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Going Green: Managing the Environment Through International Investment Arbitration

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GOING GREEN: MANAGING THE ENVIRONMENT THROUGH INTERNATIONAL INVESTMENT ARBITRATION*

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I. INTRODUCTION

With a letter signed by more than 300 civil society groups in tow, demonstrators descended on the World Bank's headquarters in Washington, D.C. on a spring morning last year to protest an investment arbitration initiated by a Canadian mining company against the government of El Salvador. The demonstrators accused the mining company of using the arbitral process to "subvert a democratic nationwide debate over mining and environmental health."[1] According to the investors, the dispute concerns the non-issuance of a concession because of a *de facto* moratorium on mining. The move was taken to allow the government to study the environmental impact of mining on, among other things, the country's scarce water resources. This case is not an anomaly but rather exemplifies the growing number of investor-state disputes in which private business interests collide with public interest laws.

Investment arbitration provides an international forum for foreign investors to air their grievances over governmental conduct that ostensibly contravenes a treaty obligation. Although the earliest investment disputes can be traced to the 1970s,[2] most cases implicating environmental policies have only emerged in the last fifteen years.[3] The emergence of environment-related disputes reflects shifting societal perceptions about the importance of

1. Claire Provost, *El Salvador Groups Accuse Pacific Rim of "Assault on Democratic Governance"*, GUARDIAN (Apr. 10, 2014), http://www.theguardian.com/global-development/2014/apr/10/el-salvador-pacific-rim-assault-democratic-governance.

2. *See* INT'L CENTRE FOR SETTLEMENT OF INVEST. DISPUTES, THE ICSID CASELOAD – STATISTICS 7-8 (2014), *available at* https://icsid.worldbank.org/apps/ICSIDWEB/resources/Documents/ICSD%20Web%20Stats%202014-2%20(English).pdf (identifying nine ICSID cases registered in the 1970s, a fraction of the annual ICSID cases since the late 1990s).

3. *See* JORGE E. VIÑUALES, FOREIGN INVESTMENT AND THE ENVIRONMENT IN INTERNATIONAL LAW 17-18 (James Crawford & John S. Bell eds., 2012) (explaining that only four investment disputes with environmental components occurred prior to the year 2000).

sustainable development. Disputes have sometimes arisen when a government's environmental policies have negatively affected an investor's bottom-line.

Given the breadth of environmental regulation, these cases covered an array of industrial sectors and involved governmental actions aimed at combating pollution, conserving natural resources, and protecting fragile ecosystems and endangered species. Alarm set in amongst public interest groups as States were hauled before international tribunals for denying permits to operate landfills,[4] prohibiting the manufacture of toxic chemicals,[5] refusing to grant licenses for water extraction,[6] disallowing mining activities,[7] tackling

4. *See, e.g.*, Gallo v. Canada, PCA Case No. 55798, Award, ¶ 121 (Permanent Court of Arbitration 2011), http://www.international.gc.ca/ (revocation of mine-site waste disposal approval); Tecnicas Medioambientales Tecmed S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award, ¶¶ 39, 139, 144, 147, 149 (May 29, 2003), 19 ICSID Rev. FILJ 158 (2004) (rejection of landfill renewal authorization); Metalclad Corp. v. United Mexican States, ICSID Case No. ARB(AF)/97/1, Award, at 99-100 (Aug. 30, 2000), 16 ICSID Rev. FILJ 165 (2001) (rejection of construction permit for a landfill).

5. *See, e.g.*, Dow Agrosciences LLC v. Canada, Settlement Agreement, ¶¶ 1, 3b-c (UNCITRAL 2011) (Kluwer Law Int'l) (restrictions on the sale and use of pesticide); Chemtura Corp. v. Canada, Award, ¶¶ 11-13 (UNCITRAL 2010) (Kluwer Law Int'l) (lindane-treated food product ban); Methanex Corp. v. United States, Final Award of the Tribunal on Jurisdiction and Merits, Part II Ch. D ¶ 2 (UNCITRAL 2005), http://www.state.gov/documents/organization/51052.pdf (methanol-based gasoline mixture ban); S.D. Myers Inc. v. Canada, Partial Award on Liability, ¶¶ 127-28 (UNCITRAL Nov. 13, 2000) (Kluwer Law Int'l) (industrial waste transport prohibition); Ethyl Corp. v. Canada, Award, ¶ 5 (UNCITRAL June 24, 1998) (Kluwer Law Int'l) (unleaded gasoline mixture ban).

6. *See, e.g.*, Sun Belt Water, Inc. v. Canada, Notice of Intent to Submit a Claim to Arbitration, ¶¶ 4, 13, 16 (UNCITRAL 1998), http://www.transnational-dispute-management.com (explaining claimant's argument that respondent's moratorium on water exports was intended to favor domestic investors over foreign ones).

7. *See, e.g.*, Pac Rim Cayman LLC v. Republic of El Salvador, ICSID Case No. ARB/09/12, Decision on the Respondent's Jurisdictional Objections, ¶ 1.8 (June 1, 2012) (Kluwer Law Int'l) (discussing arbitral proceedings against El Salvador for refusing permits to a mining company); Clayton v. Canada, Notice of Arbitration, ¶¶ 10-11 (UNCITRAL 2008), http://www.italaw.com/sites/default/files/case-documents/italaw1143.pdf (explaining the claimant's argument that Canada's environmental assessment of a coastal quarry project was unfair, arbitrary, and discriminatory); *see also* Gold Reserve Inc. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB(AF)/09/1, Award (Sept. 22, 2014) (adjudicating a claim by a mining company against Venezuela for its termination of mining concessions in an environmentally-sensitive area).

claims of environmental harm arising from oil extraction operations,[8] and halting tourist development projects in ecologically-sensitive locations.[9] There is no slowdown of these disputes in sight. Indeed, a new generation of cases is on the horizon springing from shifts in governmental policies on renewable energy,[10] fracking,[11]

8. *See, e.g.*, Chevron Corp. v. Ecuador, Claimant's Notice of Arbitration, ¶¶ 3-4 (UNCITRAL 2009), http://www.italaw.com/sites/default/files/case-documents/ita0155_0.pdf (summarizing claimant's grievance that Ecuador colluded with Ecuadorian plaintiffs in the Lago Agrio litigation that seek damages and other remedies for environmental impacts in a former concession area).

9. *See, e.g.*, Unglaube v. Republic of Costa Rica, ICSID Case Nos. ARB/08/1, ARB/09/20, Award, ¶¶ 191, 219, 223, 230, 234, 255, 258 (May 16, 2012), http://www.italaw.com/sites/default/files/case-documents/ita1052.pdf (determining that, while Costa Rica had violated article 4(2) of its BIT with Germany by adjoining a wildlife refuge through its regulation of claimant's property, the claimant failed to carry out its evidentiary burden for most of its claims); Compañía del Desarrollo de Santa Elena v. Republic of Costa Rica, ICSID Case No. ARB/96/1, Final Award, ¶¶ 16-17, 81-82 (Feb. 17, 2000), 15 ICSID Rev. 169 (2000) (finding for the claimant in a case which arose when Costa Rica expropriated property for ecological concerns that the claimant intended to develop as a resort).

10. *See, e.g.*, Vattenfall AB v. Fed. Republic of Germany, ICSID Case No. ARB/12/12, Decision Pursuant to ICSID Arbitration Rules 41(5) (July 2, 2013), http://www.iareporter.com/articles/20130704_2 (commenting on the pending status of an arbitration based on Germany's decision to phase out the use of nuclear power plants in the country); Mercer Int'l Inc. v. Government of Can., ICSID Case No. ARB(AF)/12/3, Request for Arbitration, ¶¶ 24-25 (Apr. 30, 2012), http://italaw.com/sites/default/files/case-documents/italaw1508.pdf (asserting that Canada violated its obligations under NAFTA by unreasonably regulating the production of energy from biofuels, specifically wood pulp); AES Solar v. Spain, Decision on Bifurcation (UNCITRAL 2013), http://iareporter.com/articles/20130617_1 (reporting on investor's claim that 2010 cuts to tariffs paid to solar energy producers were contrary to earlier commitments of the Spanish government and its obligations under the Energy Charter Treaty); Windstream Energy LLC v. Canada, Amended Notice of Arbitration, ¶¶ 12, 22, 31-32, 36 (UNCITRAL 2013), http://www.transnational-dispute-management.com (alleging that Canada, through the actions of the Government of Ontario opposing a wind energy feed-in tariff contract, acted inconsistently with its obligations under Chapter 11 of NAFTA); Mesa Power Grp., LLC v. Canada, Notice of Arbitration, ¶¶ 6, 46-48 (UNCITRAL 2011), http://www.transnational-dispute-management.com (asserting the Government of Ontario applied arbitrary and unfair rules for awarding FIT Program contracts that hinder the ability for wind energy production); *see also Dutch Affiliates of US Energy Company, NextEra, Are the Latest to Sue Spain at ICSID*, IA REPORTER (May 27, 2014), http://www.iareporter.com/articles/20140527 1/print (stating that Dutch affiliates of the U.S. solar energy company, NextEra, had filed an arbitration claim against Spain with ICSID for charges resulting from Spain's investment incentive roll-back and became one of many other companies

biodiversity,[12] and climate change mitigation.[13]

Environment-related disputes by their nature involve a tension and, at times, a direct conflict between competing obligations of the State to, on one hand, promote foreign investment and, on the other hand, protect its population and territory from environmental harm while responsibly managing its natural resources. States face the challenge of reconciling these competing demands—a task made even more formidable by its international investment commitments. Expanding on themes developed at the American University International Law Review Symposium,[14] this article explores to what extent investor-state arbitration is equipped to deal with environment-related disputes. Section II analyzes the treaties themselves and classifies the main types of environmental clauses most commonly found in bilateral investment treaties ("BITs"). The article then examines how environmental disputes have been resolved in investor-State arbitrations to date in Section III. Section IV provides an appraisal of the main challenges of adjudicating environmental disputes and suggests ways to make investment arbitration more responsive to environmental concerns. Section V assesses the prospects for managing environmental concerns through investment arbitration. In short, the article concludes that to ensure greater support from both the users and observers of the system, investor-state arbitration could be more sensitive to environmental

to do so).

11. *See, e.g.*, Lone Pine Res. Inc. v. Canada, Notice of Arbitration, ¶¶ 11-12 (UNCITRAL 2013), http://www.italaw.com/sites/default/files/case-documents/italaw1596.pdf (arguing that Lone Pine was unfairly denied the "valuable right to mine for oil and gas" through the process of fracking without due process, compensation, or cognizable public purpose).

12. *See, e.g.*, Myanmar's Foreign Investment Law 2012 (designating businesses for "farming agriculture," "breeding," and "Marine Fisheries" as restricted or prohibited activities).

13. *See generally* Kate Miles, *Arbitrating Climate Change: Regulatory Regimes and Investor-State Disputes*, 1 CLIMATE L. 76 (2010) ("It is the emergence of this approach in investor-state arbitral jurisprudence that causes concern for the implementation of new environmental protection measures, including new climate change mitigation regulation.").

14. One of the authors participated as a panelist in the American University International Law Review's 2014 Symposium: Managing the Global Environment Through Trade: WTO, TPP and TTIP Negotiations, and Bilateral Investment Treaties Versus Regional Trade Agreements, that took place on February 18, 2014.

policy concerns through the invocation of various procedural, evidentiary, and conceptual tools.

II. CURRENT STATUS OF ENVIRONMENTAL CLAUSES IN BILATERAL INVESTMENT AND REGIONAL TRADE AGREEMENTS

International investment agreements, such as bilateral investment treaties and investment chapters in regional trade agreements, provide the legal basis for investor-state claims by defining the contours of a State's consent to arbitrate.[15] These agreements typically set out procedural preconditions for submitting a claim, the substantive obligations owed by the contracting states to a foreign investor, and remedies available in the event of a breach. The text of investment agreements is therefore a logical starting point to analyze the legal basis for arbitral tribunals to balance a State's environmental policy concerns with its investment protection commitments.

The Organisation for Economic Co-operation and Development recently conducted a survey of international investment agreements to catalogue environmental references and made three important observations.[16] First, most BITs do not contain language referring to environmental concerns (they are found in just 6.5 percent of these treaties), but such references are more common in free trade agreements.[17] Second, while environmental language has appeared in BITs since the mid-1980s, language relating to environmental concerns became more common in recent BITs.[18] In fact, nearly half

15. *See, e.g.*, Daimler Fin. Servs. AG v. Argentine Republic, ICSID Case No. ARB/05/1, Award, ¶ 168 (Aug. 22, 2012), http://www.transnational-dispute-management.com (explaining that state consent provides the foundation of the arbitration proceedings that arise from treaty commitments).

16. Kathryn Gordon & Joachim Pohl, *Environmental Concerns in International Investment Agreements: A Survey* 5 (Org. for Econ. Co-Operation & Dev. Working Papers on Int'l Inv., Working Paper No. 2011/01, 2011) (providing that its study was based on environmental concerns that appear in a sample of 1,623 international investment agreements across forty-nine countries).

17. *Id.* (emphasis omitted) ("Language referring to environmental concerns is rare in BITs but common in non-BIT IIAs. In the treaty sample, 133, or 8.2 [percent], of the IIAs contain a reference to environmental concerns. All 30 non-BIT IIAs contain such references, but only 6.5 [percent] of BITs do.").

