

SPECIAL ISSUE ON ENERGY TRANSITION

Environmental Clauses in Investment Arbitration: Deep Roots, Green Shoots and Dead Wood

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Abstract—An assumed conflict between international investment law and environmental protection has driven many States to negotiate investment treaty clauses that reaffirm their policy space. But what on earth is policy space? Are we sure that environmental and investment protection are conflicted? Now that environmental clauses have been interpreted by tribunals, which functions, if any, are they serving in investment arbitration? In addressing such questions, this article defends an integrated hierarchy of environmental over investment protection, affirmed by the International Court of Justice and wider practice, whereby a State’s presumptive right to regulate for environmental protection is inherently limited by a test of manifest disproportionality. Against that normative baseline, we are better equipped to assess whether environmental clauses have affirmed or diverged from a State’s rights and obligations under general international law. The article introduces a typology of 12 environmental clauses in investment treaties, examined in light of arbitral practice and organised according to three stages of analysis: jurisdiction (legality, exclusion, exemption, denial of benefits); breach (conflict, affirmation, clarification, implementation, non-regression); and exception (justification, reservation, investor obligation). Ultimately, this article identifies which clauses reflect general international law (deep roots), may enhance environmental protection (green shoots) or make negligible contribution (dead wood).

I. INTRODUCTION: SEEING THE WOOD AND THE TREES

The relationship between international investment law and environmental protection has long been narrated as one of normative conflict, said to arise from incompatible obligations under special regimes.² Tribunals in treaty-based investment arbitration have thus been encouraged by commentators to apply traditional rules for resolving

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² International Law Commission (ILC), ‘Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law—Report of the Study Group of the International Law Commission’, UN Doc A/CN.4/L.682 (2006) para 8. See the discussion of conflict clauses in [Section III.C](#).

such conflicts or interpreting them away,³ foremost the principle of systemic integration.⁴ For critics, however, the arbitral terrain is tilted against the environment, given the asymmetry of investor-State claims and the biases of bilateral investment treaties (BITs): natural resources are protected as income-generating assets to be exploited by private operators, while the host State is hindered from regulating the negative externalities of such exploitation—whether to protect ecosystems or communities—unless it pays burdensome awards of compensation.⁵ This ‘conflict narrative’—in both its normative and critical registers—emerged amid the first wave of cases under the North American Free Trade Agreement (NAFTA),⁶ some of which failed to take seriously the public concerns over environmental degradation.⁷ In truth, the record is mixed, both then and now.⁸ Early on, other NAFTA tribunals paid close attention to obligations under multilateral environmental agreements (MEAs).⁹ Still today, we find tribunals paying lip service to environmental protection without fully exploring the available defence arguments.¹⁰ Yet others have found neither jurisdiction nor breach on traditional grounds in cases concerning the termination of fossil energy infrastructure, without needing to integrate relevant rules of international environmental law.¹¹ Amid the energy transition, however, the assumed conflict

³ Jorge E Viñuales, *Foreign Investment and the Environment in International Law* (CUP 2012) ch 6 (considering the utility of conflict rules—*lex posterior*, *lex specialis*, *lex superior*—and certain interpretive techniques).

⁴ Vienna Convention on the Law of Treaties (opened for signature 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 (‘VCLT’) art 31(3)(c). In the past year alone, there has been a mass of scholarship on the systemic integration of environmental law in investment arbitration, mainly with a view to the climate crisis: Helionor de Anzizu and Nikki Reisch, ‘Investor-State Disputes, the Climate Emergency, and the Duty to Regulate Fossil Fuels: A Human Rights Perspective’ in Anja Ipp and Annette Magnusson (eds), *Investment Arbitration and Climate Change* (Wolters Kluwer 2024) 179; Xenia Astapenka, ‘The International Investment Regime and Climate Change Goals: Clash of Existing Systems and Available Balancing Tools’ (2023) 26 ZEuS 311; Monica Feria-Tinta, ‘Public Interest in Investment Arbitration: The Rapid Ascent of Human Rights, Labour Law and Environmental Law’ in Vesselin Popovski and Ankit Malhotra (eds), *Reimagining the International Legal Order* (Routledge 2024) ch 20; Giovanna E Gismondi, *International Environmental Law and International Human Rights Law in Investment Treaty Arbitration: The Contribution of Host States’ Argumentation in Re-Shaping International Investment Law* (Wolters Kluwer 2023) ch 4; Oliver Hailes, ‘The Customary Duty to Prevent Unabated Fossil Fuel Production: A Tipping Point for Energy Investment Arbitration?’ (2023) 1 Transnatl Disp Mgmt <www.transnational-dispute-management.com/article.asp?key=2984> accessed 1 February 2025; Camille Martini, ‘From Fact to Applicable Law: What Role for the International Climate Change Regime in Investor-State Arbitration?’ (2024) 61 CYIL 1; Aniruddha Rajput, ‘Climate Justice and the Greening of Investment’ (2021) NYBIL 161; Carlo de Stefano, ‘Litigating Climate Change Mitigation and Adaptation in Investment Dispute Resolution’ (2023) 3 Athena 187. See generally Campbell McLachlan, *The Principle of Systemic Integration in International Law* (OUP 2024) para 9.110 (concluding that systemic integration, as ‘a means of finding coherence between the multiple obligations of States’, has ‘taken on a special importance in light of the existential threats that humanity currently faces’, foremost climate change).

⁵ This narrative is often linked to reform proposals in service of environmental protection: Kate Miles, *The Origins of International Investment Law: Empire, Environment, and the Safeguarding of Capital* (CUP 2013) ch 6.

⁶ North American Free Trade Agreement (signed 17 December 1992, entered into force 1 January 1994, terminated 1 July 2020) 32 ILM 289, 605 (‘NAFTA’). NAFTA was replaced by the Agreement between the United States of America, Mexico, and Canada (signed 30 November 2018, entered into force 1 July 2020) (‘USMCA’), which has little relevance in this study due to its limited scope for investor-State arbitration: annexes 14-C and 14-D. But see n 115.

⁷ *Metalclad Corporation v United Mexican States*, ICSID Case No ARB(AF)/97/1, Award (30 August 2000) paras 74–112; *Técnicas Medioambientales Tecmed, SA v United Mexican States*, ICSID Case No ARB(AF)/00/2, Award (29 May 2003) paras 119–51. On these cases, see Section II.B. See also *Compañía del Desarrollo de Santa Elena SA v Republic of Costa Rica*, ICSID Case No ARB/96/1, Award (17 February 2000) para 71 fn 32, wherein a distinguished tribunal dismissed ‘detailed evidence’ on the respondent’s ‘international legal obligation to preserve the unique ecological site’ in a single footnote.

⁸ Daniel Behn and Malcolm Langford, ‘Trumping the Environment? An Empirical Perspective on the Legitimacy of Investment Treaty Arbitration’ (2017) 18 JWIT 14.

⁹ *SD Myers, Inc v Canada*, UNCITRAL, Partial Award (13 November 2000) paras 205–11, 252–68; *Chemtura Corporation v Canada*, UNCITRAL, Award (2 August 2010) paras 133–43, 254.

¹⁰ *Rockhopper Exploration Plc, Rockhopper Italia SpA and Rockhopper Mediterranean Ltd v Italian Republic*, ICSID Case No ARB/17/14, Award (23 August 2022) paras 10, 195–98. See Section II.D; Rhys Carvosso, ‘The Precarity of the Police Powers Doctrine in Investment Arbitration: *Rockhopper v Italy*’ (2024) 15 JIDS 172.

¹¹ *Westmoreland Mining Holdings, LLC v Canada*, ICSID Case No UNCT/20/3, Final Award (31 January 2022) paras 192–237; *Lone Pine Resources Inc v Canada*, ICSID Case No UNCT/15/2, Final Award (21 November 2022) paras 490–528, 586–633; *TC Energy Corporation and TransCanada Pipelines Limited v United States of America*, ICSID Case No ARB/21/63, Award (12 July 2024) paras 125–210.

between environmental and investment protection is even less clear-cut.¹² Recently, a tribunal lacked jurisdiction over the cancellation of an emissions trading scheme, but observed that the impugned measures ‘discourage the participation of private actors in positive actions towards climate change’.¹³ Meanwhile, a long wave of renewable energy disputes continues to drain government coffers, generating uncertainty among investors, States and publics as to the limits of lawful regulation in ‘an era where radical reforms in the energy sector are not only desirable but necessary for the sustainability of human life on Earth’.¹⁴

Such inconsistent arbitral practice goes some way to explaining the growth of express references to environmental protection in recent treaties, rising from 35 BITs in 2000 containing the word ‘environmental’ (1.7 per cent of all BITs) to 273 references in mid-2024 (8.0 per cent).¹⁵ In a 2011 survey, the Organisation of Economic Co-operation and Development (OECD) suggested that environmental language had peaked in 2008, when 89 per cent of newly concluded BITs and relevant trade agreements contained environmental references.¹⁶ Yet, in 2022, all publicly available treaties signed that year contained some reference to environmental concerns.¹⁷ Still, in 2024, half of foreign investment stock was covered by old-generation treaties, concentrated in developing countries and excluding environmental clauses.¹⁸ Now that environmental clauses have begun to generate a modest body of case law, it is timely to assess which functions, if any, they are serving in investment arbitration.¹⁹

While their specific forms vary, the inclusion of environmental clauses is commonly understood to ‘reaffirm the domestic environmental policy space’ of States.²⁰ Despite the breadth of treaty reform, however, tribunals have tended to fall back on familiar

¹² On the dynamic role of investment treaties in both entrenching the protection of fossil fuels and promoting the transition towards renewable energy, see Oliver Hailes and Jorge E Viñuales, ‘The Energy Transition at a Critical Juncture’ (2023) 26 JIEL 627, 637–42. cf Ladan Mehranvar and Lisa Sachs, ‘The Role and Relevance of Investment Treaties in Promoting Renewable Energy Investments’ in Anja Ipp and Annette Magnusson (eds), *Investment Arbitration and Climate Change* (Wolters Kluwer 2024) 263.

¹³ *Koch Industries, Inc and Koch Supply & Trading, LP v Canada*, ICSID Case No ARB/20/52, Award (13 March 2024) para 157.

¹⁴ *Mathias Kruck and others v Kingdom of Spain*, ICSID Case No ARB/15/23, Partial Dissenting Opinion of Prof Zachary Douglas KC (13 September 2022) (*Kruck*, Dissent) para 57.

¹⁵ UNCTAD, ‘International Investment Agreements Navigator’ <<https://investmentpolicy.unctad.org/international-investment-agreements>> accessed 1 February 2025. These figures serve to illustrate the general rise of environmental clauses, rather than to capture all relevant clauses, which are also found in investment chapters of trade agreements and may refer instead to ‘sustainable development’, ‘climate change’, ‘biological diversity’ and so on. The term ‘environmental’ was chosen to exclude older treaties that require parties to maintain a favourable ‘environment’ for investments.

¹⁶ Kathryn Gordon and Joachim Pohl, ‘Environmental Concerns in International Investment Agreements: A Survey’ (2011) OECD Working Papers on International Investment 2011/01 8.

¹⁷ UNCTAD, ‘Navigator’ (n 15). The texts of five out of the 19 treaties signed in 2022 could not be examined, but relevant press releases and other treaties of the signatories (Angola, Cabo Verde, Georgia, Kazakhstan, Mozambique, Philippines, Qatar and United Arab Emirates) suggest that these BITs are likely also to contain environmental language, even if it is merely preambular.

¹⁸ UNCTAD, *World Investment Report 2024: Investment Facilitation and Digital Government* UNCTAD/WIR/2024, ch II.

¹⁹ Key cases include *Al Tamimi v Sultanate of Oman*, ICSID Case No ARB/11/33, Award (3 November 2015); *Copper Mesa Mining Corporation v Republic of Ecuador*, PCA No 2012-2, Award (15 March 2016); *Busun SA, Lecorier and Stein v Italian Republic*, ICSID Case No ARB/14/3, Award (27 December 2016); *Bear Creek Mining Corporation v Republic of Peru*, ICSID Case No ARB/14/21, Award (30 November 2017); *Aven et al v Republic of Costa Rica*, ICSID Case No UNCT/15/3, Final Award (18 September 2018); *Infinito Gold Ltd v Republic of Costa Rica*, ICSID Case No ARB/14/5, Award (3 June 2021); *Eco Oro Minerals Corp v Republic of Colombia*, ICSID Case No ARB/16/41, Decision on Jurisdiction, Liability and Directions on Quantum (9 September 2021) (*Eco Oro*, Liability); *Lopez-Goyne Family Trust and others v Republic of Nicaragua*, ICSID Case No ARB/17/44, Award (1 March 2023); *Red Eagle Exploration Limited v Republic of Colombia*, ICSID Case No ARB/18/12, Award (28 February 2024); *Montauk Metals Inc (formerly known as Galway Gold Inc) v Republic of Colombia*, ICSID Case No ARB/18/13, Award (7 June 2024). These and other relevant cases are discussed in Section III.

²⁰ Shunta Yamaguchi, ‘Greening Regional Trade Agreements on Investment’ (2020) OECD Trade and Environment Working Papers 2020/03 2.

norms, as determined by prior decisions.²¹ In criticising this arbitral trend, Alschner cautions that ‘equating general treaty exceptions with custom collapses distinct lines of defense in litigation and lowers the policy space these exceptions offer’.²² But what on earth is policy space? Typically used to describe a State’s freedom to regulate notwithstanding its trade or investment treaty obligations,²³ the notion of policy space is of relatively recent vintage and speaks little to relevant rules of decision, whatever its value in other discourse.²⁴ Critically, this notion tells us nothing of a State’s rights and obligations under general international law,²⁵ which underpin the implementation of environmental measures and ought to form the baseline for any exercise in treaty reform or arbitral interpretation.²⁶ Indeed, unless a clause removes the measure or asset from the scope of jurisdiction, it is difficult to imagine an investment tribunal interpreting any environmental clause in a manner that gives a State more freedom to regulate than it is entitled under general international law.²⁷ Beyond that baseline, a State’s obligations under MEAs are also bound to have interpretive relevance, not least if the OECD Secretariat is successful in aligning investment treaties with the Paris Agreement.²⁸ Yet even this laudable initiative refers to ‘climate policy space’, though it truly seeks to ground the implementation of mitigation, adaptation and finance measures in the international obligations of States in respect of climate change.²⁹

²¹ Wolfgang Alschner, *Investment Arbitration and State-Driven Reform: New Treaties, Old Outcomes* (OUP 2022).

²² *ibid* 159–66.

²³ eg Tomer Broude, Yoram Z Haftel and Alexander Thompson, ‘Who Cares about Regulatory Space in BITs? A Comparative International Approach’ in Anthea Roberts and others (eds), *Comparative International Law* (OUP 2018) 527.

²⁴ Policy space was originally coined by political scientists to analyse conflict among government bureaucracies, adopted by NAFTA critics to describe its implications for Canadian federal and provincial governments: Bruce Campbell, *Canada Under Siege: Three Years into the Free Trade Era* (Canada Centre for Policy Alternatives 1992) 12. In 2000, UNCTAD first applied the notion in its report series on investment treaties, seeking to ensure that governments maintain ‘the policy space they need to advance their paramount objective of national development’: UNCTAD, *International Investment Agreements: Flexibility for Development*, UNCTAD/ITE/IIT/18 (June 2000) 11. This report relied on a paper presented a year earlier to one of UNCTAD’s regional symposia by Venezuela’s Ambassador to the WTO: Werner Corrales, ‘The Space for Development Policies in International Investment Agreements’ (Inter-Regional Symposium on International Investment Agreements and their Implications for Development, Caracas, 6 December 1999). Over the next decade, regulatory or policy space became a touchstone in development economics and analyses of investment treaties: Ha-Joon Chang, ‘Policy Space in Historical Perspective with Special Reference to Trade and Industrial Policies’ (2006) 41 EPW 627; Suzanne A Spears, ‘The Quest for Policy Space in a New Generation of International Investment Agreements’ (2010) 13 JIEL 1037. It is instructive that tribunals have treated a State’s ‘legitimate regulatory space’ as coextensive with its customary right to regulate or police powers: *Infinio Gold* (n 19) para 778.

²⁵ General international law is here defined—in line with ICJ practice—as norms of customary international law, as well as general principles of law, that apply to the conduct of all States and thus form the baseline in interpreting any additional rights and obligations assumed voluntarily by treaty: *Pulp Mills on the River Uruguay (Argentina v Uruguay)* Judgment [2010] ICJ Rep 14 paras 203–04. Certain multilateral treaties, such as the UN Charter and some MEAs, may approximate general international law in their range of application, but these sources should not be conflated: cf Gregory Tunkin, ‘Is General International Law Customary Only?’ (1993) 4 EJIL 534.

²⁶ This is not to exclude the utility of studies that take a specific policy agenda as the prescription for investment treaty reform: eg Lorenzo Cotula, ‘International Investment Law and Climate Change: Reframing the ISDS Reform Agenda’ (2023) 24 JWIT 766. But the present article suggests that such prescriptions are difficult to realise without a firmer grounding in the general international law on environmental and investment protection.

²⁷ This point was made over a decade ago in respect of clauses modelled on art XX of the General Agreement on Tariffs and Trade (adopted 15 April 1994, entered into force 1 January 1995) 33 ILM 1153 (‘GATT’). See Andrew Newcombe, ‘General Exceptions in International Investment Agreements’ in Marie-Claire Cordonier Segger, Markus W Gehring and Andrew Newcombe (eds), *Sustainable Development in World Investment Law* (Wolters Kluwer 2011) 351, 368–69; Céline Lévesque, ‘The Inclusion of GATT Article XX Exceptions in IIAs: A Potentially Risky Policy’ in Roberto Echandi and Pierre Sauvé (eds), *Prospects in International Investment Law and Policy* (CUP 2013) 363, 367–70. As explained in Section III.D, express justifications for environmental measures make more sense in WTO law than in investment arbitration due to the disparate character of the primary norms. On other clauses in trade and investment treaties that may not refer expressly to the environment but which operate to exempt or justify measures addressing negative externalities, see Jorge E Viñuales, *The International Law of Energy* (CUP 2022) 105–26.

²⁸ Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS 54113.

²⁹ OECD, *Survey of Climate Policies for Investment Treaties: Note Describing Responses to the Survey* (2024) DAF/IN-V/TR1/WD(2023)2/REV1, 24–27.

To avoid both the polarising narrative of normative conflict and the alegal notion of policy space, this article examines how tribunals have interpreted and applied environmental clauses in investment treaties by rooting the relevant clauses and cases in general international law and specific stages of arbitral analysis. First, it challenges the conflict narrative by presenting the correct relationship between environmental and investment protection as one of integrated hierarchy, supported by recent judgments of the International Court of Justice (ICJ), wherein a State's sovereignty over natural resources and its environmental obligations are prior to any determination of whether an investor has been negatively affected by a manifestly excessive measure (Section II). Hence, a presumptive right to regulate—inherently limited by a negative test of manifest disproportionality—provides the normative baseline against which to introduce a typology of 12 environmental clauses, ranging from illegal investments to investor obligations (Section III). The specific function and the main stage of arbitral analysis (*jurisdiction*, *breach* or *exception*) are identified for each type of clause (see Table 1). Finally, this article takes stock of arbitral and treaty practice (see Table 2), identifying which clauses reflect general international law (*deep roots*), may enhance environmental protection (*green shoots*) or make negligible contribution (*dead wood*). It concludes by noting the importance of integrating recent judicial practice on the environmental obligations of States in the arbitral application of investment treaties, regardless of whether they contain express clauses (Section IV).

II. DEEP ROOTS: ENVIRONMENTAL REGULATION IN GENERAL INTERNATIONAL LAW

This section challenges the conflict narrative by showing, first, how the protection of foreign investment and the prevention of environmental harm are twin branches of each State's exclusive jurisdiction over territory, rooted in the basic obligation to regulate economic activities with diligence and propriety (section A). Although these branches seemingly diverged in post-war practice, an earlier award is singled out as an exemplary case of how the right to regulate has long been limited by an arbitral test that accommodates both environmental and investment protection (section B). Recent judgments of the ICJ support an integrated hierarchy of environmental *over* investment protection, which must be borne in mind when considering whether environmental clauses affirm or diverge from general international law (section C). In essence, a State's right to regulate is inherently limited by a negative test of manifest disproportionality. Beyond regulation, this section addresses environmental protection in three alternative forms: expropriation, taxation and state of necessity (section D).

A. *Twin Branches of Resource Sovereignty*

Sovereignty is a creature of international law: the exclusive jurisdiction of each State over assets and activities in its territory—including rights to regulate, tax or expropriate foreign nationals—is inherently limited by the basic obligation to exercise that

jurisdiction in a manner corresponding to circumstances, taking into account any specific obligations of the State.³⁰ This basic obligation was well established in arbitral decisions by the start of the last century, expressed in customary obligations to exercise due diligence in the prevention of reasonably foreseeable harm to other States and their nationals and not to deny them justice.³¹ ‘The state is under a duty to control the activities of private persons within its state territory’, recalled Brownlie, ‘and the duty is no less applicable where the harm is caused to persons or other legal interests within the territory of another state’.³² To prevent harm in their own territories, moreover, States have always enjoyed a presumptive right ‘to prescribe whatever will best contribute to the public safety, utility and convenience’,³³ such that ‘individuals are not so perfectly free in the economy or government of their affairs, as not to be subject to the laws and regulations of police made by the sovereign’.³⁴ Although these basic rights and obligations were long ago posited, the post-war development of international law has sharpened their application to the overlapping issues of environmental and investment protection.³⁵

The priority of resource sovereignty over ‘purely individual or private interests’ was reinforced by successive resolutions of the UN General Assembly (UNGA), affirming the right of newly independent States to regulate and tax the exploitation of natural resources where ‘necessary or desirable’.³⁶ But the right to expropriate any foreign interest was qualified by an obligation to pay ‘appropriate compensation’, with the possibility of States consenting to further standards of treatment and to the international arbitration of investment disputes.³⁷ That is indeed what happened, with the bilateral signing of many hundred treaties and the subsequent rise of investment arbitration.³⁸ In 1990, the first BIT case affirmed that such standards were to be interpreted in light of interwar authorities on a State’s obligation to exercise due diligence in protecting property from injury by third parties.³⁹ Yet the same obligation had long been the root of State responsibility for transboundary harm, typified by the 1941 award in the *Trail Smelter* case.⁴⁰ By 1972, moreover, ‘the sovereign

³⁰ *Island of Palmas case (Netherlands v United States of America)*, (1928) 2 RIAA 829, 838–40; James Crawford, *Brownlie’s Principles of Public International Law* (9th edn, OUP 2019) 432–33, 596.

