where, indeed, the result of leveraging, and the World Bank's private sector engagement practice has also privileged this approach.[13] The second aspect is the reference to private sector investment in the 2030 Agenda document. In addition to the references in targets 17.3. ('mobiliz[ing] additional financial resources for developing countries from multiple sources') and 17.5 ('Adopt[ing] and implement[ing] investment promotion regimes for least developed countries'), three substantive targets relating to food security, energy and inequality among countries specifically refer to the promotion of 'investment'.[14] At the same time, perhaps as a result of the high-profile debate over investment arbitration and the regulatory chill, target 17.15 of the Agenda specifically highlights, as a 'systemic issue' under SDG 17, the need to '[r]espect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development'.[15]

---

10 *Ibid.*, Means of Implementation and the Global Partnership, para 70.

11 *Ibid.*, Follow up and Review, para 82-90.

12 *Ibid.*, Declaration, para 43.

13 *See* Viñuales, above n. 1, pp. 42-45, 50.

14 2030 Agenda, above n. 6, SDGs, targets 2.a, 7.a, and 10.b.

15 *See* also *ibid.*, Means of implementation and the Global Partnership, para 63, which after affirming the need to 'respect each country's policy space and leadership to implement policies for poverty eradication and sustainable development' adds 'while remaining consistent with relevant international rules and commitments'.

The third aspect is found in an extension of the 2030 Agenda covering a document adopted earlier in 2015, namely the *Addis Ababa Action Agenda* developed at the Third International Conference on Financing for Development.[16] The 2030 Agenda contains an express *renvoi* to the Addis Ababa Agenda, which is thereby considered to be 'an integral part of the 2030 Agenda for sustainable development'.[17] Among the many references to private investment made in the Addis Ababa Agenda, the most important one is the 'Action area' devoted to 'Domestic and international private business and finance'. Paragraph 35 opens this section as follows:

> 'Private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation. We acknowledge the diversity of the private sector, ranging from microenterprises to cooperatives to multinationals. We call upon all businesses to apply their creativity and innovation to solving sustainable development challenges. We invite them to engage as partners in the development process, to invest in areas critical to sustainable development and to shift to more sustainable consumption and production patterns. We welcome the significant growth in domestic private activity and international investment since Monterrey. Private international capital flows, particularly foreign direct investment, along with a stable international financial system, are vital complements to national development efforts.'

This paragraph is complemented by two others, which make a more direct reference to the legal dimension of foreign investment:

> 'We recognize the important contribution that direct investment, including foreign direct investment, can make to sustainable development, particularly when projects are aligned with national and regional sustainable development strategies […] We will encourage investment promotion and other relevant agencies to focus on project preparation. We will prioritize projects with the greatest potential for promoting full and productive employment and decent work for all, sustainable patterns of production and consumption, structural transformation and sustainable industrialization, productive diversification and agriculture. Internationally, we will support these efforts through financial and technical support and capacity-building and closer collaboration between home and host country agencies. We will consider

16 *Addis Ababa Action Agenda of the Third International Conference on Financing for Development* (Addis Ababa Action Agenda), UNGA Resolution 69/313, 27 July 2015, UN Doc A/RES/69/313, Annex.

17 2030 Agenda, above n. 6, Means of implementation and the Global Partnership, para 62.

> the use of insurance, investment guarantees, including through the Multilateral Investment Guarantee Agency, and new financial instruments to incentivize foreign direct investment to developing countries, particularly least developed countries, landlocked developing countries, small island developing States and countries in conflict and post-conflict situations […] We note with concern that many least developed countries continue to be largely sidelined by foreign direct investment that could help to diversify their economies, despite improvements in their investment climates. We resolve to adopt and implement investment promotion regimes for least developed countries. We will also offer financial and technical support for project preparation and contract negotiation, advisory support in investment-related dispute resolution, access to information on investment facilities and risk insurance and guarantees such as through the Multilateral Investment Guarantee Agency, as requested by the least developed countries.'[18]

This is a clear endorsement of the possible synergies between foreign investment and sustainable development, including environmental protection. It is perhaps the most significant recognition of such synergies made in a sustainable development instrument so far.

3. ENVIRONMENTAL CONSIDERATIONS IN FREE TRADE AGREEMENTS AND MEGA-REGIONALS

The increasing integration of private investment in sustainable development instruments is mirrored by the increasing reference to sustainable development and, more specifically, environmental considerations in international investment agreements. To assess this trend, which was already noticeable in the 2000s and even earlier, with the impulsion given by the NAFTA[19] and the Uruguay Round, one can refer to a number of studies developed under the aegis of the UNCTAD and the OECD.[20]

---

18 Addis Ababa Action Agenda, above n. 16, para 45-46.

19 North American Free Trade Agreement, 17 December 1992, 32 ILM 296.

I have discussed the increasing reference to environmental considerations in IIAs in some detail elsewhere.[21] The trend towards the inclusion of environmental clauses is very clear. Although a minority of all IIAs taken as a whole contain such clauses, an increasing part of those concluded in the last years does so. More specifically, an OECD report published in 2011 and covering 1623 IIAs (approximately half of all IIAs) finds that only 8.2% of IIAs analysed include express references to environmental concerns,[22] but since the mid 1990s 'the proportion of newly concluded IIAs that contain environmental language began to increase moderately, and, from about 2002 onwards, steeply […] reaching a peak in 2008, when 89% of newly concluded treaties contain[ed] reference to environmental concerns'.[23] Two other reports issued in 2014[24] confirm this trend and provide further details on (i) the contribution of Free Trade Agreement (FTA) practice as well as the negotiation of so-called 'mega-regional' agreements, and (ii) the main drivers of such increased integration of environmental concerns.

Regarding the first point, an UNCTAD Report analysing 18 IIAs (11 Bilateral Investment Treaties and 7 FTAs) that were concluded in 2013 shows that the majority of these treaties contain environmental references in the form of preambular language or GATT-like exceptions or, still, anti-race-to-the-bottom provisions. A minority (5 out of 18) also contain a reference to corporate and social responsibility (CSR) standards in the form of either a separate clause or preambular language. Importantly, a variety of clauses and mechanisms are also part of the on-going negotiation of mega-regional agreements. Among these, the above UNCTAD Report mentions, in addition to the familiar GATT-like exceptions, also CSR promotion clauses and regulatory cooperation mechanisms involving exchange of draft laws/regulations and trade/investment conformity evaluations. Another,

---

20 *See* OECD, *Environment and Regional Trade Agreements* (Paris: OECD, 2007) ('OECD 2007'); J. Bourgeois, K. Dawar and S. J. Evenett, *A Comparative Analysis of Selected Provisions in Free Trade Agreements* (2007), available at: http://www.kamaladawar.com (visited on 2 September 2015); UNCTAD 2012, above n. 5; UNCTAD, *World Investment Report 2014. Investing in the SDGs* (2014) ('UNCTAD 2014'), available at: www.unctad.org (visited on 2 September 2015); C. George, 'Environment and Regional Trade Agreements: Emerging Trends and Policy Drivers', *OECD Trade and Environment Working Papers, 2014/02* ('OECD 2014'), available at: http://dx.doi.org/10.1787/5jz0v4q45g6h-en (visited on 2 September 2015).

21 Viñuales, above n. 1, pp. 14-17.

22 Gordon, K. and J. Pohl, 'Environmental Concerns in International Investment Agreements: a survey' (2011) *OECD Working Papers on International Investment* No. 2011/1 ('OECD 2011'), p. 8.

23 *Ibid.*, p. 8.

24 OECD 2014 and UNCTAD 2014, both above 19.

more fine-grained study,[25] discusses the sustainable development provisions/chapters included in the generation of EU FTAs adopted since 2007, on the basis of the mandate given by the 2006 Global Europe Communication[26] and the 2006 Renewed Sustainable Development Strategy ('SDS').[27] These provisions/chapters, included in a number of EU economic partnership agreements such as those with CARIFORUM States, South Korea, Central America, Colombia and Peru, present several commonalities, essentially a reference to 'context and objectives' followed by provisions on the right to regulate, the role of multilateral environmental agreements (MEAs), the obligation not to lower environmental regulation to attract trade and investment, the promotion of green trade and investment, cooperation and implementation mechanisms, among others.[28]

Moving to the second point, a 2014 OECD Report devoted to environmental considerations in FTAs (hence not specifically to investment) sheds light on the reasons underpinning the integration of such considerations in treaty practice. One such reason is the 'commitments' made by several countries or trade blocks, in either domestic legislation or policy instruments, to integrate environmental considerations in their trade negotiations. I mentioned earlier the impulsion given in the EU context by the 2006 SDS and the Global Europe Communication. The 2014 OECD Report surveys other similar commitments in countries or trade areas such as Australia, Canada, Chile, the European Free Trade Association, Japan, New Zealand, Switzerland or the United States.[29] But underpinning these commitments are more fundamental policy objectives, which can be considered as the true drivers of environmental integration. The Report identifies four such objectives '(1) to contribute to the overarching goal of sustainable development; (2) to ensure a level playing field among Parties to the agreement; (3) to enhance co-operation in environmental matters of shared interest; and (4) pursuing an international environmental

25 Zvelc, R., 'Environmental integration in EU trade policy: the Generalised System of Preferences, trade Sustainability Impact Assessments and Free Trade Agreements', in E. Morgera (ed.), *The External Environmental Policy of the European Union EU and International Law Perspectives* (Cambridge University Press, 2012), pp. 174-203.

26 Commission, 'Communication – Global Europe: competing in the world: a contribution to the EU's Growth and Jobs Strategy', COM (2006) 567.