18. *Id.* (explaining that environmental language appeared in a BIT for the first

of new treaties concluded since 2005 reference the environment in some way. Third, countries vary widely in the content and custom of including such language.[19]

Since the scope and content of protections vary from treaty to treaty, a complete taxonomy of environment-related provisions is impractical. Furthermore, the language used in a specific investment agreement must be analyzed according to general principles of treaty interpretation to properly determine its legal significance. With that said, general observations can be made regarding the classes of environment-related provisions typically found in investment agreements. These provisions broadly reflect three main themes, each demonstrating the distinct policy goals of the contracting parties: (1) to recognize environmental protection as a treaty objective; (2) to preserve the right of States to regulate environmental matters; and (3) to ensure the continuing duty of States to enforce and promote environmental protection measures.

The first set of references recognizes environmental protection and conservation amongst the treaty's objectives. These references comprise the second most common category of environmental language.[20] Often this type of language is in the treaty's preamble.[21] The preamble of the 2012 U.S. Model BIT illustrates this point: "Desiring to achieve these objectives in a manner consistent with the protection of health, safety, and the environment."[22]

Although these clauses do not typically prescribe a hierarchy of legal obligations, they serve a useful function by confirming that environmental protection is a concern of the parties. General principles of treaty interpretation recognize the role of preambles. According to article 31(1)(2) of the Vienna Convention on the Law of Treaties, the preamble provides context for interpretation and may

time in 1985 between China-Singapore and sparked a trend which would lead to a fifty percent increase of such provisions by 2005).

19. *Id.* at 9-10 (noting that environmental references are most commonly found in BITs from Canada, New Zealand, Japan, United States, and Finland).

20. *Id.* at 11.

21. *Id.*

22. *2012 U.S. Model Bilateral Investment Treaty*, U.S. TRADE REPRESENTATIVE pmbl. (2012), www.ustr.gov/sites/default/files/BIT%20text%20for%20ACIEP%20Meeting.pdf.

provide background on the object and purpose of the treaty.[23] In practice, foreign investment decisions at times de-emphasize preamble clauses when identifying the object and purpose of a treaty.[24] One commentator surmises that this may occur when the object and purpose of the treaty is obvious or the preamble is poorly drafted.[25] It may also reflect the differing legal cultures from which arbitrators are drawn; for example, an adjudicator hailing from a civil law culture may be more likely to view the treaty text, including the preamble, holistically. Nevertheless, the fact remains that preamble clauses may provide a useful starting point in this analysis.

The second category of provisions affirms a contracting party's right to regulate environmental matters. This is the oldest and most common category of environmental language.[26] These provisions vary widely in scope and may be framed as exceptions, exclusions, or carve-outs. For example, some international investment treaties adopt language similar to article XX of the General Agreement on Tariffs and Trade ("GATT") excepting measures taken for reasons of "human, animal or plant life or health,"[27] "conservation of

23. *See* Vienna Convention on the Law of Treaties art. 31(2), May 23, 1969, 1155 U.N.T.S. 331 (providing that States interpret treaties in the full context of a given treaty's preamble and annexes, as well as any collateral agreements the respective parties may have signed); *see also* ANTHONY AUST, MODERN TREATY LAW AND PRACTICE 336-37 (2000) (stating that drafters often use preamble language to mollify opponents of a majority view and accordingly drafters must keep in mind article 31 of the Vienna Convention on the Law of Treaties to ensure preambles are not inconsistent with substantive provisions of a treaty); RICHARD GARDINER, TREATY INTERPRETATION 186 (2008) (arguing that treaty preambles help identify the object and purpose of a treaty).

24. *See, e.g.*, Philip Morris Brands SARL v. Oriental Republic of Uruguay, ICSID Case No. ARB/10/7, Decision on Jurisdiction, ¶ 201 (July 2, 2013), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&action Val=showDoc&docId=DC3592_En&caseId=C1000 ("The Preamble therefore does not materially advance analysis. Likewise, the reference in the Preamble . . . appears too general to permit the drawing of definitive conclusions regarding the need for the investment to contribute to the host state's economic development.").

25. J. ROMESH WEERAMANTRY, TREATY INTERPRETATION IN INVESTMENT ARBITRATION ¶ 3.80 (2012).

26. Gordon & Pohl, *supra* note 16, at 11 ("Use of this category of language began in 1985, and is therefore among the oldest categories of language.").

27. *See, e.g.*, Agreement Between the Government of Canada and the Government of the Arab Republic of Egypt for the Promotion and Protection of Investments art. XVII(3)(b), Can.-Egypt, Nov. 13, 1996.

exhaustible natural resources,"[28] or "protection of national treasures of artistic, historic or archaeological value."[29]

Treaties commonly include a more general policy space clause, such as those included in the Canada, United States, and Norway Model BITs.[30] An example of a broad policy space clause can be found in article III(1) of Annex I of the Canada-Costa Rica Foreign Investment Promotion and Protection Agreement: "[n]othing in this Chapter shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns."[31]

28. Bilateral Investment Treaty Between the Government of the Hashemite Kingdom of Jordan and the Government of the Republic of Singapore art. 18(e), Jordan-Sing., May 16, 2004 (Kluwer Law Int'l).

29. Agreement Between Japan and the Republic of Peru for the Liberalization, Promotion, and Protection of Investment art. 19(1)(f), Japan-Peru, Nov. 22, 2008 (Kluwer Law Int'l).

30. *See 2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, art. 12(5) ("Nothing in this Treaty shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Treaty that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns."); *Canada Model Agreement for the Promotion and Protection of Investment*, INV. TREATY ARBITRATION art. 10(1) (2004), http://italaw.com/documents/Canadian2004-FIPA-model-en.pdf 1/ (last visited Jan. 22, 2015) [hereinafter *Canada Model BIT*] (emphasizing that parties are entitled to take reasonable actions to protect ecological resources); *Norway Model Agreement for the Promotion and Protection of Investments (Draft Version 191207)*, INV. TREATY ARBITRATION art. 12, http://www.italaw.com/sites/default/files/archive/ita1031.pdf (last visited Jan. 22, 2015) [hereinafter *Norway Model BIT*] ("Nothing in this Agreement shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Agreement that it considers appropriate to ensure that investment activity is undertaken in a manner sensitive to health, safety or environmental concerns.").

31. Agreement between the Government of Canada and the Government of the Republic of Costa Rica for the Promotion and Protection of Investments art. III(1) of Annex I, Can.-Costa Rica, Mar. 18, 1998, *available at* http://www.treaty-accord.gc.ca/text-texte.aspx?id=101533; *see* North American Free Trade Agreement art. 1114(1), U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 605 (1993) [hereinafter NAFTA] (emphasis omitted); *see also The Dominican Republic-Central American Free Trade Agreement*, U.S. TRADE REPRESENTATIVE art. 10.11 (2007), http://www.ustr.gov/sites/default/files/uploads/agreements/cafta/asset uploadfile328_4718.pdf [hereinafter *CAFTA-DR*] (ensuring States can take "appropriate" measures to ensure investors conduct themselves in a "sensitive"

These clauses intend to carve out regulatory space for States to achieve policy goals without breaching their substantive obligations. A state party that invokes such a provision bears the burden of proving that the exception applies and the relevant criteria are satisfied.[32] If successfully invoked, the exception may obviate the State's obligation to pay compensation for the offending conduct. However, how tribunals will interpret these clauses is uncertain. To date, investment tribunals have generally interpreted other exception clauses restrictively.[33] One reason for this might be the "otherwise consistent with this Agreement" language, which arbitrators could read to weaken these policy space clauses.[34] Looking ahead, investment tribunals interpreting reservations may borrow from analogous legal constructs, such as the customary law plea of necessity,[35] non-precluded measure exceptions,[36] or the analytical

manner regarding environmental issues); Gordon & Pohl, *supra* note 16, at 11 (concluding that provisions ensuring a contracting parties' right to "[reserve] environmental policy space" are one of the most common provisions found across a sample of several treaties).

32. *See* Andrew Newcombe, *General Exceptions in International Investment Agreements*, *in* SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 355, 362-63 (Marie-Claire Cordonier Segger et al. eds., 2011).

33. *Id.* at 361; *see also* Sempra Energy Int'l v. Argentine Republic, ICSID Case No. ARB/02/16, Award, ¶ 373 (Sept. 28, 2007), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC694_En&caseId=C8 (stating that parties cannot interpret treaties to use policy space provisions as an "escape route" from obligations to which they are normally bound under a treaty); Enron Creditors Recovery Corp. v. Argentine Republic, ICSID Case No. ARB/01/3, Award, ¶ 331 (May 22, 2007) (Kluwer Law Int'l) (limiting the object and purpose of article 11 of the United States and Argentinean investment treaty to specific situations involving economic "difficulty and hardship" and requiring that it should be narrowly interpreted).

34. *But see* Gordon & Pohl, *supra* note 16, at 21 (citing NAFTA and stating that many treaties include policy space provisions that allow those States to take otherwise prohibited actions without facing sanctions).

35. *See* VIÑUALES, *supra* note 3, at 384 (observing that in evaluating claims of GATT violations, WTO tribunals are more frequently interpreting the doctrine of "necessity" liberally).

36. *See generally* William W. Burke-White & Andreas von Staden, *Investment Protection in Extraordinary Times: The Interpretation and Application of Non-Precluded Measures Provisions in Bilateral Investment Treaties*, 48 VA. J. INT'L L. 307, 311-13 (2008) (discussing the increasing prevalence of non-precluded measure provisions, which allow States to take actions otherwise prohibited by treaty obligations when such actions are taken in pursuit of expressly permitted public policy purposes).

approach of the World Trade Organization ("WTO"),[37] depending on the precise wording of the relevant provision.

A subset of these provisions clarifies that certain regulatory action relating to environmental matters may not be the basis for a compensatory claim under the investment agreement. For example, some provisions carve out an exception for specific disciplines, such as performance requirements.[38] A small number of Model BITs also establish that non-discriminatory measures designed to serve a public health, safety, or environmental protection objective do not constitute an indirect expropriation.[39] Other treaties exclude environmental provisions altogether from application of the dispute settlement

37. *See generally* Newcombe, *supra* note 32, at 363, 365 (explaining that the WTO Appellate Body follows a weighing and balancing analysis "of either restrictive or wide interpretation, in interpreting the meaning of 'necessary' for the purposes of the general exceptions in GATT," rather than a strict formalistic approach).

38. *See, e.g.*, Agreement Between Canada and the Republic of Peru for the Promotion and Protection of Investments art. 7(2), Can.-Peru, Nov. 14, 2006, *available at* http://www.treaty-accord.gc.ca/text-texte.aspx?id=105078 (providing that measures that require investment to meet applicable health, safety or environmental requirements may be permissible forms of technology transfer); NAFTA, *supra* note 31, art. 1106(2), (6) (assuring that state parties, except when they act in a "arbitrary or unjustifiable manner," will ensure compliance with domestic regulations regarding health, public safety, and conservation policies); *2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, art. 8(3)(c) (ensuring compliance with conservation measures for state parties so long as compliance is not affected in an "arbitrary or unjustifiable manner").

39. *See, e.g.*, *2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, Annex B(4)(b) ("Except in rare circumstances, non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations."); *CAFTA-DR*, *supra* note 31, Annex 10-C(4)(b) (providing that "nondiscriminatory regulatory actions" aimed at safeguarding public health, safety, and the environment are not expropriatory); *Canada Model BIT*, *supra* note 30, Annex B.13(1)) ("[N]on-discriminatory measures of a Party that are designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, do not constitute indirect expropriation.").

mechanism.[40] These clauses typically have the most far-reaching effects.[41]

Many treaties also place States under a continuing obligation to uphold environmental standards. Clauses that oblige States not to lower environmental regulations to attract foreign investments illustrate this third type of clause.[42] These statements may be in the preamble[43] or a free-standing clause. An example of the latter is article 23 of the Japan-Uzbekistan BIT:

> The Contracting Parties recognize that it is inappropriate to encourage investment by investors of the other Contracting Party and of a non-Contracting Party by relaxing its health, safety or environmental measures, or by lowering its labor standards. To this effect each Contracting Party should not waive or otherwise derogate from such measures and standards as an encouragement for the establishment, acquisition or expansion in its Area of investments by investors of the other Contracting Party and of a non-Contracting Party.[44]

These provisions appear hortatory and aspirational in nature. Their aim is to avoid a regulatory race to the bottom by States. Sometimes these clauses are complemented with recourse to consultations

40. *See, e.g.*, Agreement Between the Belgium-Luxembourg Economic Union and the Republic of Colombia in the Reciprocal Promotion and Protection of Investments art. VII(5), Feb. 4, 2009, *available at* http://www.kluwerarbitration.com.proxy.wcl.american.edu/CommonUI/document.aspx?id=KLI-KA-1322227-n (foreclosing dispute settlement mechanisms in relation to disputes involving environmental issues).

41. *But see* Gordon & Pohl, *supra* note 16, at 20 (stating that only a handful of treaties include such provisions).

42. *Id.* at 21.

43. *See* Agreement on the Promotion and Protection of Investments Between the Government of the Republic of Finland and the Government of the Republic of Armenia, preamble, Fin.-Arm., Oct. 5, 2004, 2431 U.N.T.S. 85 ("AGREEING that these objectives can be achieved without relaxing health, safety and environmental measures of general application").