³¹ *Alabama Claims (United States of America v Great Britain)* (1872) 29 RIAA 125. Award rendered on 14 September 1872 by the tribunal of arbitration established by Article I of the Treaty of Washington of 8 May 1871; *Affaire des biens britanniques au Maroc espagnol (Espagne contre Royaume Uni)* (1925) 2 RIAA 615; *LFH Neer and Pauline Neer (USA) v United Mexican States* (1926) 4 RIAA 60.

³² Ian Brownlie, *System of the Law of Nations: State Responsibility, Part I* (Clarendon Press 1983) 165.

³³ Emer de Vattel, *The Law of Nations; or, Principles of the Law of Nature, Applied to the Conduct and Affairs of Nations and Sovereigns* (Joseph Chitty ed, 6th edn, Johnson 1844) book II, §174.

³⁴ *ibid.*, book I, §255.

³⁵ Georges Abi-Saab, ‘Permanent Sovereignty over Natural Resources and Economic Activities’ in Mohamed Bedjaoui (ed), *International Law: Achievements and Prospects* (UNESCO 1991) 597; Nico Schrijver, *Sovereignty over Natural Resources: Balancing Rights and Duties* (CUP 1997); Leslie-Anne Duvic-Paoli and Jorge E Viñuales, ‘Principle 2: Prevention’ in Jorge E Viñuales (ed), *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015) 107, 114–18.

³⁶ Permanent Sovereignty over Natural Resources UNGA Res 1803 (XVII) (14 December 1962) UN Doc A/5217 [PSNR Resolution 1803] paras 2–3. See further *The Status of Permanent Sovereignty over Natural Wealth and Resources: Study by the Secretariat* (1962) UN Doc A/AC.97/5/Rev.2, 7–62. The priority of sovereign rights was simultaneously recognised by early advocates of BITs: Eli Lauterpacht, ‘The Drafting of Treaties for the Protection of Investment’ in *The Encouragement and Protection of Investment in Developing Countries* (BIICL 1962) 18, 27, 30 (noting it was ‘scarcely justifiable’ to ‘exclude’ the rights of States to ‘nationalise foreign property’ and ‘regulate the conduct of business within its territory’).

³⁷ PSNR Resolution 1803 (n 36) paras 4 and 8.

³⁸ Taylor St John, *The Rise of Investor-State Arbitration: Politics, Law, and Unintended Consequences* (OUP 2018).

³⁹ *Asian Agricultural Products Ltd v Republic of Sri Lanka*, ICSID Case No ARB/87/3, Award (27 June 1990) paras 72–78.

⁴⁰ *Trail Smelter case (United States v Canada)* (1941) 3 RIAA 1905, 1963–65 citing *Alabama Claims* (n 31) and Clyde Eagleton, *The Responsibility of States in International Law* (New York UP 1928) 80 (‘A State owes at all times a duty

right to exploit their own resources pursuant to their own environmental policies’—including the promotion and protection of foreign investment—was qualified by ‘the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction’.⁴¹ This ‘prevention principle’ has since been formulated by the ICJ as the obligation of all States to exercise due diligence in preventing significant harm to the environment, entailing obligations of ongoing cooperation and environmental impact assessment (EIA).⁴² Due diligence may warrant a precautionary approach—proactive regulation in the face of scientific uncertainty—depending on a State’s capabilities and available resources.⁴³ In preventing the violation of human rights, moreover, States must regulate the activities of private entities that could cause environmental harm within or outside their territories.⁴⁴

All to say, the protection of foreign investment and the prevention of environmental harm are twin branches of resource sovereignty, reflecting a basic obligation of States to regulate economic activities with diligence and propriety. Latterly, these branches have converged in the concept of sustainable development; States are thus obliged to integrate ‘appropriate environmental measures in the design and implementation of economic development activities’.⁴⁵ Yet the ‘mere invocation’ of sustainable development does not provide an arbitral solution to ‘what may or may not be done, where, by whom and at whose costs’.⁴⁶ Our next step is showing how best to integrate these twin branches in an authoritative test that lends itself to investment treaty disputes.

to protect other States against injurious acts by individuals from within its jurisdiction’). See further Jorge E Viñuales, ‘Due Diligence in International Environmental Law: A Fine-Grained Cartography’ in Heike Krieger, Anne Peters and Leonhard Kreuzer (eds), *Due Diligence in the International Legal Order* (OUP 2020) 111.

⁴¹ Declaration of the United Nations Conference on the Human Environment (16 June 1972) UN Doc A/CONF.48/14/Rev.1 [Stockholm Declaration] principle 21. See also Rio Declaration on Environment and Development (12 August 1992) UN Doc A/CONF.151/26 (Vol I), 31 ILM 874 (1992) principle 2. For many explicit and implicit references to the prevention principle in multilateral and regional treaties, see Duvic-Paoli and Viñuales (n 35) 121–22.

⁴² *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica/Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua/Costa Rica)* Judgment [2015] ICJ Rep 665 paras 104, 161.

⁴³ *Climate Change and International Law*, (Advisory Opinion, 21 May 2024) ITLOS Case No 31 paras 233–43. On whether the precautionary principle (Rio Declaration, principle 17) is a standalone norm of customary international law, and its implications for investment arbitration, see Madhav Mallya, ‘Bilateral Investment Treaties, Investor Obligations and Customary International Environmental Law’ in Panos Merkouris and others (eds), *Custom and Its Interpretation in International Investment Law* (CUP 2024) 261, 268–72.

⁴⁴ *The Environment and Human Rights*, Advisory Opinion OC-23/17, IACtHR Series A 23 (15 November 2017) paras 127–74. Beyond this general obligation, all 38 OECD members and 13 other adherents to the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (8 June 2023) are specifically obliged to establish National Contact Points to support the implementation of such Guidelines, with rising relevance for climate change, biodiversity loss and other environmental harm: Ekaterina Aristova and others, ‘Corporate Climate Change Responsibilities under the OECD Guidelines for Multinational Enterprises’ (2024) 73 ICLQ 505. At the domestic and regional levels, moreover, there are emerging regimes on corporate supply chain due diligence, which impose ‘obligations for companies regarding actual and potential human rights adverse impacts and environmental adverse impacts, with respect to their own operations, the operations of their subsidiaries, and the operations carried out by their business partners in the chains of activities of those companies’: Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 art 1(a). If environmental harm is not prevented, of course, private entities and their parent companies may also be held liable in tort or otherwise before the domestic courts of their home or host States: *ibid*, art 29; Viñuales, *Energy* (n 27) 174–80; Ekaterina Aristova, *Tort Litigation Against Transnational Corporations: The Challenge of Jurisdiction in English Courts* (OUP 2024). This possibility is expressly affirmed in recent investment treaty practice: Nicolas Bueno, Anil Yilmaz Vastardis and Isidore Ngueuleu Djeuga, ‘Investor Human Rights and Environmental Obligations: The Need to Redesign Corporate Social Responsibility Clauses’ (2023) 24 JWIT 179, 210–15. See Section III.D.

⁴⁵ *Iron Rhine Arbitration (Belgium/Netherlands)* (2005) 27 RIAA 35 para 59. See further Rio Declaration, principle 4; Virginie Barral and Pierre-Marie Dupuy, ‘Principle 4: Sustainable Development through Integration’ in Jorge E Viñuales (ed), *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015) 157.

⁴⁶ *Iron Rhine Arbitration* (n 45) para 60.

B. An Integrated Hierarchy of Environmental over Investment Protection

Let us recall two cases that gave short shrift to environmental protection, regarding hazardous waste facilities in Mexico: the *Metalclad* and *Tecmed* tribunals interpreted the NAFTA standard of fair and equitable treatment (FET) with little regard to general international law, leading to partial set-aside in the former case and widespread criticism of them both.⁴⁷ By contrast, the tribunal in *SD Myers v Canada* affirmed that it did not have ‘an open-ended mandate to second-guess government decision-making’ due to ‘the high measure of deference that international law generally extends to the right of domestic authorities to regulate matters within their own borders’, accounting for ‘any specific rules of international law that are applicable to the case’.⁴⁸ In determining that Canada had breached the FET standard by imposing a ban on the export of contaminated waste, the tribunal applied NAFTA in light of a bilateral agreement on hazardous waste,⁴⁹ as well as the Basel Convention,⁵⁰ which affirmed that Canada was obliged to achieve its ‘chosen level of environmental protection’ by adopting ‘the alternative that is most consistent with open trade’.⁵¹ This integrated assessment of Canada’s presumptive right to regulate in light of its investment, trade and environmental obligations was informed by NAFTA’s provisions on applicable law and treaty conflicts.⁵² From the parties’ submissions, however, it seems that the tribunal’s mandate for a high measure of deference was influenced by the ICJ’s 1989 judgment in the *ELSI* case and, perhaps more surprisingly, the 1910 award in the *North Atlantic Coast Fisheries* case (*NACF*).⁵³ Although the definition of arbitrary conduct in the former case is reflected in arbitral practice on the customary minimum standard and related FET standards,⁵⁴ the latter is a lesser known yet exemplary case of how the sovereign right to regulate is inherently limited by international law, applied by taking a State’s obligation to prevent environmental harm as the reference point for its obligation to treat any negatively affected foreigners with fairness and equity. In retracing several iterations of the *NACF* test, this section defends an integrated hierarchy of environmental over investment protection, wherein the lawfulness of an impugned measure must be determined by reference to the strength of its regulatory purpose.⁵⁵

In the *NACF* case, the tribunal settled the interpretive interaction between the liberty of US nationals to exploit the Newfoundland fishery, conferred by an 1818

⁴⁷ See n 7; *United Mexican States v Metalclad Corporation*, 2001 BCSC 664 paras 57–67; Anna de Luca and others, ‘Responding to Incorrect Decision-Making in Investor-State Dispute Settlement: Policy Options’ (2020) 21 JWIT 374, 392–94.

⁴⁸ *SD Myers* (n 9) paras 261, 263. See also *SD Myers, Inc v Canada*, UNCITRAL, Separate Opinion by Dr Bryan Schwartz (12 November 2000) para 227.

⁴⁹ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (opened for signature 22 March 1989, entered into force 5 May 1992) 1673 UNTS 57. Note, however, that the United States had not and still has not ratified this Convention. See n 175.

⁵⁰ Agreement Between Canada and the United States Concerning the Transboundary Movement of Hazardous Waste (signed 29 October 1986, entered into force 8 November 1986, amended 25 November 1992).

⁵¹ *SD Myers* (n 9) paras 221, 255.

⁵² *ibid* paras 197–99, 214. See Section III.C.

⁵³ *SD Myers, Inc v Canada*, UNCITRAL, Memorial of the Investor (Initial Phase) (20 July 1999) para 110 citing *North Atlantic Coast Fisheries Case (Great Britain/United States)* (1910) 11 RIAA 167 (*‘NACF’*); *SD Myers, Inc v Canada*, UNCITRAL, Canada Counter Memorial (5 October 1999) para 292 citing *Elettronica Sicula SpA (ELSI) (United States of America v Italy)* Judgment [1989] ICJ Rep 15.

⁵⁴ *ELSI* (n 53) para 128 (defining arbitrariness as ‘a wilful disregard of due process of law, an act which shocks, or at least surprises, a sense of juridical propriety’); *Waste Management, Inc v United Mexican States*, ICSID Case No ARB(AF)/00/3, Award (30 April 2004) paras 95–98.

⁵⁵ This integrated analysis is further supported by a presumption against conflict: Joost Pauwelyn, *Conflict of Norms in Public International Law: How WTO Law Relates to Other Rules of International Law* (CUP 2003) 240–44.

treaty, and Britain's right to regulate when and how that liberty could be exercised. The tribunal saw 'no reason' why the treaty 'should be considered as different from every other Treaty under which the right of a State to regulate the action of foreigners admitted by it on its territory is recognized'.⁵⁶ In fact, Britain was 'not only entitled, but *obliged, to provide for the protection and preservation of the fisheries*', albeit 'limited by the obligation to execute the treaty in good faith'.⁵⁷ Hence, when Britain's regulations were challenged by the United States, their presumptive lawfulness could be submitted to an 'impartial arbitral test'.⁵⁸ The tribunal held that Britain's right was limited to 'reasonable regulations', which in this case were: (i) 'appropriate or necessary for the protection and preservation of such fisheries'; or (ii) 'desirable or necessary on grounds of public order and morals without unnecessarily interfering with the fishery itself'; and (iii) 'in both cases equitable and fair as between local and American fishermen' and 'not so framed as to give unfairly an advantage to the former over the latter class'.⁵⁹ In brief, claimants have long borne the burden to prove that their treatment was unreasonable or discriminatory in light of the presumptive right to regulate and the overall circumstances of what we now call the prevention of environmental harm.⁶⁰

Along with the widely cited mandate for deference in *SD Myers*, this arbitral test of lawful regulation is reflected in several cases preceding the rise of investment treaty disputes.⁶¹ For example, both parties to the 1958 *Aramco* arbitration viewed the *NACF* case as the most salient authority on the 'minimum standard as regards the protection of the rights of aliens' in the circumstances of economic regulation, though the tribunal viewed Saudi Arabia's agreement to transfer a monopoly shipping concession as 'a typical contractual provision' rather than 'reasonable regulation of external transport of oil'.⁶² However, in the 1972 case of *International Bank of Washington v Overseas Private Insurance Corporation*, the tribunal held that the Dominican Republic's 'series of police regulations or bureaucratic delays'—including restrictions on timber exports and sawmilling operations—was 'not arbitrary or unreasonable'

⁵⁶ *NACF* (n 53) 186.

⁵⁷ *ibid* 187 (emphasis added). Although the source of this obligation was not spelled out by the tribunal, the parties had chiefly relied on nineteenth-century treaty and regulatory practice in view of authorities such as 'Grotius and Vattel and Azuni': *Proceedings in the North Atlantic Coast Fisheries Arbitration* vol XI (Government Printing Office 1912) 1776 (Robson for Britain). Vattel, in particular, was 'frequently quoted' in oral hearings: Charles G Fenwick, 'The Authority of Vattel' (1913) 7 *APSR* 395, 395–96. And, indeed, *Le droit de gens* seems to prefigure the State's obligation to prevent environmental harm. Exhaustible common resources like fisheries, observed Vattel, 'give room for abuses, and excite disturbances, which it is important to the state to prevent, and against which the prince is obliged to take just measures', including to 'prohibit the use of certain nets, and of every destructive method': Vattel (n 33) Book I, §246. But if a sovereign 'makes any regulations with any other view than that of the public welfare, he abuses his power': *ibid*. Such obligations were premised on jurisdiction or control: cf *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals*, (1893) 28 *RIAA* 263, 269–76; UN Convention on the Law of the Sea (opened for signature 10 December 1982, entered into force 16 November 1994) 1833 *UNTS* 3, pt XII; *Climate Change and International Law* (n 43) paras 244–58.

⁵⁸ *NACF* (n 53) 188.

⁵⁹ *ibid* 189.

⁶⁰ We find even longer continuity in respect of public health regulation, ranging from diplomatic protection of aliens affected by nineteenth-century quarantine measures to recent arbitral and treaty practice: Oliver Hailes, 'Police Powers in a Pandemic: Investment Treaty Interpretation and the Customary Presumption of Reasonable Regulation' in Panos Merkouris and others (eds), *Custom and Its Interpretation in International Investment Law* (CUP 2024) 233, 252–60; Freya Baetens, 'Protecting Foreign Investment and Public Health through Arbitral Balancing and Treaty Design' (2022) 71 *ICLQ* 139.

⁶¹ See also *Affaire concernant le filetage à l'intérieur du golfe du Saint-Laurent entre le Canada et la France* (1986) 19 *RIAA* 225 para 54; *Iron Rhine Arbitration (Belgium/Netherlands)*, PCA Case No 2003-02, Memorial of the Kingdom of Belgium (1 October 2003) para 56.

⁶² *Saudi Arabia v Arabian American Oil Company (Aramco)*, Ad hoc, Arbitral Award (23 August 1958) 27 *ILR* 117, 141, 216–18.

under ‘general principles of international law’ in view of ‘all of the circumstances, including the newness of administering the program of forestry and watershed conservation and the scarcity of trained forestry experts characteristic of a developing country’.⁶³ In a 1982 survey entitled ‘Treatment of Foreign Investment’, this case was cited alongside several UNGA resolutions to conclude that ‘foreign investors are required to protect the environment of the host State in the territory of which they operate, and take into account its environmental plans and priorities’.⁶⁴

One might also discern a resemblance between the *NACF* test and the law of the World Trade Organization (WTO).⁶⁵ Yet the Appellate Body has interpreted Article XX of the General Agreement on Tariffs and Trade (GATT) as providing an ‘affirmative defence’ to inconsistent measures,⁶⁶ for which respondents bear the burden of proof.⁶⁷ In interpreting the covered agreements as *leges specialis*, panels have thus declined to give any practical effect to a member’s ‘inherent right to regulate’ or ‘sovereignty over natural resources’.⁶⁸ Moreover, as opposed to the ambivalent ‘weighing and balancing process’ endorsed by the Appellate Body,⁶⁹ the ‘hierarchy of values [was] fixed’ in the *NACF* case: the sovereign right to regulate prevailed, so long as the measure was necessary or desirable to achieve a public purpose and did not discriminate or otherwise treat foreigners unfairly.⁷⁰ Indeed, the ‘presumptive lawfulness’ of environmental regulation remains the ‘starting point’ under general international law,⁷¹ which is expressly or tacitly integrated in investment treaty interpretation.⁷²

C. A Negative Test of Manifest Disproportionality

An integrated hierarchy of environmental over investment protection is further supported by recent judicial practice on the distinction between regulation and compensable measures, which helps to refine the *NACF* test with a view to investment treaty disputes. In *Turgut v Turkey*, the European Court of Human Rights (ECtHR) affirmed that ‘[f]inancial imperatives and even certain fundamental rights, such as ownership, should not be afforded priority over environmental protection

⁶³ *International Bank of Washington v Overseas Private Investment Corporation*, AAA, Decision (8 November 1972) 48 ILR 179, 182–85.

⁶⁴ UN Institute for Training and Research, *Progressive Development of the Principles and Norms of International Law Relating to the New International Economic Order: Analytical Papers and Analysis of Texts of Relevant Instruments*, UN Doc UNITAR/DS/5 (15 August 1982) 377. See also John A Westberg and Bertrand P Marchais, ‘General Principles Governing Foreign Investment as Articulated in Recent International Tribunal Awards and Writings of Publicists’ in *Legal Framework for the Treatment of Foreign Investment*, vol 1 (World Bank 1992) 135, 165.

⁶⁵ Lorand Bartels, ‘The Chapeau of General Exceptions in the WTO GATT and GATS Agreements: A Reconstruction’ (2015) 109 AJIL 95, 102–03. The express terms of general exceptions were derived from interwar treaty practice: Steve Charnovitz, ‘Exploring the Environmental Exceptions in GATT Article XX’ (1991) 25 JWIT 37.

⁶⁶ WTO, *Thailand: Customs and Fiscal Measures on Cigarettes from the Philippines—Report of the Appellate Body* (17 June 2011) WT/DS371/AB/R para 173.

⁶⁷ Although the burden of proof lies with the respondent, the complaining party must identify any alternative measures that the respondent should have taken: WTO, *United States: Measures Affecting the Cross-Border Supply of Gambling and Betting Services—Report of the Appellate Body* (7 April 2005) WT/DS285/AB/R paras 309–11.

⁶⁸ WTO, *China: Measures Related to the Exportation of Various Raw Materials—Reports of the Panel* (30 January 2012) WT/DS394/R, WT/DS395/R and WT/DS398/R paras 7.377–7.383, 7.155–7.159. cf Andrew D Mitchell, ‘The Right to Regulate and the Interpretation of the WTO Agreement’ (2023) 26 JIEL 462.

⁶⁹ WTO, *Korea: Measures Affecting the Imports of Fresh, Chilled and Frozen Beef—Report of the Appellate Body* (11 December 2000) WT/DS161/AB/R and WT/DS169/AB/R paras 164–66.

⁷⁰ Bartels (n 65) 103.

⁷¹ *Philip Morris Brands Sàrl, Philip Morris Products SA and Abal Hermanos SA v Oriental Republic of Uruguay*, ICSID Case No ARB/10/7, Concurring and Dissenting Opinion (28 June 2016) (‘*Philip Morris*, Dissent’) paras 141–42.

⁷² Hailes (n 60) 245–52.

considerations, in particular when the State has legislated in this regard', whereas compensation was typically required for 'deprivation of property'.⁷³ In *Certain Iranian Assets*, moreover, the ICJ endorsed a series of arbitral decisions on the customary doctrine of police powers—used to distinguish an act of regulation from compensable expropriation—then applied the same test as for a discrete obligation to refrain from 'unreasonable' measures: the negative impact must not be 'manifestly excessive' when measured against the protection afforded to a legitimate purpose.⁷⁴ Although this case concerned the arbitrary imposition of civil liability, the Court derived its test from *Navigational and Related Rights*, which affirmed 'the legitimate purpose of protecting the environment' in determining that certain restrictions on navigation and fishing—including outright prohibition—were lawful regulations.⁷⁵ Akin to the mandate for deference in *SD Myers*, this test was seemingly based on the *NACF* case.⁷⁶

Before *Certain Iranian Assets*, only one investment tribunal had cited the ICJ's test of manifestly excessive measures.⁷⁷ Specifically, in addressing a constitutional amendment to ban water exports, the majority in *Muszynianka v Slovak Republic* held that the 'vital importance of this non-renewable resource cannot be overstated, especially in an era of alarming climate change', such that the amendment did not impose an 'excessive burden' on the claimant's commercial rights.⁷⁸ But we find versions of this test in many awards, typically described as proportionality *stricto sensu*, as opposed to requiring merely a rational link between means and ends or a necessity test of least restrictive means.⁷⁹ It is a mistake, however, to describe this proportionality test as requiring a tribunal to 'weigh' or 'balance' the competing interests or values,

⁷³ *Turgut and others v Turkey*, App No 1411/03 (ECtHR, 8 July 2008) paras 90–91. Beyond this general distinction, however, the case law of the ECtHR elides the police powers doctrine and should thus be handled with care in investment treaty disputes; the right not to be 'deprived' of 'possessions' does not guarantee full compensation for expropriation, whereas bona fide regulation may warrant submarket compensation to strike a 'fair balance' between public and private interests: Protocol 1 to the European Convention for the Protection of Human Rights and Fundamental Freedoms (opened for signature 4 November 1950, entered into force 18 May 1954) ETS 9, art 1; Hélène Ruiz Fabri, 'The Approach Taken by the European Court of Human Rights to the Assessment of Compensation for "Regulatory Expropriations" of the Property of Foreign Investors' (2002) 11 NYU Envt LJ 148. cf Ursula Kriebaum, 'Regulatory Takings: Balancing the Interests of the Investor and the State' (2007) 8 JWIT 717.