27 Council, 'Review of the EU Sustainable Development Strategy (EU SDS) - Renewed Strategy', 26 June 2006, p. 21 available at: http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2010917%202006%20INIT (visited on 3 September 2015).

28 Zvelc, above n. 26, pp. 195-200.

29 OECD 2014, above n. 19, pp. 14-19.

agenda.'[30] Interestingly, and perhaps unsurprisingly, the policy objective more frequently pursued is 'to ensure a level playing field among Parties to the agreement' or, in other words, to protect the environment for instrumental – competition – reasons. This is what arises from the answers provided by ten delegations (representing 31 countries) of the OECD Joint Working Programme on Trade and Environment to a questionnaire circulated by the authors of the Report.[31] The promotion of sustainable development follows competitiveness closely by a slight difference. The quantification of policy rationales underpinning certain provisions or their link to one of the aforementioned drivers is a delicate exercise that leaves room for different interpretations. This said, the 2014 OECD Report provides important evidence that the inclusion of environmental provisions in FTAs is not merely a matter of green ideology. Quite to the contrary, a major – perhaps the main – policy driver is economic liberalization.

Despite the increasing use of different provisions integrating environmental considerations, their actual operation in investment dispute settlement remains open. Indeed, aside from trade litigation concerning GATT[32] Article XX exceptions, which provide some guidance as to how similarly worded exceptions in FTA would operate, investment jurisprudence has not yet clarified the scope and meaning of environmental clauses. A potential exception to this statement is the 2000 partial award in *S.D. Myers v. Canada*,*S.D. Myers Inc. v. Canada*, NAFTA Arbitration (UNCITRAL Rules), Partial Award (13 November 2000), para 214-215 and 255-256. where the tribunal discussed the operation of Article 104 (and its Annex) of the NAFTA, without applying it *in casu*. Another case to look at is *Spence International Investments et al v. Costa Rica*, currently pending.[33] One contentious point in this case relates to the scope and operation of Annex 10-C(4)(b) of CAFTA-DR.[34] I will discuss this case later in this paper. For present

30 *Ibid.*, p. 14.

31 *Ibid.*, pp. 11-12.

32 General Agreement on Tariffs and Trade (1994), 1867 UNTS 187.

33 *Spence International Investments, LLC, Bob F. Spence, Joseph M. Holsten, Brenda K. Copher, Ronald E. Copher, Brette E. Berkowitz, Trevor B. Berkowitz, Aaron C. Berkowitz and Glen Gremillion v. Costa Rica*, ICSID Case No. UNCT/13/2, pending.

34 Dominican Republic—Central America—United States Free Trade Agreement (initially concluded by and between the United States, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, later joined the Dominican Republic), 5 August 2004, 43 ILM 514.

purposes, suffice it to conclude that the trend towards the increasing integration of environmental considerations in IIAs has intensified in recent years. As we shall see next, the analysis of investment jurisprudence points in a similar direction.

4. THE SURGE IN INVESTMENT CLAIMS WITH ENVIRONMENTAL COMPONENTS

The most visible confirmation of the difficult relationship between the laws governing foreign investment and environmental protection is the surge in foreign investment disputes with environmental components in the last four years. This phenomenon is difficult to capture because, on the one hand, it is unclear what cases must count as investment disputes with environmental components and, on the other hand, because part of the information needed to clarify the trend is confidential or otherwise unavailable. This section is based on a set of 114 cases with environmental components that I have compiled over the last few years, drawing upon a variety of sources. Following previous work, by 'investment disputes with environmental components' I understand disputes that arise from the operations of investors (i) in environmental markets (e.g. land-filling, waste treatment, garbage collection, pesticides/chemicals, energy efficiency, emissions-reduction, biodiversity compensation, etc.) and/or (ii) in other activities, where their impact on the environment or on certain minorities is part of the dispute (e.g. tourism, extractive industries, pesticides/chemicals, water extraction or distribution) and/or (iii) to disputes where the application of domestic or international environmental law is at stake.[35]

Using this understanding, Table 1 lists those investment disputes with environmental components in the 114-set that are either concluded (whether decided, settled or discontinued) or where an environmentally-relevant decision has been rendered:

35 Viñuales, above n. 1, p. 17.

Table 1: Investment disputes with environmental components – Decided/settled/discontinued

Environment-related disputes decided in 1972	**Environmental component(s)**
International Bank of Washington v. OPIC (1972) 11 I.L.M. 1216	Dispute concerning an alleged indirect expropriation as a result of forestry regulation
Environment-related disputes decided in 1992	**Environmental component(s)**
Southern Pacific Properties (Middle East) Limited (SPP) v. Arab Republic of Egypt, ICSID Case No. ARB/84/3, Award (20 May 1992)	Dispute relating to a touristic real estate development blocked by the listing of the pyramids site in the World Heritage List (WHC)
Environment-related disputes decided in 1995	**Environmental component(s)**
Saar Papier Vertriebs GmbH v. Republic of Poland, UNCITRAL Rules, Award (16 October 1995)	Dispute relating to the prohibition of imports of waste paper based on a domestic environmental law
Environment-related disputes decided in 1998	**Environmental component(s)**
Ethyl Corporation v. Government of Canada, NAFTA (UNCITRAL), Preliminary Award on Jurisdiction (24 June 1998)	Dispute concerning a Canadian environmental regulation banning trade in a gasoline additive
Environment-related disputes decided in 1999	**Environmental component(s)**
Robert Azinian, Kenneth Davitian and Ellen Baca v. United Mexican States, ICSID Case No ARB(AF)/97/2, Award (1 November 1999)	Dispute concerning the cancellation of a concession relating to waste collection and disposal
Environment-related disputes decided in 2000	**Environmental component(s)**
Compañía del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica, ICSID Case No. ARB/96/1, Award (17 February 2000)	Dispute concerning the expropriation of land to establish a natural preserve
Metalclad Corp. v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award (25 August 2000)	Dispute concerning the refusal of permit to build a landfill and the subsequent reclassification of the land as an ecological preserve
S.D. Myers Inc. v. Canada, NAFTA Arbitration (UNCITRAL Rules), Partial Award (13 November 2000)	Dispute concerning trade measures interfering with the investor's waste treatment activities
Emilio Agustín Maffezini v. Kingdom of Spain, ICSID Case No. ARB/97/7, Award (13 November 2000)	Dispute concerning a chemical plant the construction of which started before completion of an environmental impact assessment
Environment-related disputes decided in 2003	**Environmental component(s)**
Técnicas Medioambientales Tecmed S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003)	Dispute concerning the non-renewal of the operational permit of a waste treatment facility.
Environment-related disputes decided in 2004	**Environmental component(s)**
Waste Management Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004)	Dispute concerning the operation of a landfill
MTD Equity Sdn Bhd and MTD Chile SA v. Republic of Chile, ICSID Case No. ARB/01/7, Award (25 May 2004)	Dispute concerning the refusal of a permit based on local zoning regulations
Environment-related disputes decided in 2005	**Environmental component(s)**
Empresa Lucchetti S.A. and Lucchetti Peru S.A. v. Republic of Peru, ICSID Case No. ARB/03/4, Award (7 February 2005)	Dispute concerning the annulment of permits necessary for the operation of a food factory on the basis of environmental reasons
Methanex Corporation v. United States of America, NAFTA (UNCITRAL), Award (3 August 2005)	Dispute concerning the adoption of an environmental regulation indirectly banning the product of the investor

Environment-related disputes decided in 2007	**Environmental component(s)**
Bayview Irrigation District v. United Mexican States, ICSID Case No. ARB(AF)/05/1, Award (19 June 2007)	Dispute concerning water rights arising from a treaty between the US and Mexico
Parkerings-Compagniet AS v. Republic of Lithuania, ICSID Case No. ARB/05/8, Award (11 September 2007)	Dispute concerning the construction of a parking lot affecting a UNESCO protected site
Environment-related disputes decided in 2008	**Environmental component(s)**
Canadian Cattlemen for Fair Trade v. United States of America, NAFTA Arbitration (UNCITRAL Rules), Award on Jurisdiction (28 January 2008)	Dispute concerning certain bans and other restrictions on the imports of Canadian cattle under the US Animal Health Protection Act
Plama Consortium Ltd. v. Republic of Bulgaria, ICSID Case No. ARB/03/24, Award (27 August 2008)	Dispute concerning a change in the domestic environmental laws rendering the investor liable for environmental remediation
Environment-related disputes decided in 2009	**Environmental component(s)**
Glamis Gold Ltd. v. The United States of America, NAFTA Arbitration (UNCITRAL), Award (16 May 2009)	Dispute concerning delays and legislative/regulatory action, based on considerations of environmental and cultural protection, that thwarted the investor's mining operations
Environment-related disputes decided in 2010	**Environmental component(s)**
Georg Nepolsky v. The Czech Republic, UNCITRAL Arbitration, Award (February 2010)	Dispute concerning a water extraction concession
Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador, PCA Case No. 34877 (UNCITRAL Rules), Partial Award on the Merits (30 March 2010), Final Award (31 August 2011)	Dispute concerning the release of liability for environmental damage in an agreement between the investor and the host State
Suez, Sociedad General de Aguas de Barcelona S.A. and InterAguas Servicios Integrales del Agua S.A. v. The Argentine Republic, ICSID Case No. ARB/03/17, Decision on liability (31 July 2010)	Dispute concerning a water distribution concession with consequences for the right to water
Suez, Sociedad General de Aguas de Barcelona, S.A. and Vivendi Universal, S.A. v. The Argentine Republic, ICSID Case No. ARB/03/19, Decision on liability (31 July 2010)	Dispute concerning a water distribution concession with consequences for the right to water
Chemtura Corporation (formerly Crompton Corporation) v. Government of Canada, UNCITRAL, Award (2 August 2010)	Dispute concerning a phase-out of certain pesticides on health/environmental grounds
Piero Foresti, Laura de Carli and others v. Republic of South Africa, ICSID Case No. ARB(AF)/07/1, Award (4 August 2010)	Dispute concerning the effects of post-apartheid redistribution policies based on economic, social and cultural rights
Environment-related disputes decided in 2011	**Environmental component(s)**
Grand River Enterprises Six Nations, Ltd, et al v. United States of America, NAFTA Arbitration (UNCITRAL Rules), Award (12 January 2011)	Dispute concerning alleged special economic rights held by indigenous peoples
Vattenfall AB, Vattenfal Europe AG, Vattenfall Europe Generation AG v. Federal Republic of Germany, ICSID Case No. ARB/09/6 Award (11 March 2011)	Dispute concerning the delays and the refusal of operational and water permits for the operation of a coal-fired electricity generation plant
Commerce Group Corp and San Sebastian Gold Mines, Inc v Republic of El Salvador, Award, ICSID Case No ARB/09/17, Award (14 March 2011)	Dispute concerning the refusal of an environmental permit to conduct gold mining operations
Dow Agrosciences LLC v. Government of Canada, NAFTA Arbitration (UNCITRAL Rules)(settled on 25 May 2011)	Dispute concerning a phase-out of a pesticide on health/environmental grounds
Vito G. Gallo v. Government of Canada, NAFTA (UNCITRAL), Award (15 September 2011)	Dispute concerning the cancellation of permits to convert an abandoned mine into a landfill