44. Agreement Between Japan and the Republic of Uzbekistan for the Liberalization, Promotion and Protection of Investment art. 23, Japan-Uzb., Aug. 15, 2008, *available at* http://www.kluwerarbitration.com.proxy.wcl.american.edu/CommonUI/document.aspx?id=KLI-KA-1042201-n; *see also* NAFTA, *supra* note 31, art. 1114(2) (allowing parties to request the other to abstain from encouraging investment by relaxing environmental regulations). *But see 2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, art. 12(2) n.15 (recognizing that it would be "inappropriate" for the parties to waive or derogate from their own environmental regulation or law in an effort to encourage investment).

between the contracting states when one party is suspected of relaxing its standards.[45] While they do not directly address the balance between investment protection obligations and environmental policy objectives, consultations potentially introduce a novel policing function for States to safeguard existing environmental standards. Although consultations have not been initiated for environmental matters, this procedure was invoked under an analogous provision of the Labor Chapter in the Dominican Republic-Central America Free Trade Agreement by the United States against Guatemala. Although the parties initially reached an agreement, the United States subsequently announced that it was proceeding with its labor case against Guatemala because Guatemala failed to implement key actions under the plan.[46] This case suggests a potentially useful role for consultations, particularly when coupled with a dispute settlement mechanism.[47]

Given that the majority of investment agreements are silent on policy issues in general, including the environment, tribunals have not had to grapple with thorny questions of treaty interpretation. However, a tribunal confronted with such a provision should endeavor to apply general principles of treaty interpretation to the specific language of the treaty to give full effect to the parties' intentions. For now, parties may be guided by the jurisprudence of

45. These clauses are found in Canadian and U.S. Model BITs. *See, e.g.*, *2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, art. 12(6) ("A Party may make a written request for consultations with the other Party regarding any matter arising under this Article."); *Canada Model BIT*, *supra* note 30, art.11 ("If a Party considers that the other Party has offered such an encouragement, it may request consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement."). A similar provision is found in NAFTA and US-CAFTA-DR. *See* NAFTA, *supra* note 31, art. 1114(2) (using language identical to the *Canada Model BIT*); *CAFTA-DR*, *supra* note 31, art. 17.10 (allowing parties to request consultation for any matter considered by the treaty).

46. *In the Matter of Guatemala – Issues Relating to the Obligations Under Article 16.2.1(a) of the CAFTA-DR*, U.S. TRADE REPRESENTATIVE, https://ustr.gov/issue-areas/labor/bilateral-and-regional-trade-agreements/guatemala-submission-under-cafta-dr (last visited Mar. 30, 2015).

47. *See, e.g.*, Wolfgang Alschner & Elizabeth Tuerk, *The Role of International Investment Agreements in Fostering Sustainable Development*, *in* INVESTMENT LAW WITHIN INTERNATIONAL LAW: INTEGRATIONIST PERSPECTIVES 217, 227 (Freya Baetens ed., 2013) ("Such an institutional mechanism facilitates consultations over CSR, allows the adjustment of CSR policies over time, and helps to prevent CSR-related misunderstandings and disputes.").

investment treaty cases on environment-related disputes, a topic discussed in the next section.

III. TREATMENT OF ENVIRONMENTAL ISSUES IN INTERNATIONAL INVESTMENT TREATY JURISPRUDENCE

Since their emergence, environmental disputes have been highly controversial and deeply polarizing. At their core, these disputes involve States' right to regulate for human health and environmental reasons. Investment tribunals tasked with deciding these cases have considered environmental issues as part of their factual analysis of the claim rather than as questions of law.

Factually, these cases are diverse and may challenge the scientific basis of an environmental policy or the validity of a regulatory decision taken for reasons of natural resource conservation or wildlife protection. However, it is rare—although not unheard of—for an investor to complain about a State failing to apply its environmental laws in an investment treaty claim.[48] States may also raise environmental considerations defensively to justify the reasonableness of the disputed regulatory action.[49] In doing so, a State may describe the severity of an environmental issue, the rigorous internal processes or scientific analyses leading to the policy's adoption, and global initiatives to combat the problem. This information provides factual background that will usually bear on the

48. The *Allard v. Barbados* case provides a notable example where a claimant argued that the host state violated domestic and international environmental norms. Allard v. Bardados, Notice of Dispute, ¶¶ 14, 16 (UNCITRAL, Sept. 8, 2009), http://graemehall.com/legal/index.htm. In 2009, Mr. Allard filed a notice of dispute under the Canada-Barbados FIPA with respect to his eco-tourism project. The Canadian investor claimed that he was forced to close the wetlands sanctuary due to certain acts and omissions by the Barbadian government. He claimed these actions violated the government's domestic and international laws and amounted to an indirect expropriation and a failure to accord fair and equitable treatment to its investment. It bears mentioning that the breaches of environmental law were not made as independent claims but rather were used as evidence of treaty breaches.

49. *See* Mark Wu & James Salzman, *The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy*, 108 NW. U. L. REV. 401, 435 (2014) (citing, as an example, a dispute between China and the European Union over Feed-In Tariffs, which is currently being resolved through consultations).

tribunal's application of the relevant treaty provision, such as fair and equitable treatment.

Environmental facts can be relevant to legal issues relating to jurisdiction, liability, and even damages, which this section will discuss in turn. With regard to jurisdiction, many bilateral investment treaties require Parties to make an investment in accordance with the host state's laws for the investor to avail itself of the dispute settlement mechanism.[50] Many arbitral tribunals have recognized that jurisdiction may be denied under this type of provision where the underlying investment failed to comply with domestic rules.[51] Although it remains untested, an investment made in violation of a host state's environmental regulation could arguably fall outside the protection of the treaty depending on the nature and gravity of the violation.

Analyzing environmental issues can also be relevant to the merits of the dispute. States have defended against environment-related challenges by explaining that a legitimate and rational basis for adopting the measure in question exists.[52] In showing that a

50. RUDOLF DOLZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW 84-88 (2008).

51. *See, e.g.*, Metal-Tech Ltd. v. Republic of Uzbekistan, ICSID Case No. ARB/10/3, Award, ¶ 165 (Oct. 4, 2013), http://www.transnational-dispute-management.com (agreeing with the parties that respondent's domestic law prohibiting "corruption" fell within the subject-matter of the legality requirement under the relevant BIT); Quiborax S.A. v. Plurinational State of Bolivia, ICSID Case No. ARB/06/2, Decision on Jurisdiction, ¶ 266 (Sept. 27, 2012), http://www.italaw.com/sites/default/files/case-documents/italaw1098.pdf (finding that a claimant investor need only show that it had made the legally required investment to prove an arbitral tribunal has jurisdiction); Desert Line Projects LLC v. Republic of Yemen, ICSID Case No. ARB/05/17, Award, ¶¶ 104-05 (Feb. 6, 2008), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC791_En&caseId=C62 (ruling against the respondent by finding that it failed to prove that the claimant had not made the required investment or that such an investment had failed to comply with the respondent's domestic laws).

52. *See, e.g.*, Methanex Corp. v. United States, Final Award of the Tribunal on Jurisdiction and Merits, Part IV Ch. D ¶ 7 (UNCITRAL 2005), http://www.state.gov/documents/organization/51052.pdf ("[A]s a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects . . . a foreign investor or investment is not deemed expropriatory and compensable unless specific commitments had been given . . . that the government would refrain from such regulation.").

governmental action or regulation aims to combat a serious environmental concern, a State may show that the act was neither arbitrary nor discriminatory.[53] Likewise, under the police powers doctrine,[54] a State may not be found liable for a measure with an expropriatory effect so long as it was enacted in accordance with due process, for a public purpose such as sustainable development, and on a non-discriminatory basis.[55]

When assessing the reasonableness of a particular measure, tribunals have often focused their analysis on several key issues. First, some tribunals have examined the State's motives for adopting the measure in question to determine if the regulation constitutes a disguised protectionist measure. For example, in *S.D. Myers Inc. v. Canada*,[56] the tribunal concluded that a ban on the export of polychlorinated biphenyls (in line with the Basel Convention) was designed in part to economically benefit the Canadian hazardous waste disposal industry.[57] As a result, the measure was held to violate Canada's obligations under the North American Free Trade Agreement ("NAFTA") against nationality-based discrimination.[58]

Second, tribunals have focused on a measure's effect on foreign investors to determine whether it was proportionate to the public interest requiring protection. In one such case, *Tecnicas Medioambientales Tecmed S.A. v. United Mexican States*,[59] the tribunal considered whether Mexico's non-renewal of the investor's permits to operate a landfill purportedly for environmental reasons

53. *See, e.g.*, *id.* ¶¶ 14-15 (holding that, given the respondent's scientific impetus for implementing the regulation at issue and the manner in which the regulation was promulgated, the claimant failed to show the respondent's actions were discriminatory).

54. *See infra* Section IV.C.1.

55. *See id.*

56. Partial Award on Liability, ¶ 155 (UNCITRAL Nov. 13, 2000) (Kluwer Law Int'l) (stating that the "indirect motive" of ensuring the strength of local industry was "understandable," but not a lawful means for ensuring Canada's economic well-being).

57. *See id.* ¶ 252 (determining whether the policy was impermissibly protectionist under NAFTA by assessing whether the measure created a policy favoring nationals over non-nationals).

58. *Id.* ¶ 256.

59. ICSID Case No. ARB(AF)/00/2, Award (May 29, 2003), 19 ICSID Rev. FILJ 158 (2004).

was reasonably proportional.[60] In the tribunal's view, Mexico based its decision upon the community's opposition to the landfill, which did not give rise to "a serious urgent situation, crisis, need or social emergency" that was proportionate to the deprivation of the investment's economic value.[61]

Third, the tribunal's level of engagement with scientific evidence is relevant to its decision on the measure's reasonableness.[62] That is, the degree of deference accorded to the scientific determinations of State agencies reflects the willingness of tribunals to evaluate the robustness of this evidence. For example, in *Glamis Gold, Ltd. v. United States*,[63] which involved a challenge to California's mandatory backfilling regulation, the tribunal determined that it was inappropriate to apply domestic deference from national court systems.[64] Rather, the tribunal considered the legal standard already accorded that deference.[65] As such, it did not add to that standard.[66] Taking a slightly different approach, the tribunal in *Chemtura Corp. v. Canada*[67] declined to consider whether the chemical lindane posed

60. *See id.* ¶¶ 19, 49 ("The Respondent stresses the negative attitude of the community towards the landfill due to its location and to the negative and highly critical view taken by the community with regard to the way Cytrar performed its task of transporting and confining the hazardous toxic waste originating in the former lead recycling and recovery plant . . . which would highlight the importance of demanding strict compliance with the new permit granted").

61. *See id.* ¶¶ 139, 144, 151 (finding the respondent was engaged in an expropriation because the respondent failed to show any evidence that the landfill posed a real or potential threat to the environment or public health or that community backlash against the claimant was severe enough to warrant reneging on its obligations).

62. *See generally* Céline Lévesque, *Science in the Hands of International Investment Tribunals: A Case for 'Scientific Due Process'*, 20 FINNISH Y.B. INT'L L. 259, 277 (2009) (exploring the concept of "scientific due process" in order to suggest criteria that tribunals might consider when applying investment treaty standards); Marcos A. Orellana, *The Role of Science in Investment Arbitrations Concerning Public Health and the Environment*, 17 Y.B. INT'L ENVTL. L. 48, 49-50 (2006) (arguing that a focus on scientific due process would relieve tribunals from deciding the truth of scientific claims).

63. Award (UNCITRAL June 8, 2009) (Kluwer Law Int'l).

64. *See id.* ¶ 617 ("The Tribunal disagrees that domestic deference in national court systems is necessarily applicable to international tribunals.").

65. *Id.*

66. *Id.*

67. Award (UNCITRAL 2010) (Kluwer Law Int'l).

a danger to human health or the environment.[68] The tribunal concluded that it was inappropriate for it to judge the correctness or adequacy of Canada's pest management agency's scientific determinations regarding the environmental and health risks associated with the pesticide.[69] Instead, it considered the administrative process followed and global initiatives to ban the substance in assessing whether the agency conducted the scientific review as part of its regulatory mandate and its international commitments rather than as a result of a trade irritant.[70] Accordingly, a tribunal that defers to the State on the scientific merits of a given policy will opt instead to evaluate the regulatory process followed by policymakers.

The tribunal's decision in *Methanex Corp. v. United States*[71] illustrates the weighing of these various factors.[72] The case arose from California's ban on the sale and use of the gasoline additive methyl tertiary-butyl ether ("MTBE").[73] Based on the findings of a research team at the University of California ("UC Report")[74] on the effects of MTBE, California policymakers determined that the chemical posed a risk to groundwater and drinking water due to leaking underground fuel storage tanks.[75] Methanex, a large

68. *See id.* ¶ 134 ("The Tribunal notes at the outset that it is not its task to determine whether certain uses of lindane are dangerous, whether in general or in the Canadian context . . . . [and it] is not to second-guess the correctness of the science-based decision-making of highly specialized national regulatory agencies.").

69. *See id.* ¶ 153 (adding that it cannot question the scientific findings of a government agency, even when divergence of opinions is expressed within the agency).

70. *See id.* ¶ 137 (determining whether the ban was a "trade irritant" solely based on economic policies or whether it implements a legal commitment undertaken pursuant to the Aarhus Protocol to the United Nations Convention on Long-Range Transboundary Air Pollution Convention).

71. Final Award of the Tribunal on Jurisdiction and Merits, Part II Ch. D ¶ 2 (UNCITRAL 2005), http://www.state.gov/documents/organization/51052.pdf.

72. *See, e.g., id.* Part III Ch. B ¶ 57.

73. *Id.* Part I Preface ¶ 1.

74. The UC Report was a massive collaborative effort involving more than sixty researchers whose work spanned five volumes and consisted of seventeen papers. *Id.* Part III Ch. A, ¶ 3.

75. *See id.* Part II Ch. D ¶ 15 (noting that, by California law and given the findings on MTBE, the Governor was required to either certify MTBE was hazardous to the public health or certify that it posed no health risks whatsoever).