⁷⁴ *Certain Iranian Assets (Islamic Republic of Iran v United States of America)* Merits [2023] ICJ Rep 51 paras 145–49, 155–56, 185–86. A similar test was implicit in *ELSI* (n 53): Olivier Corten, 'The Notion of "Reasonable" in International Law: Legal Discourse, Reason and Contradictions' (1999) 48 ICLQ 613, 623–24. See also Mir-Hossein Abedian and Reza Eftekhari, 'Reasonableness: A Guiding Light' (2024) 40 Arb Intl 307.

⁷⁵ *Dispute regarding Navigational and Related Rights (Costa Rica v Nicaragua)*, Judgment [2009] ICJ Rep 213 paras 87–89, 104, 109, 118, 127, 141.

⁷⁶ *Dispute regarding Navigational and Related Rights (Costa Rica v Nicaragua)*, Counter-Memorial of the Republic of Nicaragua: Volume I (29 May 2007) paras 2.1.50–2.1.63; *Dispute Regarding Navigational and Related Rights (Costa Rica v Nicaragua)*, Verbatim Record CR2009/4, 5 March 2009, 30–35 (Brownlie for Nicaragua); *Dispute Regarding Navigational and Related Rights (Costa Rica v Nicaragua)*, Verbatim Record CR2009/7, 12 March 2009, 8–9 (Brownlie for Nicaragua). Nicaragua also relied on the affirmation of a riparian State's police powers under the interwar law of international watercourses in *James H McMahan (USA) v United Mexican States* (1929) 4 RIAA 486, 490–492. This case offers a much more sophisticated analysis of the distinction between reasonable regulation and compensable expropriation than the *Bischoff Case*, (1903) 10 RIAA 420, which was cited by the ICJ as an early authority for the police powers doctrine: *Certain Iranian Assets* (n 74) para 185.

⁷⁷ *Muszynianka spółka z ograniczoną odpowiedzialnością v Slovak Republic*, PCA Case No 2017-08, Award (7 October 2020) para 574 fn 1207. Parties have begun to rely on the combined authority of the two ICJ judgments: eg *Ruby River Capital LLC v Canada*, ICSID Case No ARB/23/5, Memorial on Jurisdiction and the Merits (21 November 2023) paras 778–79.

⁷⁸ *Muszynianka* (n 77) paras 545–76. A dissenting arbitrator accepted that the award 'correctly identifies the legal standards', though he disagreed on their application: *Muszynianka spółka z ograniczoną odpowiedzialnością v Slovak Republic*, PCA Case No 2017-08, Partial Dissenting Opinion of Professor Robert G Volterra (7 October 2020) para 36.

⁷⁹ Joshua Paine, *The Functions of International Adjudication and International Environmental Litigation* (CUP 2024) 232–48.

which would be to ignore the integrated hierarchy of environmental over investment protection and the presumptive lawfulness of sovereign regulation.⁸⁰ In *PV Investors v Spain*, a majority ‘recognized that States [themselves], as the entities tasked with balancing the often competing interests involved, enjoy a margin of appreciation in the field of economic regulation’, such that ‘the limits of the State’s power are drawn by the principles of reasonableness and proportionality’.⁸¹ Rather than arbitral balancing, therefore, the ICJ’s test of manifestly excessive measures is better understood as requiring the claimant’s rebuttal of a strong presumption of regulatory reasonableness, which may assist tribunals to ‘carefully set out contextually meaningful limitations on rights which are susceptible to abuse’.⁸²

Although the qualifier ‘manifestly’ seems vague,⁸³ it may be understood as requiring a State’s excessive measure to be ‘obvious, clear or easily recognizable’.⁸⁴ In *Navigational and Related Rights*, the ICJ affirmed that a claimant’s evidence of sovereign wrongdoing must surmount the customary presumption that environmental regulation is internationally lawful: ‘It will not be enough in a challenge to a regulation simply to assert in a general way that it is unreasonable’.⁸⁵ The Court required ‘[c]oncrete and specific facts’ to prove ‘the allegedly disproportionate impact of the regulations’, in light of the State’s ‘primary responsibility’ for ‘assessing the need for regulation’ and ‘choosing ... the measure that it deems most appropriate to meet that need’.⁸⁶ Similar considerations are reflected in arbitral recognition of a ‘margin of appreciation’, mentioned above in *PV Investors*, which is typically traced to European human rights law.⁸⁷ Yet this contested notion adds little clarity to the sovereign right to regulate and its lawful limits,⁸⁸ which always must be defined according to circumstances.⁸⁹ In particular, an impugned measure’s purpose, such as whether it was adopted in pursuit of an international obligation, may lift the threshold

⁸⁰ For a concise critique of balancing discourse, see Martins Paparinskis, ‘International Investment Law and the European Union: A Reply to Catharine Titi’ (2015) 26 EJIL 663. See also Bartels (n 65) 104–06.

⁸¹ *PV Investors v Kingdom of Spain*, PCA Case No 2012-14, Final Award (28 February 2020) para 583.

⁸² Jan Paulsson, *The Unruly Notion of Abuse of Rights* (CUP 2020) 132.

⁸³ Caroline Henckels, *Proportionality and Deference in Investor-State Arbitration: Balancing Investment Protection and Regulatory Autonomy* (CUP 2015) 161–62, 167–68; Paine (n 79) 278–79.

⁸⁴ This accords with ordinary meaning, reflected in interpretations of art 52(1)(b) of the ICSID Convention: *Tulip Real Estate Investment and Development Netherlands BV v Republic of Turkey*, ICSID Case No ARB/11/28, Decision on Annulment (30 December 2015) para 56.

⁸⁵ *Navigational and Related Rights* (n 75) para 101. For arbitral recognition of the presumption of validity, legality or lawfulness of certain sovereign measures, typically taxation but also regulation, see *Brewer, Moller & Co Case* (1903) 10 RIAA 423; *El Paso Energy International Company v Argentine Republic*, ICSID Case No ARB/03/15, Award (31 October 2011) para 290; *Mobil Exploration and Development Argentina Inc Suc Argentina and Mobil Argentina Sociedad Anónima v Argentine Republic*, ICSID Case No ARB/04/16, Decision on Jurisdiction and Liability (10 April 2013) para 852; *Philip Morris*, Dissent (n 71) para 141; *Triodos SICAV II v Kingdom of Spain*, SCC Case No 2017/194, Final Award (24 October 2022) paras 684, 692.

⁸⁶ *Navigational and Related Rights* (n 75) para 101. This presumption of reasonable regulation may be contrasted to the Court’s stricter standard of review in determining whether Japan was whaling ‘for purposes of scientific research’: *Whaling in the Antarctic (Australia v Japan, New Zealand intervening)* Judgment [2014] ICJ Rep 226 paras 62–97.

⁸⁷ Jorge E Viñuales, ‘Defence Arguments in Investment Arbitration’ (2020) 18 ICSID Rep 9 paras 94–97.

⁸⁸ For a thoroughgoing critique, see Gary Born, Danielle Morris and Stephanie Forrest, ‘“A Margin of Appreciation”: Appreciating its Irrelevance in International Law’ (2020) 61 HILJ 65.

⁸⁹ *Gabriel Resources Ltd and Gabriel Resources (Jersey) Ltd v Romania*, ICSID Case No ARB/15/31, Award (8 March 2024) paras 856–57.

of establishing that the measure was manifestly excessive,⁹⁰ and perhaps vice versa if the measure derogated from environmental protection to a claimant's detriment.⁹¹

Inherently, therefore, the right to regulate is limited by a negative test of *manifest disproportionality*: rather than requiring a State to prove positively the reasonableness of regulation, a claimant must prove that the impugned measure's impact was obviously excessive when measured against the protection afforded to the legitimate purpose, taking into account any international obligation that may reinforce the priority of that purpose and thus lift the threshold of proving breach.⁹² In this light, the added value of investment treaty reform, surveyed in Section III, might be to agree on more precise indicia of disproportionality or even a special rule in the case of environmental protection,⁹³ rather than relying on the tribunal's ability to interpret and apply investment obligations in accordance with the relevant rules of customary and other treaty law.⁹⁴ Over and above this inherent limit—which reflects the minimum standard and informs the main treaty obligations⁹⁵—an authorised entity may *consensually* limit the State's right to regulate in respect of foreign nationals by, for example, agreeing to a valid stabilisation clause in an investment contract.⁹⁶ Indeed, any exercise of sovereign authority designed to abrogate a commercial promise may engage responsibility.⁹⁷ However, despite the expansive arbitral practice on the protection of an investor's 'legitimate expectations' under FET standards,⁹⁸ any expectations based merely on a non-contractual representation as to regulatory conduct, as in a fixed-term subsidy regime, are 'essentially *consideranda*' in determining whether an amendment was manifestly disproportionate in its negative impact on claimants who

⁹⁰ *Chemtura* (n 9) paras 135–39; *Philip Morris Brand SARL, Philip Morris Products SA and Abal Hermanos SA v Oriental Republic of Uruguay*, ICSID Case No ARB/10/7, Award (8 July 2016) paras 395–96, 401. See also Jorge E Viñuales, 'The Environmental Regulation of Foreign Investment Schemes under International Law' in Pierre-Marie Dupuy and Jorge E Viñuales (eds), *Harnessing Foreign Investment to Promote Environmental Protection* (CUP 2013) 273, 285–91 (discussing 'internationally induced measures').

⁹¹ See the discussion of implementation and non-regression clauses in Section III.C.

⁹² Although this test has been distilled from the ICJ's recent case law and older international practice on the limits of lawful regulation, it should be noted that, under EU law, it is likewise 'for the claimant to show manifest disproportionality' in the judicial review of 'a social, political or economic discretionary power': Paul Craig, *UK, EU and Global Administrative Law: Foundations and Challenges* (CUP 2015) 379. It may well be that the test of manifest disproportionality finds additional support as a general principle of law derived from domestic legal systems: *Casinos Austria International GmbH and Casinos Austria Aktiengesellschaft v Argentine Republic*, ICSID Case No ARB/14/32, Award (5 November 2021) para 351; *Kruck*, Dissent (n 14) paras 102–08.

⁹³ For an overview of possible approaches, see Caroline E Foster, *Global Regulatory Standards in Environmental and Health Disputes: Regulatory Coherence, Due Regard, and Due Diligence* (OUP 2020).

⁹⁴ See n 4.

⁹⁵ For pedagogic reasons, we have focused our inquiry on the State's right to regulate, but its inherent limit reflects the customary minimum standard. See Martins Paparinskis, *The International Minimum Standard and Fair and Equitable Treatment* (OUP 2013) 220–26, 239–42 (concluding that 'international law defers to the legitimacy of the purpose and means chosen to pursue it as such (unless they are entirely indefensible), but scrutinizes the formal and procedural safeguards against abuse in their implementation (the absence of which permits a more critical engagement with the ends and means)').

⁹⁶ Lorenzo Cotula, 'Reconciling Regulatory Stability and Evolution of Environmental Standards in Investment Contracts: Towards a Rethink of Stabilization Clauses' (2008) 1 JWELB 158.

⁹⁷ Stephen M Schwebel, 'On Whether the Breach by a State of a Contract with an Alien is a Breach of International Law' in *Justice in International Law: Selected Writings* (CUP 1994) 425; Jean Ho, *State Responsibility for Breaches of Investment Contracts* (CUP 2018) ch 3.

⁹⁸ Even the leading authorities on legitimate expectations tend to blur these inherent and consensual limits of a State's right to regulate: eg *Micula and others v Romania*, ICSID Case No ARB/05/20, Award (11 December 2013) paras 666–73. But a principled distinction should be maintained between the inherent limits of a State's 'public regulatory relationship' with a foreign investor and their 'private contractual relationship', which may consensually limit the incidence of regulation: *Kruck*, Dissent (n 14) paras 24–33. This distinction is further blurred by arbitral practice on transparency, certainty, stability or predictability as standalone elements of the FET standard. For an appraisal of these elements, see International Law Association, *Rule of Law and International Investment Law* (Interim Report, 2022) paras 42–75.

have ‘committed substantial resources’.⁹⁹ In short, environmental regulation must neither be manifestly disproportionate (inherent limit) nor abrogate any contractual promise to a specific investor (consensual limit).¹⁰⁰

D. Environmental Protection in Alternative Forms

Although the presumptive lawfulness of environmental regulation is firmly established, the scope of a State’s right to regulate must be distinguished from its merely commercial activities, on one hand, and discrete forms of sovereign authority, on the other.¹⁰¹ Leaving aside its capacity as a private contractor,¹⁰² a State may adopt environmental measures in three alternative forms—expropriation, taxation and state of necessity—which can be restated concisely.¹⁰³

First, a direct taking of property for environmental purposes is no less a compensable expropriation,¹⁰⁴ unless the property was taken as an enforcement measure,¹⁰⁵ whereas any substantial deprivation of value may be characterised as an indirect expropriation only if a claimant first proves that an ostensible regulation was not a ‘reasonable *bona fide* exercise of police powers’ for environmental protection,¹⁰⁶ which the ICJ found to be coextensive with its test for unreasonable measures.¹⁰⁷

⁹⁹ *Eurus Energy Holdings Corporation v Kingdom of Spain*, ICSID Case No ARB/16/4, Decision on Jurisdiction and Liability (17 March 2021) paras 314–19, 338.

¹⁰⁰ Oscar Schachter, ‘International Law in Theory and Practice: General Course in Public International Law’ (1982) 178 *Recueil des Cours* 9, 311–12; *Gabriel Resources* (n 89) paras 850–60.

¹⁰¹ The closest we come in arbitral practice to a definition of regulation *in abstracto* might be ‘a norm of greater or lesser generality creating [domestic] rights and obligations while it remains in force’, albeit to distinguish ‘a promise or contractual commitment’: *Blusun* (n 19) para 371.

¹⁰² Any disputes arising from State contracts are likely to be resolved by commercial arbitration. On environmental aspects, see Anatole Boute, ‘Environmental Force Majeure: Relief from Fossil Energy Contracts in the Decarbonisation Era’ (2021) 33 *JEL* 339; Kirsten Odynski and H  lo  se Broc, ‘Commercial Arbitration’ in Edgardo Sobenes, Sarah Mead, Benjamin Samson (eds), *The Environment through the Lens of International Courts and Tribunals* (Springer 2022) 351; Wendy J Miles, ‘International Commercial Arbitration and Investment Agreements Involving States’ in Anja Ipp and Annette Magnusson (eds), *Investment Arbitration and Climate Change* (Wolters Kluwer 2024) 63.

¹⁰³ For a full account, see Oliver Hailes, ‘A Reasonably Well Organized Modern State’: Investment Treaty Arbitration and the Reformation of Economic Sovereignty in Customary International Law’ (PhD thesis, University of Cambridge 2023).

¹⁰⁴ *Santa Elena* (n 7) paras 71–72. A neglected inquiry in that case, however, was whether a State’s environmental obligations may be integrated in the tribunal’s analysis of compensation, whether in choosing the appropriate method of calculating fair market value or in forecasting the expected cash flows from heavily regulated assets: Anatole Boute, ‘Investor Compensation for Oil and Gas Phase Out Decisions: Aligning Valuation Methods to Decarbonization’ (2023) 23 *Clim Pol* 1087; Oliver Hailes, ‘Unjust Enrichment in Investor-State Arbitration: A Principled Limit on Compensation for Future Income from Fossil Fuels’ (2023) 32 *RECIEL* 358.

¹⁰⁵ Direct takings that do not qualify as expropriation include measures ‘enforcing existing regulations against the investor’s own wrongdoings, such as criminal, tax and administrative sanctions, or revocation of licenses and concessions’: *Magyar Farming Company Ltd and others v Hungary*, ICSID Case No ARB/17/27, Award (13 November 2019) para 366. See also Eduardo Jim  nez de Ar  chaga, ‘International Law in the Past Third of a Century’ (1978) 159 *Recueil des Cours* 1, 300 (‘Measures such as the total suppression, for reasons of general policy, of a detrimental or inconvenient industrial or commercial activity, are not subject to compensation’).

¹⁰⁶ *Philip Morris* (n 90) para 295. Interpretive annexes on indirect expropriation in recent treaties, ‘whether or not introduced *ex abundanti cautela*, reflect the position under general international law’: *ibid* paras 300–01. See the discussion of environmental clarifications in Section III.C. Some tribunals have suggested that the police powers doctrine is further qualified by ‘whether specific commitments had been given by the regulating government to the then putative foreign investor contemplating investment that the government would refrain from such regulation’, such that the breach of those commitments would transform the measure into a compensable expropriation: *Methanex Corporation v United States of America*, UNCITRAL, Final Award of the Tribunal on Jurisdiction and Merits (3 August 2005) pt IV, ch D, paras 6–10. A better approach, which removes the need for a claimant also to prove substantial deprivation of property, is that any abrogation of a specific commitment in the contractual form of a valid stabilisation clause would breach the minimum standard of treatment, while a claimant’s reliance on non-contractual representations of regulatory stability would be relevant in proving that the impugned measure was manifestly disproportionate: see Section II.C; *Waste Management* (n 54) para 98; *Burlington Resources, Inc v Republic of Ecuador*, ICSID Case No ARB/08/5, Decision on Liability (12 December 2012) (‘*Burlington, Liability*’) para 403.

¹⁰⁷ *Certain Iranian Assets* (n 74) paras 185–86.

Second, whereas some tribunals have implied that the right to tax must be exercised for the ‘principal purpose’ of generating revenue,¹⁰⁸ the correct position—reflecting the ubiquity of tax measures designed principally to change economic behaviour or to internalise the social costs of negative externalities¹⁰⁹—is that each State enjoys the presumptive right to make ‘a compulsory exaction of money by law for [all] public purposes’, so long as the measure is not ‘entirely unrelated’ to raising revenue,¹¹⁰ which cannot involve any direct reciprocal benefit to the payer,¹¹¹ and may be rebutted by evidence of discrimination against a foreign national or an intention to confiscate its assets.¹¹²

Finally, even if a measure has breached an investment obligation, environmental protection is an ‘essential interest’ that may ground the plea of necessity as a circumstance precluding wrongfulness,¹¹³ but the cumulative requirements are notoriously difficult to satisfy and may not even preclude a duty to compensate for material loss.¹¹⁴

Having now traced the integrated relationship between environmental and investment protection in several forms, which is elided by the conflict narrative, we are better equipped to consider whether environmental clauses have affirmed or diverged from general international law and to assess their functions in investment arbitration, rather than referring to alegal notions of policy space.

III. GREEN SHOOTS? ARBITRAL PRACTICE ON ENVIRONMENTAL CLAUSES

Environmental clauses are hardly new, first appearing in NAFTA.¹¹⁵ Over the last decade, however, as clauses have grown in number, there have been many studies on

¹⁰⁸ *Antaris Solar GmbH and Michael Göde v Czech Republic*, PCA Case No 2014-01, Award (2 May 2018) para 250.

¹⁰⁹ Janet Milne, ‘Environmental Taxation’ in Emma Lees and Jorge E Viñuales (eds), *The Oxford Handbook of Comparative Environmental Law* (OUP 2019) 903; OECD, ‘Environmentally Related Tax Revenue’ (updated May 2023) <<https://stats.oecd.org/Index.aspx?DataSetCode=ERTR>> accessed 1 February 2025.

¹¹⁰ *BayWa re Renewable Energy GmbH and BayWa re Asset Holding GmbH v Kingdom of Spain*, ICSID Case No ARB/15/16, Decision on Jurisdiction, Liability and Directions on Quantum (2 January 2019) paras 297–314. See also *InfraRed Environmental Infrastructure GP Limited and others v Kingdom of Spain*, ICSID Case No ARB/14/12, Award (2 August 2019) paras 297–308.

¹¹¹ *Silver Ridge Power BV v Italian Republic*, ICSID Case No ARB/15/37, Award (26 February 2021) paras 304–05; Audley Sheppard, ‘Tax and Arbitration (An ISDS Update)’ (2023) 39 *Arb Intl* 314, 320–21.

¹¹² AR Albrecht, ‘The Taxation of Aliens under International Law’ (1952) 29 *BYIL* 145; *Burlington*, Liability (n 106) paras 391–93; *Stadtwerke München GmbH and others v Kingdom of Spain*, ICSID Case No ARB/15/1, Award (2 December 2019) paras 169–70.

¹¹³ *Gabčíkovo–Nagymaros Project (Hungary/Slovakia)* Judgment [1997] ICJ Rep 7 para 53; International Law Commission, ‘Draft Articles on the Responsibility of States for Internationally Wrongful Acts with Commentaries’, UN GAOR 56th Session Supp 10, ch 4, UN Doc A/56/10 (2001) (ARSIWA) art 25.

¹¹⁴ Federica Paddeu and Michael Waibel, ‘Necessity 20 Years On: The Limits of Article 25’ (2022) 37 *ICSID Rev—FILJ* 160; ARSIWA (n 113) art 27(b). See the discussion of justifications in Section III.D.