Konsortium Oeconomicus v. Czech Republic, UNCITRAL Rules, Decision for Termination of the Proceedings (5 December 2011)	Dispute concerning financial guarantees given by the Czech Minstry of the Environment to project to build a waste incineration plant
Société Française d'Etudes et de Conseil (SOFRECO) v. Republic of Chad, EDF Rules, Award (2011)	Dispute arising from a drinking water project funded by the European Development Fund
Environment-related disputes decided in 2012	**Environmental component(s)**
Marion Unglaube v. Republic of Costa Rica, ICSID Case No. ARB/08/1, Award (16 May 2012)	Dispute concerning the creation of a natural preserve in foreign-owned lands
Reinhard Unglaube v. Republic of Costa Rica, ICSID Case No. ARB/09/20, Award (16 May 2012)	Dispute concerning the creation of a natural preserve in foreign-owned lands
Accession Eastern Europe Capital AB and Mezzanine Management Sweden AB v. Republic of Bulgaria, ICSID Case No. ARB/11/3, Procedural order of discontinuance (23 July 2012)	Dispute concerning the cancellation of waste-collection and street-cleaning contracts
Naftrac Limited v. National Environmental Investment Agency (Ukraine), PCA Arbitration (Optional Environmental Rules), Award (4 December 2012)	Dispute concerning a Kyoto joint implementation project
Environment-related disputes decided in 2013	**Environmental component(s)**
St Marys VCNA, LLC v. Government of Canada, NAFTA (UNCITRAL Rules), Consent Award (29 March 2013)	Dispute concerning the issuance of a water permit for a stone quarry project
Abengoa, S.A. y COFIDES, S.A. v. United Mexican States, ICSID Case No. ARB(AF)/09/2, Award (18 April 2013)	Dispute concerning the refusal of a construction permit of a waste treatment facility
Niko Resources (Bangladesh) Ltd. v. People's Republic of Bangladesh, Bangladesh Petroleum Exploration and Production Company Limited ('Bapex') and Bangladesh Oil Gas and Mineral Corporation ('Petrobangla'), ICSID Cases No. ARB/10/11 and ARB/10/18, Decision on Jurisdiction (19 August 2013)	Dispute relating to governmental action linked to the investor's environmental liability for two gas blow-outs
Michael McKenzie v. Vietnam, UNCITRAL Rules, Award (11 December 2013)	Dispute concerning a touristic real estate development affected by the granting of mining rights in a beach nearby
Environment-related disputes decided in 2013	**Environmental component(s)**
Renée Rose Levy and Gremcitel S.A. v. Republic of Peru, ICSID Case No. ARB/11/17, Award (9 January 2015)	Dispute arising in relation to a touristic real-estate development nearby a cultural protected site
Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador, PCA Case No 2009-23 (UNCITRAL Rules), First Partial Award on Track I (17 September 2013), Decision on Track 1B (12 March 2015).	Dispute concerning the treatment by Ecuadorian courts of an environmental liability claim for damage caused by Texaco during its oil extraction operations
William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton, and Bilcon of Delaware, Inc. v. Government of Canada, NAFTA (UNCITRAL), Award (17 March 2015)	Dispute concerning an allegedly flawed environmental assessment of a basalt quarry and marine terminal project
Gambrinus, Corp. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB/11/31, Award (15 June 2015)	Dispute arising from the nationalization of a group of companies producing fertilisers for food security reasons
Perenco Ecuador Ltd. v. The Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (Petroecuador), ICSID Case No. ARB/08/6, Decision on remaining issues of jurisdiction and on liability (12 September 2014); Interim Decision on the Environmental Counterclaim (11 August 2015)	Dispute relating to environmental damage arising from the investor's conduct in addressing oil spills

Table 1 provides a simplified overview of the disputes and the type of environmental components at stake. However, the yearly number of investment disputes with environmental components in the period under examination (2012-2015) shows no significant difference with some previous years (e.g. 2010 or 2011). To better visualise the trend, one must use a different metric, namely the number of disputes filed (rather than concluded) per year, so as to capture a large number of disputes that are still pending. Figure 1 describes the evolution in the number of investment disputes with environmental components filed per year for the entire 114-set (excluding an isolated case):

Figure 1: Investment disputes with environmental components filed per year (including pending)

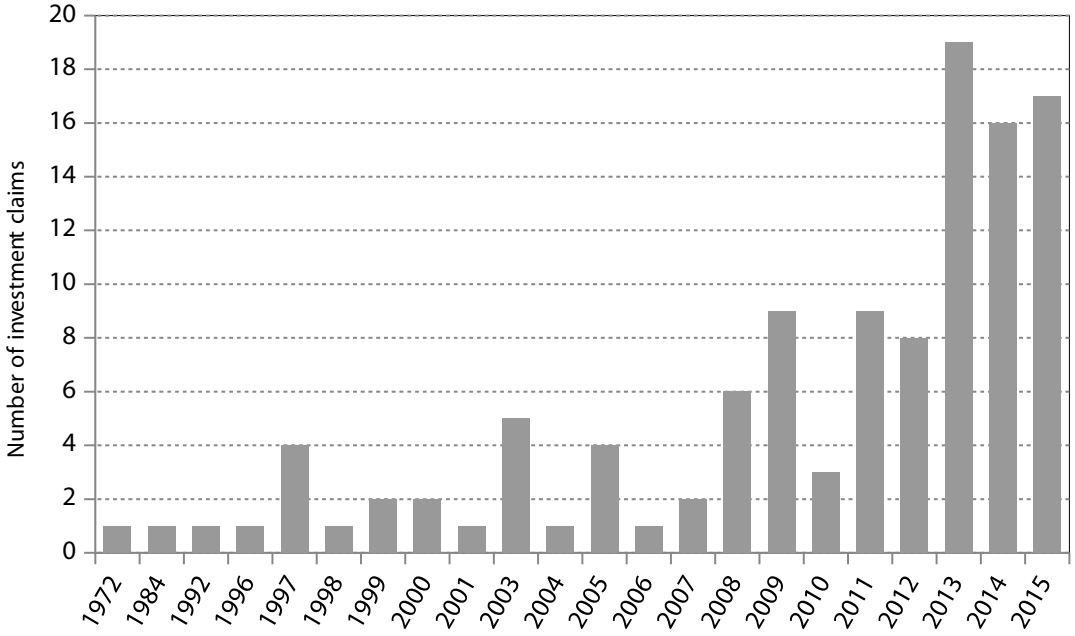
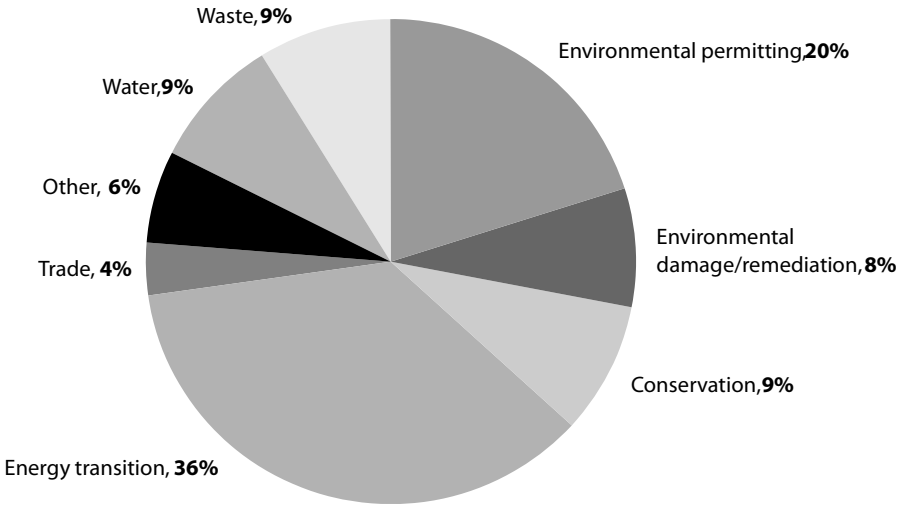


Figure 1 shows a steep increase in the number of investment disputes with environmental components filed in the period 2012-2015 (until August). A total of 60 such disputes have been filed since 2012, which amounts to more than half of the entire 114-set (the complete list of cases can be found in Annex to this paper).