Canadian producer of a component used to manufacture MTBE, brought a claim under NAFTA for $970 million for losses caused by the ban.[76] The company argued that banning one component of reformulated gasoline but allowing other dangerous components was irrational and exposed California's true motives to benefit the U.S. ethanol industry.[77] The parties each presented expert witnesses to evaluate the strengths and weaknesses of the UC Report.[78] The award summarizes the administrative process followed, the main findings of the report, and the testimony of the parties' experts. After weighing this evidence, the tribunal concluded that the UC Report reflected "a serious, objective and scientific approach to a complex problem."[79] Focusing on the scientific process, the tribunal surmised that the report was not a sham because it had been subject to an open and informed debate.[80] Although the tribunal did not make a determination on the scientific merits of the UC Report, it stated that it was not persuaded that the report was scientifically incorrect.[81] Accordingly, the tribunal found that the California ban was a lawful regulation and did not amount to an expropriation.[82]

Finally, a tribunal's findings on environmental issues can in some cases limit an investor's entitlement to compensation where a State has been found liable for breaching an investment obligation. For example, a State could argue that widespread adoption of an

76. *Id.* Part I.

77. *See* Methanex Corp., Final Award of the Tribunal on Jurisdiction and Merits, Part II Ch. D ¶¶ 24-25 (discussing the claimant's argument that California should have banned all USTs, rather than just MTBE, indicating an obvious bias existed and California's decision was arbitrary).

78. *Id.* Part III, Ch. A ¶ 41 (recognizing that expert reports went "to the heart of the question of whether the US measures . . . constitute[d] a sham environmental protection in order to cater to local political interests or in order to protect a domestic industry.") (internal quotes omitted).

79. *Id.* Part III Ch. A ¶ 101.

80. *See id.* ("In particular, the UC Report was subjected at the time to public hearings, testimony and peer-review; and its emergence as a serious scientific work from such an open and informed debate is the best evidence that it was not the product of a political sham engineered by California").

81. *Id.* (acknowledging that it is "possible for other scientists and researchers to disagree in good faith with certain of its methodologies, analyses and conclusions").

82. *See id.* Part IV Ch. D ¶ 15 (concluding that California's regulations were a legitimate exercise of its authority and not an expropriation because the regulations had a public purpose, were non-discriminatory, and subject to due process).

international environmental law would have limited the future profitability of the investment or would have made future profits entirely speculative.[83] *Chemtura Corp.* illustrates this argument.[84] The claimant was a U.S. chemical manufacturer that challenged a Canadian federal measure that banned the application of lindane on canola, which had been the primary use of the pesticide. Chemtura argued that the Special Review, which was conducted by Canada's Pest Management Regulatory Agency to assess the risks of lindane, was flawed. Canada's scientific findings were consistent with many other countries' findings that had also decided to phase out the use of lindane because of its risks to human health and the environment. In its defense, Canada presented evidence of national, regional, and international initiatives aimed at reducing and eliminating lindane.[85] Canada argued that Chemtura's damages claim for lost future profits was limited or nil due to the loss of markets in the United States and elsewhere from the progressive ban of the chemical.[86] Ultimately, the tribunal did not discuss damages, having dismissed all of Chemtura's claims.[87]

International investment treaty jurisprudence suggests that tribunals consider environmental issues as factual rather than legal matters. Because States often rely on environmental considerations to explain a measure's legality and reasonableness, a tribunal's findings on these factual issues will impact how it assesses whether the State has violated a treaty obligation. A tribunal's findings on

83. *See, e.g.*, Southern Pac. Properties (Middle East) Ltd. v. Arab Republic of Egypt, ICSID Case No. ARB/84/3, Award on the Merits, ¶¶ 188-91 (May 20, 1992), 8 ICSID Rev. 328 (1993) (rejecting the claimant's lost profits claim because the tourist development project was in its infancy at the date of breach and its lost sales would have been limited when Egypt registered the Pyramids Plateau under the UNESCO Convention).

84. *See generally* Chemtura Corp. v. Canada, Award, (UNCITRAL Aug. 2, 2010) (Kluwer Law Int'l).

85. Lindane had been found to accumulate in human tissue, cause nervous system damage, and persist and bioconcentrate in various food chains. *See id.* ¶ 135-36 (noting that, in addition to the Stockholm Convention on Persistent Organic Pollutants, which includes a provision that calls for eliminating the use of lindane, at least twenty-one States had banned or restricted the use of lindane).

86. *See generally* Chemtura Corp. v. Canada, Canada's Counter-Memorial, ¶¶ 919, 1005 (UNCITRAL 2008) (arguing that the claim for lost profit was too speculative as other countries also were banning the substance).

87. *Chemtura Corp.*, Award, Part V.

environmental facts can also be relevant to other legal determinations, such as jurisdiction and an investor's entitlement to compensation as well as the quantum of damages owed. However, these decisions leave unanswered questions about evaluating government motives, conflicting scientific evidence, and the regulatory choices of States in implementing public policy objectives. In particular, the case law leaves open the fundamental question of the appropriate standard by which to review regulations addressing public health and the environment. In the following section, this article addresses these shortcomings and proposes potential ways that investment arbitration can be made more responsive to environmental concerns.

IV. THE WAY FORWARD: MANAGING ENVIRONMENTAL ISSUES MORE EFFECTIVELY IN INVESTMENT ARBITRATION

As investment treaty jurisprudence demonstrates, many challenges in adjudicating environmental disputes exist. First, most bilateral investment treaties do not reference substantive policy issues and thus tribunals have no guidance on how to weigh ecological aims of governmental measures.[88] Including robust exception provisions in investment treaties may help tribunals to avoid examining and making value judgments on the legitimacy of State objectives and policy choices.[89] Concomitantly, imposing obligations on States

88. *See generally Tecnicas Medioambientales Tecmed S.A.*, ICSID Case No. ARB(AF)/00/2, Award, ¶ 122 (May 29, 2003), 19 ICSID Rev. FILJ 158 (establishing that it is in the tribunal's purview to weigh the reasonableness of a State's regulation, while acknowledging the due deference owed to the State in defining its public policy); Glamis Gold, Ltd. v. United States, Award, ¶ 23 (UNCITRAL June 8, 2009) (Kluwer Law Int'l) (holding that international tribunals do not necessarily need to afford deference to domestic decisions, as it is already reflected in the standard of review); S.D. Myers Inc. v. Canada, Partial Award on Liability, ¶¶ 255, 263 (UNCITRAL Nov. 13, 2000) (Kluwer Law Int'l) (ruling against respondent on the grounds that, although ensuring the strength of domestic business was a legitimate state aim, the methods used amounted to expropriation and thus were impermissible under NAFTA).

89. *See generally 2012 U.S. Model Bilateral Investment Treaty*, *supra* note 22, Annex B(4)(b) (providing that non-discriminatory regulatory actions designed for legitimate "public welfare objectives" do not constitute indirect expropriations, except in "rare circumstances"); *CAFTA-DR*, *supra* note 31, Annex 10(C)(4)(b) (providing an identical policy space provision to the U.S. BIT); *Canada Model*

without any corresponding obligations on investors can lead to unbalanced outcomes that undermine the legitimacy of the system.[90] For example, balancing the rights and responsibilities under treaties by increasing the availability of counterclaims by States under BITs may help redress this concern.

Second, cases involving environmental disputes often involve complicated technical issues.[91] Without direction from the treaty, tribunals have focused on either the merits of the scientific evidence or the scientific process that regulators follow.[92] Tribunals that opt for the former approach face the daunting task of assessing the reliability of conflicting scientific evidence presented by each party. To aid in analyzing this complex technical evidence, disputing parties and arbitrators may avail themselves of currently under-utilized procedural and evidentiary means. First, international environmental courts and specialized arbitral rules offer a promising alternative to ensure that the process is sensitive to the issues raised in these disputes.[93] Second, increased participation of non-disputing parties could contribute to the tribunal's understanding of the wider interests at stake and assuage criticisms regarding the democratic

BIT, *supra* note 30, Annex B.13(1)(c) (providing an identical policy space provision to the U.S. BIT and CAFTA but further defining the rare circumstances as situations where "a measure or series of measures are so severe in the light of their purpose that they cannot be reasonably viewed as having been adopted and applied in good faith").

90. *See, e.g.*, Andrea K. Bjorklund, *The Role of Counterclaims in Rebalancing Investment Law*, 17 LEWIS & CLARK L. REV. 461, 462-63 (2013) (using the example of a State's inability to file a claim under most investment treaties to demonstrate the imbalance of power between investors and States).

91. *See, e.g.*, Gail Bingham, Pamela Esterman & Christopher Riti, *Effective Representation of Clients in Environmental Dispute Resolution*, 27 PACE ENVT'L. L. REV. 61, 63 (2009) ("Environmental disputes also tend to involve complex technical issues and scientific uncertainty. There are typically gaps in scientific information, different models or assumptions for interpreting existing data, and multiple disciplines each with their own terminology, and all of which complicate the dispute.").

92. *Compare* Methanex Corp. v. United States, Final Award of the Tribunal on Jurisdiction and Merits, Part III Ch. A ¶¶ 101, 102(2)-(4) (UNCITRAL 2005), http://www.state.gov/documents/organization/51052.pdf (considering whether the study predicating the MTBE ban was conducted in good faith rather than whether it was methodologically sound or empirically correct), *with Chemtura Corp.*, Award ¶ 153 (forgoing consideration of scientific evidence in favor of deferring to State and international practice regarding the regulation of lindane).

93. *See* discussion *infra* Section IV.B.1.

deficit in investment arbitration.[94] Finally, the precautionary principle may provide a useful device to assess and weigh scientific evidence associated with high levels of uncertainty and risk.[95]

Moreover, tribunals may have recourse to certain conceptual tools, in the form of administrative standards of review and defenses,[96] in cases where the focus turns to the scientific process followed by regulators. Such analyses could provide a means to balance the regulatory powers of States against the commercial interests of foreign investors. Utilizing the concept of police powers, applying the margin of appreciation to government conduct, and assessing the proportionality of state action vis-à-vis the harm done are legal tools most adept to assessing procedures followed by States.[97]

A. REVISING BILATERAL INVESTMENT TREATIES

The rise of BITs and investment arbitration cases has increased the exposure of States to challenges for regulatory conduct taken for environmental or health reasons.[98] This growth of investor-state arbitrations with an environmental dimension should cause States to take a serious look at their investment treaties to ensure that the sustainable development goals of policymakers are adequately reflected and placed on an equal plane with economic growth. To achieve this, States can modify their BIT Models and future treaties to include more robust exception clauses and counterclaim provisions. Despite their friction at times, these policy goals do not

94. *See* discussion *infra* Section IV.B.3.

95. *See* discussion *infra* Section IV.B.2.; *see also* Rio Declaration on Environment and Development, June 14, 1992, U.N. Doc. A/CONF.151/5, 31 I.L.M. 8744 (1992) [hereinafter Rio Declaration] ("In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.").

96. *See, e.g.*, Burke-White & von Staden, *supra* note 36.

97. *Infra* Section IV.C.

98. Presently, there are approximately 3,200 agreements in existence. According to one recent survey, at least ninety-five countries have had to respond to one or more of the 500 plus treaty-based disputes. *Towards a New Generation of International Investment Policies: UNCTAD's Fresh Approach to Multilateral Investment Policy-Making*, UNCTAD 4-5 (July 2013), http://unctad.org/en/PublicationsLibrary/webdiaepcb2013d6_en.pdf [hereinafter *Towards a New Generation of International Investment Policies*].

have to conflict because sustainable development can complement economic growth objectives through responsible investment.

1. Robust Exception Clauses

States have begun to ensure that environmental policy goals are reflected in bilateral investment treaties and regional agreements in various ways. While preamble clauses recognizing environmental protection objectives and provisions discouraging regulatory slackness tend to be dull tools,[99] a clearly drafted exception clause may offer better protection against challenges to legitimate environmental measures. An exception clause allows States to reserve wider policy space to respond to new circumstances with greater regulatory flexibility.[100]

Exception clauses can designate subjects, such as endangered species, biodiversity, toxic chemicals, and air pollution, that are immune from investment claims. However, in a rapidly changing world, it is unlikely that all future environmental challenges can be anticipated in advance. Moreover, failing to anticipate an area of environmental concern might have the unintended consequence of limiting the range of legitimate objectives available to the State.[101] A more practical solution might be to exclude measures adopted for environmental reasons from certain investment disciplines, such as indirect expropriation.[102] Carving out treaty obligations instead of broadly excluding environmental disputes from dispute settlement provisions should also ensure that the rights of foreign investors are adequately protected.

Including exception clauses offers potential advantages. First, it provides States with greater policy space to address environmental problems without breaching certain international investment

99. *See supra* Section II.

100. *See* Robert Volterra, *Memorandum for the Workshop on Global Investment Governance*, BLAVATNIK SCH. OF GOV'T 30 (June 28, 2012), http://www.bsg.ox.ac.uk/events/multilateral-liberalisation-through-bilateral-treaties (noting that States may be restrained by BITs that do not include exception clauses, which often reserve more power to States to use regulatory measures in case of a crisis).

101. *See* Newcombe, *supra* note 32, at 358 (stating that some arbitral tribunals may interpret general exception provisions as limiting, rather than empowering, state regulatory power).

102. *See supra* note 39.

obligations. Second, exception clauses can be implemented with relative ease when the political will exists between the States. Third, a facially legitimate and non-discriminatory regulation combined with a robust exceptions clause should avoid the need for tribunals to scrutinize the entire realm of government motives. To accomplish these objectives, it is imperative to ensure that tribunals give full effect to these provisions.