¹¹⁵ In the typology below, art 104 of NAFTA is characterised as a conflict clause, art 1114(1) as an affirmation, and art 1114(2) as a non-regression clause. Some studies have mentioned preambular references to environmental protection in BITs dating back to 1971, but those references could not be verified. The USMCA has a wider range of environmental clauses, but they have limited relevance in this study because the parties did not generally consent to investment arbitration: USMCA, arts 1.3 (conflict), 14.16 and 24.3 (affirmation), 24.8 (implementation), 24.4 (non-regression). See Guillermo J Garcia Sanchez, ‘Contradictions and Tensions in the Way the USMCA Regulates Energy’ (2023) 26 *JIEL* 703, 714–19.

the general trend,¹¹⁶ specific types of clauses,¹¹⁷ the treaty practice of certain States or regional organisations,¹¹⁸ and a singularly notorious decision.¹¹⁹ Still, in recent inter-governmental proposals, we find a sparse menu of three draft clauses under the ‘Right to regulate’, which provide unremarkable guidance in the interpretation (‘Nothing ... shall be construed as preventing ...’) or application (‘... the Tribunal shall give a high level of deference ...’) of investment obligations, or seek to carve out claims

¹¹⁶ Alessandra Asteriti, ‘Waiting for the Environmentalists: Environmental Language in Investment Treaties’ in Rainer Hofmann and Christian J Tams (eds), *International Investment Law and Its Others* (Nomos 2012) 117; Viñuales, *Foreign Investment* (n 3) 14–17; Markus W Gehring and Avidan Kent, ‘International Investment Agreements and the Emerging Green Economy: Rising to the Challenge’ in Freya Baetens (eds), *Investment Law within International Law: Integrationist Perspectives* (CUP 2013) 187; Michele Potestà, ‘Mapping Environmental Concerns in International Investment Agreements: How Far Have We Gone?’ in Tullio Treves, Francesco Seatzu and Seline Trevisan (eds), *Foreign Investment, International Law and Common Concerns* (Routledge 2013) 193; Christina L Beharry and Melinda E Kuritsky, ‘Going Green: Managing the Environment through International Investment Arbitration’ (2015) 30 *Am Univ Int Law Rev* 383, 388–96; Madison Condon, ‘The Integration of Environmental Law into International Investment Treaties and Trade Agreements: Negotiation Process and the Legalization of Commitments’ (2015) 33 *Va Env’t LJ* 102; Laurence Boisson de Chazournes, ‘Protección del medio ambiente y arbitraje de inversión: ¿yin y yang?’ (2017) 10 *ACDI* 371; Camille Martini, ‘Balancing Investors’ Rights with Environmental Protection in International Investment Arbitration: An Assessment of Recent Trends in Investment Treaty Drafting’ (2017) 50 *Intl L* 529; Sabrina Robert-Cuendet, ‘Protection of the Environment and International Investment Law’ in Markus Krajewski and Rhea T Hoffmann (eds), *Research Handbook on Foreign Direct Investment* (Edward Elgar 2019) 596; Jorge E Viñuales, ‘Foreign Investment and the Environment in International Law: Current Trends’ in Kate Miles (ed), *Research Handbook on Environment and Investment Law* (Edward Elgar 2019) 12; Jason Rudall, ‘Green Shoots in a Barren World: Recent Developments in International Investment Law’ (2020) 67 *NILR* 453; Ted Gleason and Catharine Titi, ‘Right to Regulate the Environment and International Investment Agreements’ in Panagiotis Delimatsis and Leonie Reins (eds), *Trade and Environmental Law* (Edward Elgar 2021) 638; Makane Moïse Mbengue and Elena Cima, ‘Greening International Investment Arbitration’ in Makane Moïse Mbengue and Elena Cima (eds), *A Multifaceted Approach to Trade Liberalisation and Investment Protection in the Energy Sector* (Brill 2021) 218; Crina Baltag, Riddhi Joshi and Kabir Duggal, ‘Recent Trends in Investment Arbitration on the Right to Regulate, Environment, Health and Corporate Social Responsibility: Too Much or Too Little?’ (2023) 38 *ICSID Rev—FILJ* 381; Jason Rudall, ‘Greening International Investment Agreements’ in Daniëlla Dam-de Jong and Fabian Amtenbrink (eds) (2021) *NYBIL* (Asser Press 2023) 133; Carlo de Stefano, ‘Giving “Teeth” to Climate Change Related Obligations through International Investment Law’ in Sandrine Maljean-Dubois and Jacqueline Peel (eds), *Climate Change and the Testing of International Law* (Brill 2023) 251, 256–62.

¹¹⁷ Newcombe (n 27); Barton Legum and Ioana Petculescu, ‘GATT Article XX and International Investment Law’ in Roberto Echandi and Pierre Sauvé (eds), *Prospects in International Investment Law and Policy* (CUP 2013) 340; Lévesque (n 27); Amelia Keene, ‘The Incorporation and Interpretation of WTO-Style Environmental Exceptions in International Investment Agreements’ (2017) 18 *JWIT* 62; Andrew D Mitchell and James Munro, ‘No Retreat: An Emerging Principle of Non-Regression from Environmental Protections in International Investment Law’ (2019) 50 *GJIL* 625; Tania Voon, Andrew Mitchell and James Munro, ‘Importing WTO General Exceptions into International Investment Agreements: Proportionality, Myths, and Risks’ in Lisa Sachs, Lise Johnson and Jesse Coleman (eds), *Yearbook on International Law & Policy* 2017 (OUP 2019) 305; Ying Zhu, ‘Do Clarified Indirect Expropriation Clauses in International Investment Treaties Preserve Environmental Regulatory Space?’ (2019) 60 *HILJ* 377; Caroline Henckels, ‘Permission to Act: The Legal Character of General and Security Exceptions in International Trade and Investment Law’ (2020) 69 *ICLQ* 557; Dafina Atanasova, ‘Non-Economic Disciplines Still Take the Back Seat: The Tale of Conflict Clauses in Investment Treaties’ (2021) 34 *LJIL* 155; Emanuel Castellarin, Arnaud de Nanteuil and Sabrina Robert, ‘Arbitrage d’investissement et droit international général’ (2021) 67 *AFDI* 729, 758–60; Bueno, Yilmaz Vastardis and Djeuga (n 44); Joshua Paine and Elizabeth Sheargold, ‘A Climate Change Carve-Out for Investment Treaties’ (2023) 26 *JIEL* 285; Ying Zhu, ‘A Quasi-Normative Conflict: Resolving the Tension between Investment Treaties and Climate Action’ (2024) 33 *RECIEL* 183.

¹¹⁸ Rumiana Yotova, ‘Balancing Economic Objectives and Environmental Considerations in New EU Investment Agreements: A Brave New World?’ in Kate Miles (ed), *Research Handbook on Environment and Investment Law* (Edward Elgar 2019) 379; Reynold L Orsua, ‘Going Green in Philippine Investment Treaty Drafting: An Overview of the Environmental Language in International Investment Agreements’ (2020) 65 *Ateneo LJ* 109; Kim Anh Dao, ‘Environmental Provisions in ASEAN Investment Agreements: Reserving Member States’ Right to Regulate Environmental Issues’ (2023) 16 *J E Asia Int Law* 301; Kexhen Su and Wei Shen, ‘Environmental Protection Provisions in International Investment Agreements: Global Trends and Chinese Practices’ (2023) 15 *Sust* 8525; *International Investment Agreements and Climate Change: What Is the Role that International Investment Agreements Play in the Transition to a Green Economy?* (APEC Investment Experts’ Group, July 2024); Senai W Andemariam, Isaias T Berhe and Henok G Gebrezgabihier, ‘Addressing Environmental Protection Gaps in Sino-African Bilateral Investment Treaties’ (2024) 25 *JWIT* 410.

¹¹⁹ *Eco Oro*, Liability (n 19); Alschner (n 21) 163–66; Gupta Aarushi, ‘*Eco Oro v Colombia*: Is GATT Article XX to be Blamed?’ (2023) 89 *Arb: Intl J of Arb M & DS* 21; Lorenzo Cotula and Nicolás M Perrone, ‘Seeing Santurbán through ISDS: A Sociolegal Case Study of *Eco Oro v Colombia*’ (2024) 37 *LJIL* 440; Robert Garden, ‘*Eco Oro v Colombia*: The Brave New World of Environmental Exceptions’ (2023) 38 *ICSID Rev—FILJ* 17; J Benton Heath, ‘*Eco Oro* and the Twilight of Policy Exceptionalism’ (*International Institute for Sustainable Development (IISD)*, 20 December 2021) <www.iisd.org/itn/en/2021/12/20/eco-oro-and-the-twilight-of-policy-exceptionalism> accessed 1 February 2025; Hou-chih Kou and Jeffrey Lo, ‘Runaway Tribunal? An Assessment of the *Eco Oro* Tribunal’s Opinion on the General Exceptions’ (2022) 15 *Contemp Asia Arbitr J* 143; Laura Létourneau Tremblay, ‘In Need of a Paradigm Shift: Reimagining *Eco Oro v Colombia* in Light of New Treaty Language’ (2022) 23 *JWIT* 915; Güneş Ünüvar, ‘A Tale of Policy Carve-Outs and General Exceptions: *Eco Oro v Colombia* as a Case Study’ (2023) 14 *JIDS* 517. See the discussion of clarifications in Section III.C and justifications in Section III.D.

from consent to arbitration ('No claim may be submitted for resolution ...').¹²⁰ What is so far lacking is a more granular typology of environmental clauses that situates them against their normative and practical baselines. The previous section set out the general international law on environmental and investment protection, focusing on the presumptive albeit limited right to regulate, which provides a normative baseline against which to interpret most clauses. A practical baseline is provided by recent work on defence arguments in international dispute settlement, which helps to identify the specific stage of arbitral analysis at which a clause may be applied, who then bears the burden of proof, and what might be its consequences.¹²¹

This section begins by introducing 12 types of clauses in tabular form (section A). They are then grouped in three stages of arbitral analysis: *jurisdiction* (section B), *breach* (section C) and *exception* (section D).¹²² These stages could be further refined, but they offer enough granularity to capture: the main phase of proceedings at which an environmental clause is likely to operate; whether these clauses supplement the primary norms of investment protection or operate as secondary norms that justify an otherwise wrongful act; and which party bears the burden of proof.¹²³ A claimant bears the burden to prove that its assets and the impugned measure fall within jurisdiction, as well as to prove the respondent's breach of a primary norm; whereas the respondent bears the burden to prove its breach was justified by the terms of any exception under a secondary norm or otherwise to reduce any award by a successful counterclaim (for which the respondent bears the burden of both jurisdiction and breach). Section IV takes stock of this arbitral and treaty practice, identifying which clauses reflect general international law (*deep roots*), may enhance environmental protection (*green shoots*) or make negligible contribution (*dead wood*).

A. 12 Types of Environmental Clauses

The purpose of this section is not to catalogue empirically every clause but rather to map the 12 main types, focusing on the specific function of each type in investment arbitration.¹²⁴ In Table 1, the clauses are numbered roughly in the order that they might appear in arbitral analysis. The next three columns serve to label each clause,

¹²⁰ UNCITRAL, 'Possible Reform of Investor-State Dispute Settlement (ISDS): Draft Provisions on Procedural and Cross-Cutting Issues: Note by the Secretariat' (26 July 2023) UN Doc A/CN.9/WG.III/WP.231 ('Draft Provisions'), draft provision 12. For analysis, see UNCITRAL, 'Possible Reform of Investor-State Dispute Settlement (ISDS): Annotations to the Draft Provisions on Procedural and Cross-Cutting Issues: Note by the Secretariat' (31 July 2023) UN Doc A/CN.9/WG.III/WP.232 paras 30–31; Joshua Paine and Elizabeth Sheargold, 'Shoehorning Substance into a Procedural Mandate? The Right to Regulate and UNCITRAL Working Group III' (*EJIL:Talk!*, 7 September 2023) <www.ejiltalk.org/shoehorning-substance-into-a-procedural-mandate-the-right-to-regulate-and-uncitral-working-group-iii/> (accessed 1 February 2025).

¹²¹ Federica Paddeu, *Justification and Excuse in International Law: Concept and Theory of General Defences* (CUP 2018); Lorand Bartels and Federica Paddeu (eds), *Exceptions in International Law* (OUP 2020); Viñuales (n 87).

¹²² With the possible exception of the denial of benefits, discussed in Section III.B, environmental clauses are unlikely to ground any objection to admissibility; the traditional distinction between jurisdiction and inadmissibility turns on whether a tribunal's power to adjudicate was limited by the parties' instrument of consent or whether the power should not be exercised in respect of a specific claim, often based on implicit sources such as general principles of law. See Zachary Douglas, *The International Law of Investment Claims* (CUP 2009) ch 3; Yuval Shany, *Questions of Jurisdiction and Admissibility before International Courts* (CUP 2015).

¹²³ On burden and standard of proof, see Cameron Miles, 'Cross-Cutting Procedural Powers of International Courts and Tribunals' in Andreas Kulick and Michael Waibel (eds), *General International Law in International Investment Law: A Commentary* (OUP 2024) 555 paras 52–58.

¹²⁴ This typology was induced from the wide literature on arbitral and treaty practice and refined by keyword searches in three major treaty and case law databases: UNCTAD, 'Navigator' (n 15); Wolfgang Alschner, Manfred Elsig and Rodrigo Polanco, 'Introducing the Electronic Database of Investment Treaties (EDIT): The Genesis of a New Database and Its Use' (2021) 20 WTR 73; Jus Mundi <<https://jusmundi.com/en/>> accessed 1 February 2025. The typology should be updated in the light of subsequent practice and further research.

describe its function and provide an example, selected from treaties that include parties from several continents to show how environmental clauses are no longer limited to the regional treaty practice of North America. Caveats should be attached to some examples: the exclusion is a modified annex, not yet in force, to exclude fossil fuels in modernising the Energy Charter Treaty (ECT);¹²⁵ while the exemption relates to tobacco control measures as a comparator for recent proposals to exempt climate mitigation measures. Some other examples are also not yet in force or were sourced from model BITs, though they still serve to illustrate the developing state of practice.¹²⁶ A shaded box then indicates the main stage of analysis for each clause: jurisdiction, breach or exception, as explained above. In the final column, relevant cases are listed to show how tribunals have interpreted and applied environmental or similar clauses. The relevance of each case is fleshed out in the following sections.

B. *Jurisdiction: Legality, Exclusion, Exemption and Denial of Benefits*

The four clauses surveyed in this section serve to remove environmental disputes from the scope of an investment treaty or a tribunal's jurisdiction based on (1) the *legality* of the putative investment, (2) the *exclusion* of assets, (3) the *exemption* of measures or (4) the *denial of benefits* to investors.

(1) **Legality clauses** give expression to an otherwise implied requirement that protected investments must have been made in accordance with domestic law, traceable at least to the *NACF* case.¹²⁷ In *Cortec v Kenya*, for example, where there was no legality clause in the applicable BIT, the tribunal held that a mining licence was 'wholly a creature of Kenyan domestic law', which was 'void *ab initio*' because the claimant failed to comply with 'statutory conditions *precedent*' of 'fundamental importance in an environmentally vulnerable area'.¹²⁸ Yet, in reaching this conclusion, the tribunal asked whether 'the denial of treaty protection' was a 'proportionate response' in light of the significance of the domestic environmental obligations and the seriousness of the claimant's conduct.¹²⁹ In the absence of an express provision, such factors have doubtful relevance in a tribunal's determination of its subject-matter jurisdiction.¹³⁰ Whereas the subsequent illegality and seriousness of a claimant's conduct could be relevant to the merits, or even ground a counterclaim, any illegality tainting the initial acquisition removes the putative investment from a tribunal's jurisdiction.¹³¹ Here we discern the added value of legality clauses: to clarify whether lesser breaches of environmental law remove the investment from a tribunal's jurisdiction. Article 14 of the Morocco–Nigeria BIT provides that investors

¹²⁵ Energy Charter Treaty (with Annexes) (opened for signature 17 December 1994, entered into force 16 April 1998) 2080 UNTS 95 ('ECT'); Decision of the Energy Charter Conference, 'Amendments to the Energy Charter Treaty', CCDEC202412 (3 December 2024), 'Modifications and Changes to Annexes to the Energy Charter Treaty', CCDEC202413 (3 December 2024) (together, 'Modernised ECT'), annex NI.

¹²⁶ cf Yoram Z Haftel, Morr Link and Tomer Broude, 'Last Year's Model? Investment Arbitration, Negotiation, and the Gap Between Model BITs and IIAs' (2023) 26 JIEL 483.

¹²⁷ Rumiana Yotova, 'Compliance with Domestic Law: An Implied Condition in Treaties Conferring Rights and Protections on Foreign Nationals and Their Property?' in Joseph Klinger, Yuri Parkhomenko and Constantinos Salonidis (eds), *Between the Lines of the Vienna Convention? Canons and Other Principles of Interpretation in Public International Law* (Wolters Kluwer 2018) 307, 310 citing *NACF* (n 53) 179, 186. See also Lucinda A Low, 'Legality Clauses in Investment Agreements: Scope, Principles, and Consequences' (2025) 21 ICSID Rep (forthcoming).

¹²⁸ *Cortec Mining Kenya Limited, Cortec (Pty) Limited and Stirling Capital Limited v Republic of Kenya*, ICSID Case No ARB/15/29, Award (22 October 2018) paras 222, 333, 343–65.

¹²⁹ *ibid* para 365.

¹³⁰ cf *Kim and others v Republic of Uzbekistan*, ICSID Case No ARB/13/6, Decision on Jurisdiction (8 March 2017) paras 363–413.

¹³¹ Zachary Douglas, 'The Plea of Illegality in Investment Treaty Arbitration' (2014) 29 ICSID Rev—FILJ 155.

Table 1. Twelve types of environmental clauses in investment treaties

No	Type	Function	Example	Stage of arbitral analysis			Relevant cases
				Jurisdiction	Breach	Exception	
1	Legality clauses	Requires investments to be made in accordance with domestic environmental law.	Morocco–Nigeria BIT (2016), art 14				<i>Cortec v Kenya</i>
2	Exclusions	Excludes a type of asset from protection on environmental grounds.	Modernised ECT (2022), annex NI, ss B and C				<i>Phoenix Action v Czech Republic</i>
3	Exemptions	Exempts a type of environmental measure from protection.	Kazakhstan–Singapore BIT (2018), art 11.1				<i>InfraRed v Spain</i>
4	Denial of benefits	Permits a party to deny protection to investors on environmental grounds.	Colombia Model BIT (2017), art [##]–Denial of Benefits				<i>Pac Rim v El Salvador</i>
5	Conflict clauses	Gives priority to a MEA in the event of inconsistency with an investment obligation.	Canada–Korea FTA (2014), art 1.3				<i>SD Myers v Canada</i>
6	Affirmations	Affirms the inherent right to regulate for environmental protection.	Oman–US FTA (2006), art 10.10				<i>Al Tamimi v Oman; Aven v Costa Rica; Infinito Gold v Costa Rica</i>
7	Clarifications	Provides interpretive guidance on the scope of investment obligations regarding environmental measures.	CETA (2016), annex 8–A.3				<i>Bear Creek v Peru; Eco Oro v Colombia; Montauk v Colombia</i>

Table 1. (continued)

No	Type	Function	Stage of arbitral analysis			Relevant cases
			Example	Jurisdiction	Breach	Exception
8	Implementation clauses	Requires the parties to effectively implement MEAs or other sources of international environmental law.	EC Non-Paper (2023), arts [] Investment and Environment, Investment and Climate Change			<i>Blusun v Italy</i> ; <i>Chemtura v Canada</i> ; <i>Allard v Barbados</i>
9	Non-regression clauses	Obliges the parties to enforce or not to derogate from domestic environmental law.	NAFTA (1992), art 1114(2)			<i>Al Tamimi v Oman</i> ; <i>Allard v Barbados</i>
10	Justifications	Renders lawful an environmental measure that would otherwise breach an investment obligation, typically modelled on art XX of the GATT.	Canada–Colombia FTA (2008), art 2201 (3)			<i>Copper Mesa v Ecuador</i> ; <i>Eco Oro v Colombia</i>
11	Reservations	Justifies a party’s non-conforming environmental measures in respect of specified obligations.	CPTPP (2018), art 9.12, annexes I and II			<i>Mobil v Canada</i>
12	Investor obligations	Imposes environmental obligations on investors, providing a basis for counterclaim or contributory fault.	ECOWIC (2018), art 27			<i>Lopez-Goyne v Nicaragua</i> ; <i>Al-Warrag v Indonesia</i>

‘shall comply with environmental assessment screening and assessment processes applicable to their proposed investments prior to their establishment’, prescribing the precautionary principle.¹³² In combination with requirements that any protected investment must be established ‘in accordance with’ domestic law, such a legality clause would render a tribunal without jurisdiction over any investment that failed to comply with a pre-establishment EIA.¹³³ There would be no need for any inquiry into the significance of the obligation to perform an EIA or the seriousness of its breach,¹³⁴ let alone whether the obligation applies to investors.¹³⁵

(2) **Exclusions** remove a type of asset from the treaty’s scope or consent to arbitration. To date, no environmental exclusion has entered into force. The best-known example is Annex NI of a modernised ECT, which excludes investments in various types of fossil fuels and related forms of electrical energy and infrastructure.¹³⁶ In simplified terms, Part III of the ECT would cease to apply to such investments in the United Kingdom (UK), the European Union (EU) or its Members States made after the entry into force of the modified Annex NI and cease to apply to established fossil energy investments after 10 years and to established UK coal investments immediately.¹³⁷ On 3 December 2024, the Energy Charter Conference adopted these modifications, which will enter into force on 3 September 2025 in respect of subsequent fossil energy investments and, on a provisional basis subject to any party’s contrary declaration, to established investments on the same date.¹³⁸ Yet, because so many of the relevant parties are due to withdraw from the ECT by mid-2025, one year after their written notifications,¹³⁹ the practical effect of such exclusions depends on

¹³² Reciprocal Investment Promotion and Protection Agreement Between the Government of the Kingdom of Morocco and the Government of the Federal Republic of Nigeria (signed 3 December 2016, not yet entered into force) (‘Morocco–Nigeria BIT’). On the precautionary principle, see n 43.

¹³³ Morocco–Nigeria BIT, arts 1, 3. In many respects, however, this BIT is not a model of clarity for prospective investors or their hosts, which may be why it still has not entered into force. The definition of ‘investment’, for example, covers any enterprise ‘established, acquired, expanded or operated, in good faith, by an investor of the other State in accordance with law of the Party in whose territory the investment is made’, which implies that any post-establishment illegality may remove the enterprise from the scope of jurisdiction: art 1 (emphases added). The requirement to perform a pre-establishment EIA, moreover, is determined ‘by the laws of the host state for such an investment or the laws of the home state for such an investment, whichever is more rigorous in relation to the investment in question’: art 14.1. Such ambivalence may lead officials wrongly to make assurances that an investment has duly complied, which could estop a respondent’s plea of illegality: *Bankswoith Ghana Ltd v Republic of Ghana*, PCA Case No 2011–10, Award Save as to Costs (4 March 2011) paras 11.71–11.97.

