

BEYOND KYOTO: THE TREATMENT OF OUTLIERS

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INTRODUCTION

The United States is an outlier with respect to the Kyoto Protocol; it has neither ratified the protocol nor abided by its terms. The follow-up protocol to Kyoto will presumably also have its outliers. In this Essay, I will explain why outliers will be of critical importance to the next climate accord. I will also explain why the importance of outliers, in turn, will make the treatment of outliers practically difficult. I will also touch upon some issues that may arise to the extent that the next accord seeks to use trade sanctions as a means of punishing outliers. I will not endeavor to cover all aspects of these questions; instead, I hope to contribute to the dialogue by highlighting points that I believe to be most salient.

Part I of the Essay sets out the problem of climate change, and the international community's responses to it, including the Kyoto Protocol. It explains how climate change differs from other environmental challenges to which the international community has responded. Part II looks at treaty outliers; it examines the possible characteristics of outliers to a post-Kyoto protocol. It also outlines different approaches that a post-Kyoto protocol might take with respect to outliers. It then elucidates, in particular, issues that might arise from the attempt to use trade sanctions.

I. THE CLIMATE CHANGE CHALLENGE

Succinctly put, climate change results from the presence of so-called "greenhouse gases" ("GHGs") in the upper atmosphere. These gases act to trap heat within the earth's biosphere. Scientists have already measured moderate changes in the earth's climate, and they predict greater changes in the future.¹ They attribute the bulk of these changes to anthropogenic

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¹ See Jonathan Remy Nash, *Standing and the Precautionary Principle*, 108 COLUM. L. REV. 494, 507 (2008).

greenhouse gas emissions. Since the industrial revolution, human activity has produced an increasing amount of greenhouse gases. Warmer global temperatures are predicted to create increased risk of disease. Water scarcity, already a problem in some areas, will become even more pronounced. In addition, sea levels will rise as the earth's considerable ice (especially at the poles) melts, resulting in flooding and loss of coastline. Finally, scientists predict more severe weather events, including hurricanes and tornadoes, as a result of climate change.²

Because the harm of global warming results from concentrations of greenhouse gases in the upper atmosphere, the location from which greenhouse gases are emitted is immaterial. In this sense, climate change differs from many other environmental challenges faced by the international community. For example, sulfur dioxide emissions may generate acid precipitation. Yet, while sulfur dioxide may travel over substantial distances, the location of the acid precipitation is to some extent a function of the original emission. Sulfur dioxide is thus a regional pollutant, and acid precipitation a regional problem.³ In contrast, greenhouse gases are global pollutants, and climate change is a global problem.⁴ Put another way, while acid precipitation presents an international environmental law problem to the extent of trans-boundary pollutant transport – and, on some understandings, is not a problem of international scope to the extent that the harm arises in the same jurisdiction as the emission – climate change turns on all emissions, no matter where they originate.

The international community's initial response to climate change was the 1992 Framework Convention on Climate Change ("FCCC").⁵ True to its name, the treaty simply provided a framework for future agreements. It did not on its own impose or suggest any limits on greenhouse gas emissions.

The Kyoto Protocol followed up on the FCCC.⁶ It was negotiated in the 1990s but did not go into effect until 2005, when (as required by the terms of the Protocol) developed countries responsible for at least 55% of the world's greenhouse gas emissions ratified it.⁷ Though the United States was heavily involved in negotiating the terms of the Protocol, it has yet to ratify it. President Clinton declined to submit the Protocol for ratification after the

² *See id.*

³ Jonathan Remy Nash & Richard L. Revesz, *Markets and Geography: Designing Marketable Permit Schemes to Control Local and Regional Pollutants*, 28 *ECOLOGY L.Q.* 569, 576-77 (2001).

⁴ *Id.* at 576.

⁵ United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

⁶ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22.

⁷ *See id.* art. 24(1).

Senate issued a unanimous “sense-of-the-Senate” resolution against it.⁸ One major reason for domestic opposition is the fact that the Kyoto Protocol itself imposes greenhouse gas emission reduction requirements only on developed countries, and not on developing economies.⁹

The problem of climate change differs from other environmental law challenges in three important ways.¹⁰ First, as I have discussed above, greenhouse gases are global pollutants. As such, the problem is global and not limited to the more common setting of transboundary pollution.¹¹ Second, to the extent that global warming is a global problem, it is imperative, for any solution to work, that all, or very nearly all, countries participate in the regime. Even a few outliers can undermine the affirmative steps taken by the majority if the outliers manage to generate enough emissions.¹² Third, greenhouse gas emissions result from a broad array of human activities, from agricultural to industrial, and across industrial sectors. As a corollary, broad attempts to control greenhouse gas emissions will impact broad swaths of the world’s economy, and indeed of virtually every affected country’s economy.