2. Counterclaims Provisions

Investor-state arbitration is often viewed as a one-way street, and States rarely file counterclaims against investors.[103] The current language and orientation of investment treaties may be one reason for this. The challenge for States bringing counterclaims in disputes arising under a treaty is identifying the investor's specific obligations and thus the tribunal's jurisdiction to hear the dispute.[104] Indeed, the signatories—and thus the parties bound—to the investment treaty are only the host state and the national state, and not the investor. Another hurdle in environmental cases is that tribunals may be reluctant to interpret BITs in ways that impose liability for the externalities associated with investment activity, such as breaches of human rights or harm to the environment.

103. José Antonio Rivas, *ICSID Treaty Counterclaims: Case Law and Treaty Evolution*, 11 TRANSNAT'L DISPUTE MGMT. no. 1, 2014, at 2, *available at* http://www.transnational-disputemanagement.com/search/get_page.asp?v2=download&v1=tv11%2D1%2Darticle68%2E.pdf (positing that investors have initiated nearly all ICSID cases brought pursuant to a treaty, as opposed to a contract); *see also* Alschner & Tuerk, *supra* note 47, at 226 ("IIAs do little to ensure that [S]tates get the development contribution they seek from foreign investment in return for tying their hands in an international agreement."); Yaraslau Kryvoi, *Counterclaims in Investor-State Arbitration* 9-10 (Lon. Sch. Econ. & Political Sci., LSE Law, Soc'y & Econ. Working Paper No. 8/2011, 2011), *available at* http://ssrn.com/abstract=1891935 (stating that the "vast majority" of BITs are silent on the issue of counterclaims).

104. *See, e.g.*, Roussalis v. Romania, ICSID Case No. ARB/06/1, Award, ¶ 869 (Dec. 7, 2011), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC2431_En&caseId=C70 2011) (finding the language of the BIT to "undoubtedly limit jurisdiction to claims brought by investors"); Genin v. Republic of Estonia, ICSID Case No. ARB/99/2, Award, ¶¶ 216, 222, 287, 385(1) (June 25, 2001), 17 ICSID Rev. FILJ 395 (2002) (considering and rejecting Estonia's counterclaim founded on proceeds illicitly transferred out of an Estonian financial institution).

However, when consent is clear, tribunals might not balk in accepting jurisdiction. As the *Metal-Tech Ltd. v. Republic of Uzbekistan* tribunal recently put it when adjudicating a counterclaim in an investment case:

> In treaty arbitration, consent is achieved by the respondent State making an offer to arbitrate when ratifying the investment treaty and the investor accepting that offer in principle when filing the request for arbitration. The scope of the offer is defined in the State's investment treaty, in particular in the dispute resolution clause of that treaty. When he initiates arbitration under the treaty, the investor accepts the offer within the scope defined in the treaty.[105]

In this case, although the tribunal determined that the language of the BIT covered "*any* dispute about an investment," it declined to find jurisdiction over either the main claim or the counterclaim because it found the Claimant's actions did not constitute an investment within the meaning of the BIT.[106] Beyond disputes arising out of treaty claims in which consent is not always clear, however, disputes arising from contractual claims may encounter more success with counterclaims due to the breach of a legal instrument under which both parties carry obligations.[107]

Investment treaties could be re-drafted to provide for express consent for the counterclaim. For example, express language that makes clear that the term "disputes" signifies both claims and counterclaims or language indicating consent to the submission of "any disputes" or "all disputes" would signal to the tribunal that parties have granted consent.[108] Some States have begun to impose

105. Metal-Tech Ltd. v. Republic of Uzbekistan, ICSID Case No. ARB/10/3, Award, ¶ 409 (Oct. 4, 2013), http://www.transnational-dispute-management.com.

106. *Id.* ¶¶ 410-11.

107. *See, e.g.*, Atlantic Triton v. Government of Guinea, ICSID Case No. ARB/84/1, Award, (Apr. 21, 1986), 3 ICSID Rev. 23 (1995) (finding jurisdiction on the basis of a signed contract between the parties but rejecting the counterclaim on the merits); Maritime Int'l Nominees Establishment v. Government of Guinea, ICSID Case No. ARB/84/4, Decision, ¶ 8.01 (Dec. 14, 1989), 5 ICSID Rev. 95 (1990) (discussing award in which tribunal exercised jurisdiction over Guinea's counterclaim and upheld it for the claimant's violation of the dispute resolution clause, which required ICSID to handle disputes).

108. Rivas, *supra* note 103, at 5 (citing Inmaris v. Ukraine, ICSID Case No. ARB/08/8, Award, ¶¶ 270, 432, (Mar. 1, 2012), Paushak v. Government of Mongolia, Award on Jurisdiction and Liability, ¶ 689 (UNCITRAL 2011), and

direct obligations on investors in their model treaties.[109] However, in practice, it may be difficult to negotiate these provisions with some developing states that wish to be seen as "investor-friendly"[110] or, conversely, with capital-exporting states that wish to protect their nationals. Because States do not know whether including counterclaims in BITs would dry up foreign investment, States may conduct a cost-benefit analysis to determine whether the unidentified costs of including counterclaim provisions outweigh the buy-in that governments could potentially receive from their constituents.[111]

In the event that redrafting the dispute resolution clause is not an option, States could opt for inserting preambular language that promotes environmentally responsible investment in tandem with foreign direct investment objectives, either explicitly or by reference to other international corporate social responsibility or environmental standards, such as the Voluntary Principles, U.N. Global Compact, and Rio Declaration.[112] States could also include screening

Saluka Invests. BV v. Czech Republic, Partial Award, ¶ 39 (UNCITRAL 2004)).

109. *See, e.g.*, Alschner & Tuerk, *supra* note 47, at 228 (citing to Ghana's and Botswana's Model BITs); *see also* HOWARD MANN ET AL., INT'L INST. FOR SUSTAINABLE DEV., IISD MODEL INTERNATIONAL AGREEMENT ON INVESTMENT FOR SUSTAINABLE DEVELOPMENT: NEGOTIATORS' HANDBOOK 9, 15, 22, 29 (2d ed. 2006), *available at* http://www.iisd.org/itn/wp-content/uploads/2012/10/sadc-model-bit-template-final.pdf (including multiple provisions that impose obligations on investors, such as disclosure and contribution requirements); SOUTHERN AFRICAN DEV. CMTY., SADC MODEL BILATERAL INVESTMENT TREATY TEMPLATE WITH COMMENTARY 5, 32, 39 (2012), *available at* http://www.iisd.org/itn/wp-content/uploads/2012/10/sadc-model-bit-template-final.pdf (including a model provision that imposes common obligations on both investors and States regarding corruption and another which would ensure tribunals have jurisdiction over breaches of such obligations).

110. It is of course open to debate whether BITs lead to more foreign direct investment. *See* Susan D. Franck, *Foreign Direct Investment, Investment Treaty Arbitration, and the Rule of Law*, 19 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 337, 349 (2006) (pointing out that many international bodies, such as the UNCTAD and World Bank, have found investment treaties have "minimal impact on foreign investments," although such treaties still play a large role in promoting foreign investment relative to other driving forces).

111. Another option might be to require the investor to consent to the submission of an ICSID counterclaim when requesting arbitration against the State. In practice, this would likely only occur upon the State's insistence at the time it is notified of the dispute. *See* Rivas, *supra* note 103, at 5 (expressing doubt that investors would willfully expose themselves to cross-claim liability).

112. *See, e.g.*, Alschner & Tuerk, *supra* note 47, at 227 (discussing the increasing rate at which free trade agreements cite to customary international

provisions in their domestic laws[113] that allow the government to vet potential investors before they can invest in environmentally sensitive sectors.[114] However, this may not be a viable option for States that lack the capacity to engage in this vetting process or are large recipients of foreign direct investment. Finally, another option might be to expand denial of benefits clauses[115] to prevent parties from enjoying the treaty's benefits if there is environmental harm caused to the host state. Ultimately, any desired changes to a treaty's language or structure could be included in a State's Model BIT.

With respect to existing treaties, there are a few options are available. Contracting states could amend existing BITs. When adopting this approach, States must be mindful of how existing treaties will retrospectively impact previous investments and potentially circumvent development-friendly provisions by using broad most favored nation clauses. Alternatively, a State could terminate the BIT. However, termination may not be politically feasible. Further, many BITs provide that a State's obligations survive the treaty for a prescribed period of time in relation to

norms, such as U.N. Global Compact). *See generally* Rio Declaration, *supra* note 95, princ. 15 (mandating that States do not forego implementing environmental protections simply because no scientific consensus exists); *United Nations Global Compact: Corporate Sustainability in the World Economy*, U.N. GLOBAL COMPACT OFFICE (Jan. 2014), https://www.unglobalcompact.org/docs/newsevents/8.1/GC_brochure_FINAL.pdf (stating that businesses should adopt the Precautionary Principle and promote sustainability policies); *Voluntary Principles on Security and Human Rights*, U.S. DEP'T OF STATE (Dec. 20, 2000), http://www.state.gov/www/global/human_rights/001220_fsdrl_principles.html.

113. Smitha Francis, *Rethinking Investment Provisions in Free Trade Agreements* 1, 8 (Int'l Dev. Econ. Assoc., Policy Note, 2012), *available at* http://www.networkideas.org/alt/may2011/Investment_Policy_Note.pdf (suggesting that domestic procedures for vetting investors could be imported into the treaty through language such as "in accordance with the domestic laws of the host state").

114. *See, e.g.*, MANN ET AL., *supra* note 109, at 22-23 (formulating a model treaty provision requiring investors to conduct a pre-impact study before beginning the relevant business in a contracting state); *see also* Alschner & Tuerk, *supra* note 47, at 228 (stating that screening provisions allow host states to collect valuable information on investors so they can make informed decisions on whether to accept investments).

115. *See, e.g.*, NAFTA, *supra* note 31, art. 1113 (outlining the criteria by which a state party could refuse the coverage of NAFTA when dealing with an investor owned or controlled by a non-party state).

investments made before the effective date of termination.[116] Perhaps a third approach is to use regional trade agreements, which can offer a consistent level of protection across States.[117] However, this would require phasing out old agreements to avoid overlap and inconsistencies. In short, revising a treaty—whether to include more robust exception clauses, counterclaim provisions, or any other development-friendly text—is a progressive move toward ensuring that States consider environmental issues in investment arbitration, but the process will likely be gradual at best.

B. PROCEDURAL AND EVIDENTIARY MEANS TO EVALUATE SCIENTIFIC EVIDENCE

Some environmental disputes raise complicated technical issues. Arbitrators may be asked to evaluate and reconcile conflicting scientific evidence. As we have seen, investment treaty jurisprudence reflects two broad approaches in dealing with scientific matters. Some awards suggest that tribunals prefer deferring to the State's scientific *findings* and their analysis focuses on the scientific *process* that regulators follow. In other cases, tribunals have opted to evaluate the soundness of the scientific findings. This section proposes potential mechanisms for assessing scientific evidence based on the choice of forum or arbitral rules, the use of third party procedures, and the application of evidentiary principles. The following section considers what conceptual tools tribunals can apply to their evaluation of the scientific process.

1. An International Environmental Court or Environmental Arbitral Rules

Creating an international environmental court is an idea that has been floated in the international community for some time. In 1993,

116. *See* Laurence R. Helfer, *Terminating Treaties*, *in* OXFORD GUIDE TO TREATIES 634, 640 (Duncan Hollis ed., 2012), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1937205 (stating that it is a common tenet of international law that treaty obligations can still persist even when the treaty expires or a party terminates it).

117. *See Towards a New Generation of International Investment Policies*, *supra* note 98, at 5 (noting a gradual shift towards regionalism which can promote consistent investment rules).

the International Court of Justice ("ICJ") took heed and established a Chamber for Environmental Matters to hear environmental disputes between States. Acting pursuant to article 26(1) of the Statute of the Court, the ICJ explained that the Chamber was created "[i]n view of the developments in the field of environmental law and protection which have taken place in the last few years" and taking into account the need to "be prepared to the fullest possible extent to deal with any environmental case falling within its jurisdiction."[118] Curiously, this Chamber has yet to be used and, in fact, the Court has suspended elections for a bench since 2006.[119] Some commentators posit that the Chamber fell into disuse because States have not chosen to define their dispute as purely environmental.[120] In the foreign investment sphere, an international environmental court is not likely to be a viable option for the following reasons. Procedurally, this model may not be directly transposable to investment arbitration where disputes are heard before *ad hoc* tribunals according to institutional rules specified under the treaty.[121] From a practical perspective, it is difficult to imagine a standing body of arbitrators with the specialized knowledge or expertise to make determinations on scientific or technical matters.

Instead, arbitration rules designed for environmental disputes may offer a better solution. The Permanent Court of Arbitration ("PCA") has made great strides in this direction. In 2001, the PCA developed the Optional Rules for Arbitration of Disputes Relating to the

118. Press Communiqué 93/20, Int'l Court of Justice, Constitution of a Chamber of the Court for Environmental Matters (July 19, 1993), http://www.ruhr-uni-bochum.de/www-public/fischhcy/ICJ/E269.htm.

119. *See The Court: Chambers and Committees*, INT'L COURT JUSTICE, http://www.icj-cij.org/court/index.php?p1=1&p2=4 (last visited Jan. 11, 2015) (stating that the elections were suspended because States had not yet requested that the Chamber hear a case).

120. *See, e.g.*, Philippe Sands, *Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law*, ORG. FOR ECON. CO-OPERATION & DEV. 4 (Mar. 28, 2008), http://www.oecd.org/investment/globalforum/40311090.pdf.