¹³⁴ In the arbitral interpretation of domestic environmental regulations, there is a ‘rebuttable presumption’ in favour of ‘an interpretation by the responsible bodies entrusted with governmental powers’: *Pac Rim Cayman LLC v Republic of El Salvador*, ICSID Case No ARB/09/12, Award (14 October 2016) para 8.31. cf *Bilcon of Delaware, Inc and others v Canada*, PCA Case No 2009–04, Award on Jurisdiction and Liability (17 March 2015) paras 597–604; *Bilcon of Delaware, Inc and others v Canada*, PCA Case No 2009–04, Dissenting Opinion of Professor Donald McRae (10 March 2015) paras 44–51.

¹³⁵ See the discussion of implementation clauses in Section III.C and investor obligations in Section III.D.

¹³⁶ Other environmental clauses in the Modernised ECT include an affirmation (art 16), clarification (art 13(4)), non-derogation clause (art 19(3)), implementation clause (art 19 bis) and justification (art 24). See further Johannes Tropper and Kilian Wagner, ‘The European Union Proposal for the Modernisation of the Energy Charter Treaty—A Model for Climate-Friendly Investment Treaties?’ (2022) 23 JWIT 813.

¹³⁷ Modernised ECT, Annex NI, ss B(1), B(3) and C.

¹³⁸ Decision of the Energy Charter Conference, Entry into Force and Provisional Application of Amendments to the Energy Charter Treaty and Changes and Modifications to its Annexes CCDEC202415 (3 December 2024). Amendments do not fully enter into force until 90 days after at least three-quarters of the parties have ratified, accepted or approved them: ECT, art 42(4).

¹³⁹ ECT, art 47(2). The following parties submitted their written notifications of withdrawal between the conclusion of the Modernised ECT on 24 June 2022 and its adoption on 3 December 2024, with the date of effective withdrawal in brackets: Germany (20 December 2023), Poland (29 December 2023), Luxembourg (17 June 2024), Slovenia (14 October 2024), Portugal (2 February 2025), Spain (17 April 2025), UK (27 April 2025), EU and the European Atomic Energy Community (28 June 2025) and the Netherlands (28 June 2025). Italy and France notified their withdrawals before the Modernised ECT was concluded, whereas Russia and Australia terminated the treaty’s provisional application.

a careful application of the law of treaties.¹⁴⁰ In brief, the ordinary meanings of all temporally relevant terms in the ECT's 20-year sunset clause suggest that the provisions of the treaty 'as of the date when' withdrawal 'takes effect' are those which 'continue to apply' to established investments 'from such date', otherwise the remaining parties could amend the treaty's provisions in a more burdensome manner without the consent of the withdrawn non-party.¹⁴¹ Therefore, the exclusions would not apply to fossil energy investments made in the UK, for example, because it is due to withdraw from the ECT on 27 April 2025, four months before the modifications to Annex NI (provisionally) enter into force.¹⁴² However, 18 EU Member States have not notified their withdrawal, so they may yet benefit from the fossil energy exclusions,¹⁴³ whereas narrower exclusions were agreed in respect of investments made in Switzerland (conventional hydrogen, certain synthetic fuels) and in all ECT parties (coal tar, fuel wood, wood charcoal), which enter into force on 3 September 2025.¹⁴⁴

Fossil energy exclusions have also been floated by the OECD Secretariat, proposing a model list of 'Fossil Fuel Energy Materials and Products, and Activities' based on the Harmonized Commodity Description and Coding System of the World Customs Organization (Harmonized System).¹⁴⁵ So long as provision is made for possible changes,¹⁴⁶ this list could easily be applied by tribunals, which have grappled with more elusive criteria for protected investments.¹⁴⁷ Moreover, the exclusion of specific assets is hardly unprecedented, with recent treaties excluding portfolio investments and sovereign debt instruments.¹⁴⁸ Yet it is difficult to understate the paradigm shift in excluding oil, gas and coal assets, which have long been the quintessence of foreign investment. '[N]obody would contest that the construction and operation of a power plant is an investment', observed the tribunal in *Phoenix Action v Czech Republic*.¹⁴⁹ Equally, however, 'nobody would suggest that ICSID protection should be granted to investments made in violation of the most fundamental rules of protection of human rights', seeing as jurisdictional requirements 'cannot be read and interpreted in isolation from public international law'.¹⁵⁰ As States begin to admit that their environmental and human rights obligations require more ambitious measures, such exclusions could be viewed as the best means of bringing investment arbitration into

¹⁴⁰ Nikos Braoudakis, Rosanne Craveia and Clémentine Baldon, 'Neutralising the ECT Sunset Clause *Inter Se*' (2024) 39 ICSID Rev—FILJ 347; Tibisay Morgandi and Lorand Bartels, 'Exiting the Energy Charter Treaty under the Law of Treaties' (2023) 34 KLJ 145; Eoin Jackson, 'The Energy Charter Treaty: Letting the Sun Set on Sunset Clauses' (2024) 33 RECIEL 619.

¹⁴¹ ECT, art 47(3). Note that the annexes form an 'integral part' of the treaty: ECT, art 48. Thanks to Alexander Horne, Veronika Korom and Daniel Peat for a productive exchange on the possible interpretations of these provisions.

¹⁴² If the exclusions somehow did apply to the UK, based on an ambulatory interpretation of 'provisions of this Treaty' under art 47(3), they would effectively cut in half the ECT's sunset clause in respect of most fossil energy investments made before 3 September 2025 and wholly exclude coal investments from protection. Any established oil and gas investments would not be excluded from protection until 3 September 2035, whereas renewable energy investments would continue to be protected until 27 April 2045.

¹⁴³ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Ireland, Latvia, Lithuania, Malta, Romania, Slovakia and Sweden.

¹⁴⁴ Modernised ECT, Annex NI, ss A and B(2).

¹⁴⁵ OECD, 'Methods to Align Investment Treaty Benefits for Energy Investment with the Paris Agreement and Net Zero: Note by the Secretariat' (26 June 2024) DAF/INV/TR1/WD(2024)1/REV1, 12–15.

¹⁴⁶ cf Isabel Feichtner, 'The Administration of the Vocabulary of International Trade: The Adaptation of WTO Schedules to Changes in the Harmonized System' (2008) 9 GLJ 1481.

¹⁴⁷ Michael Waibel, 'Subject Matter Jurisdiction: The Notion of Investment' (2021) 19 ICSID Rep 25.

¹⁴⁸ UNCTAD, *International Investment Agreements Reform Accelerator* (2020) UNCTAD/DIAE/PCB/INF/2020/8, 10–11.

¹⁴⁹ *Phoenix Action, Ltd v Czech Republic*, ICSID Case No ARB/06/5, Award (15 April 2009) para 79.

¹⁵⁰ *ibid* para 78.

line with those obligations by excluding the most carbon-intensive and other highly polluting assets from the scope of jurisdiction.¹⁵¹

(3) Exemptions remove a type of measure from the treaty's scope or consent to arbitration, sometimes described as carve-outs or non-precluded measures.¹⁵² Such exemptions are commonplace in respect of measures with a legally defined operation or object, such as taxation or tobacco products, and those addressing highly sensitive purposes, such as the necessary protection of essential security interests.¹⁵³ These *formal* and *purposive* exemptions are addressed in turn.

Formal exemptions are preferable because they allow a tribunal to determine whether the impugned measure conforms to a legal definition.¹⁵⁴ The ordinary meaning of taxation in Article 21 of the ECT, for example, has been derived from general international law: 'a compulsory exaction of money by law for public purposes', which may include 'the efficient production of energy that respects the environment and sustainability'.¹⁵⁵ Yet, as recalled in *InfraRed v Spain*, taxation measures are defined by their 'legal operation', not whether their 'economic effects' achieved the purpose of environmental protection; claimants thus bore the burden to show an ostensible tax was 'entirely unrelated to ... levying state revenue'.¹⁵⁶ More recently, Article 11.1 of the Kazakhstan–Singapore BIT exempts from investment arbitration any dispute concerning a 'measure adopted ... in respect of tobacco or tobacco-related products', where such products are defined by reference to the Harmonized System.¹⁵⁷ In both examples, the exemption is all or nothing, determined by a measure's legally defined operation or object.¹⁵⁸

Purposive exemptions, in contrast, are qualified by whether a measure was necessary or directed to achieve the relevant purpose, which has led some tribunals to engage in artificial arithmetic of partial exemption where the measure had a mixed purpose.¹⁵⁹ There is real risk of partial application in the case of environmental exemptions, which have been proposed to cover 'measures with the purpose of reducing or stabilizing greenhouse gas emissions';¹⁶⁰ or 'to protect ... the environment (including compliance with the Paris Agreement or any principle or commitment

¹⁵¹ See Section IV.

¹⁵² Viñuales (n 87) paras 8, 18.

¹⁵³ While early cases interpreted the latter exemption by direct reference to necessity as a circumstance precluding wrongfulness, that course was corrected by later tribunals on the ground that 'the content of the two defenses is different'; essential security exemptions place 'such measures outside the scope of the Treaty', whereas a state of necessity may justify 'an act otherwise in breach of an international obligation': *Continental Casualty Company v Argentine Republic*, ICSID Case No ARB/03/9, Award (5 September 2008) paras 162–68.

¹⁵⁴ cf *Fisheries Jurisdiction (Spain v Canada)* Judgment [1998] ICJ Rep 432 para 68.

¹⁵⁵ *Eurus* (n 99) paras 171–75. See Section II.D.

¹⁵⁶ *InfraRed* (n 110) paras 297–306. This 'broad and general' interpretation of art 21 was buttressed by 'the principle of state sovereignty enshrined (in its application to state energy resources)' in art 18 of the ECT: *ibid* para 309.

¹⁵⁷ Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Singapore on the Promotion and Mutual Protection of Investments (signed 21 November 2018, not yet entered into force) ('Kazakhstan–Singapore BIT'). A better-known clause on tobacco control measures operates not as an exclusion or exemption but rather through the denial of benefits, which depends on the positive election of a party: Comprehensive and Progressive Agreement on Trans-Pacific Partnership (signed 8 March 2018, entered into force starting 30 December 2018) [2018] ATS 23 ('CPTPP') art 29.5.

¹⁵⁸ This distinction between formal and purposive exemptions could be blurred by some treaties, including the ECT, that combine the international legal form of a measure with its definition under domestic law, which might include a purposive element: cf *Antaris* (n 108) paras 223–43.

¹⁵⁹ *CC/Devas (Mauritius) Ltd, Devas Employees Mauritius Private Limited, and Telcom Devas Mauritius Limited v Republic of India*, PCA Case No 2013-09, Award on Jurisdiction and Merits (25 July 2016) paras 354–73; *CC/Devas (Mauritius) Ltd, Devas Employees Mauritius Private Limited, and Telcom Devas Mauritius Limited v Republic of India*, PCA Case No 2013-09, Dissenting Opinion of Arbitrator David R Haigh QC (25 July 2016) para 109.

¹⁶⁰ Paine and Sheargold (n 117) 299.

contained in articles 3 and 4 of the United Nations Framework Convention on Climate Change [UNFCCC])’.¹⁶¹ Without any formal definition of their operation or object,¹⁶² these provisions do not achieve the necessary ‘tight drafting’ for a ‘complete exemption’.¹⁶³ A claimant might persuade a tribunal that a climate measure was designed, in whole or in part, with a protectionist motive.¹⁶⁴ However, because tribunals tend to lack climate-related expertise, treaties could instead refer disputes over purposive exemptions to the joint determination of the parties’ environmental authorities or inter-State arbitration.¹⁶⁵ There is seemingly no appetite for self-judging exemptions, which would exempt any measure that a State unilaterally ‘considers necessary’ for environmental protection.¹⁶⁶

(4) Denial of benefits clauses permit a party to deny protection to investors on environmental grounds. The denial of benefits may go to the admissibility of an investor’s claim, such that a respondent bears the burden to show that the requirements of an applicable clause are satisfied.¹⁶⁷ In *Pac Rim v El Salvador*, however, the tribunal clarified that a State’s consent to investment arbitration may be ‘necessarily qualified from the outset’ by the possible denial of protection.¹⁶⁸ What is remarkable, for the present study, is how far the sole environmental example has departed from the conventional function of such clauses.¹⁶⁹ The Colombia Model BIT would permit denial of benefits if ‘an international court or a judicial or administrative authority of any State with which the Contracting Parties have diplomatic relations’ has ‘proven that such investor has directly or indirectly . . . caused serious environmental damage in the Territory of the Host Party’, provided that the party has ‘corroborated’ this ground and ‘promptly communicate[d]’ the denial of benefits to the affected investor and its home State.¹⁷⁰ Such wording might be explained by Colombia’s exposure to environmental harm from economic activities in neighbouring States, which has been

¹⁶¹ UNCITRAL, Draft Provisions (n 120) draft provision 12.3. See UN Framework Convention on Climate Change (opened for signature 9 May 1992, entered into force 21 March 1994) 1171 UNTS 107 (‘UNFCCC’).

¹⁶² NGOs have proposed that climate exemptions should specifically apply to ‘a denial or revocation of permits for exploration and the development of fossil fuels; the planned phase-out of certain energy sources such as coal, oil, and gas; and the removal of fossil fuel subsidies’: Center for International Environmental Law, ClientEarth and IISD, *Submission to the Organisation for Economic Co-operation and Development on Investment Agreements and Climate Change* (March 2022) para 44.

¹⁶³ Arman Sarvarian, ‘Invoking the Paris Agreement in Investor-State Arbitration’ (2023) 38 ICSID Rev—FILJ 422, 440.

¹⁶⁴ This risk is particularly acute amid the merger of climate mitigation and industrial policy: Bentley Allan, Joanna I Lewis and Thomas Oatley, ‘Green Industrial Policy and the Global Transformation of Climate Politics’ (2021) 21 GEP 1; Hailes and Viñuales (n 12) 639–41.

¹⁶⁵ Paine and Sheargold (n 117) 302–03. Such mechanisms have been previously agreed in respect of exemptions for financial regulation: eg CPTPP, arts 11.11, 11.22(2). See further Andrew D Mitchell, Jennifer K Hawkins and Neha Mishra, ‘Dear Prudence: Allowances under International Trade and Investment Law for Prudential Regulation in the Financial Services Sector’ (2016) 19 JIEL 787, 796–97.

¹⁶⁶ cf *Seda and others v Republic of Colombia*, ICSID Case No ARB/19/6, Award (27 June 2024) paras 609–802; Fabian Eichberger, ‘Self-Judgment in International Law: Between Judicialization and Pushback’ (2024) 37 LJIL 915.

¹⁶⁷ Douglas (n 122) ch 13. Arbitral practice is equivocal: Campbell McLachlan, Laurence Shore and Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (2nd edn, OUP 2017) paras 5.187–5.188.

¹⁶⁸ *Pac Rim* (n 134) para 4.90.

¹⁶⁹ Denial of benefits clauses were conventionally included to deny protection based on a corporate investor’s lack of ‘substantial business activities’ in its putative home State or its ultimate ownership by nationals of an unfriendly third State, whether to avoid the protection of enemy aliens, to counteract nationality planning or simply to maintain the reciprocal character of the treaty: Loukas A Mistelis and Crina Mihaela Baltag, ‘Denial of Benefits and Article 17 of the Energy Charter Treaty’ (2009) 113 Penn St L Rev 1301.

¹⁷⁰ Colombia Model BIT (2017), Article [##]-Denial of Benefits.

addressed by the ICJ and the Inter-American Court of Human Rights (IACtHR).¹⁷¹ Even so, this unwieldy provision does little to prevent environmental harm.¹⁷²

C. Breach: Conflict, Affirmation, Clarification, Implementation and Non-Regression

The next five clauses operate at the level of primary norms, serving respectively (5) to resolve any normative *conflict* with an MEA, (6) to *affirm* the right of States to regulate, (7) to *clarify* the scope of specific obligations, (8) to require the *implementation* of MEAs or (9) to prevent *regression* from domestic environmental law. Most of these environmental clauses, it will be seen, either reflect the position under general international law or operate as interpretive context.

(5) **Conflict clauses** give priority to an MEA in the event of any inconsistency with an investment obligation. The scarcity of these clauses, let alone their application, is difficult to reconcile with the widespread narrative of conflict between environmental and investment protection.¹⁷³ Strictly speaking, normative conflict involves ‘the impossibility of simultaneous performance of two norms that share the same subject matter’.¹⁷⁴ Yet, as explained in Section II, the correct relationship between environmental and investment protection is one of integrated hierarchy, wherein the strength of regulatory purpose is prior to any determination of whether an investor has been negatively affected by a manifestly disproportionate measure. Conflict clauses have ironically imposed a more stringent test. Article 104 of NAFTA, for example, states that trade-related obligations under a closed list of MEAs ‘shall prevail to the extent of the inconsistency’, so long as the party ‘chooses the alternative that is least inconsistent with the other provisions’ of NAFTA where there are ‘equally effective and reasonably available means of complying with such [MEA] obligations’. In *SD Myers*, though the United States had not ratified the Basel Convention,¹⁷⁵ the tribunal mentioned Article 104 in applying a test of least restrictive means to find breaches of national treatment and FET arising from Canada’s export ban, which operated as *lex specialis* in respect of the inherent limit on environmental regulation.¹⁷⁶

Most conflict clauses have followed NAFTA’s model.¹⁷⁷ A variation is found in Article 1.3 of the Canada–Korea FTA: a party is ‘not precluded from taking a particular measure necessary to comply with its obligations’ under certain MEAs, ‘provided that the measure is not applied in a manner that would constitute, where the same conditions prevail, arbitrary or unjustifiable discrimination, or a disguised restriction on international trade’.¹⁷⁸ This language is lifted from the chapeau of Article XX of

¹⁷¹ Jorge Contesse, ‘Inter-State Disputes under the Inter-American Human Rights System’ (2024) 13 HRLR 74, 90–92.

¹⁷² Colombia’s only subsequent BIT has kept closer to the conventional function of denying benefits, extending only to judicial findings that an investor had committed international crimes or financed terrorism: Acuerdo entre La República de Colombia y El Reino de España para la Promoción y Protección Recíproca de Inversiones (signed 16 September 2021, not yet entered into force) art 18.1(d).

¹⁷³ See Section I. Conflict clauses are more common in respect of taxation, finance, intellectual property and trade: Atanasova (n 117) 165.

¹⁷⁴ Gloria M Alvarez, ‘Redefining the Relationship Between the Energy Charter Treaty and the Treaty of Functioning of the European Union: From a Normative Conflict to Policy Tension’ (2018) 33 ICSID Rev—FILJ 560, 568–70.

¹⁷⁵ Art 104.1(c) of NAFTA provided that the conflict clause applied in respect of the Basel Convention ‘on its entry into force for Canada, Mexico and the United States’.

¹⁷⁶ *SD Myers* (n 9) paras 210–21, 255, 266.

¹⁷⁷ Atanasova (n 117) 163.

¹⁷⁸ Free Trade Agreement between Canada and the Republic of Korea (signed 22 September 2014, entered into force 1 January 2015) (‘Canada–Korea FTA’).

the GATT, which is discussed below in respect of environmental justifications.¹⁷⁹ At this juncture, let us observe that such a clause does not give priority to MEAs but rather disciplines their application according to traditional standards of international economic law.¹⁸⁰ The same problem attends a recent recommendation that conflict clauses be drafted to give priority to climate mitigation and adaptation obligations, so long as the measure is ‘carried out in a non-discriminatory manner, follows due process, and does not frustrate the legitimate expectations of foreign investors based on specific commitments made by host States’.¹⁸¹ The apparent impossibility of drafting an environmental conflict clause without duplicating obligations of investment protection is less surprising once we recall the integrated hierarchy in general international law.¹⁸² From this vantage, there is no conflict to resolve. Rather, a presumptive right with an inherent limit.

(6) Affirmations of a State’s ‘right to regulate’ are ubiquitous in the preambles and main texts of recent treaties, whether or not they use that precise language.¹⁸³ They differ from clarifications, next discussed, in that they apply to all investment obligations as context under the general rule of treaty interpretation.¹⁸⁴ For example, Article 8.9 of the Canada–EU Comprehensive Economic and Trade Agreement (CETA) reaffirms the parties’ ‘right to regulate within their territories to achieve legitimate policy objectives, such as the protection of ... the environment’, then provides that the ‘mere fact’ of regulatory change contrary to investor expectations or the denial of subsidies does not breach any investment obligation.¹⁸⁵ Not only does this clause affirm the right to regulate, but it ensures that measures giving rise to expectations are not conflated with any ‘specific commitment under law or contract’ by which a State may consensually limit the future incidence of regulation on the promised subsidy.¹⁸⁶

To similar effect, the United States has long provided in its treaty practice, dating back to Article 1114(1) of NAFTA, that ‘[n]othing ... shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent’ with the investment chapter that ‘it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns’. Although Article 1114(1) was ignored in early NAFTA cases,¹⁸⁷ its identical terms were taken seriously in the form of Article 10.10 of the Oman–US FTA.¹⁸⁸ In *Al Tamimi v Oman*, the tribunal interpreted this provision as ‘plac[ing] a high premium on environmental protection’ and ‘expressly qualif[y]ing the construction’ of all investment obligations.¹⁸⁹ In applying the minimum standard, the tribunal

¹⁷⁹ See Section III.D.

¹⁸⁰ Atanasova (n 117) 164–65, 171–72.

¹⁸¹ Zhu (n 117) 192.

¹⁸² See Section II.B.

¹⁸³ In a recent study, affirmations were divided into categories of ‘Preamble’, ‘General provisions’ and ‘Consistency with IIA obligations’: Baltag, Joshi and Duggal (n 116). Only in dialogue with general international law and recent arbitral practice may we discern that these seemingly discrete categories are functionally equivalent.

¹⁸⁴ VCLT, art 31(2); J Romesh Weeramantry, *Treaty Interpretation in Investment Arbitration* (OUP 2012) paras 3.52–3.69; Richard Gardiner, *Treaty Interpretation* (2nd edn, OUP 2015) 197–210.