A significant proportion of these new disputes arise from energy-transition policies, particularly the introduction and management of renewable energy policies in Spain and the Czech Republic. But there are also other types of disputes, mostly relating to environmental permitting, water, waste, and the impact of extractive industries. Figure 2

provides an overview of the main type of areas where such disputes have emerged. Of course, as with any attempt at aggregating complex factual configurations into a limited number of simple labels, there is some margin of appreciation as to the category under which a dispute may be classified. Analytical charts are selective and they seek to highlight some features of the topography at the risk of obscuring others. Figure 2 is no exception. In order to address to some extent the ambiguities in the classification process, the Annex to this paper contains both the main classification and some further information between brackets. A more fine-grained analysis would no doubt be required, but it is beyond the bounds of this paper:

Figure 2: Disputes by environmental dimension



The trend described by these figures is likely to further intensify in the future. Even assuming (against most evidence) that the 2030 Agenda for Sustainable Development would have little impact or that current climate change negotiations will not prompt significant shifts in private investment until the 2020s, when the agreement expected to arise from the December 2015 Paris Conference will become applicable, the necessary policy changes in the areas of water, food, energy and waste are so fundamental that it seems almost unthinkable that they will be smooth and painless for economic operators committed to the current production matrix. In turn, international investment law offers a potentially important tool for such economic operators to resist or recover the costs of environmental regulatory change, hence the potential for conflicts. This leads me to another question, namely what is the current state of the law in respect of such regulatory change.

5. CONNECTING THE DOTS: DERIVING LEGAL MEANING

5.1. Consolidation of the upgraded approach

To assess progress or regress in the way international law addresses the complex relationship between foreign investment and environmental protection it is useful, and perhaps unavoidable, to identify a benchmark or baseline that can serve as a comparator to assess how the relevant international norms and instruments had been applied until then. Such a baseline must summarise, in a condensed manner, a large body of jurisprudence relating to the relationship between foreign investment and environmental protection.

As I have written elsewhere,[36] for many years, the 'traditional approach' was to consider all conflicts as legitimacy conflicts. The environmental measures adopted by host States were thus seen as 'suspicious' (unilateral protectionism in disguise) and in all events 'subordinated' to international (investment) law (by virtue of the rule that international law prevails over domestic law). This view, which may have reflected the specific factual configurations of some early cases (e.g. *S.D. Myers v. Canada*,[37] *Metalclad v. Mexico*,[38] *CDSE v. Costa Rica*,[39] *Tecmed v. Mexico*[40]), has sometimes been extrapolated to the

36 Viñuales, above n. 2. The summary in this section relies on P.-M. Dupuy and J. E. Viñuales, *International Environmental Law* (Cambridge University Press, 2015), pp. 386-389.

37 *S.D. Myers v. Canada*, above n. 33. In *casu*, the export ban of hazardous waste that was challenged by the claimant had indeed been adopted to favour Canadian competitors.

38 *Metalclad Corp. v United Mexican States*, ICSID Case No. ARB(AF)/97/1, Award (25 August 2000) ('*Metalclad v. Mexico*'). The decree creating a natural preserve for the protection of cacti came very late in the dispute, calling into doubt its genuine environmental purpose.

39 *Compañía del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica*, ICSID Case No. ARB/96/1, Award (17 February 2000) ('*CDSE v. Costa Rica*'). The decree formally expropriating the land owned by investor did not refer to any of the potentially applicable environmental treaties.

40 *Técnicas Medioambientales Tecmed S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003) ('*Tecmed v Mexico*'). Despite genuine environmental concerns, the refusal to renew the operation permit of the investor's waste treatment facility followed the growing public opposition regarding

assessment of genuinely environmental and even internationally-induced measures, with the unfortunate result that environmental considerations remained legally subordinated to purely economic considerations. At the opposite side of the spectrum, a more 'progressive' approach would be possible, considering conflicts as 'normative conflicts'. Under this view, most domestic environmental measures would be seen as required or justified by environmental treaties, hence standing on an equal footing with other international norms (such as investment disciplines) and reflecting multilateral action (defeating the suspicion of unilateral protectionism). This view would, in fact, apply a different set of conflict rules to different types of conflicts ('legitimacy' and 'normative' conflicts) and, more generally, defuse the suspicion and mistrust that some tribunals still see, despite the rise of environmental awareness at the global level, as the starting-point in the analysis of environmental regulation.

In practice, a number of decisions suggested that investment tribunals have followed a middle way, a sort of 'upgraded' traditional approach under which conflicts are still seen as 'legitimacy conflicts' (with environmental measures considered as essentially domestic and not driven by or based on international environmental law) but where environmental considerations are given increasing room and importance through the interpretation of legal concepts such as the police powers doctrine, the definition of 'like circumstances', the level of reasonableness required from investors or the use of emergency and necessity clauses. Thus, in *Chemtura v. Canada*, the tribunal considered that a measure banning the production and commercialization of an environmentally-harmful pesticide was a valid exercise of the police powers of Canada and therefore rejected the investor's claim for compensation.[41] In *Parkerings v. Lithuania*, the tribunal rejected a claim for breach of the most-favoured-nation clause (a non-discrimination standard) on the grounds that the project of the claimant had an adverse impact on a UNESCO-protected site and, as a result, it was not in 'like circumstances' with the project of the other investor identified as the comparator.[42] In *Plama v. Bulgaria*, the tribunal considered that a change in the

---

the scheme.

41 *Methanex Corporation v. United States of America*, NAFTA (UNCITRAL), Award (3 August 2005), part IV, chap. D, para. 7; *Chemtura Corporation (formerly Crompton Corporation) v. Government of Canada*, UNCITRAL, Award (2 August 2010) ('*Chemtura v. Canada*'), para 266. The tribunal referred to its analysis of the claim under art 1105, which explained that the measure adopted by Canada was consistent with its obligations under multilateral environmental agreements.

42 *Parkerings-Compagniet AS v. Republic of Lithuania*, ICSID Case No. ARB/05/8, Award (11 September 2007)('*Parkerings v. Lithuania*'), para 392.

domestic environmental laws placing the financial burden of decontaminating a site on the investor was not in breach of the applicable investment agreement because the investor should have been aware, had it deployed all the due diligence expected from it, that such a regulatory change was being discussed in the Bulgarian parliament at the time it made the investment.[43] Finally, in some cases against Argentina, particularly in the one brought by *LG&E*, the tribunal considered that the violation of an investment treaty by Argentina was justified by the need to ensure the affordability of some basic public services during an economic and social crisis.[44]

This upgraded approach has been confirmed by recent developments. Importantly, the reasoning of investment tribunals integrates environmental considerations in an increasingly clear and open form, even when the relevant environmental measures are found to be in breach of investment law. The purpose of the following analysis is to draw a jurisprudential line connecting a number of recent developments, including the decisions in *Unglaube v. Costa Rica*,[45] *Clayton and Bilcon v. Canada*,[46] and *Perenco v. Ecuador*,[47] as well as certain aspects of two pending disputes, *Spence International Investments v. Costa*

43 *Plama Consortium Ltd. v. Republic of Bulgaria*, ICSID Case No. ARB/03/24, Award (27 August 2008), para 219-221.

44 *LG&E v. Argentina*, ICSID Case No. ARB/02/1, Decision on Liability (13 October 2006) ('*LG&E v. Argentina*'), para 234-237, 245. In two other cases, the arbitral tribunals considered that the provision of water and sanitation services was an 'essential interest' of States in the meaning of the necessity rule codified in the 2001 ILC Articles on State Responsibility. See *Suez, Sociedad General de Aguas de Barcelona S.A. and InterAguas Servicios Integrales del Agua S.A. v. The Argentine Republic*, ICSID Case No. ARB/03/17, Decision on liability (30 July 2010), para 238; *Suez, Sociedad General de Aguas de Barcelona, S.A. and Vivendi Universal, S.A. v. The Argentine Republic*, ICSID Case No. ARB/03/19, Decision on liability (30 July 2010), para 260.

45 *Marion Unglaube v. Republic of Costa Rica*, ICSID Case No. ARB/08/1 and *Reinhard Unglaube v. Republic of Costa Rica*, ICSID Case No. ARB/09/20, Award (16 May 2012) ('Unglaube v. Costa Rica').

46 *William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton, and Bilcon of Delaware, Inc. v. Government of Canada*, NAFTA (UNCITRAL), Award (17 March 2015), pending ('Clayton and Bilcon v. Canada').

47 *Perenco Ecuador Ltd. v. The Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (Petroecuador)*, ICSID Case No. ARB/08/6, Interim Decision on the Environmental Counterclaim (11 August 2015).

Rica[48] and *Mesa v. Canada.*[49] This line highlights the increasing mainstreaming or 'normality' of environment reasoning in investment jurisprudence and calls for a proper treatment of such considerations in transactional, pre-litigation and litigation practice.

5.2. Footprints of a mindset change

A mindset change can be conveyed in different manners. The 'footprints' that I will be tracking here take three main forms. The first is the reference to environmental considerations as a matter of course, as an obvious reference point, when discussing the operation of common legal concepts of foreign investment law. The second is the inclusion of *obiter dicta* highlighting the importance of environmental considerations. The third is the use of some techniques tailored to address the specificities of environmental disputes, again, without much *ad hoc* justification, so as to stress the normality of resorting to such techniques. Tracking footprints is a difficult exercise that requires both close scrutiny of the relevant materials and dispassionate judgment of what, in fairness, the potential findings genuinely convey. I hope the reader will find the following remarks sufficiently balanced.