121. *See generally* Ole W. Pedersen, *An International Environmental Court and International Legalism*, 24 J. ENVTL. L. 547, 551 (2012) (arguing that the International Court of Environmental Arbitration and Conciliation may provide an alternative model for disputes involving non-state actors if the court moves beyond the issuance of consultative opinions).

Environment and/or Natural Resources. These Optional Rules are based on the United Nations Commission on International Trade Law ("UNCITRAL") Arbitration Rules but have been modified for disputes relating to natural resources, conservation, or environmental protection.[122] Parties may agree to apply these rules in agreements, contracts, treaties, or upon mutual consent.[123] The Optional Rules contain several unique features related to: (i) appointing competent arbitrators; (ii) selecting qualified experts; and (iii) assisting the tribunal with evaluating scientific or technical matters.[124] For example, the PCA provides parties with a list of arbitrators considered to have expertise in the subject-matter of the dispute.[125] The Optional Rules also assist in the arbitrator's understanding of technical and scientific matters by allowing tribunals to request a non-technical document summarizing any scientific or technical information.[126] The Optional Rules go beyond other arbitral rules that empower tribunals to appoint their own experts by providing support from the Secretary-General in identifying experts.[127]

122. *Report*, PERMANENT COURT OF ARBITRATION ¶ 17, http://www.pca-cpa.org/showfile.asp?fil_id=503 (last visited Jan. 18, 2015).

123. *See Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment*, PERMANENT COURT OF ARBITRATION 185 (June 19, 2001), http://www.pca-cpa.org/showfile.asp?fil_id=590 [hereinafter *Perm. Ct. Arb. Optional Rules for Arbitration*].

124. *Id.* at 187-88, 197-99; *see also* Natalie L. Bridgeman & David B. Hunter, *Narrowing the Accountability Gap: Toward A New Foreign Investor Accountability Mechanism*, 20 GEO. INT'L ENVTL. L. REV. 187, 216 (2008) (arguing the PCA optional rules are potentially well-suited for resolving environmental disputes while acknowledging that the PCA has some shortcomings as a forum, which have led to the optional rules not being used).

125. *See Perm. Ct. Arb. Optional Rules for Arbitration*, *supra* note 123, at 190 (requiring the PCA's Secretary-General to make a list "of persons considered to have expertise in the subject-matters of the dispute at hand" and to provide it to the parties).

126. *Id.* at 197.

127. *Compare id.* at 198-99 (mandating that the PCA Secretary-General be involved in calling further expert witnesses), *with* Arbitration Rules of the United Nations Commission on International Trade Law, G.A. Res. 31/98, art. 29(1), U.N. GAOR, 31st Sess., Supp. No. 17, U.N. Doc. A/31/17 (Dec. 15, 1976) (stating that a tribunal may close proceedings when the parties have no further offers of proof, without providing any independent authority to call witnesses), *and* Int'l Bar Ass'n, *IBA Rules on the Taking of Evidence in International Arbitration* art. 6(1) (May 29, 2010) (allowing individual tribunals to call further expert witnesses, but requiring the tribunal to work with the parties to determine which expert witnesses to call).

The PCA's Optional Rules offer a novel approach to manage technical and scientific issues involved in some environmental disputes. While using experts should assist with the tribunal's understanding of these issues, it will also inevitably increase arbitration costs. The parties may take steps to control these expenses by deferring the use of experts until a later stage in the proceedings. For example, where jurisdictional objections have been raised (that do not involve the evaluation of technical or scientific evidence), the parties may refrain from using experts until the merits or damages phase. In addition, the tribunal's understanding of technical matters may be clarified at a manageable cost by using joint experts, although this may be difficult to implement in practice. Exposing experts' evidence to external scrutiny by making pleadings publicly available or live broadcasting oral proceedings may be another cost effective strategy to test expert evidence. This has the added benefit of increasing transparency in cases that often implicate public policy issues. However, increasing transparency of written and oral submissions is meaningless if it is not complemented with non-disputing party participation, a topic explored below.

2. Third-party Participation

Although initially disfavored, third-party participation has taken off in investor-state arbitration in recent years, most notably in the form of amicus curiae written submissions.[128] The structural shift in the various sets of arbitration rules may allow for more meaningful third-party participation in investor-state disputes.[129]

128. Eugenia Levine, Amicus Curiae *in International Investment Arbitration: The Implications of an Increase in Third-Party Participation*, 29 BERKELEY J. INT'L L. 200, 201 (2011) (discussing other forms of third-party participation including publishing documents, granting access to hearing, and presenting and/or testifying at hearings).

129. In general, tribunals are increasingly engaged in third-party participation despite the fact that the UNCITRAL Arbitration Rules neither authorize nor expressly prohibit third-party participation. *See* G.A. Res. 31/98, *supra* note 127, arts. 4-5 (allowing parties to enlist the help of third-parties, while requiring parties to give notice to other litigants as to the nature of the third-party's assistance). However, the Commission adopted a set of rules in April 2014 that aim to improve transparency in investor-state arbitration. These new rules shift the underlying assumption of privacy in these disputes to one of transparency. Articles 4 and 5 of the Rules govern participation by third-parties and non-disputing states and affirm the authority of investment tribunals to accept submissions from them. U.N.

Third-party participation provides an opportunity to bring scientific or technical points, other facts, or laws to the attention of the tribunal. Historically, the special perspective or expertise provided to the court or tribunal justified *amicus* participation.[130] For example, in *Methanex*, the U.S. government argued its case on public health grounds while the *amici* raised environmental law issues not otherwise addressed.[131] While interested third parties could always

COMM'N ON INT'L TRADE LAW, UNCITRAL RULES ON TRANSPARENCY IN TREATY-BASED INVESTOR-STATE ARBITRATION 8-9 (2013), *available at* http://www.uncitral.org/pdf/english/texts/arbitration/rules-on-transparency/Rules-on-Transparency-E.pdf. In July 2014, UNCITRAL approved the Mauritius Convention on Transparency that increases the applicability of these transparency rules, as they currently only apply to cases brought under treaties that were concluded after April 1, 2014, unless parties consent to their application to earlier treaties. Press Release, U.N. Comm'n on Int'l Trade Law, Commission on International Trade Law Approves Draft UNCITRAL Convention on Transparency in Treaty-Based Investor-State Arbitration, U.N. Press Release UNIS/L/202 (July 10, 2014), *available at* http://www.unis.unvienna.org/unis/en/pressrels/2014/unisl202.html. Most recently, in March 2015, eight States signed the Mauritius Convention, which provides that investor-state disputes to which they are party will be subject to the new transparency rules. U.N. Press Release UNIS/L/214, Signing Ceremony for the United Nations Convention on Transparency in Treaty-based Investor-State Arbitration (March 17, 2015), *available at* http://www.unis.unvienna.org/unis/en/pressrels/2015/unisl214.html. In addition, in 2006, the ICSID Rules of Arbitration were amended to explicitly recognize the tribunal's authority to allow third-party participation through written submissions. *See ICSID Convention, Regulations and Rules*, INT'L CENTER FOR SETTLEMENT OF INV. DISPUTES 101 (Apr. 2006), https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRREnglish-final.pdf (granting authority to allow third-party participation after certain considerations, such as whether the third-party would help reach a determination of fact or law, whether the third-party would address an issue within the scope of the dispute, and whether the third-party had an interest in the dispute). Also, several States, including Canada, the United States, and Norway, now incorporate reference to the rights of third-parties in their model BITs. *See, e.g.*, *U.S. Model Bilateral Investment Treaty*¸ *supra* note 22, art. 28(3) (providing that tribunals shall have the authority to accept and consider *amicus curiae* submissions).

130. Lance Bartholomeusz, *The* Amicus Curiae *Before International Courts and Tribunals*, 5 NON-ST. ACTORS & INT'L L. 209, 211 (2005).

131. *See* Methanex Corp. v. United States, Submission of Non-Disputing Parties Bluewater Network, Communities for a Better Environment and Center for International Environmental Law, at 2, 5 (UNCITRAL 2004), http://www.state.gov/documents/organization/30472.pdf (arguing for deferential review of California's evidence and the particular dangers of MTBE to potable water); Methanex Corp. v. United States, Application for Amicus Curiae Status by the International Institute for Sustainable Development, at 2-3 (UNCITRAL 2004),

petition the parties to the dispute with their expertise or knowledge, allowing an independent party to provide expertise in a separate process is valuable because it prevents disputing parties from acting as gatekeepers of specialized knowledge.

This is certainly true in cases that implicate environmental issues. Environmental policy usually provides the tools to evaluate problems, such as environmental impact studies, risk assessments (such as Environmental Risk Assessments), policy design, and cost-benefit analysis.[132] Arbitral tribunals may not be best-placed to scrutinize these assessments whereas expert non-governmental organizations ("NGOs") can provide robust and independent expert analysis.[133] This expertise can also help in situations where the tribunal faces the difficult task of assessing the validity of conflicting scientific evidence from each party.[134] Such participation may provide the tribunal with information it needs to make a decision.

Some argue that the practical burdens of arbitration increase with more third-party participation and lead to more cost and delay for the parties.[135] While a State may often be more willing to bear this

http://www.state.gov/documents/organization/30473.pdf (discussing the host state's right to protect the environment and promote sustainable development in the international law context); Methanex Corp. v. United States, Amended Statement of Defense of Respondent, ¶ 15 (UNCITRAL 2003), http://www.state.gov/documents/organization/27063.pdf (conceptualizing the California ban on MTBE as a measure to protect public health given the effects of the chemical once it enters the water system); *see also* PMI v. Uruguay, ICSID Case No. ARB/10/7, Procedural Order No. 3 (Feb. 17, 2015), www.italaw.com/sites/default/files/case-documents/italaw4161.pdf (granting petition by the WHO and the Framework Convention on Tobacco Control Secretariat to file a submission providing evidence of the relationship between health warning labels and the protection of public health).

132. Tomoko Ishikawa, *Third Party Participation in Investment Treaty Arbitration*, 59 INT'L & COMP. L.Q. 377, 403 (2010); *see generally* Valentina S. Vadi, *Environmental Impact Assessments in Investment Disputes: Method, Governance and Jurisprudence*, 30 POLISH Y.B. INT'L L. 169 (2010) (describing Environmental Impact Analysis as a means of avoiding dispute resolution mechanisms in the first place).

133. *See* Ishikawa, *supra* note 132, at 403 (claiming that NGOs are "best placed" to determine what approach to environmental issues are optimal).

134. *Id.*

135. *See* Lucas Bastin, *The* Amicus Curiae *in Investor-State Arbitration*, 1 CAMBRIDGE J. INT'L & COMP. L. 208, 225 (2012) (arguing that allowing amicus

burden given the aid that third-parties can provide to its case, third-parties can benefit investors as well.[136] These burdens can be minimized, however, by defining the procedures for *amicus* participation, such as specifying the number and length of submissions, stipulating the qualifications of participants, and limiting participation to particular facts or issues. Whereas experts add to the costs each side must bear, third-parties provide information at little, if any, cost to the parties. In addition, these concerns have not borne out in practice; for example, third-party participation has not led to an unwieldy number of submissions in the WTO or before other international tribunals.[137]

Tribunals that receive evidentiary assistance through third-party participation may have the added benefit of increasing the decision's legitimacy.[138] This is particularly true as arbitrations are increasingly addressing sectors that utilize natural resources, such as water, minerals, oil, and gas, and thus implicate public interest issues. This has led some observers to question whether the investment arbitration system should permit private *ad-hoc* tribunals composed of foreign nationals to render judgments on democratically-enacted legislation.[139] Thus, the perception that this process may potentially

submissions greatly increase the litigation costs of parties opposing the opinions expressed in those submissions).

136. *See, e.g.*, Glamis Gold Ltd. v. United States, Non-Disputing Party Submission of the National Mining Association, at 8, 10 (UNCITRAL 2006), http://www.state.gov/documents/organization/75179.pdf (submitting a brief arguing that States should not abruptly change regulation regimes, as the financial stability of the mining industry depended on a predictable legal paradigm).

137. *See* Kyla Tienhaara, *Third-Party Participation in Investment-Environment Disputes: Recent Developments*, 16 REV. EUR. COMMUNITY & INT'L ENVTL. L. 230, 240 (2007) (stating that it has not been the experience of the WTO that allowing third party participation has "open[ed] the floodgates").

138. *Id.* at 234-35 (quoting Suez, Sociedad General de Barcelona S.A. v. Argentine Republic, ICSID Case No. ARB/03/19, Order in Response to a Petition for Participation as *Amicus Curie*, ¶¶ 21-22 (Mar. 17, 2006), 21 ICSID Rev. FILJ 351 (2006)); *see* Andrew Newcombe & Axelle Lemaire, *Should Amici Curiae Participate in Investment Treaty Arbitrations?*, 5 VINDOBONA J. INT'L COM. L. & ARB. 22, 31-32 (2001) (arguing that arbitration proceedings lack legitimacy if they do not provide for some measure of public participation).

139. *See* Barnali Choudhury, *Recapturing Public Power: Is Investment Arbitration's Engagement of the Public Interest Contributing to the Democratic Deficit?*, 41 VAND. J. TRANSNAT'L L. 775, 783 (2008) (positing that international arbitration mechanisms may potentially threaten "basic principles of democracy,"

usurp national decision-making and erode aspects of state sovereignty can be counterbalanced with public sector or NGO participation.[140] Such participation can promote procedural openness by allowing public interest groups to provide particular knowledge or insight on public policy issues. Third party participation can also ensure that the public does not perceive the process as taking place behind closed doors[141] or too costly or burdensome to be justified. Beyond third-party participation, tribunals may deal with complicated scientific evidence by shifting the evidentiary burden, as is discussed below.