¹⁸⁵ Comprehensive Economic and Trade Agreement (CETA) between Canada, of the one part, and the European Union and its Member States, of the other part (signed 30 October 2016, provisionally entered into force 21 September 2017) [2017] OJ L11/23.

¹⁸⁶ CETA, art 8.9(2)–(3). However, by allowing for specific commitments ‘under law’, art 8.9(3)(a) does not fully remove the possibility of claims that the regulatory regime itself gave rise to a binding promise. cf Section II.C.

¹⁸⁷ eg *Metalclad* (n 7) para 98.

¹⁸⁸ Agreement between the Government of the United States of America and the Government of the Sultanate of Oman on the Establishment of a Free Trade Area (signed 19 January 2006, entered into force 1 January 2009) (‘Oman–US FTA’).

¹⁸⁹ *Al Tamimi* (n 19) para 387.

acknowledged that it had no ‘open-ended mandate to second-guess government decision-making’, quoting *SD Myers*, particularly in view of the ‘forceful defence of environmental regulation and protection provided in the express language of the Treaty’.¹⁹⁰ While this affirmation could not ‘protect a State from liability for measures that are carried out in bad faith, or in violation of the expected standards of basic fairness or due process’, the tribunal observed that police investigation of a mining operation was ‘precisely the kind of environmental regulatory enforcement that the Parties sought to protect’, thus removing any doubt that the impugned arrest and prosecution were undertaken for a ‘legitimate purpose’ and not a ‘covert political agenda’.¹⁹¹

The fact that affirmations do little more than remind tribunals how to apply a treaty in light of general international law was confirmed in two cases against Costa Rica. In *Aven*, the tribunal held that the ‘express terms’ of an affirmation ‘essentially subordinate’ investments to a State’s right to regulate for environmental protection, but ‘this subordination is not absolute’ by requiring the State to ‘act in line with principles of international law’, foremost good faith.¹⁹² In *Infinito Gold*, the tribunal rejected the respondent’s argument that an identical clause provided an ‘exception to liability’ for breach of an FET standard.¹⁹³ In the tribunal’s view, such ‘references to environmental measures’ did not suggest ‘there should be greater deference in matters relating to the environment than the deference due generally to States in relation to their domestic regulatory affairs’.¹⁹⁴ The tribunal’s statement could have been expressed more carefully; regardless of whether the applicable treaty contains an affirmation, the deference due to a State’s right to regulate may well be reinforced by a relevant obligation of environmental protection.¹⁹⁵ That much is clear from arbitral and treaty practice which integrates a respondent’s obligations under MEAs, explored shortly with regard to clarifications and implementation clauses, though the point is less well recognised in respect of a State’s environmental obligations under general international law.¹⁹⁶

(7) **Clarifications** provide interpretive guidance on the scope of specific obligations. The leading examples are interpretive annexes on indirect expropriation. Annex 8-A of CETA provides that ‘non-discriminatory measures of a Party that are designed and applied to protect legitimate public welfare objectives, such as ... the environment, do not constitute indirect expropriations’, ‘except in the rare circumstance when the impact of a measure ... is so severe in light of its purpose that it appears manifestly excessive’.¹⁹⁷ In *Philip Morris v Uruguay*, the tribunal observed that such ‘confirmation’ of ‘the police powers doctrine ... in recent trade and investment treaties’, ‘whether or not introduced *ex abundanti cautela*, reflect the position under general international law’.¹⁹⁸ In *Bear Creek v Peru*, however, these ‘very detailed

¹⁹⁰ *ibid* para 389.

¹⁹¹ *ibid* paras 440–47.

¹⁹² *Aven* (n 19) paras 411–12.

¹⁹³ *Infinito Gold* (n 19) paras 770–81.

¹⁹⁴ *ibid* para 774.

¹⁹⁵ Some affirmations have thus provided, ‘[f]or greater certainty, measures taken by a State Party to comply with its international obligations under other relevant treaties shall not constitute a breach’: Protocol to the Agreement Establishing the African Continental Free Trade Agreement on Investment (Draft) (January 2023) art 24.

¹⁹⁶ See Section IV.

¹⁹⁷ CETA, annex 8-A.3.

¹⁹⁸ *Philip Morris* (n 90) paras 300–01. cf *Military and Paramilitary Activities in and Against Nicaragua* (*Nicaragua v USA*) Merits [1986] ICJ Rep 14 paras 177–79.

provisions’ were read as *lex specialis*.¹⁹⁹ An arguable difference with general international law is that such clarifications apply only to indirect expropriation, whereas even the direct taking of property may be characterised as a regulatory measure under the police powers doctrine.²⁰⁰ Nevertheless, in *Eco Oro v Colombia*, the tribunal held that an environmental clarification in Annex 811 of the Canada–Colombia FTA—which set the disproportionality test as ‘measures so severe in the light of its purpose that it cannot be reasonably viewed as having been adopted in good faith’²⁰¹—did not exclude but rather ‘reflect[ed] the more general doctrine of police powers in customary international law’; ‘awards on the police powers doctrine’ could thus ‘provide some guidance (by analogy)’ in ‘interpreting and applying the provisions’.²⁰²

In *Eco Oro*, the tribunal examined a series of executive, legislative (Law 1753), and judicial (Judgment C-35) measures to protect the Santurbán páramo—a biodiverse alpine wetland that provides vital ecosystem services such as freshwater and carbon storage—which culminated in the deprivation of a gold mining concession.²⁰³ As a baseline in applying Annex 811, the tribunal noted that páramos have ‘significant environmental importance, recognised at the national and international levels’—evident in judicial application of the precautionary principle and Colombia’s obligations under the Ramsar Convention²⁰⁴—which were ‘under threat from both human intervention and climate change’.²⁰⁵ In reviewing the evidence, the tribunal’s core inquiry was whether the measures were so excessive that they could not have been adopted in good faith, which required ‘a very significant aggravating element’ and ‘not just a bureaucratic muddle’.²⁰⁶ A majority thus found no indirect expropriation arising from measures ‘motivated both by a genuine belief in the importance of protecting the páramo ecosystem and pursuant to Colombia’s longstanding legal obligation’.²⁰⁷ Yet another split of the tribunal held that the same measures breached the minimum standard.²⁰⁸ In doing so, the latter majority’s ‘starting point’ was the ICJ’s definition of arbitrary measures in the *ELSI* case, from which it derived the requirements to protect an investor’s legitimate expectations and to provide ‘a stable and predictable regulatory environment’.²⁰⁹ The majority concluded that the ‘confusion and uncertainty’ caused by Colombia’s ‘failure to lawfully and finally delimit’

¹⁹⁹ *Bear Creek* (n 19) paras 473–74. In this case, a decree revoking ownership of mineral concessions was disproportionate to the purpose of mitigating social unrest: *ibid* paras 400–12.

²⁰⁰ See n 105.

²⁰¹ Free Trade Agreement between Canada and the Republic of Colombia (signed 21 November 2008, entered into force 15 August 2011) (‘Canada–Colombia FTA’) annex 811.2(b).

²⁰² *Eco Oro, Liability* (n 19) paras 624–29. See also *Montauk* (n 19) para 761.

²⁰³ Specifically, these measures included (i) a resolution of the Ministry of Environment that limited the claimant’s right to extend its concession beyond the initial term and allowed for revision of environmental licences (Resolution 2090); (ii) a national development plan, approved by Congress, which prohibited mining operations in the páramo yet grandfathered certain licensed activities including the claimant’s investment (Law 1753); (iii) a judgment of the Constitutional Court, which struck down the grandfathering exceptions in Law 1753 as unconstitutional (Judgment C-35); and (iv) a resolution of the National Mining Agency that gave effect to Judgment C-35 (Resolution 829): *Eco Oro, Liability* (n 19) paras 505–26. For narration, see *ibid* paras 96–204.

²⁰⁴ Convention on Wetlands of International Importance Especially as Waterfowl Habitat (opened for signature 2 February 1971, entered into force 21 December 1975) 996 UNTS 245 (‘Ramsar Convention’).

²⁰⁵ *Eco Oro, Liability* (n 19) paras 460, 635–42.

²⁰⁶ *ibid* paras 643, 698.

²⁰⁷ *ibid* para 699. A dissenting arbitrator underscored the ‘adverse and severe impact’ of the measures in applying a ‘weighing and balancing exercise’ under annex 811: *Eco Oro Minerals Corp v Republic of Colombia*, ICSID Case No ARB/16/41, Partial Dissenting Opinion (9 September 2021) (‘*Eco Oro*, Grigera Naón’) paras 26–27. As explained in Section II.C, such references to arbitral balancing are a subtle deviation from the negative test of manifest disproportionality, which is better understood as requiring the claimant’s rebuttal of a strong presumption.

²⁰⁸ *cf Eco Oro Minerals Corp v Republic of Colombia*, ICSID Case No ARB/16/41, Partial Dissent of Professor Philippe Sands QC (9 September 2021) (‘*Eco Oro*, Sands’).

²⁰⁹ *Eco Oro, Liability* (n 19) paras 758–62, 805.

the Santurbán páramo was ‘arbitrary and disproportionate’, ‘inflict[ing] damage on Eco Oro without serving any apparent purpose’.²¹⁰

A decisive difference between the *Eco Oro* tribunal’s findings on expropriation and the minimum standard might have been the inclusion of an environmental clarification in respect of the former investment obligation.²¹¹ Yet the tribunal recognised both obligations were to be interpreted in view of the general international law on environmental regulation.²¹² And there were very weak grounds—whether in treaty or custom—to graft any requirement of stability or predictability onto the minimum standard.²¹³ For our survey, it is striking to note how the tribunal’s contradictory results were reached in applying two tests that, in the ICJ’s view, are coextensive: the police powers doctrine and the determination of arbitrary or unreasonable measures.²¹⁴ In *Eco Oro*, at least, an environmental clarification in respect of indirect expropriation failed to clarify the integrated hierarchy of environmental over investment protection in the total review of regulatory measures.²¹⁵

However, a unanimous tribunal in *Montauk v Colombia*—addressing the same measures under the Canada–Colombia FTA—reached consistent conclusions in the application of Annex 811 and the minimum standard,²¹⁶ with special attention to Judgment C-35.²¹⁷ An ‘element of arbitrariness’ was discernible in the Constitutional Court’s finding that the grandfathering provisions in Law 1753 were ‘unacceptable under the precautionary principle ... based on scientific information already available ... and without considering the possible consequences’ on investors.²¹⁸ Yet, in applying Annex 811, the tribunal affirmed ‘the special deference that international arbitral tribunals afford to judicial decisions’, requiring a denial of justice in the case of alleged expropriation.²¹⁹ In concluding that the Court’s *volte-face* had not crossed a high threshold of ‘manifest arbitrariness or blatant unfairness’, the tribunal recalled that ‘judicial bodies across the globe are widely recognized to validly lead the way in the development of the law according to society’s evolving values’.²²⁰ The *Montauk*

²¹⁰ *ibid* paras 820–21.

²¹¹ *Ünütvar* (n 119) 527.

²¹² When interpreting the minimum standard, for example, the majority acknowledged that, ‘in exercising its police powers, a State will find itself at times having to make difficult and potentially controversial choices, particularly when considering issues of environmental protection’, and thus reaffirmed the mandate in *SD Myers* (n 9) for a high degree of deference: *Eco Oro*, Liability (n 19) para 751.

²¹³ *Eco Oro*, Sands (n 208) paras 19–24. See n 98.

²¹⁴ The Court did not ‘examine the content of the customary minimum standard of treatment’: *Certain Iranian Assets* (n 74) para 141. Yet it equated the customary doctrine of police powers with its test for unreasonable measures, while treating unreasonableness as comparable to arbitrariness in the *ELSI* case, which is a touchstone for the minimum standard: see n 74. Arbitral practice and commentary have also treated these textual variations as equivalent: Rudolf Dolzer, Ursula Kriebaum and Christoph Schreuer, *Principles of International Investment Law* (3rd edn, OUP 2022) 239–49.

²¹⁵ Another contradiction, acknowledged by the tribunal but without explanation, was the disparate application of ‘reasonable investment-backed expectations’ in its expropriation analysis and the protection of ‘legitimate expectations’ under the minimum standard: *Eco Oro*, Liability (n 19) para 804. Curiously, each dissenting wing seems to have treated these expectations as coextensive: *Eco Oro*, Grigera Naón (n 207) paras 5–16; *Eco Oro*, Sands (n 208) para 18. Indeed, in *Red Eagle*, a majority held that ‘the same principles are applicable’ regarding ‘any expectation that Claimant may have had’: *Red Eagle* (n 19) paras 401–04. In applying the same treaty as *Eco Oro* to similar measures, the *Red Eagle* majority reached internally consistent findings that there was neither an expropriation nor a breach of the minimum standard—the measures were plainly designed and applied to protect the public policy goal of environmental protection—but it did not need to address ‘whether the measures fall within the scope of the Respondent’s police powers outlined in Annex 811’: para *ibid* para 400. See also *Montauk* (n 19) paras 776–84.

²¹⁶ *Montauk* (n 19) paras 725–827, 899–940. See also *Copper Mesa* (n 19) paras 6.63–6.67.

²¹⁷ See the summary of Colombia’s impugned measures at n 203.

²¹⁸ *Montauk* (n 19) para 811.

²¹⁹ *ibid* paras 813–15. On unique aspects of the Court’s proceeding, see *ibid* paras 816–26.

²²⁰ *ibid* paras 812–13.

tribunal thus tied up a loose end of the ICJ regarding judicial acts:²²¹ the test of manifest disproportionality is more demanding in challenges to domestic environmental adjudication than in respect of legislative or executive regulation.²²²

(8) Implementation clauses require the parties to an investment treaty to effectively implement their obligations under MEAs or other sources of international environmental law. The touchstone of ‘effective implementation’ may seem to be a tautology, but it denotes an unequivocal obligation that must be evidenced by actual practice and cannot be satisfied by mere formality.²²³ Such clauses are commonplace in trade agreements, foremost those of the EU.²²⁴ But many of these agreements do not include chapters on investment protection or consent to arbitration.²²⁵ In 2023, however, the European Commission issued guidance on the negotiation of BITs between EU Member States and third States (EC Non-Paper), including model articles on ‘Investment and Environment’ and ‘Investment and Climate Change’.²²⁶ These articles provide that ‘environmental laws and policies . . . *shall be consistent with each Party’s commitments to internationally recognised standards and agreements on environmental protection*’ and that each party ‘*shall effectively implement the [MEAs], protocols and amendments that it has ratified*’, specifically ‘the UNFCCC and the Paris Agreement adopted thereunder, including its commitments with regard to its Nationally Determined Contributions [NDCs]’.²²⁷ The Commission explains that these articles introduce ‘a floor on the level of ambition of such policies while

²²¹ Judges Sebutinde and Bhandari and Judge *ad hoc* Barkett found that the Court did not adequately address the arbitral practice on judicial expropriation: *Certain Iranian Assets (Islamic Republic of Iran v United States of America)* Merits (Dissenting Opinion of Judge Sebutinde) [2023] ICJ Rep 158 para 28; *Certain Iranian Assets (Islamic Republic of Iran v United States of America)* Merits (Declaration of Judge Bhandari) [2023] ICJ Rep 182; *Certain Iranian Assets (Islamic Republic of Iran v United States of America)* Merits (Separate Opinion, Partly Concurring and Partly Dissenting, of Judge *ad hoc* Barkett) [2023] ICJ Rep 236 paras 39–42.

²²² cf *Infinito Gold* (n 19) paras 361–62; *Lone Pine v Canada* (n 11) paras 623–24. Degrees of deference towards different State organs have been empirically mapped in Esmé Shirlow, *Judging at the Interface: Deference to State Decision-Making Authority in International Adjudication* (CUP 2021) 207–11.

²²³ The phrase is used by the ICJ, for example, when it orders provisional measures: *Application of the Convention on the Prevention and Punishment of the Crime of Genocide in the Gaza Strip (South Africa v Israel)*, Provisional Measures (Order of 24 May 2024) <www.icj-cij.org/sites/default/files/case-related/192/192-20240524-ord-01-00-en.pdf> accessed 1 February 2025, paras 52, 57. See also WTO, *United States: Restrictions on Imports of Cotton and Man-Made Fibre Underwear—Report of the Appellate Body* (10 February 1997) WT/DS24/AB/R, 15; *GAMI Investments, Inc v United Mexican States*, UNCITRAL, Final Award (15 November 2004) paras 86–110; Secretary General’s report under Article 52 ECHR on the question of secret detention and transport of detainees suspected of terrorist acts, notably by or at the instigation of foreign agencies, SG/Inf (2006) 5 (28 February 2006) para 12; *Guatemala—Issues Related to the Obligations under Article 16.2.1(a) of the CAFTA-DR (United States of America v Guatemala)*, Ad hoc, Final Report of the Panel (14 June 2017) paras 128–39. In political science, ‘implementation’ has been studied as processes that bring about routine compliance: Alexander Betts and Phil Orchard (eds), *Implementation and World Politics: How International Norms Change Practice* (OUP 2014).

²²⁴ For an overview, see Gracia Marín Durán, ‘The EU’s Evolving Approach to Environmental Sustainability in Free Trade Agreements’ in Ramses A Wessel and others (eds), *EU External Relations Law and Sustainability: The EU, Third States and International Organizations* (Asser Press 2025) 257. See further Gregory Messenger, ‘The Legal Links between Free Trade Agreements and Multilateral Environmental Agreements’ in Geraldo Vidigal and Kathleen Claussen (eds), *The Sustainability Revolution in International Trade Agreements* (OUP 2024) 145.

²²⁵ Those that do include consent to investment arbitration may contain further restrictions, such as the 2023 China–Nicaragua FTA, wherein the parties merely ‘reaffirm’ their effective implementation of MEAs to which *both* are bound, while the entire chapter on Trade and Environment is not subject to dispute settlement: Free Trade Agreement between the Government of the People’s Republic of China and the Government of the Republic of Nicaragua (signed 31 August 2023, entered into force 1 January 2024) (‘China–Nicaragua FTA’) arts 15.6, 15.10. One commentator called such reaffirmations ‘pointless’ or ‘close to redundant’ because they are ‘already the subject of hard obligations’ in MEAs: Lorand Bartels, ‘Human Rights, Labour Standards, and Environmental Standards in CETA’ in Stefan Griller, Walter Obwexer and Erich Vranes (eds), *Mega-Regional Trade Agreements: CETA, TTIP, and TiSA: New Orientations for EU External Economic Relations* (OUP 2017) 202, 204. But that is to overlook their function in contextual interpretation of investment obligations.

²²⁶ European Commission, ‘Annotations to the Model Clauses for Negotiation or Re-Negotiation of Member States’ Bilateral Investment Agreements with Third Countries’ (Non-Paper, 21 September 2023) (‘EC Non-Paper’) 21.

²²⁷ *ibid* 21–22 (emphases added).

reserving a State's right to be more ambitious' and affirm that 'the interplay between investment and sustainable development must be addressed comprehensively'.²²⁸

What might be the interpretive relevance of such clauses? In addressing the older terms of Article 19(1)(i) of the ECT—which requires the parties merely to 'promote the transparent assessment . . . of Environmental Impacts of environmentally significant energy investment projects'—the tribunal in *Blusun v Italy* acknowledged that it was 'at least arguable' that a tribunal could 'take into account conduct clearly in breach of other provisions of the ECT'.²²⁹ Depending on the impugned measure, protected asset or investment obligation, implementation clauses may thus serve as a shield for respondents or as a sword for claimants. On one hand, it may be harder to prove that a measure was disproportionate where it was taken to implement a State's obligations under an MEA. In *Chemtura v Canada*, the tribunal observed that a review of agricultural pesticides was the 'result of Canada's international obligations', which undercut claims that the ultimate ban was an expropriation or breached the minimum standard.²³⁰ On the other hand, it should be easier to prove breach where the measure was inconsistent with MEA obligations to the detriment of an investor in, say, renewable energy or environmental goods and services.

The latter scenario was addressed in *Allard v Barbados*, wherein the value of an ecotourism sanctuary was destroyed by mismanagement of a sluice gate, zoning decisions and sewage spill.²³¹ Because the respondent had designated the site under the Ramsar Convention and was a party to the Convention on Biological Diversity,²³² the claimant invoked Article 31(3)(c) of the VCLT in interpreting the standards of FET and full protection and security (FPS).²³³ As to FET, the tribunal held that these MEAs could not ground a legitimate expectation that the respondent would take certain environmental measures in the absence of any specific assurance to the claimant.²³⁴ As to FPS, the tribunal accepted that 'consideration of a host State's international obligations may well be relevant in the application of the standard to particular circumstances' and assumed there was 'an obligation of the host State to protect foreign investments against environmental damage'.²³⁵ Such integrated analysis reflects the shared roots of environmental and investment protection in the basic obligation of States to regulate economic activities with due diligence.²³⁶ Still, the respondent's regime did not fall short of its FPS obligation to exercise reasonable care.²³⁷ Rather than relying on systemic integration, however, the inclusion of express clauses may better persuade a tribunal that a State's acts or omissions breached an

²²⁸ *ibid* 22.

²²⁹ *Blusun* (n 19) para 275. In this case, the tribunal dismissed the respondent's objection to admissibility—on the ground that the claimants failed to perform an EIA—because art 19 of the ECT 'operates not at the level of individual investors but at the interstate level' and, in any event, the claimants had complied with domestic law: *ibid* paras 275–76.

²³⁰ *Chemtura* (n 9) paras 135–43, 266. Specifically, the tribunal referred to the Stockholm Convention on Persistent Organic Pollutants (opened for signature 22 May 2001, entered into force 17 May 2004) 2256 UNTS 119 and the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants (opened for signature 24 June 1998, entered into force 23 October 2003) 2230 UNTS 79.

²³¹ *Allard v Barbados*, PCA Case No 2016-06, Award (27 June 2016) paras 55–61.

²³² Convention on Biological Diversity (opened for signature 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.

²³³ *Allard* (n 231) paras 177–78, 230.

²³⁴ *ibid* para 208.

²³⁵ *ibid* paras 244, 252.

²³⁶ See Section II.A.