The first decision, rendered in respect of two joined cases, appears to add little to the traditional approach as expressed in *CDSE v. Costa Rica.* On the surface, the configuration of facts in *Unglaube v. Costa Rica* is, indeed, quite similar to that in *CDSE v. Costa Rica.* Both cases concern the tension between environmental protection through the creation of natural preserves and real estate development for touristic purposes and, in both cases, the tribunals found that Costa Rica had expropriated property of the claimants in breach of the applicable investment treaties. Yet, on closer inspection, beyond the many differences in the specific facts relating to each dispute, there is a noticeable – and telling – difference in how the tribunal approaches environmental protection. One may recall the poor treatment given to such considerations in the *CDSE v. Costa Rica* case, confined in essence to two paragraphs and a footnote,[50] despite the emphasis that the respondent had placed on them in arguing its case.[51] By contrast, in *Unglaube v. Costa*

48 *Spence International Investments v. Costa Rica*, above n. 34, pending.

49 *Mesa Power Group, LLC v. Government of Canada*, UNCITRAL Rules, PCA Case No. 2012-17, pending.

50 *CDSE v. Costa Rica*, above n. 40, para 71-72 and footnote 32.

51 *See See* C. Brower, J. Wong, 'General Valuation Principles: The Case of Santa Elena', in T. Weiler (ed.) *International Investment Law and Arbitration: Leading Cases from the ICSID, NAFTA, Bilateral Treaties and Customary International Law* (2005) 764.

Rica, the tribunal gave environmental considerations specific practical impact. The difference of treatment is noticeable, despite the measured language used by the tribunal, in the assessment of compensation. In *CDSE v. Costa Rica*, the tribunal noted that 'the compensation to be paid should be based upon the fair market value of the Property calculated by reference to its "*highest and best use*"',[52] and then added that:

> 'While an expropriation or taking for environmental reasons may be classified as a taking for a public purpose, and thus may be legitimate, *the fact that the Property was taken for this reason does not affect either the nature or the measure of the compensation to be paid for the taking.* That is, the purpose of protecting the environment for which the Property was taken does not alter the legal character of the taking for which adequate compensation must be paid. The international source of the obligation to protect the environment makes no difference.'[53]

The tribunal in *Unglaube v. Costa Rica* also considered the fair market value of the property by reference to the 'highest and best use', as prompted by the claimants' expert. Yet, it characterised such standard in the light of environmental considerations:

> 'If, as Claimants' expert has suggested, it is appropriate, in determining fair market value, to identify the highest and best use of this particular property, it seems plain to the Tribunal that that can only be the highest and best use *subject to all pertinent legal, physical, and economic constraints. In this case, it obviously should refer not to high density usage – appropriate to a large city or factory area – but rather to a usage appropriate to the environmentally-sensitive surroundings – including residential home construction, with a density comparable to that permitted by the guidelines set forth in the 1992 Agreement.*'[54]

At this point in the decision, the factual elements of the case (particularly the acknowledged difficulty in deciding on an expropriation date) become controlling, but the fact remains that the understanding of the standard of compensation for expropriation is environmentally-sensitive. A parallel can be attempted here with the approach followed by the tribunal in *SPP v. Egypt*,[55] according to which the valuation of the property

---

52 *CDSE v. Costa Rica*, above n. 40, para 70 (italics added).

53 *Ibid.*, para 71 (italics added).

54 *Unglaube v. Costa Rica*, above 46, para 309 (italics added).

55 *Southern Pacific Properties (Middle East) Limited (SPP) v. Arab Republic of Egypt*, ICSID Case No. ARB/84/3, Award (20 May 1992), para 191.

expropriated had to take into account the fact that, once the Pyramids site had been listed in the World Heritage List, the activities projected by the claimant would have become illegal. In addition, the tribunal in *Unglaube v. Costa Rica* gave other indications of a mindset more attune to the current understanding of environmental protection needs, including references to the diligence expected from the investor,[56] to the deference that tribunals should recognise to States in their regulatory activities (beyond the context of expropriation)[57] and, significantly, to the relevance of environmental considerations in granting differential treatment to different entities.[58] As discussed next, deference to environmental regulatory action is being more explicitly addressed – however paradoxically – in the reasoning of other investment tribunals.

The decision in *Clayton and Bilcon v. Canada* has raised much controversy. The case concerned the denial of a permit to conduct mining activities in Nova Scotia following the recommendation of an environmental review panel. The majority of the tribunal concluded that the review panel had acted in breach of Canadian environmental law, which in turn amounted to a breach of the international minimum standard of treatment enshrined in Article 1105 of the NAFTA. This is problematic because Canadian courts were not seized to ascertain the breach of Canadian environmental law and it is generally

---

56 *Unglaube v. Costa Rica*, above 46, para 258 ('As intelligent and experienced investors, Claimants were, of course, required, as part of their due diligence, to become familiar with Costa Rican law and procedure. The Tribunal understands that the workings of the courts and administrative agencies of Costa Rica surely involve noticeable differences from those with which Claimants may be more familiar. But, because governments are accorded a considerable degree of deference regarding the regulation/administration of matters within their borders, such differences are not significant, insofar as this Tribunal is concerned, unless they involve or condone arbitrariness, discriminatory behavior, lack of due process or other characteristics that shock the conscience, are clearly "improper or discreditable" or which otherwise blatantly defy logic or elemental fairness.')

57 *Ibid.*, para 246-247 ('The tribunal makes the following reference to deference in the context of fair and equitable treatment: '[w]here, however, a valid public policy does exist, and especially where the action or decision taken relates to the State's responsibility 'for the protection of public health, safety, morals or welfare, as well as other functions related to taxation and police powers of states,"149 such measures are accorded a considerable measure of deference in recognition of the right of domestic authorities to regulate matters with their borders […] This deference, however, is not without limits. Even if such measures are taken for an important public purpose, governments are required to use due diligence in the protection of foreigners and will not be excused from liability if their action has been arbitrary or discriminatory')

58 *Ibid.*, para 264.

considered – including by the three NAFTA parties – that a mere breach of domestic law (and even more so a breach that has not been properly ascertained) is not, as such, sufficient to reach the demanding threshold for a breach of Article 1105 of the NAFTA.[59] However, for present purposes, the interest of *Clayton and Bilcon v. Canada* lies elsewhere, namely in the great efforts made by the majority to portray the decision as environmentally responsible and deferent. Among the different indications of such efforts, the decision includes a number of *obiter dicta* of particular significance. For example, in paragraph 531, after reaching the conclusion that the 'community core values' standard used by the environmental review panel was inadequate, the tribunal adds:

> 'To avoid any possible misunderstanding, the Tribunal has absolutely no doubt that the extent to which community members value various assessable components can be an entirely legitimate part of an environmental assessment. If some or all members of a community place a significant value on auditory quiet or a view of nature unmarred by development, or the ability to continue engaging in traditional economic or recreational activities, or community cohesion, these effects might be included in an assessment under the laws of Canada, and in fact in appropriate cases could lead to a finding of likely significant adverse effects after mitigation.'

59 *See Clayton and Bilcon v. Canada*, above n. 46, Dissenting Opinion of Professor Donald McRae, para 40. See also the submissions of Mexico and the United States as non-disputing parties in the context of Mesa v. Canada, above n. 50. In this case, the tribunal asked the parties and non-disputing parties to take position on the relevance of the award in Clayton and Bilcon v. Canada. In its submission (Second Submission of Mexico pursuant to Article 1128, 12 June 2015), Mexico stated the following: 'Mexico concurs with Canada's submission that, as noted in the dissenting opinion, the majority in Bilcon failed to engage in a proper analysis of customary international law when it apparently determined that failure to comply with applicable domestic law amounted to a failure to meet the minimum standard of treatment at international law. A tribunal only has the authority to decide whether the claimant has established, on the basis of state practice and opinio juris, that the conduct complained of amounts to a violation of the international law minimum standard. Making a determination that the international law minimum standard has been breached on the basis of purported non-compliance with domestic law amounts to a failure to apply the proper law of the arbitration' (para 11). Similarly, in its submission (Second Submission of the United States of America, 12 June 2015), the United States concluded that 'A failure to satisfy requirements of national law, moreover, does not necessarily violate international law. Rather, "something more than simple illegality or lack of authority under the domestic law of a State is necessary to render an act or measure inconsistent with the customary international law requirements of Article 1105(1)."' (para 22).