3. The Precautionary Principle

The general rule in international arbitration is that each party has the burden of proving facts in support of its claim ("*actori incumbit probatio*").[142] Any deviation from this rule is rare. However, a

as these mechanisms are increasingly used to undermine domestic regulations created by elected officials); Newcombe & Lemaire, supra note 138, at 29-30 (arguing that the use of *amicus curie* briefs counterbalance the perceived problem of investors using international arbitration to bypass the democratic mechanisms by which domestic regulations are passed); *see also* George Kahale, III, *A Problem in Investor/State Arbitration*, 6 TRANSNAT'L DISPUTE MGMT., no. 1, 2009, at 2-3 (discussing States' increasing dissatisfaction with the investor-state system due to the perception of sovereign prerogatives giving way to private interests); Public Statement, Osgoode Hall L. Sch., Public Statement on the International Investment Regime – 31 (Aug. 31, 2010), *available at* http://www.osgoode.yorku.ca/public-statement-international-investment-regime-31-august-2010/ (advocating for States to withdraw or renegotiate investment treaties to ensure they are able to effectively advocate for their respective populations).

140. *See* Levine, *supra* note 128, at 205, 209 (noting that many investor-state disputes involve public service sectors and that NGOs involved in related arbitration dispute usually advocate on behalf of the public interest in these sectors).

141. *See* Op-Ed, *The Secret Trade Courts*, N.Y. TIMES, Sept. 27, 2004, http://www.nytimes.com/2004/09/27/opinion/27mon3.html?_r=1& (arguing that, due to the great impact arbitration decisions can have on public welfare, there is an implicit obligation that arbitrations take place in a public forum).

142. U.N. COMM'N ON INT'L TRADE LAW, UNCITRAL ARBITRATION RULES (AS REVISED IN 2010) art. 27 (2011), *available at* http://www.uncitral.org/pdf/english/texts/arbitration/arb-rules-revised/arb-rules-revised-2010-e.pdf; *see also* MOJTABA KAZAZI, BURDEN OF PROOF AND RELATED ISSUES: A STUDY ON EVIDENCE BEFORE INTERNATIONAL TRIBUNALS 53 (1996) (stating the "fundamental obligation of parties to prove their allegations"); SHABTAI ROSANNE, THE LAW AND PRACTICE OF INTERNATIONAL COURT, 1920-2005 1040 (2006) (noting the application of this principle requires "the party putting forward a claim

tribunal may adjust the burden of proof where it is difficult to establish the environmental risk or harm of a particular activity. A shift in the burden of proof could be achieved according to one interpretation of the precautionary principle.[143]

While no uniform definition of the precautionary principle exists,[144] it is generally understood to govern how States should respond in situations of scientific uncertainty where there are risks of serious or irreversible damage. Scientific uncertainty may be the result of insufficient data, the indeterminacy of the degree of harm, or an absence of knowledge regarding risks involved. The principle functions to shift risk from society to those seeking to engage in

or a particular contention to establish the elements of fact and of law on which the decision in its favour might be given."); DURWARD V. SANDIFER, EVIDENCE BEFORE INTERNATIONAL TRIBUNALS 92-93 (1939) (describing the basic rule of burden of proof as resting on the party that asserts the affirmative of the proposition).

143. The conceptual origin of the precautionary principle is generally traced to the German environmental policy "Vorsorgeprinzipo" (meaning "worrying before"). In recent years, it has emerged as a principle of international environmental law. It first achieved global recognition at the 1992 Earth Summit where the concept was reflected in principle 15 of the Rio Declaration on Environment and Development. *See* Rio Declaration, *supra* note 95, princ. 15 (rejecting the requirement for absolute scientific certainty where environmental damage may be irreversible). The principle has since been enshrined in international environmental treaties relating to climate change, oceans and watercourses, marine pollution, fisheries conservation, ozone layer protection, conservation of endangered species, biological diversity, and trade in hazardous waste. *See, e.g.*, 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter arts. 2, 3, Nov. 7, 1996, 36 I.L.M. 1 (1997) (maritime pollution context); Agreement for the Implementation of the Provision of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks art. 6, Aug. 4, 1995, 2167 U.N.T.S. 3 (1995) (fisheries context); Convention for the Protection of the Marine Environment of the North-East Atlantic art. 2(2)(a), Sept. 22, 1992, 32 I.L.M. 1228 (1993) (maritime pollution context); Montreal Protocol on Substances that Deplete the Ozone Layer, pmbl, Sept. 16, 1987, 26 I.L.M. 1541, 1522 U.N.T.S. 3 (1987) (airborne pollution context).

144. PHILIPPE SANDS ET AL., PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 272-73 (3d ed. 2012); Daniel Kazhdan, *Precautionary Pulp:* Pulp Mills *and the Evolving Dispute Between International Tribunals over the Reach of the Precautionary Principle*, 38 ECOLOGY L.Q. 527, 529-30 (2011); *see also* David VanderZwaag, *The Precautionary Principle in Environmental Law and Policy: Elusive Rhetoric and First Embraces*, 8 J. ENVTL. L. & PRAC. 355, 360 (1998) (finding several interpretations of the concept).

risky activities such that the latter bears the burden of proving the safety of the proposed activities. It is based on the assumption that, in the face of a serious risk, States should act now rather than wait to see whether the harm occurs. In this way, the principle could be viewed as a defensive strategy for a State that seeks to preclude activities for which the harm is uncertain.

This approach is not without controversy.[145] There are mixed views on when and how to use the principle, such as what level of uncertainty is needed to invoke the principle. As a result of this lack of precision, some non-state actors have argued that the precautionary principle can be a form of protectionism. However, the precautionary principle does not excuse a treaty breach. Rather, this approach merely increases the evidentiary burden on the party seeking to engage in harmful activity by allowing tribunals to assess and weigh highly technical but uncertain scientific evidence on environmental harms. While no investment treaty tribunal has expressly applied the precautionary principle, other international courts and tribunals have considered it,[146] suggesting that there may be room for its application in the investor-state context.[147] The application of the principle is highly fact-specific; nevertheless, it could be applied in exceptional cases involving a high level of scientific uncertainty and risk of environmental damage, such as nuclear power.[148]

145. *See* Marie-Claire Cordonier Segger & Andrew Newcombe, *An Integrated Agenda for Sustainable Development in International Investment Law*, *in* SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 120-21 (Marie-Claire Cordonier Segger et al. eds., 2011).

146. *See, e.g.*, Simon Marr, *The Southern Bluefin Tuna Cases: The Precautionary Approach and Conservation and Management of Fish Resources*, 11 EUR. J. INT'L L. 815, 816 (2000) (arguing that the court in the *Southern Bluefin Tuna* case implicitly applied the precautionary principle).

147. *See Norway Model BIT*, *supra* note 30, art. 24(v) (referring to the right of the contracting parties to adopt or enforce measures deemed necessary, including under the precautionary principle, to protect the environment).

148. *See* CAROLINE E. FOSTER, SCIENCE AND THE PRECAUTIONARY PRINCIPLE IN INTERNATIONAL COURTS AND TRIBUNALS: EXPERT EVIDENCE, BURDEN OF PROOF AND FINALITY 18 (2011) (arguing that the high threshold requirement of an "exceptional case" involves "the need for decision-making that errs on the side of allowing for worst-case scenarios").

C. CONCEPTUAL TOOLS TO BALANCE THE REGULATORY POWERS OF STATES WITH THE INTERESTS OF FOREIGN INVESTORS

While arbitral rules for managing expert evidence, third-party participation, and evidentiary burden-shifting can help tribunals better assess scientific evidence, varying standards of review and recognition of specific defenses allow tribunals to properly evaluate the regulatory process. Regulation is essential to state functions and many argue this authority must be protected if the State is to act in the public interest on environmental, health, economic, and social issues.[149] Because of concerns regarding mounting indirect expropriation claims that threaten this "right to regulate," some States have changed their approach to include more robust carve-outs or exclusions in investment agreements. Indeed, the conceptual tools described below can also be used as interpretive guidance for these exceptions or carve-out clauses in treaties.

Even in the absence of such clauses, States have argued that tribunals should defer to State regulators' scientific findings made on a non-discriminatory and non-arbitrary basis and in accordance with due process. Various standards of review and defenses suggest that investment tribunals may not be best-positioned to make value judgments on internal environmental policies, which may involve technical expertise.[150] For example, as discussed above, in *Chemtura Corp.*, the tribunal noted that it was not within the scope of its task to "second-guess the correctness of the science-based decision-making of highly specialized national regulatory agencies."[151]

149. Rainer Geiger, *Regulatory Expropriations in International Law: Lessons from the Multilateral Agreement on Investment*, 11 N.Y.U. ENVTL. L.J. 94, 108 (2002); *see also* Stephen Olynyk, *A Balanced Approach to Distinguishing Between Legitimate Regulation and Indirect Expropriation in Investor-State Arbitration*, 15 INT'L TRADE & BUS. L. REV. 254, 279 (2012) (citing M. SORNARAJAH, THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 283 (2004)) (arguing that non-discriminatory policy space provisions typically relate to areas of regulation critical to state administration).

150. *See, e.g.*, S.D. Myers Inc. v. Canada, Partial Award on Liability, ¶ 261 (UNCITRAL Nov. 13, 2000) (Kluwer Law Int'l) (holding that Chapter 11 tribunals do "not have open-ended" mandates to review the policy decisions of States).

151. Chemtura Corp. v. Canada, Award, ¶ 134 (UNCITRAL Aug. 2, 2010) (Kluwer Law Int'l); *see also* Int'l Thunderbird Gaming Corp. v. United Mexican States, Award, ¶ 160 (UNCITRAL Jan. 26, 2006) (Kluwer Law Int'l).

Balancing a State's regulatory powers against the interests of foreign investors is particularly apt in environmental cases. The "chilling effect" on the host state's environmental policy is powerful as States already face immense pressure from domestic and international businesses to relax their environmental standards. For example, in *Ethyl Corp. v. Canada*, one of the first NAFTA cases that involved the banning of a gasoline additive that the government found to be toxic, Canada settled and reversed the ban in the face of a $251 million claim and a loss on a jurisdictional ruling.[152] More than ten years later, Canada settled another environmental case, this time involving a challenge by the agrochemical company, Dow AgroSciences, over a Quebec ban on the sale and use of lawn pesticides containing the ingredient 2, 4-D.[153] Acknowledging the complexity of these concepts and the uncertainty with which tribunals may or may not utilize them, the following subsections introduce potential legal tools available to tribunals when adjudicating the right to regulate.

1. Police Powers

Customary international law establishes that certain state action is beyond compensation under the international law of expropriation because States enjoy wide latitude to regulate within the realm of their police powers.[154] Police powers cover State actions such as taxation, legislation restricting the use of property—including in areas of planning, environment, safety, and health—and the imposition of criminal penalties.[155] In the modern legal view of police powers, the State is understood to regulate through a variety of

152. *See* Ethyl Corp. v. Canada, Preliminary Tribunal Award on Jurisdiction (UNCITRAL 1998), http://www.international.gc.ca/trade-agreements-accords-commerciaux/assets/pdfs/disp-diff/ethyl-08.pdf.

153. *See* Dow Agrosciences LLC v. Canada, Settlement Agreement, ¶¶ 1, 3b-c (UNCITRAL 2011) (agreeing that Canada's ban on 2, 4-D will remain in place and that Canada will not have to pay damages).

154. *See, e.g.*, RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 712 cmt. g (1987) (positing that "general taxation, regulation, forfeiture . . . or other action" is permissible so long as it is nondiscriminatory).

155. U.N. CONFERENCE ON TRADE & DEV., EXPROPRIATION: UNCTAD SERIES ON ISSUES IN INTERNATIONAL INVESTMENT AGREEMENTS II, at 79, U.N. Doc. UNCTAD/DIAE/IA/2011/7, U.N. Sales No. E.12.II.D.7 (2012) [hereinafter UNCTAD, EXPROPRIATION].

channels and in broad areas, such as protecting the environment, and to exercise a wide range of powers in adopting new regulations or enforcing existing ones vis-à-vis investors.[156]

Investment tribunals accepting police powers as a defense has not been uniform. For example, in *Compañía del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica*,[157] the tribunal took a narrow approach to police powers, concluding that the State's environmental purpose had no bearing on the issue of compensation.[158] In *Methanex Corp.*, the tribunal recognized the State's police powers and held that the contested MTBE ban was a "lawful regulation and not an expropriation."[159] However, it somewhat limited the defense by noting that compensation would be required if "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."[160] *Chemtura Corp.* affirmed a broader reading of the principle of police powers. There, the tribunal held that Canada's regulations phasing out the use of a harmful chemical, lindane, "constituted a valid exercise of [Canada's] police powers" and thus did "not constitute an expropriation."[161]

156. *Id.*

157. ICSID Case No. ARB/96/1, Final Award (Feb. 17, 2000), 15 ICSID Rev. 169 (2000).

158. *Id.* ¶ 72 ("[W]here property is expropriated, even for environmental purposes, whether domestic or international, the [S]tate's obligation to pay compensation remains.").

159. Methanex Corp. v. United States, Final Award of the Tribunal on Jurisdiction and Merits, Part II Ch. D ¶ 15 (UNCITRAL 2005), http://www.state.gov/documents/organization/51052.pdf.

160. *Id.* Part IV Ch. D ¶ 7.