²³⁷ *Allard* (n 231) paras 249–52.

investment obligation by failing to effectively implement its obligations under an applicable MEA or even its NDC under the Paris Agreement.²³⁸

(9) Non-regression clauses require a party to enforce or not to derogate from domestic environmental law.²³⁹ The first example was found in Article 1114(2) of NAFTA, which recognises that ‘it is inappropriate to encourage investment by relaxing domestic ... environmental measures’ such that a party ‘should not waive or otherwise derogate from ... such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor’.²⁴⁰ In *Aven*, non-regression clauses did not confer an ‘absolute right’ to implement and enforce environmental laws ‘in any manner Respondent desires’, being limited by ‘principles of due process’.²⁴¹ In *Al Tamimi*, however, the tribunal accepted that such clauses provide ‘further relevant context’ in the interpretation of investment obligations, thereby supporting the ambitious enforcement of environmental regulation, even if such clauses do not ‘fall directly’ within a tribunal’s jurisdiction.²⁴² Yet some treaties do include non-regression clauses in the scope of consent to arbitration, thus providing a standalone basis for investor claims against measures that regress from domestic environmental law.²⁴³ Depending on its drafting, the breach of a non-regression clause typically requires evidence of a State’s intention to encourage investment or even of the derogation’s actual impact.²⁴⁴ A claimant might be able to show, for instance, that a State intended to encourage investment in carbon-intensive sectors by reducing its support for renewable energy or cancelling an emissions trading scheme.²⁴⁵ Akin to affirmation and implementation clauses, however, a more likely function of non-regression clauses is to provide interpretive context for investment obligations, such that it would be easier for a claimant to prove a lack of legitimate purpose or manifest disproportionality where the measure derogates from domestic environmental law.²⁴⁶ Equally, a non-regression clause might have relaxed the burden to prove a breach of FPS in *Allard*, where the claimant failed to specify which sources of pollution gave rise to prosecutable offences under the Barbadian Marine Pollution Control Act and thus evidence a lack of due diligence.²⁴⁷ In this connection, obligations to ‘effectively enforce’ domestic laws have been interpreted as requiring a State to ‘compel compliance’ with ‘sufficient certainty’

²³⁸ An obligation to effectively implement NDCs would thus avoid the question of whether an NDC itself gives rise to international obligations as a unilateral act: EC Non-Paper (n 226) 21–22. See Benoit Mayer, ‘International Law Obligations Arising in Relation to Nationally Determined Contributions’ (2018) 7 TEL 251.

²³⁹ Non-regression clauses may be further divided into ‘non-derogation’ and ‘non-enforcement’ clauses, but they are often discussed together as they both address a State’s domestic environmental laws: Marco Bronckers and Giovanni Gruni, ‘Retooling the Sustainability Standards in EU Free Trade Agreements’ (2021) 24 JIEL 24, 30–33; Marín Durán (n 224).

²⁴⁰ This clause was drafted to address concerns that US producers might relocate their operations to Mexico based on the latter’s laxer regulations, though it has since become a standard feature of treaty practice by the EU and many States that are concerned to ensure the progressive development of environmental protection: Andrew D Mitchell and James Munro, ‘An International Law Principle of Non-Regression from Environmental Protections’ (2023) 72 ICLQ 35, 37–39.

²⁴¹ *Aven* (n 19) para 413.

²⁴² *Al Tamimi* (n 19) para 388. Specifically, the tribunal addressed art 17.2.1(a) of the Oman–US FTA: ‘Neither Party shall fail to effectively enforce its environmental laws, through a sustained or recurring course of action or inaction, in a manner affecting trade between the Parties, after the date of entry into force of this Agreement’. Even the ‘very existence’ of an environmental chapter ‘exemplifie[d] the importance attached by [the parties] to the enforcement of their respective environmental laws’: *Al Tamimi* (n 19) para 389.

²⁴³ Mitchell and Munro (n 240) 43–44.

²⁴⁴ cf *Guatemala* (n 223) paras 164–97.

²⁴⁵ Mitchell and Munro (n 240) 45–47.

²⁴⁶ *ibid* 47–51. See further Mitchell and Munro (n 117).

²⁴⁷ *Allard* (n 231) para 251.

that it may ‘reasonably be expected’ that actors ‘will generally comply with those laws’.²⁴⁸

D. Exception: Justification, Reservation and Investor Obligation

The final three clauses operate mostly at the level of secondary norms, serving (10) to *justify* an investment treaty breach, (11) to *reserve* certain measures that do not conform with investment obligations or (12) to impose *investor obligations* that may ground a State’s counterclaim or plea of contributory fault. All these clauses serve as exceptions, loosely speaking, insofar as each is invoked by a respondent to avoid or at least reduce its liability to pay compensation as a form of reparation for wrongful acts. But respondents have been seldom successful.

(10) Justifications ostensibly render lawful an environmental measure that would otherwise breach an investment obligation,²⁴⁹ typically modelled on general exceptions under Article XX of the GATT.²⁵⁰ For example, subject to an equivalent chapeau that ‘such measures are not applied in a manner that constitute arbitrary or unjustifiable discrimination between investments or between investors, or a disguised restriction on international trade or investment’, Article 2201(3) of the Canada–Colombia FTA provides that nothing in the investment chapter ‘shall be construed to prevent a Party from adopting or enforcing measures necessary’: (a) ‘To protect human, animal or plant life or health, which the Parties understand to include environmental measures necessary to protect human, animal or plant life and health’; (b) ‘To ensure compliance with laws and regulations that are not inconsistent with this Agreement’; or (c) ‘For the conservation of living or non-living exhaustible natural resources’.²⁵¹ In *Red Eagle v Colombia*, the tribunal affirmed that Article 2201(3) does not provide ‘an objection to the jurisdiction but rather a defense on the merits’, to be addressed only ‘if it determines that there has been a breach of a primary obligation’.²⁵² Indeed, we have already discussed how Article XX of the GATT is a false friend of the presumptive right to regulate: whereas a claimant must prove a measure was manifestly disproportionate to establish an indirect expropriation or breach of the minimum standard, a respondent bears the burden to prove the conditions of an environmental justification.²⁵³ In *Bear Creek*, the tribunal elided this distinction between primary and secondary norms by interpreting a similar justification as *lex specialis* in respect of the police powers ‘exception’.²⁵⁴ In *Copper Mesa v Ecuador*, however, the tribunal acknowledged that the police powers doctrine was a

²⁴⁸ *Guatemala* (n 223) para 139.

²⁴⁹ This label conforms to an important distinction in legal theory: a ‘justification’ renders an impugned act lawful based on characteristics of that act, whereas an ‘excuse’ shields an actor from legal consequences of their unlawful conduct based on characteristics of that actor: Paddeu (n 121). There are no environmental excuses in investment treaties. cf Boute (n 102).

²⁵⁰ Article XX of the GATT provides that ‘nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures’ (b) ‘necessary to protect human, animal or plant life or health’; and (g) ‘relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production’. All these exceptions are subject to the overarching requirement, or chapeau, that such measures are ‘not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade’.

²⁵¹ On the leading role of Canada in the adoption of such clauses, see Céline Lévesque and Andrew Newcombe, ‘Canada’ in Chester Brown (ed), *Commentaries on Selected Model Investment Treaties* (OUP 2013) 53, 87–89.

²⁵² *Red Eagle* (n 19) paras 174–75, 428. See also *Eco Oro*, Liability (n 19) paras 379–80.

²⁵³ See Section II.B.

²⁵⁴ *Bear Creek* (n 19) paras 471–74.

prior inquiry to any ‘express exception’,²⁵⁵ though they ‘turn[ed] on the same factors’.²⁵⁶ In its finding of expropriation, the tribunal held that executive resolutions to terminate a mining concession were ‘no mere regulatory measures’ because they were ‘made in an arbitrary manner and without due process’, which equally meant that the measures breached the FET standard and could not be justified under the chapeau.²⁵⁷

It has long been observed that the chapeau of Article XX of the GATT is broadly coextensive with the types of conduct addressed by investment treaty standards, which speaks to a deeper mistake in transforming the general exceptions of WTO law into environmental justifications.²⁵⁸ The primary norms of the WTO covered agreements tend to prescribe or prohibit certain types of trade measures, for which it makes sense to have secondary norms to ensure members may adopt necessary environmental measures; whereas investment treaties embody international standards of sovereign conduct, which take for granted that no investor is immune from reasonable regulation for the purpose of environmental protection.²⁵⁹ Fundamentally, it is difficult to imagine any measure that a claimant proves to breach the main treaty standards, which the respondent may then render lawful on the terms of Article XX. This redundancy problem is reflected in a major controversy, namely whether environmental justifications even provide any exception to liability.²⁶⁰

Certainly, the avoidance of compensation seems to have been the intention of States.²⁶¹ Yet, in *Eco Oro*, the tribunal held that, ‘whilst a State may adopt or enforce a measure pursuant to the stated objectives in Article 2201(3) without finding itself in breach’, this ‘does not prevent an investor claiming . . . that such a measure entitles it to the payment of compensation’.²⁶² This interpretation was supported by ordinary meaning—the absence of any express provision that a measure could be adopted without compensation—and contextual references to environmental protection in respect of indirect expropriation (Annex 811) and performance requirements (Article 802), which supposedly would be ‘otiose’ if Article 2201(3) removed the possibility of compensation for breach of those provisions.²⁶³ Although this interpretation ignores the distinction between primary and secondary norms, and the tribunal seemed not to consider that the necessity requirement of least-restrictive means might have made Article 2201(3) narrower not wider than Annex 811,²⁶⁴ its principal emphasis on

²⁵⁵ Agreement between the Government of Canada and the Government of the Republic of Ecuador for the Promotion and Reciprocal Protection of Investments (signed 29 April 1996, entered into force 6 June 1997, terminated 19 May 2018) art XVII(3), which is materially identical to art 2201(3) of the Canada–Colombia FTA (n 201).

²⁵⁶ *Copper Mesa* (n 19) para 6.58.

²⁵⁷ *ibid* paras 6.66–6.67.

²⁵⁸ Newcombe (n 27) 368–69; Legum and Petculescu (n 117) 355–62; Keene (n 117) 85–86. To avoid this ‘problem of redundancy’, such clauses could be reframed as ‘permissions’ that are prior to a tribunal’s inquiry into breach, rather than justifications of an established breach: Henckels (n 117) 575–83.

²⁵⁹ Environmental justifications make more sense in respect of less frequently invoked investment protections, such as restrictions on performance requirements, which are more akin to WTO law in listing types of measures that are prohibited: Legum and Petculescu (n 117) 359–61. See eg CPTPP, art 9.10.3.

²⁶⁰ See the commentary at n 119.

²⁶¹ That was the submission of both Canada and Colombia in *Eco Oro*, Liability (n 19) paras 362, 374, 378.

²⁶² *ibid* para 830.

²⁶³ *ibid* paras 827–33.

²⁶⁴ Such a test of least restrictive means, as in *SD Myers* (n 9), is more stringent than the generally applicable requirement that a claimant must prove the manifest disproportionality of an environmental measure: Newcombe (n 27) 366–68. Others have disagreed, though they tend to compare the necessity test with proportionality qua arbitral balancing: Voon, Mitchell and Munro (n 117).

textual silence was a somewhat defensible application of the general rule of interpretation,²⁶⁵ which has been endorsed by other tribunals.²⁶⁶ The preferred interpretation of Canada and Colombia might have been confirmed by any available preparatory works, in accordance with Article 32 of the VCLT, which were seemingly not provided to the tribunal.²⁶⁷ Indeed, given the widely observed pitfalls of adopting the language of Article XX of the GATT, treaty negotiators should have been alive to this undesired result.²⁶⁸ No treaty has since clarified that such clauses are meant to avoid compensation.²⁶⁹

Much less persuasive was the *Eco Oro* tribunal's view that its interpretation was 'further supported' by Articles 27(b) and 36(1) of the ILC Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA).²⁷⁰ If a measure breaches an investment treaty standard, it is trite that compensation may be owed under Article 36(1) as a form of reparation for injury caused by that wrongful act, whereas Article 27(b) provides that any invocation of circumstances precluding wrongfulness is 'without prejudice' to 'the question of compensation for any material loss caused by' the lawful measure.²⁷¹ If the tribunal's premise was that a successful justification may preclude breach but not compensation, then the basis for payment cannot be reparation for wrongful acts and would need to be sourced elsewhere.²⁷² A more plausible relationship between Article 2201(3) and the law of State responsibility was implied by the *Montauk* tribunal: such clauses might mandate compensation as the sole form of reparation for wrongful acts by precluding restitution in kind.²⁷³ However, the Canada–Colombia FTA contains a *lex specialis* on the available remedies in the event of breach, allowing only for an award of compensation or 'restitution of property',²⁷⁴ not the removal of the impugned measures as a notionally available form of reparation.²⁷⁵

²⁶⁵ Gardiner (n 184) 165–67. cf Simon Batifort and Andrew Larkin, 'The Meaning of Silence in Investment Treaties' (2023) ICSID Rev—FILJ 322, 338–39.

²⁶⁶ *Bear Creek* (n 19) paras 477–78; *Montauk* (n 19) paras 976–80.

²⁶⁷ This omission might be explained by Colombia's primary submission that art 2201(3) of the Canada–Colombia FTA (n 201) operated not as a justification but as an environmental exemption, thus removing the dispute from jurisdiction: *Eco Oro*, Liability (n 19) paras 362–66. See Section III.C.

²⁶⁸ Lévesque (n 27) 367–70; Voon, Mitchell and Munro (n 117) 336.

²⁶⁹ eg Agreement between Japan and the Republic of Angola for the Liberalisation, Promotion and Protection of Investment (signed 9 August 2023, entered into force 21 July 2024) art 16; China–Nicaragua FTA (n 225) art 19.2. However, the European Commission has recommended that future EU BITs apply general exceptions only to obligations regarding non-discrimination and free transfer, on the ground that the 'remaining standards of protection, notably FET and expropriation ... should be read together with the Article on the right to regulate': EC Non-Paper (n 226) 17–18. Even before the *Eco Oro* decision, Canada determined to end 'the policy of including GATT Article XX-type exceptions': Céline Lévesque and Christian Schmid, 'The 2021 Canadian Model FIPA: More Than Meets the Eye' (2023) 38 ICSID Rev—FILJ 670, 679–80.

²⁷⁰ *Eco Oro*, Liability (n 19) para 835.

²⁷¹ ARSIWA (n 113) art 27(b).

²⁷² *ibid* art 27, comments 4–6. Primary obligations to compensate for lawful expropriation are the most likely candidates, though the measure of fair market value is unlikely to differ much from reparation for injury: Oliver Hailes, 'Valuation of Compensation in Fossil Fuel Phase-Out Disputes' in Anja Ipp and Annette Magnusson (eds), *Investment Arbitration and Climate Change* (Wolters Kluwer 2024) 139, 145–48. A secondary obligation to compensate for material loss without a wrongful act, as implied by art 27(b) of ARSIWA and sometimes defended by reference to the prohibition against unjust enrichment as a general principle of law, finds little support in State practice, let alone *opinio juris*: Federica A Paddeu, 'Investment Tribunals and the Duty of Compensation in Cases of Necessity: A Customary Law Void?' in Panos Merkouris and others (eds), *Custom and Its Interpretation in International Investment Law* (CUP 2024) 151.

²⁷³ *Montauk* (n 19) paras 981–83; ARSIWA (n 113) art 35. See also *Eco Oro*, Liability (n 19) para 829.

²⁷⁴ Canada–Colombia FTA (n 201) art 834(2) (emphasis added). Thanks to Mona Paulsen for this observation.

²⁷⁵ Michelle Bradfield and David Attanasio, 'Non-Pecuniary Remedies Revisited: Expanding Influence of the ILC Articles?' (2022) 37 ICSID Rev—FILJ 313.

The mainstream interpretation of GATT-style justifications has thus made them redundant, contrary to the principle of effectiveness.²⁷⁶ A more fundamental problem, as discussed, is that such clauses are poorly designed for investment treaties in light of the disparate character of WTO law. In an unexpected turn, however, the *Eco Oro* tribunal made no award of compensation: the claimed losses were caused by Colombia's lawful exercise of police powers rather than its breach of the minimum standard,²⁷⁷ underscoring the importance of proving a causal link between the specific breach and alleged injury.²⁷⁸ Equally, this result underscores the economy—not to say correctness—of the *Copper Mesa* and *Montauk* tribunals in their equivalent findings on the minimum standard and indirect expropriation.²⁷⁹

(11) Reservations justify the breach of specific obligations by one party's non-conforming measures. Such reservations could be framed as narrow exclusions from the scope of jurisdiction, for which claimants bear the burden.²⁸⁰ But the weight of authority addresses them as affirmative defences, which serve to justify a measure that is otherwise in breach.²⁸¹ By contrast to truly unilateral reservations under the general law of treaties,²⁸² investment chapters in trade agreements tend to prescribe special regimes on the scope and modification of a party's non-conforming measures,²⁸³ while providing that the relevant annexes form 'an integral part' of the treaty.²⁸⁴ For example, Article 9.12 of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) allows that obligations regarding national treatment, most-favoured-nation (MFN) treatment, and performance requirements do not apply to existing (Annex I) and future (Annex II) non-conforming measures scheduled by each party. Brunei Darussalam thus adopted environmental reservations by prohibiting foreign enterprises from providing environmental consulting or waste management services, subject to certain exceptions,²⁸⁵ while reserving the right to adopt discriminatory measures to ensure 'the availability and sustainability of fisheries resources' or in respect of coal, petroleum and silica mining.²⁸⁶ Yet there are three limits on the environmental relevance of reservations, at least under CPTPP. First, they do not cover the minimum standard or expropriation. Second, a majority in *Mobil v Canada* cautioned that any subordinate legislation adopted under a non-conforming measure cannot 'decrease the conformity' of the reserved measure, lest a

²⁷⁶ Lorand Bartels and Tibisay Morgandi, 'International Investment Law and State Human Rights Obligations' (2024) University of Cambridge Faculty of Law Research Paper No 37/2024 <<https://ssrn.com/abstract=4967604>> accessed 1 February 2025.

²⁷⁷ *Eco Oro Minerals Corp v Republic of Colombia*, ICSID Case No ARB/16/41, Award (15 July 2024) paras 290–322. A dissenting view reflected the previous position that the impugned measures were an indirect expropriation: *Eco Oro Minerals Corp v Republic of Colombia*, ICSID Case No ARB/16/41, 2nd Note of Dissent (March 2024). cf *Eco Oro*, Grigera Naón (n 207) paras 16–32.

²⁷⁸ Hailes (n 272) 148–50.

²⁷⁹ See the discussion of clarifications in Section III.C.

²⁸⁰ Viñuales (n 87) para 75.

²⁸¹ *Attorney-General of Canada v Mobil et al* 2016 ONSC 790 paras 40–51; *Global Telecom Holding SAE v Canada*, ICSID Case No ARB/16/16, Award (27 March 2020) para 363.

²⁸² VCLT, art 2.1(d), defining 'reservation' as a 'unilateral statement' that 'purports to exclude or to modify the legal effect of certain provisions of the treaty', as opposed to a treaty mechanism that allows for each party to designate non-conforming measures. cf *MOL Hungarian Oil and Gas Company Plc v Republic of Croatia*, ICSID Case No ARB/13/32, Award (5 July 2022) paras 437–48 (interpreting annex IA of the ECT in light of a prohibition on reservations under art 46).

²⁸³ cf Alain Pellet and Jean-Baptiste Merlin, 'Articles 19–23 of the VCLT: Reservations (Overview)—Flexibility Devices in Applying Treaties in the Field of Investment' in Andreas Kulick and Michael Waibel (eds), *General International Law in International Investment Law: A Commentary* (OUP 2024) 33.

²⁸⁴ NAFTA, art 2201; CPTPP, art 30.1; USMCA, art 34.2.

²⁸⁵ CPTPP, annex I—Brunei Darussalam—9–10.

²⁸⁶ ibid annex II—Brunei Darussalam—6, 8–14.

party circumvent the treaty's amendment mechanism.²⁸⁷ Finally, it is highly doubtful that nationality-based discrimination promotes environmental protection, whereas certain performance requirements already may be justified by a special rule.²⁸⁸

(12) Investor obligations regarding environmental protection may provide a basis for respondents to reduce any liability by setting off a successful counterclaim or on grounds of contributory fault.²⁸⁹ Generally, respondents face three procedural hurdles in bringing environmental counterclaims.²⁹⁰ First, to establish a tribunal's jurisdiction,²⁹¹ given the instrument of consent to arbitration chiefly contemplates claims against States.²⁹² Second, to satisfy the tribunal that a counterclaim is admissible on grounds of sufficient connection to the primary claim and the State's standing to bring it.²⁹³ Third, to identify a suitable cause of action in domestic or international law.²⁹⁴ Tribunals have accepted that investment treaties may allow a State to counterclaim for environmental damage, so long as it can identify an actionable obligation under the applicable law of a dispute settlement clause.²⁹⁵ In *Lopez-Goyne v Nicaragua*, for example, the CAFTA-DR contemplated claims related to breach

²⁸⁷ This case concerned an impugned increase of local expenditure requirements for petroleum projects: *Mobil Investments Canada Inc and Murphy Oil Corporation v Canada*, ICSID Case No ARB(AF)/07/4, Decision on Liability and Principles of Quantum (22 May 2012) para 341. The original reservation, however, need not be interpreted restrictively: *ibid* paras 214–25; *Republic of Hungary v Électricité de France (EDF) International SA*, Swiss Federal Tribunal, First Court of Civil Law, Judgment 4A_34/2015 of 6 October 2015, para 3.5.1; *Global Telecom* (n 281) paras 365–80. cf *Mobil Investments Canada Inc and Murphy Oil Corporation v Canada*, ICSID Case No ARB(AF)/07/4, Partial Dissenting Opinion, Professor Philippe Sands QC (17 May 2022).

²⁸⁸ CPTPP, art 9.10.3(d).

²⁸⁹ On investor obligations in general, see Jorge E Viñuales, 'Investor Diligence in Investment Arbitration: Sources and Arguments' (2017) 32 ICSID Rev—FILJ 413, 415–27. See also Xuan Shao, 'A Nightmare or a Noble Dream? Establishing Investor Obligations through Treaty-Making and Treaty-Application' (2020) 5 BHRJ 105; Jean Ho and Mavluda Sattorova (eds), *Investors' International Law* (Hart 2021); Patrick Abel, *International Investor Obligations: Towards Individual International Responsibility for the Public Interest in International Investment Law* (Nomos 2022); Klara Polackova Van der Ploeg, 'Investor Obligations: Transformative and Regressive Impacts of the Business and Human Rights Framework' (2024) 9 BHRJ 221. Because this article focuses on investment arbitration, it does not address an investor's civil liability in tort or otherwise for environmental damage before the domestic courts of its home or home State, though this possibility is affirmed in several treaties: see n 44.