Later on, at the end of its analysis of the claim for breach of Article 1105, the tribunal made a lengthy *obiter dictum* which, given its limited integration with the rest of the text, strikes as a last-hour addition reacting to the dissenting opinion appended by one of the arbitrators. I will quote parts of this *obiter dictum* because it clearly conveys the impression of the majority that they need to justify their decision on more than just law:

> 'The Tribunal notes that this case involves environmental regulation, and that there is substantial concern among the public and state authorities that investor-state treaty provisions not be used as obstacles to the maintenance and implementation of high standards of protection of environmental integrity. The Tribunal therefore wishes to make several points very clear […]
>
> The concepts of promoting both economic development and environmental integrity are integrated into the [NAFTA] Preamble's endorsement of the principle of sustainable development.
>
> Environmental regulations, including assessments, will inevitably be of great relevance for many kinds of major investments in modern times. The mere fact that environmental regulation is involved does not make investor protection inapplicable. Were such an approach to be adopted—and States Parties could have chosen to do so—there would be a very major gap in the scope of the protection given to investors […]
>
> In arriving at its conclusion in this case, the Tribunal is not suggesting that there is the slightest issue with the level of protection for the environment provided in the laws of Canada and Nova Scotia. Each is free under NAFTA to adopt laws that are as demanding as they choose in exercising their sovereign authority. Canada and Nova Scotia have both adopted high standards.
>
> There can be absolutely no issue with that under Chapter Eleven of NAFTA. The Tribunal's concern is actually that the rigorous and comprehensive evaluation defined and prescribed by the laws of Canada was not in fact carried out […]

The Tribunal would further reiterate that under the laws of Canada and Nova Scotia, social impacts can be within the scope of a valid assessment. Furthermore, the value placed by members of a community on distinctive components of an ecosystem can

be taken into account in an assessment under the laws of Canada and Nova Scotia. The Tribunal has respectfully taken issue with only the distinct, unprecedented and unexpected approach taken by the JRP to "community core values" in this particular case.'[60]

Other *obiter dicta* are made at the end of the decision, this time explicitly responding to the dissenting opinion.[61] This opinion highlighted, among others, two broader implications of the award, namely a potential change in the manner in which environmental reviews are conducted, which would now be less concerned with facts and more with becoming legally bullet proof (a variant of the so-called 'regulatory chill'), and the overestimation of technical aspects (particularly mitigation measures) over public preferences on the use of the environment.[62] Both are important points. But the great pains taken by the majority to make the decision acceptable from a public policy perspective are no less remarkable. They clearly convey a changing mindset. Those acquainted with the inner workings of investment tribunals will perhaps gather the impression that the case turned on its specific facts, which the legal reasoning failed to capture entirely or persuasively. Be it as it may, this decision is arguably unprecedented in its attempt at stressing – in the abstract, of course – the importance of environmental protection in investment disputes.

To move from an abstract praise of environmental protection to the actual impact it may have in a foreign investment dispute, one must turn the attention to two recent developments. One concerns the operation of environmental clauses in investment agreements, whereas the other addresses the implications of environmental mismanagement by a foreign investor and, more specifically, its resulting liability.

The operation of an environmental clause is at stake in the pending case *Spence International Investments v. Costa Rica*, brought under the CAFTA-DR. The facts are broadly similar to those in *Unglaube v. Costa Rica* but, unlike the treaty applicable in the latter case, the CAFTA-DR contains an annex shielding environmental regulation from expropriation claims. Paragraph 4(b) in Annex 10-C of the CAFTA-DR (chapter 10) provides that:

> 'Except in rare circumstances, nondiscriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations.'

---

60 *Clayton and Bilcon v. Canada*, above n. 46, para 595-601.

61 *Ibid.*, para 735-738.

62 Dissenting opinion McRae, above n. 60, para 44-51.

In the pending proceedings, Costa Rica has referred to this annex as excluding the measures challenged from the scope of the expropriation clause in Article 10.7 (Expropriation and Compensation) of the CAFTA-DR.[63] With the possible exception of *S.D. Myers v. Canada*, this is the first time that the operation of a specifically environmental clause in an investment agreement will be explicitly addressed by an investment tribunal. Aside from the parties' positions, an indication of how such a clause would operate in practice is provided by the submissions of two non-disputing parties, namely El Salvador[64] and the United States.[65] According to El Salvador, paragraph 4(b) must be construed, by its very wording, as a presumption of conformity with Article 10.7, with the consequence that: 'a claimant would have the burden to rebut the strong presumption created in CAFTA-DR that a State's nondiscriminatory regulatory measures designed to protect the environment do not constitute an indirect expropriation'.[66] The United States sees this provision only as 'additional guidance in determining whether an indirect expropriation has occurred'.[67] Importantly, both non-disputing parties exclude the characterization of paragraph 4(b) as an 'exception', which would come into play to justify a previously ascertained breach and that would have to be established by the respondent, perhaps under a restrictive interpretation test. These are some of the significant differences that must be kept in mind in deciding whether a clause is to be treated as a carve-out or as an exception. Exceptions are narrow justifications that would provide little room for the expression of environmental concerns in foreign investment law, as suggested by the still restrictive practice of trade panels in connection with Article XX of the GATT.[68] Were the tribunal in *Spence International Investments v. Costa Rica* to follow the approach suggested by the non-disputing parties, this could have significant implications for the operation of other environmental clauses increasingly included in investment agreements.

---

63 *Spence International Investments v. Costa Rica*, above n. 34, Respondent's Memorial on Jurisdiction and Counter-Memorial on the Merits, para 187-189.

64 *Spence International Investments v. Costa Rica*, above n. 34, Non-Disputing Party Submission of the Republic of El Salvador, 17 April 2015 ('Submission - El Salvador').

65 *Spence International Investments v. Costa Rica*, above n. 34, Submission of the United States of America, 17 April 2015 ('Submission - US').

66 *Submission - El Salvador*, above n. 65, para 24.

67 *Submission – US*, above n. 66, para 31.

68 *See* S. Zleptnig, *Non-Economic Objectives in WTO Law* (The Hague: Kluwer, 2010).

The second development that deserves attention is the recent decision rendered in connection with an environmental counterclaim brought by the respondent in *Perenco v. Ecuador*.[69] The case concerns the environmental impact of oil extraction activities by Perenco in the Ecuadorian part of the Amazonian rainforest. The tribunal has found Perenco liable for damage caused to the environment under both strict liability and fault-based liability regimes laid out in Ecuadorian law and incorporated into the applicable contractual framework. For present purposes, the two paragraphs (34-35) with which the tribunal opens its analysis of the counter-claim are particularly noteworthy:

> 'Ecuador presented the environmental counterclaim on the basis that its experts had determined the existence of an "environmental catastrophe" in the two oil blocks situated in the country's Amazonian rainforest that had been worked by the consortium under Perenco's operatorship. Ecuador viewed this as an extremely serious matter deserving the most careful consideration by the Tribunal. *On this point, the Tribunal cannot but agree. Proper environmental stewardship has assumed great importance in today's world. The Tribunal agrees that if a legal relationship between an investor and the State permits the filing of a claim by the State for environmental damage caused by the investor's activities and such a claim is substantiated, the State is entitled to full reparation in accordance with the requirements of the applicable law.*
>
> *The Tribunal further recognises that a State has wide latitude under international law to prescribe and adjust its environmental laws, standards and policies in response to changing views and a deeper understanding of the risks posed by various activities, including those of extractive industries such as oilfields. All of this is beyond any serious dispute and the Tribunal enters into this phase of the proceeding mindful of the fundamental imperatives of the protection of the environment in Ecuador.*'[70]

A very detailed and balanced analysis of the factual record follows, where the tribunal, far from adopting a 'green' stance, simply proceeds to a dispassionate assessment of domestic environmental law and of several instances suggesting negligence from the investor. The tribunal avoids the apologetic tone that one finds in the majority's decision in *Clayton and Bilcon v. Canada*. Yet, it assertively applies environmental law and, in

69 *Perenco v. Ecuador*, above n. 48.

70 *Ibid.*, para 34-35 (italics added)

some cases, it resorts to specifically environmental techniques (e.g. reasoning the could be described as *in dubio pro natura*,[71] the appointment of a tribunal's expert[72] and the encouragement given to the parties to reach a settlement on the amount of damage[73]) without anything but the right amount of justification. As such, one may understand this decision as a step further in the change of mindset or, more precisely, a footprint of what could be called normalisation. Environmental considerations are not integrated into the reasoning as an extraneous factor or as a component of a progressive view; they are simply addressed as a requirement of normal operations in the extractive industries. No trace here of an attempt to look 'green'. The new mindset seems well grounded. Environmental considerations seem a normal, even obvious, component of the reasoning requiring no additional justification.

Of course, in investment arbitration, decisions are the product of ephemeral tribunals with little or no representative power of what the jurisprudence may be in the future. Thus, the decision in *Perenco v. Ecuador* is at best an additional footprint rather than a representative expression of the state of the case law on this matter. But the jurisprudential line described in the preceding paragraphs provides a clear indication that environmental considerations do play an important role in the practice of investment arbitration. If such considerations are not only admitted but mainstreamed in the reasoning of investment tribunals, they should *a fortiori* be fully taken into account in transactional, pre-litigation and litigation practice. We are not (yet) in a context where international environmental law and international investment law are on an equal footing, as in the 'progressive' approach identified earlier. Although practitioners may tend to refer more frequently to international environmental law,[74] the benefits of doing so are still perceived as indirect (through the interpretation of basic concepts of foreign investment law), as suggested by the upgraded model. This is, still, the current state of play as regards foreign investment and the environment in international law.

---

71 *Ibid.*, para 361, 470-473 and 495

72 *Ibid.*, para 569, 587-588, 611(8) and (17)

73 *Ibid.*, para 593 and 611(9).

74 *See Spence International Investments v. Costa Rica*, above n. 34, Respondent's Memorial on Jurisdiction and Counter-Memorial on the Merits, para 15 (referring to CITES and to environmental soft-law).

6. THE STATE OF PLAY IN A NUTSHELL

The discussion in this paper shows that the relationship between the laws governing foreign investment and environmental protection is increasingly dense and multifaceted. The main conclusions to be gathered from the foregoing remarks can be concisely stated.

First, efforts towards sustainable development have incorporated the private sector and, more and more, foreign investment, into the overall strategy to effect a transition from a brown to a green economy. The place devoted to private investment in both the 2030 Agenda for Sustainable Development and, particularly, the Addis Ababa Action Agenda suggests that foreign investment is a central component of sustainability efforts.

Second, international investment agreements concluded in the last years tend to include an array of environmental provisions. This is particularly the case of newly concluded FTAs which frequently include preambular language referring to the environment, GATT-like exceptions and anti-race-to-the-bottom provisions as well as, in some cases, references to MEAs or to CSR duties. Moreover, the current landscape could be transformed by the conclusion of Mega-regional agreements with ambitious sustainable development chapters and mechanisms, as such agreements would replace many existing bilateral relationships concerning investment protection.