161. Chemtura Corp. v. Canada, Award, ¶ 266 (UNCITRAL Aug. 2, 2010) (Kluwer Law Int'l); *see also* Sedco v. Nat'l Iranian Oil Co., Award, 9 Iran-U.S. CTR 248, 275 (1985) (holding that it is "an accepted principle of international law that a State is not liable for economic injury which is a consequence of bona fide 'regulation' within the accepted police power of States"); Tecnicas Medioambientales Tecmed S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award, ¶ 119 (May 29, 2003), 19 ICSID Rev. FILJ 158 (2004) ("The principle that the State's exercise of its sovereign powers within the framework of its police power may cause economic damage to those subject to its powers as administrator without entitling them to any compensation whatsoever is undisputable"); S.D. Myers Inc. v. Canada, Partial Award on Liability, ¶ 281 (UNCITRAL Nov. 13, 2000) (Kluwer Law Int'l) ("The general body of precedent

Although tribunals have accepted varying degrees of the defense, police powers is a well-established concept in customary international law. The question in environmental disputes is which iteration of the doctrine a particular tribunal will apply. Moreover, tribunals have generally only applied the principle to non-compensable expropriations rather than to other treaty breaches. Thus, tribunals must decide how to apply tools such as the "margin of appreciation," discussed below, which are less established but may be more broadly applicable.[162]

2. Margin of Appreciation

The "margin of appreciation" doctrine was developed by the European Court of Human Rights as a means to balance the regulatory functions of the State while at the same time preserving the Court's ability to review decisions.[163] In investment law, the doctrine reflects an "increasing acceptance that the examination of the measures taken by the [S]tate should not be assessed too finely."[164] Indeed, even where the BIT is silent on the standard of

usually does not treat regulatory action as amounting to expropriation.").

162. *See* VIÑUALES, *supra* note 3, at 377-78 (analyzing the margin of appreciation standard in the *Methanex Corp.*, *Glamis Gold, Ltd.*, and *Chemtura Corp.* decisions).

163. *See* James v. United Kingdom, 98 Eur. Ct. H.R. (ser. A) at 32 (1986), http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-57507 (stating that the margin of appreciation doctrine gives States some latitude to treat parties differently, depending on the facts of a given situation); Handyside v. United Kingdom, 24 Eur. Ct. H.R. (ser. A) at 16-17 (1976), http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-57499 (leaving to States a margin of appreciation to interpret and apply laws in force so long as they do so reasonably and in good faith).

164. M. SORNARAJAH, THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 467 (3d ed. 2010). The margin of appreciation doctrine has been considered in a number of investment cases. *See, e.g.*, Frontier Petrol. Services Ltd. v. Czech Republic, Final Award, ¶ 527 (Perm. Ct. Arb. 2010), http://www.italaw.com/documents/FrontierPetroleumv.CzechRepublicAward.pdf ("States enjoy a certain margin of appreciation in determining what their own conception of international public policy is."); Electrabel S.A. v. Republic of Hungary, ICSID Case No. ARB/07/19, Decision on Jurisdiction, Applicable Law and Liability, ¶ 8.35 (UNCITRAL 2012), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC2853_En&caseId=C111 ("Hungary would enjoy a reasonable margin of appreciation in taking such measures before being held to account under the ECT's standards of protection."); Cont'l Cas. Co. v. Argentine Republic, ICSID Case No. ARB/03/09, Award, ¶ 181 (UNCITRAL

review or level of deference to be applied, arbitrators resist the impulse to review *de novo* a State's assessment of a situation and apply the remedies as they see fit.[165]

The doctrine differs from police powers in several ways.[166] Unlike police powers, international tribunals have applied the margin of appreciation to all claims, not just expropriation allegations in the investment arbitration context.[167] The theoretical underpinning for deferring to state action also differs: police powers are based on the State's sovereign right to regulate whereas the margin of appreciation applies a level of review to the policy assessments of state agencies akin to administrative law. Accordingly, police powers implicate state liability under legal rules while the margin of appreciation is applied to factual analysis without directly impacting a State's liability to pay compensation.

Tribunals have been known to apply—implicitly or explicitly—the margin of appreciation in addressing the scientific process followed by the relevant state agency in environmental cases. For example, in *Methanex Corp.* and *Glamis Gold Ltd.*, the tribunals "considered that their role was not to judge the scientific conclusions on which the measures challenged by the investors were based, but only the acceptability of the process followed to reach such conclusions."[168] The *Chemtura Corp.* tribunal took a more modulated approach that acknowledged the presence of "highly specialized domains involving scientific and public policy determinations," but noted that "[t]his is not an abstract assessment circumscribed by a legal doctrine about

Sept. 5, 2008) (Kluwer Law Int'l) (affirming a State's right to apply a "significant margin of appreciation" for measures taken during emergencies).

165. *See* Burke-White & von Staden, *supra* note 36, at 371 (stating that the margin of appreciation doctrine is generally triggered when a BIT lists permissible objectives or uses language that suggests deference is due to state parties).

166. *See* VIÑUALES, *supra* note 3, at 379-80 (arguing that the ultimate difference between police powers and the margin of appreciation doctrine is one of right versus process and articulating that the former doctrine empowers the State to act on its "inherent duty" to protect the public and is more deferential to state action, while the latter concerns itself more with how a decision was reached and whether it was equitable).

167. *See, e.g.*, *id.* at 376-77 (discussing how the European Court of Human Rights developed the margin of appreciation doctrine in the context of claims involving human rights derogation).

168. *Id.* at 377-78.

the margin of appreciation" and that "[i]t is an assessment that must be conducted *in concreto*."[169] On the facts of the case, the tribunal considered it appropriate to apply deference in its decision.[170]

Other tribunals have cautiously approached the margin of appreciation doctrine as well. At least one tribunal has observed that the margin of appreciation under the European Court of Human Rights jurisprudence is "not found in customary international law or the [investment] [t]reaty [at issue]."[171] Indeed, some scholars insist that the margin of appreciation is a human rights concept that has little or no application to investment cases.[172] Yet, tribunals are increasingly finding themselves confronted with similar regulatory issues that come up in more public-oriented areas of the law. Thus, while not as widely accepted as police powers in international investment law, the margin of appreciation could offer an additional conceptual framework to utilize when assessing claims involving scientific and technical regulations.

3. Proportionality

Proportionality is a general legal principle and one closely associated with the margin of appreciation in international law. It refers to weighing a State's implementation of its policy goals against the protected rights of an investor.[173] How the tribunal conducts this weighing process varies. For example, a tribunal applying the margin of appreciation to its proportionality assessment

169. Chemtura Corp. v. Canada, Award, ¶ 123 (UNCITRAL Aug. 2, 2010) (Kluwer Law Int'l).

170. *Id.*

171. Siemens A.G. v. Argentine Republic, ICSID Case No. ARB/02/8, Award, ¶ 354 (Jan. 17, 2007) (Kluwer Law Int'l).

172. *See* Eyal Benvenisti, *Margin of Appreciation, Consensus, and Universal Standards*, 31 INT'L L. & POL. 843, 843-44 (1999) (noting that the margin of appreciation imbues a "state-bias" into a process that is intended to be based on equality); Stephan W. Schill, *Deference in Investment Treaty Arbitration: Re-conceptualizing the Standard of Review*, 3 J. INT'L DISP. SETTLEMENT 1, 10 (2012) (following a private international law paradigm that affords deference to one disputing party but not the other could be viewed as an "arbitral heresy").

173. *See generally* Rahim Moloo & Justin Jacinto, *Environmental and Health Regulation: Assessing Liability Under Investment Treaties*, 29 BERKELEY J. INT'L L. 1, 22 (2011) (arguing that generally applying the doctrine of proportionality is a fact-specific exercise that varies case-by-case).

will tip the deferential balance in favor of the State.[174]

This analysis acknowledges that the investor should have the opportunity to show the tribunal that the state action is disproportionate to the State's aim while it also considers the State's factual findings underpinning the regulation from which the investor claims harm.[175] The tribunal would accordingly undertake a factual proportionality assessment that carefully balances the interests involved, such as whether the measure falls within a recognized police power of the host state, the public purpose and effect of the measure, any potential discrimination, and the relationship between the means employed and the aim sought to be realized.[176] Additional factors include the economic impact of the regulations on the investor and the investor's legitimate expectations at the time of investment.[177]

The European Court of Human Rights jurisprudence reinforces the "reasonable balance" to be struck between community interests and the private interests of alleged victims of the offending conduct.[178] Some tribunals of the International Centre for Settlement of Investment Disputes have affirmed this. For example, in *Tecmed*, the tribunal applied a proportionality analysis to distinguish between a compensable indirect expropriation and a non-compensable regulation.[179] The tribunal assessed "whether such actions or measures are proportional to the public interest presumably protected thereby and to the protection legally granted to investments, taking into account that the significance of such impact has a key role upon

174. *See id.* at 23 (pointing to LG&E Energy Corp. v. Argentine Republic, ICSID Case No. ARB/02/1, Decision on Liability (Oct. 3, 2006), 21 ICSID Rev. 203 (2006), which held that States may take proportional steps to protect the public welfare).

175. *See id.* at 35 (proposing that, if an investor has an opportunity to demonstrate a state action is not proportional, the tribunal will be better able to make a well-balanced analysis).

176. *Id.* at 23, 35.

177. UNCTAD, EXPROPRIATION, *supra* note 155, at 62.

178. Org. for Econ. Co-Operation & Dev. [OECD], *"Indirect Expropriation" and the "Right to Regulate" in International Investment Law* 17 (Org. for Econ. Co-Operation & Dev. Working Papers on Int'l Inv., Working Paper No. 2004/04, 2004), *available at* http://dx.doi.org/10.1787/780155872321.

179. Tecnicas Medioambientales Tecmed S.A. v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award, ¶ 66 (May 29, 2003), 19 ICSID Rev. FILJ 158 (2004).

deciding the proportionality."[180] Similarly, in *Occidental Petroleum Corp. v. Republic of Ecuador*,[181] the tribunal determined that proportionality is a requirement under general international law.[182] Influenced by *Tecmed*, the *Occidental Petroleum Corp.* tribunal determined that the "test at the end of the day will remain one of overall judgment, balancing the interests of the State against those of the individual, to assess whether the particular sanction is a proportionate response in the particular circumstances."[183]

Investment arbitration falls within the gray area between public international law, in which qualified deference to the State exists, and international commercial law, in which public elements of a dispute are not typically addressed. The key questions with these various doctrines therefore is how *much* deference is appropriate to grant, whether resorting to an extra-treaty standard of deference is appropriate and, if so, whether environmental regulation should be a "special case" militating towards a greater measure of deference. Because environmental protection involves public interest considerations, it may be appropriate to apply administrative standards of review and/or consider deferential defenses. This is particularly true where the State accrues no benefit or even incurs a loss from the action. Ultimately, these conceptual tools offer convenient devices for arbitral tribunals that wish to consider the special circumstances surrounding cases involving environmental issues.[184]

180. *Id.* ¶ 122; *see also* LG&E Energy Corp. v. Argentine Republic, ICSID Case No. ARB/02/1, Decision on Liability, ¶ 195 (Oct. 3, 2006), 21 ICSID Rev. 203 (2006) (endorsing *Tecmed*'s proportionality approach); Saluka Investments BV v. Czech Republic, Partial Award, ¶¶ 305-07 (Perm. Ct. Arb. 2006), http://www.italaw.com/sites/default/files/case-documents/ita0740.pdf (balancing proportionality, on the one hand, and the respondent's right to exercise police powers, on the other).

181. ICSID Case No. ARB/06/11, Award (Oct. 5, 2012), https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC2672_En&caseId=C80.

182. *Id.* ¶ 427.

183. *Id.* ¶ 417.

184. A fourth potential defense doctrine is that of necessity or public emergency. While this defense has not yet been invoked in cases concerning environmental issues, it has been used in other contexts. *See generally* VIÑUALES, *supra* note 3, at 385 ("Public emergency clauses and the necessity defence have been invoked together in the context of a series of investment disputes relating to

V. CONCLUDING REMARKS

Despite the increasing number of cases involving the environment, investment treaties themselves are not well-equipped to provide guidance to tribunals on environmental issues. As a result, these issues are generally handled on a case-by-case basis with tribunals assessing the overall reasonableness of the state policy or regulatory process followed. All the while, tribunals attempt the formidable, and at times seemingly impossible, task of balancing the public interests that the State represents and the negative impact of measures on foreign investments.

Despite these theoretical and structural burdens, the arbitral system allows for much discretion on the part of the tribunal. In the short term, relying on the tribunal's use of appropriate standards of review and properly considering factors, such as the legitimacy of the State's aim, the nature of the measure, and due process, can help lead to decisions that better consider environmental harm. Encouragingly for the long-term, States have begun to recognize the importance of environmental issues in their treaty negotiations.[185] Even with new treaties, however, a key question will continue to be how much tribunals should look at the merits of the State's action rather than the process in which the policy was made. While indiscriminate deference is a crude tool, this article recommends that tribunals also avoid *de novo* review. Balancing these two positions poses a challenge for arbitrators. Ultimately, the goal for the arbitral system is to develop the capacity to seriously consider the public policy issues and environmental concerns often at stake while fairly adjudicating the claims of investors harmed by state action.

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the Argentine crisis of 2001-3. Although most of these cases do not concern environmental issues, they remain relevant to assess the potential operation of emergency and necessity clauses in connection with such issues.").

185. International organizations are responding to States' interest in reforming the investment regime. For example, UNCTAD is supporting a coordinated and sustainability-oriented approach to international investment reform through its Investment Policy Framework for Sustainable Development. This type of guidance may help expedite system reform in a way that supports environmental considerations. U.N. CONFERENCE ON TRADE & DEV., INVESTMENT POLICY FRAMEWORK FOR SUSTAINABLE DEVELOPMENT 2-3 (2012), *available at* http://unctad.org/en/publicationslibrary/webdiaepcb2012d6_en.pdf.