²⁹⁰ Maxi Scherer, Stuart Bruce and Juliane Reschke, 'Environmental Counterclaims in Investment Treaty Arbitration' (2021) 36 ICSID Rev—FILJ 413, 415–27. See also Xuan Shao, 'Environmental and Human Rights Counterclaims in International Investment Arbitration: At the Crossroads of Domestic and International Law' (2021) 24 JIEL 157; Diego Mejia-Lemos, 'The Suitability of Investor-State Dispute Settlement and Host State Counterclaims for Implementing Climate Change Responsibility' (2023) 32 RECIEL 334; Edward Guntrip, *Counterclaims in Investment Arbitration: Holding Foreign Investors Accountable for Violations of International Law* (Brill 2024); Maxi Scherer and Clara Reichenbach, 'Climate-Related Counterclaims in International Investment Arbitration' in Anja Ipp and Annette Magnusson (eds), *Investment Arbitration and Climate Change* (Wolters Kluwer 2024) 105.

²⁹¹ The best-known examples of environmental counterclaims in investment treaty disputes arose unusually in parallel proceedings where one claimant expressly consented for sake of judicial economy and the other claimant failed to make a timely objection: *Burlington Resources, Inc v Republic of Ecuador*, ICSID Case No ARB/08/5, Decision on Counterclaims (7 April 2017) ('*Burlington*, Counterclaims') paras 60–62; *Perenco Ecuador Limited v Republic of Ecuador*, ICSID Case No ARB/08/6, Decision on Claimant's Application for Dismissal of Ecuador's Counterclaims (18 August 2017) paras 31–52.

²⁹² On direct claims against investors, see Martin Jarrett, Sergio Puig and Steven Ratner, 'Towards Greater Investor Accountability: Indirect Actions, Direct Actions by States and Direct Actions by Individuals' (2023) 14 JIDS 259; Ji Ma, 'Bridging Multinational Corporations' Investment-Climate Gap: Prospects for the Direct Claims Approach' (2023) 32 RECIEL 348.

²⁹³ eg *Chevron Corporation and Texaco Petroleum Company v Republic of Ecuador*, PCA Case No 2009-23, Second Partial Award on Track II (30 August 2018) paras 7.28–7.45 (dismissing counterclaims on behalf of injured third parties). cf Mees Brenninkmeijer and Fabien Gélinas, 'Counterclaims in Investment Arbitration: Towards an Integrated Approach' (2023) 38 ICSID Rev—FILJ 567.

²⁹⁴ Again, it is instructive that the best-known counterclaims were partly brought under the 2008 Constitution of Ecuador, which established a strict liability regime with a high level of environmental protection: *Perenco Ecuador Limited v Republic of Ecuador*, ICSID Case No ARB/08/6, Interim Decision on the Environmental Counterclaim (11 August 2015) paras 65–107; *Burlington*, Counterclaims (n 291) paras 225–33, 273–83.

²⁹⁵ *Urbaser SA and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v Argentine Republic*, ICSID Case No ARB/07/26, Award (8 December 2016) paras 1182–1221; *Aven* (n 19) paras 738–43.

of ‘an obligation under Section A’ of the treaty,²⁹⁶ whereas the respondent counterclaimed for obligations under a concession contract between it and an entity in which claimants held shares.²⁹⁷ The tribunal rejected Nicaragua’s submission that the environmental clauses in Section A—which we would call affirmations and justifications²⁹⁸—imposed obligations on investors or ‘could be read as incorporating into the Treaty environmental obligations arising under domestic law or in a contractual instrument’.²⁹⁹

The most advanced efforts to impose investor obligations are contained in several intra-African treaties.³⁰⁰ The sole example that has entered into force, the Common Investment Code (ECOWIC) of the Economic Community of West African Countries (ECOWAS), applies among 15 States.³⁰¹ Article 27 on ‘Investor Environmental Obligations’ provides that investors doing business in ECOWAS territory ‘shall ... carry out their business activities in *strict conformity* with the applicable *national environmental laws* ... and other *multilateral agreements* applicable to their investments’.³⁰² The first limb suggests a possible counterclaim for breach of domestic law, though the latter does not solve the problem of identifying an actionable obligation under an applicable MEA.³⁰³ While MEAs have informed the development of environmental, social and governance (ESG) criteria under standards of corporate social responsibility (CSR), international law generally does not impose freestanding obligations on investors.³⁰⁴

Yet some examples are found in the Morocco–Nigeria BIT. Article 14 requires investors to apply the precautionary principle to their pre-establishment EIAs,³⁰⁵ whereas the ‘general international law of EIAs’ operates ‘not at the level of individual investors but at the interstate level’.³⁰⁶ Article 16 then obliges investors post-establishment to ‘uphold human rights in the host state’ and not to ‘manage

²⁹⁶ Free Trade Agreement between Central America, the Dominican Republic and the United States of America (signed 5 August 2004, entered into force 1 March 2006) (‘CAFTA-DR’) art 10.16.1(a)(i)(A).

²⁹⁷ *Lopez-Goyne* (n 19) paras 232–50.

²⁹⁸ CAFTA-DR, arts 10.9.3(c), 10.11.

²⁹⁹ *Lopez-Goyne* (n 19) paras 599–606.

³⁰⁰ Mallya (n 43) 226–68; Scherer and Reichenbach (n 290) 124–27. Investor obligations may thus be situated in a broader reform agenda in the African region: Makane Moïse Mbengue, ‘Africa’s Voice in the Formation, Shaping and Redesign of International Investment Law’ (2019) 34 ICSID Rev—FILJ 455; Tomasz Milej, ‘Reclaiming African Agency: The Right to Regulate, Investor-State Dispute Settlement, and the “Africanisation” of International Investment Law’ in Julian Scheu and others, *Investment Protection, Human Rights, and International Arbitration in Extraordinary Times* (Nomos 2022) 337.

³⁰¹ Supplementary Act A/SA.1/12/18 Adopting the ECOWAS Common Investment Code (adopted and entered into force 22 December 2018) (‘ECOWIC’). Technically, ECOWIC is an annex to the constitutive treaty of a regional economic integration organisation, perhaps more akin to EU law than investment treaties, which became immediately binding on its adoption by a two-thirds majority of the ECOWAS Authority of Heads of State and Government: Supplementary Act A/SA.3/01/10 Amending New Article 9 of the ECOWAS Treaty as Amended by Supplementary Act A/SP.1/06/06 (adopted and entered into force 16 February 2010) arts 9(3), 9(12). Alongside its inclusion of typical treaty standards, ECOWIC defines ‘Investor’ as ‘any individual, company or enterprise legally originating from any Member State of ECOWAS or an individual, company or enterprise from a third country that has made an investment in a Member State’: ECOWIC, art 1(i) (emphasis added).

³⁰² ECOWIC, art 27(1)(a) (emphasis added).

³⁰³ But note that ECOWIC contemplates a discrete agreement to arbitrate in an investor-State contract, which would be the key instrument in addressing any counterclaim: *ibid* art 54.

³⁰⁴ Elisa Morgera, *Corporate Accountability in International Law* (2nd edn, OUP 2020). Investment treaties may expressly refer to CSR standards: eg Netherlands Model Investment Agreement (2019) (‘Dutch Model BIT’) arts 7, 23, referring *inter alia* to the OECD Guidelines (n 44) and UN Human Rights Council, ‘Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework’ (21 March 2011) UN Doc A/HRC/17/31 (‘UN Guiding Principles’). For a survey of CSR clauses, see Bueno, Yilmaz Vastardis and Djeuga (n 44).

³⁰⁵ See the discussion of legality clauses in Section III.B.

³⁰⁶ *Blusun* (n 19) para 275. cf Hailes (n 4).

or operate the investments in a manner that circumvents international environmental, labour and human rights obligations’ of the host State.³⁰⁷ While these clauses may establish that ‘investors were bound by an obligation based on international law’,³⁰⁸ it remains difficult to predict in which circumstances a tribunal might accept an environmental counterclaim, let alone the consequences of breach.³⁰⁹ International law allows for compensation as reparation for injury to ecosystem services,³¹⁰ though awards are rather paltry and have not accounted for cumulative harms to the climate system.³¹¹ In applying domestic law, moreover, the most successful environmental counterclaims—brought by Ecuador against oil companies—managed to set off merely 10 per cent of the compensation owed to claimants.³¹²

In this light, a more promising function for investor obligations—without needing to surmount the procedural hurdles and substantive uncertainties of bringing a counterclaim—could be to ground a respondent’s argument that the claimant contributed to its own injury by wilful or negligent conduct.³¹³ In *Copper Mesa*, the tribunal reduced the quantum of compensation by 30 per cent due to the mining company’s flagrant violation of Ecuador’s criminal law.³¹⁴ In *Al-Warraq v Indonesia*, moreover, the claimant was not entitled to any compensation for breach of the FET standard because his own banking practices breached another treaty clause that required investors to ‘refrain from all acts that may disturb public order or morals or that may be prejudicial to the public interest’.³¹⁵ Investor obligations may likewise provide a benchmark for contributory fault in cases where the respondent’s environmental measures were induced by a claimant’s conduct, thus running the risk of disproportionate sanction.³¹⁶ Indeed, under the Dutch Model BIT, a tribunal is ‘expected to take into account’ any ‘non-compliance by the investor with its commitments’ under the UN Guiding Principles on Business and Human Rights and the

³⁰⁷ But note that Morocco has backslid from such ambitious provisions in its more recent treaty practice: Arpan Banerjee and Simon Weber, ‘The 2019 Morocco Model BIT: Moving Forwards, Backwards or Roundabout in Circles?’ (2021) 36 ICSID Rev—FILJ 536, 553–55.

³⁰⁸ cf *Urbaser* (n 295) paras 1206–10.

³⁰⁹ The principle of full reparation for injury could be applied by analogy to State responsibility, taking the polluter pays principle (Rio Declaration, principle 16) as a ‘guiding policy’ for progressive development: cf Zachary Douglas, ‘The Enforcement of Environmental Norms in Investment Treaty Arbitration’ in Pierre-Marie Dupuy and Jorge E Viñuales (eds), *Harnessing Foreign Investment to Promote Environmental Protection* (CUP 2013) 415, 439–40. Recall that art 31 of ARSIWA is applied to investor-State claims only ‘[b]y analogy with interstate international law’: *Rockhopper* (n 10) para 207.

³¹⁰ *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* Compensation (Judgment) [2018] ICJ Rep 15 paras 29–87. On compensation for remediation of environmental harm as defined by Ecuador’s regulatory criteria and constitutional law, which required ‘the most protective standard in conformity with the principles of precaution and *in dubio pro natura*’, see *Burlington*, Counterclaims (n 291) paras 272–93, 330–46, 889. cf *Perenco Ecuador Limited v Republic of Ecuador*, ICSID Case No ARB/08/6, Award (27 September 2019) (*Perenco*, Award) paras 740–899 (relying on an independent expert report).

³¹¹ cf *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* Compensation (Dissenting Opinion of Judge *ad hoc* Dugard) [2018] ICJ Rep 119.

³¹² *Burlington*, Counterclaims (n 291) para 1099; *Perenco*, Award (n 310) para 1023.

³¹³ ARSIWA (n 113) art 39; Viñuales, ‘Investor Diligence’ (n 289) 364–66; Martin Jarrett, *Contributory Fault and Investor Misconduct in Investment Arbitration* (CUP 2019).

³¹⁴ *Copper Mesa* (n 19) paras 6.91–6.102. See also *Bear Creek Mining Corporation v Republic of Peru*, ICSID Case No ARB/14/21, Partial Dissenting Opinion, Professor Philippe Sands QC (12 September 2017).

³¹⁵ *Al-Warraq v Republic of Indonesia*, UNCITRAL, Final Award (15 December 2014) paras 631–54, 683. See Agreement on Promotion, Protection and Guarantee of Investments amongst the Member States of the Organization of the Islamic Conference (opened for signature 5 June 1981, entered into force 1 February 1988) art 9. For similar findings without any express clause, based on domestic banking regulation, see *Genin, Eastern Credit Limited, Inc and AS Baitoil v Republic of Estonia*, ICSID Case No ARB/99/2, Award (25 June 2001) paras 348–52; *Levy v Republic of Peru*, ICSID Case No ARB/10/17, Award (26 February 2014) paras 473–79.

³¹⁶ *Occidental Petroleum Corporation and Occidental Exploration and Production Company v Republic of Ecuador*, ICSID Case No ARB/06/11, Award (5 October 2012) paras 662–87. See further Jarrett (n 313) ch 5; Hailes (n 272) 158–59.

OECD Guidelines for Multinational Enterprises ‘in deciding on the amount of compensation’.³¹⁷ A tribunal might also take into account these CSR commitments at earlier stages of the quantum analysis where, for example, a claimant’s alleged injury or its proposed method of valuation is premised on future non-compliance with global best practices of environmental management.³¹⁸ As for the other 11 types of environmental clauses surveyed in this article, the limits and potential of investor obligations may be realised only in dialogue with general international law and arbitral practice.

IV. CONCLUSION: CLEARING OUT THE DEAD WOOD

More than two decades ago, Waelde and Kolo suggested that investment arbitration was ‘moving towards a single, comprehensive international tort of regulatory misconduct’.³¹⁹ In substance, they were wrong: their emphasis on the economic effects of an environmental measure has been rightly rejected by the weight of arbitral and treaty practice, which has instead embraced the police powers doctrine in distinguishing regulation from expropriation. Yet the recent endorsement of that doctrine by the ICJ—read in the light of wider practice, old and new—may be distilled into a single, comprehensive baseline for the drafting and interpretation of investment treaty clauses designed to secure the international lawfulness of environmental regulation.³²⁰ Rather than requiring a State to prove positively the reasonableness of regulation, a claimant must prove that the impugned measure’s impact was obviously excessive when measured against the protection afforded to the legitimate purpose, taking into account any international obligation that may reinforce the priority of that purpose and thus lift the threshold of proving breach (Section II). In short, manifest disproportionality. By retracing the roots of this test, we were better equipped to consider whether environmental clauses have affirmed or diverged from general international law and to assess their functions in investment arbitration, rather than assuming a conflictual relationship between environmental and investment protection or relying on alegal notions of policy space (Section I).

Against that normative baseline, this article examined the arbitral and treaty practice on 12 types of environmental clauses, divided into three stages of analysis: jurisdiction, breach and exception (Section III). In summary, Table 2 identifies which of the 12 clauses reflect general international law (*deep roots*), may enhance environmental protection (*green shoots*) or make negligible contribution (*dead wood*). *Affirmations* and *clarifications* reflect the baseline under general international law, as do *legality clauses* in respect of an investment’s initial acquisition, while *implementation* and *non-regression* clauses provide interpretive context and may assist investors in renewable energy or environmental goods and services to prove breach where the State derogates from domestic environmental law or its obligations under MEAs or NDCs. *Exclusions* of assets, *exemptions* of measures and *investor obligations* are also promising developments, though treaty practice is mostly hypothetical and should

³¹⁷ Dutch Model BIT (n 304) art 27; OECD Guidelines (n 44) ch VI; UN Guiding Principles (n 304).

³¹⁸ Hailes (n 272) 146–58.

³¹⁹ Thomas Waelde and Abba Kolo, ‘Environmental Regulation, Investment Protection and “Regulatory Taking” in International Law’ (2001) 50 ICLQ 811, 848.

³²⁰ This baseline is complemented by general international law on non-regulatory environmental measures, namely expropriation and taxation: see Section II.D.

Table 2. Assessment of environmental clauses in light of arbitral and treaty practice

No	Type	Deep roots	Green shoots	Dead wood
1	<i>Legality clause</i>			
2	<i>Exclusion</i>			
3	<i>Exemption</i>			
4	<i>Denial of benefits</i>			
5	<i>Conflict clause</i>			
6	<i>Affirmation</i>			
7	<i>Clarification</i>			
8	<i>Implementation clause</i>			
9	<i>Non-regression clause</i>			
10	<i>Justification</i>			
11	<i>Reservation</i>			
12	<i>Investor obligation</i>			

be refined in light of arbitral practice regarding, for example, the pitfalls of drafting exemptions by reference to open-ended purposes (eg climate mitigation) rather than legally defined objects (eg fossil fuels). While there is scant practice on *denial of benefits*, *conflict clauses* and *reservations*, these clauses are not well suited for environmental protection compared to their conventional functions. As to *justifications*, arbitral practice has confirmed the difficulty in transposing Article XX of the GATT to investment treaties, which inverted the presumptive right to regulate by allocating the burden to respondents and failed expressly to avoid compensation. So far, at least, the latter four types make negligible contribution to environmental protection in investment arbitration.

More generally, this assessment raises the question of whether environmental clauses add much to investment arbitration beyond the principle of systemic integration, which already requires an interpreter to take into account any relevant rules of customary and treaty law.³²¹ A possible answer is that investment treaty clauses on the environmental rights and obligations of States have served to transpose the presumptive lawfulness of regulation from external sources under Article 31(3)(c) of the VCLT to the core of treaty interpretation—text and context—thus guarding against arbitral practice that ignores the priority of environmental protection in determining whether an impugned measure qualifies as an indirect expropriation or breaches the minimum standard. Still, arbitral and treaty practice are worryingly silent on environmental obligations of States under general international law, despite the shared roots of the prevention principle and investment protection as twin branches of resource sovereignty.³²² In 2024 alone, the basic obligation to regulate economic activities with

³²¹ See n 4.

³²² For rare examples, see *Blusun* (n 19) para 275, referring to ‘the developing general international law of EIAs’, citing *Pulp Mills* (n 25) para 101 and *Construction of a Road* (n 42) paras 101, 104; *Allard* (n 231) paras 231, 236, discussing the relevance of *Trail Smelter* (n 40) to the FPS standard. Seemingly, however, States have begun to rely more frequently on principles of international environmental law in responding to investment treaty claims: eg *Odyssey Marine Exploration, Inc v United Mexican States*, ICSID Case No UNCT/20/1, Rejoinder (19 October 2021) paras 371–79 (referring to the prevention and precautionary principles in respect of the marine environment); *RWE AG and RWE Eemshaven Holding II BV v Kingdom of the Netherlands*, ICSID Case No ARB/21/4, Respondent’s Counter-Memorial (5 September 2022) paras 730–41 (referring to the prevention, precautionary and polluter pays principles in phasing out coal power generation).

diligence and propriety has been clarified by contentious and advisory proceedings regarding the precautionary standard of due diligence required to prevent greenhouse gases from causing significant harm to the marine environment;³²³ breaches of the human right to effective protection from serious adverse effects of climate change by a State's inadequate mitigation framework;³²⁴ and breaches of the human right to a healthy environment arising from century-long failure to regulate air, water and soil pollution by public and private companies.³²⁵ The ICJ is expected soon to join this authoritative chorus on the transformative measures that are required to prevent catastrophic harm to the climate system.³²⁶

Such stringent obligations make it increasingly difficult for any investor in carbon-intensive or other highly polluting industries to prove that a measure's impact was manifestly disproportionate in view of its regulatory purpose, regardless of whether the applicable treaty contains an environmental clause.³²⁷ Yet the green shoots of treaty practice may ensure that investment arbitration is more closely aligned with a State's environmental and human rights obligations by carving out the most harmful sectors from the scope of jurisdiction, such as the exclusion of fossil energy assets.³²⁸ To realise fully the potential of environmental clauses, it is vital that arbitral and treaty practice move beyond the presumptive right of States to regulate and their obligations under MEAs to integrate also the judicial clarification of environmental protection under general international law.

³²³ *Climate Change and International Law* (n 43) paras 233–43.

³²⁴ *Verein KlimaSeniorinnen Schweiz and others v Switzerland*, App No 53600/20 (ECtHR, 9 April 2024) paras 544–74.

³²⁵ *Case of the Inhabitants of La Oroya v Peru*, Judgment (Preliminary Objections, Merits, Reparations and Costs) IACtHR Series C 511 (27 November 2023) paras 115–29. A parallel dispute over environmental remediation has led to arbitration of investment treaty claims and alleged breaches of contract by a State-owned mining company, causing the identically constituted tribunals to ask the parties '[w]hat weight (if any) should the Tribunal grant to the analysis and findings of the Inter-American Court of Human Rights?': *Renco Group, Inc v Republic of Peru*, PCA Case No 2019-46, Procedural Order No 12 (8 April 2024) para 10; *Renco Group, Inc and Doe Run Resources, Corp v Activos Mineros SAC*, PCA Case No 2019-47, Procedural Order No 13 (8 April 2024) para 10. Both parties have downplayed the legal significance of the IACtHR judgment, while underlining certain findings of fact that support their respective cases: *Renco Group Inc v Republic of Peru*; *Renco Group Inc and Doe Run Resources, Corp v Activos Mineros SAC*, PCA Case Nos 2019-46 and 2019-47, Respondents' Post-Hearing Brief (21 June 2024) paras 75–88; *Renco Group Inc v Republic of Peru*; *Renco Group Inc and Doe Run Resources, Corp v Activos Mineros SAC*, PCA Case Nos 2019-46 and 2019-47, Claimants' Post-Hearing Brief (21 June 2024) 71–73.

³²⁶ Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change UNGA Res 77/276 (29 March 2023) UN Doc A/RES/77/276. Several participants have requested the ICJ to provide express guidance on the proper relationship between investment protection and climate obligations: eg *Obligations of States in Respect of Climate Change*, Advisory Opinion (Written Statement, Republic of Albania) (22 March 2024) paras 117–28.

³²⁷ cf *Lone Pine* (n 11) paras 615–33; *Gabriel Resources* (n 89) paras 758–60, 1320–22.

³²⁸ See Section III.B. A natural leader in this direction might be the UK, being the top home State of protected fossil fuel investors and the 15th most-exposed host State to potential claims: Eunjung Lee and Jordan Dilworth, *Investment Treaties Are Undermining the Global Energy Transition: Mapping the Global Coverage of ISDS Protected Fossil Fuel Assets* (E3G, July 2024) 20–25.