Third, in the last four years there has been a surge in the number of investment disputes with environmental components. Out of a sample of 114 such disputes since the 1970s, more than half have been filed since 2012. These disputes concern a variety of sectors and activities, including renewable energy, waste treatment, environmental permitting and environmental damage caused by extractive industries, among others. They concern, in short, the move from the old to the new production matrix.

It is possible to infer from a number of recent decisions a jurisprudential line suggesting that environmental considerations are now normalised or 'mainstreamed' in the reasoning of investment tribunals. Even in cases where a breach of an investment treaty has been found, such as *Unglaube v. Costa Rica* or *Clayton and Bilcon v. Canada*, tribunals have devoted significant attention to environmental concerns, going as far as adding lengthy *obiter dicta* to justify their decision from an environmental perspective. In addition, in two pending cases, two important aspects of environmental integration are or have been addressed. In *Spence International Investments v. Costa Rica*, the tribunal will likely address the operation of a clause excluding environmental regulation from the scope of indirect expropriation (Annex 10-C(4)(b) of the CAFTA-DR), whereas in *Perenco v. Ecuador*, the tribunal has heard an environmental counterclaim brought against the investor and found the latter liable for environmental damage arising from its oil extraction activities.

In all these decisions as well as in previous ones, it is possible to identify a number of recurrent themes and issues, such as the diligence that can be expected from the investor, the deference that must be accorded to State authorities, the normality and legality of environmental regulatory change over time or environmental justifications for differential treatment. These questions resonate with concepts addressed in prior decisions, such as the police powers doctrine, environmental differentiation or investor's diligence. As such, they consolidate what I have referred to, in previous work, as an upgraded traditional approach to environmental integration in that they interpret basic concepts and standards of foreign investment law in an environmental light. A trivial yet important consequence of these trends for practitioners is the need to fully integrate environmental law in the transactional, pre-litigation and litigation practice relating to foreign investment. The corollary for academics is the need to properly train the current and future operators of the system.

ANNEX: INVESTMENT DISPUTES WITH ENVIRONMENTAL COMPONENTS

Case	Environmental component	Year of filing/ registration (for ICSID)
International Bank of Washington v. OPIC (1972) 11 I.L.M. 1216	Conservation (forestry)	1972
Southern Pacific Properties (Middle East) Limited (SPP) v. Arab Republic of Egypt, ICSID Case No. ARB/84/3, Award (20 May 1992)	Environmental permitting (real estate development)	1984
Saar Papier Vertriebs GmbH v. Republic of Poland, UNCITRAL Rules, Award (16 October 1995)	Trade (waste)	1992
Compañía del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica, ICSID Case No. ARB/96/1, Award (17 February 2000)	Conservation	1996
Ethyl Corporation v. Government of Canada, NAFTA (UNCITRAL), Preliminary Award on Jurisdiction (24 June 1998)	Trade (chemicals)	1997
Metalclad Corp. v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award (25 August 2000)	Waste (treatment facility)	1997
Robert Azinian, Kenneth Davitian and Ellen Baca v. United Mexican States, ICSID Case No ARB(AF)/97/2, Award (1 November 1999)	Waste (treatment facility)	1997
Emilio Agustín Maffezini v. Kingdom of Spain, ICSID Case No. ARB/97/7, Award (13 November 2000)	Environmental permitting	1997
S.D. Myers Inc. v. Canada, NAFTA Arbitration (UNCITRAL Rules), Partial Award (13 November 2000)	Trade (waste)	1998
Italian contractor v. Mauritanian State Entity, EDF Rules, Award (2000)	Water (irrigation)	1999
Methanex Corporation v. United States of America, NAFTA (UNCITRAL), Award (3 August 2005)	Environmental permitting (chemicals)	1999
Waste Management Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004)	Waste (landfil)	2000
Técnicas Medioambientales Tecmed S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003)	Waste (treatment facility)	2000
MTD Equity Sdn Bhd and MTD Chile SA v. Republic of Chile, ICSID Case No. ARB/01/7, Award (25 May 2004)	Environmental permitting (real estate development)	2001
Suez, Sociedad General de Aguas de Barcelona S.A. and InterAguas Servicios Integrales del Agua S.A. v. The Argentine Republic, ICSID Case No. ARB/03/17, Decision on liability (31 July 2010)	Water (distribution/right to)	2003
Suez, Sociedad General de Aguas de Barcelona, S.A. and Vivendi Universal, S.A. v. The Argentine Republic, ICSID Case No. ARB/03/19, Decision on liability (31 July 2010)	Water (distribution/right to)	2003
Plama Consortium Ltd. v. Republic of Bulgaria, ICSID Case No. ARB/03/24, Award (27 August 2008)	Environmental damage/remediation	2003

Case	Environmental component	Year of filing/ registration (for ICSID)
Empresa Lucchetti S.A. and Lucchetti Peru S.A. v. Republic of Peru, ICSID Case No. ARB/03/4, Award (7 February 2005)	Conservation	2003
Glamis Gold Ltd. v. The United States of America, NAFTA Arbitration (UNCITRAL), Award (16 May 2009)	Environmental permitting (extractives)/indigenous peoples	2003
Grand River Enterprises Six Nations, Ltd, et al v. United States of America, NAFTA Arbitration (UNCITRAL Rules), Award (12 January 2011)	Other (indigenous peoples)	2004
Chemtura Corporation (formerly Crompton Corporation) v. Government of Canada, UNCITRAL, Award (2 August 2010)	Environmental permitting (chemicals)	2005
Parkerings-Compagniet AS v. Republic of Lithuania, ICSID Case No. ARB/05/8, Award (11 September 2007)	Conservation	2005
Bayview Irrigation District v. United Mexican States, ICSID Case No. ARB(AF)/05/1, Award (19 June 2007)	Water (rights)	2005
Canadian Cattlemen for Fair Trade v. United States of America, NAFTA Arbitration (UNCITRAL Rules), Award on Jurisdiction (28 January 2008)	Trade (animal health)	2005
Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador, PCA Case No. 34877 (UNCITRAL Rules), Partial Award on the Merits (30 March 2010), Final Award (31 August 2011)	Environmental damages/remediation (extractives)	2006
Vito G. Gallo v. Government of Canada, NAFTA (UNCITRAL), Award (15 September 2011)	Waste (landfil)	2007
Piero Foresti, Laura de Carli and others v. Republic of South Africa, ICSID Case No. ARB(AF)/07/1, Award (4 August 2010)	Other (ESCR)	2007
William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton, and Bilcon of Delaware, Inc. v. Government of Canada, NAFTA (UNCITRAL)	Environmental permitting (extractives)	2008
Marion Unglaube v. Republic of Costa Rica, ICSID Case No. ARB/08/1	Conservation	2008
Reinhard Unglaube v. Republic of Costa Rica, ICSID Case No. ARB/09/20	Conservation	2008
Georg Nepolsky v. The Czech Republic, UNCITRAL Arbitration, Award (February 2010)	Water (extraction concession)	2008
Perenco Ecuador Ltd. v. The Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (Petroecuador), ICSID Case No. ARB/08/6, Decision on remaining issues of jurisdiction and on liability (12 September 2014); Interim Decision on the Environmental Counterclaim (11 August 2015)	Environmental damages/remediation (counterclaim)	2008
Burlington Resources Inc. and others v. Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (PetroEcuador), ICSID Case No. ARB/08/5	Environmental damages/remediation (counterclaim)	2008
Peter A. Allard (Canada) v. The Government of Barbados, PCA Case No. 2012-06	Conservation	2009
Dow Agrosciences LLC v. Government of Canada, NAFTA Arbitration (UNCITRAL Rules)(settled on 25 May 2011)	Environmental permitting (chemicals)	2009
Société Française d'Etudes et de Conseil (SOFRECO) v. Republic of Chad, EDF Rules, Award (2011)	Water (drinking water provision)	2009
Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador, PCA Case No 2009-23 (UNCITRAL Rules), First Partial Award on Track I (17 September 2013), Decision on Track 1B (12 March 2015).	Environmental damages/remediation (extractives)	2009
Pac Rim Cayman LLC v. Republic of El Salvador, ICSID Case No. ARB/09/12	Environmental permitting (extractives)	2009

Case	Environmental component	Year of filing/ registration (for ICSID)
Commerce Group Corp and San Sebastian Gold Mines, Inc v Republic of El Salvador, Award, ICSID Case No ARB/09/17, Award (14 March 2011)	Environmental permitting (extractives)	2009
Vattenfall AB, Vattenfal Europe AG, Vattenfall Europe Generation AG v. Federal Republic of Germany, ICSID Case No. ARB/09/6 Award (11 March 2011)	Energy transition (water/CCS)	2009
Abengoa, S.A. y COFIDES, S.A. v. United Mexican States, ICSID Case No. ARB(AF)/09/2, Award (18 April 2013)	Waste (treatment facility)	2009
Naftrac Limited v. National Environmental Investment Agency (Ukraine), PCA Arbitration (Optional Environmental Rules)	Energy transition (Kyoto Protocol)	2009
Niko Resources (Bangladesh) Ltd. v. People's Republic of Bangladesh, Bangladesh Petroleum Exploration and Production Company Limited ('Bapex') and Bangladesh Oil Gas and Mineral Corporation ('Petrobangla'), ICSID Cases No. ARB/10/11 and ARB/10/18, Decision on Jurisdiction (19 August 2013)	Environmental damage (extractives)	2010
Konsortium Oeconomicus v. Czech Republic, UNCITRAL Rules, Decision for Termination of the Proceedings (5 December 2011)	Waste (treatment facility)	2010
McKenzie v. Vietnam, UNCITRAL Rules, Award (11 December 2013)	Environmental permitting (real estate development)	2010
Accession Eastern Europe Capital AB and Mezzanine Management Sweden AB v. Republic of Bulgaria, ICSID Case No. ARB/11/3	Waste (treatment facility)	2011
St Marys VCNA, LLC v. Canada, NAFTA (UNCITRAL Rules), Consent Award (29 March 2013)	Environmental permitting (extractives)	2011
Mesa Power Group, LLC v. Government of Canada, UNCITRAL Rules, PCA Case No. 2012-17	Energy transition	2011
Adel A Hamadi Al Tamimi v. Sultanate of Oman, ICSID Case No. ARB/11/33	Environmental permitting (extractives)	2011
Renée Rose Levy and Gremcitel S.A. v. Republic of Peru, ICSID Case No. ARB/11/17, Award (9 January 2015)	Conservation (cultural)	2011
The Renco Group, Inc. v. The Republic of Peru, ICSID Case No. UNCT/13/1	Environmental damage/remediation	2011
OMV Petrom SA v. Romania, ICC Case (status unknown)	Environmental damage/remediation	2011
AES Solar and others v. Spain, UNCITRAL Rules	Energy transition	2011
Gambrinus, Corp. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB/11/31, Award (15 June 2015)	Other	2011
Gelsenwasser AG v. People's Democratic Republic of Algeria, ICSID Case No. ARB/12/32	Water (distribution)	2012
Novera AD, Novera Properties B.V. and Novera Properties N.V. v. Republic of Bulgaria, ICSID Case No. ARB/12/16	Waste (treatment facility)	2012
Mercer International Inc. v. Government of Canada, ICSID Case No. ARB(AF)/12/3	Energy transition (hydro)	2012
Windstream Energy LLC v. Government of Canada, UNCITRAL Rules	Energy transition	2012
Veolia Propreté v. Arab Republic of Egypt, ICSID Case No. ARB/12/15	Waste (treatment facility)	2012
Vattenfall AB and others v. Federal Republic of Germany, ICSID Case No. ARB/12/12	Energy transition (nuclear energy phase-out)	2012

Case	Environmental component	Year of filing/ registration (for ICSID)
Churchill Mining PLC and Planet Mining Pty Ltd v. Republic of Indonesia, ICSID Case No. ARB/12/14 and 12/40.	Environmental permitting (extractives)	2012
Charanne and Construction Investments v. Spain, SCC Rules	Energy transition	2012
South American Silver Limited v. Bolivia, UNCITRAL, PCA Case No. 2013-15	Other (indigenous peoples)	2013
EVN AG v. Republic of Bulgaria, ICSID Case No. ARB/13/17	Energy transition	2013
Lone Pine Resources Inc. v. The Government of Canada, ICSID Case No. UNCT/15/2	Environmental permitting (extractives)	2013
Spence International Investments, LLC, Bob F. Spence, Joseph M. Holsten, Brenda K. Copher, Ronald E. Copher, Brette E. Berkowitz, Trevor B. Berkowitz, Aaron C. Berkowitz and Glen Gremillion v. Costa Rica, ICSID Case No. UNCT/13/2	Conservation	2013
Lieven J. van Riet, Chantal C. van Riet and Christopher van Riet v. Republic of Croatia, ICSID Case No. ARB/13/12	Environmental permitting (real estate development)	2013
Natland Investment Group N.V. and others v. The Czech Republic, UNCITRAL Rules	Energy transition	2013
Antaris Solar GmbH and others v. Czech Repulic, UNCITRAL Rules	Energy transition	2013
Voltaic Network GmbH v. The Czech Republic, UNCITRAL Rules	Energy transition	2013
I.C.W. Europe Investments Limited v. The Czech Republic, UNCITRAL Rules	Energy transition	2013
Photovoltaik Knopf Betriebs-GmbH v. The Czech Republic, UNCITRAL Rules	Energy transition	2013
WA Investments-Europa Nova Limited v. The Czech Republic, UNCITRAL Rules	Energy transition	2013
Mr Jürgen Wirtgen, Mr Stefan Wirtgen, and JSW Solar (zwei) GmbH & Co.KG v. Czech Republic, UNCITRAL Rules	Energy transition	2013
Mattioli Joint Venture v. The Ministry of Water and Energy representing the Federal Democratic Republic of Ethiopia,	Water (distribution)	2013
Transglobal Green Energy, LLC and Transglobal Green Panama, S.A. v. Republic of Panama, ICSID Case No. ARB/13/28	Energy transition (hydro)	2013
PNG Sustainable Development Program Ltd. v. Independent State of Papua New Guinea, ICSID Case No. ARB/13/33	Environmental permitting (extractives)	2013
RREEF Infrastructure (G.P.) Limited and RREEF Pan-European Infrastructure Two Lux S.à r.l. v. Kingdom of Spain, ICSID Case No. ARB/13/30	Energy transition	2013
Antin Infrastructure Services Luxembourg S.à.r.l. and Antin Energia Termosolar B.V. v. Kingdom of Spain, ICSID Case No. ARB/13/31	Energy transition	2013
Eiser Infrastructure Limited and Energia Solar Luxembourg S.a.r.l. v. Spain, ICSID Case No. ARB/13/36	Energy transition	2013
Isolux Infrastructure Netherlands B.V. v. Spain, SCC Rules	Energy transition	2013
JML Heirs LLC and J.M. Longyear LLC v. Canada, UNCITRAL Rules	Other (environmental taxation)	2014
Infinito Gold Ltd. v. Costa Rica, ICSID Case No. ARB/14/5	Environmental permitting (extractives)	2014
Corona Materials LLC v. Dominican Republic, ICSID Case No. ARB(AF)/14/3	Environmental permitting (extractives)	2014

Case	Environmental component	Year of filing/ registration (for ICSID)
Michael, Lisa and Rachel Ballantine v. Dominican Republic,	Environmental permitting (real estate development)	2014
United Utilities (Tallinn) B.V. and Aktsiaselts Tallinna Vesi v. Republic of Estonia, ICSID Case No. ARB/14/24	Water (tariffs)	2014
Blusun S.A., Jean-Pierre Lecorcier and Michael Stein v. Italian Republic, ICSID Case No. ARB/14/3	Energy transition	2014
Bear Creek Mining Corporation v. Republic of Peru, ICSID Case No. ARB/14/2	Environmental permitting (extractives/water - lake titicaca)	2014
Gabriel Resources Ltd. and Gabriel Resources (Jersey) v. Romania, ICSID Case No. ARB/15/31	Environmental permitting (extractives)	2014
Alpiq AG v. Romania, ICSID Case No. ARB/14/28	Energy transition (hydro)	2014
VICAT v. Republic of Senegal, ICSID Case No. ARB/14/19	Environmental permitting	2014
Zelena N.V. and Energo-Zelena d.o.o Inđija v. Republic of Serbia, ICSID Case No. ARB/14/27	Other (animal farm)	2014
RWE Innogy GmbH and RWE Innogy Aersa S.A.U. v. Spain, ICSID Case No. ABR/14/34	Energy transition	2014
InfraRed Environmental Infrastructure GP Limited and others v. Kingdom of Spain, ICSID Case No. ARB/14/12	Energy transition	2014
Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain, ICSID Case No. ARB/14/1	Energy transition	2014
NextEra Energy Global Holdings B.V. and NextEra Energy Spain Holdings B.V. v. Kingdom of Spain, ICSID Case No. ARB/14/11	Energy transition	2014
Regina Wen Li Ng v Thailand	Environmental damages/remediation (extractives)	2014
Hydro S.r.l. and others v. Republic of Albania, ICSID Case No. ARB/15/28	Energy transition (hydro)	2015
ENERGO-PRO a.s. v. Republic of Bulgaria, ICSID Case No. ARB/15/19	Energy transition (hydro)	2015
Degremont S.A.S. v. Mexico	Water (distribution/quality)	2015
Oded Besserglik v. Republic of Mozambique, ICSID Case No. ARB(AF)/14/2	Other (fisheries)	2015
Álvarez y Marín Corporación S.A. and others v. Republic of Panama, ICSID Case No. ARB/15/14	Conservation	2015
9REN Holding S.a.r.l v. Kingdom of Spain, ICSID Case No. ARB/15/15	Energy transition	2015
BayWa r.e. Renewable Energy GmbH and BayWa r.e. Asset Holding GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/16	Energy transition	2015
Cube Infrastructure Fund SICAV and others v. Kingdom of Spain, ICSID Case No. ARB/15/20	Energy transition	2015
Mathias Kruck and others v. Kingdom of Spain, ICSID Case No. ARB/15/23	Energy transition	2015
STEAG GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/4	Energy transition	2015
SolEs Badajoz GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/38	Energy transition	2015

Case	Environmental component	Year of filing/ registration (for ICSID)
OperaFund Eco-Invest SICAV PLC and Schwab Holding AG v. Kingdom of Spain, ICSID Case No. ARB/15/36	Energy transition	2015
E.ON SE, E.ON Finanzanlagen GmbH and E.ON Iberia Holding GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/35	Energy transition	2015
Cavalum SGPS, S.A. v. Kingdom of Spain, ICSID Case No. ARB/15/34	Energy transition	2015
KS Invest GmbH and TLS Invest GmbH v. Kingdom of Spain, ICSID Case No. ARB/15/25	Energy transition	2015
JGC Corporation v. Kingdom of Spain, ICSID Case No. ARB/15/27	Energy transition	2015
Stadtwerke München GmbH, RWE Innogy GmbH et al. v. Spain, ICSID Case No. ABR/15/1	Energy transition	2015