Consider, then, how global warming as a whole presents a distinct challenge to the international community. The pollution problem is not confined to the setting of transboundary pollutant transport. Ozone-depleting substances (“ODSs”), dealt with under the Vienna Convention for the Protection of the Ozone Layer¹³ and the accompanying Montreal

⁸ See Nash, *supra* note 1, at 507 n.62.

⁹ See *id.* The Convention and Protocol do not distinguish between developing and developed countries by characteristics. Instead, they divide countries into categories by lists, with different categories of countries receiving different treatment. Only countries listed in Annex B to the Protocol — which consists of developed countries and countries with developing economies in the former eastern bloc — are subjected to emissions caps. Major economies such as China, India, and Brazil are thus not subject to any emissions caps under the Protocol.

¹⁰ See Cass R. Sunstein, *Of Montreal and Kyoto: A Tale of Two Protocols*, 31 HARV. ENVTL. L. REV. 1 (2007) (extensively comparing these two treaty regimes).

¹¹ See *supra* text accompanying notes 3-4.

¹² See Sunstein, *supra* note 10, at 22, 43-44 (comparing aptness of prisoner’s dilemma model for Montreal and Kyoto Protocols); Jonathan B. Wiener, *Climate Change Policy and Policy Change in China*, 55 UCLA L. REV. 1805, 1808-10 (2008) (noting need for participation of largest emitters for international global warming regime to be effective). Indeed, Professor Jason Scott Johnston argues that unilateral action by the United States under the Clean Air Act to regulate greenhouse gas emissions might actually *decrease* the incentive for China and other developing nations to take steps to limit their own emissions. See Jason Scott Johnston, *Climate Change Confusion and the Supreme Court: The Misguided Regulation of Greenhouse Gas Emissions Under the Clean Air Act*, 84 NOTRE DAME L. REV. 1, 69-72 (2008).

¹³ Convention for the Protection of the Ozone Layer, Mar. 22, 1985, 1513 U.N.T.S. 293.

Protocol,¹⁴ are another example of a global pollutant and global problem. As I shall explain, however, greenhouse gases differ from ozone-depleting substances in other important ways.

Virtually all countries now generate amounts of greenhouse gases that are substantial. This was not the case with ozone-depleting substances. Only a relative few industrialized countries generated such substances. The challenge was to try to keep developing countries from starting such industries.¹⁵ Indeed, developing countries were an afterthought for the negotiations of the Vienna Convention and Montreal Protocol,¹⁶ although most countries joined later.

Moreover, the generation of ozone-depleting chemicals was confined to a particular industry and implicated relatively few companies. Thus, entering into a treaty that imposed restrictions on those few companies would likely not have a large effect on a nation's overall economy. In contrast, many sectors of the world economy give rise to greenhouse gas emissions.¹⁷ Thus, entering into a treaty that imposes restrictions on greenhouse gas emissions likely will affect large swaths of a nation's economy.

Finally, the costs of continued ozone depletion in the absence of an international treaty were seen to be substantial and shared by people around the globe.¹⁸ In contrast, the cost of not entering into a treaty and allowing global warming to occur may not devastate major sectors of many nations' economies, including that of the United States.¹⁹ As a result, one might

¹⁴ Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, 1522 U.N.T.S. 3 [hereafter Montreal Protocol].

¹⁵ See Anne Gallagher, *The "New" Montreal Protocol and the Future of International Law for Protection of the Global Environment*, 14 HOUS. J. INT'L L. 267, 311-12 (1992) ("Demand for controlled substances and for products containing or produced with such substances is steadily increasing. A number of Third World countries have developed substantial production capacity to satisfy these new lucrative markets."). In fact, the Protocol provides for the fact that demand for ODSs in developing countries is growing: it allows developing countries to increase ODS production over an initial ten-year period of time, with reductions thereafter. See Montreal Protocol, *supra* note 14, art. 5; Sunstein, *supra* note 10, at 17.

¹⁶ Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 YALE J. INT'L L. 451, 478 (1993).

¹⁷ See, e.g., John C. Dernbach, *Toward a Climate Change Strategy for Pennsylvania*, 12 PENN. ST. ENVTL. L. REV. 181, 197 (2004) ("[I]t is difficult to think of economic sectors that will not be affected by climate change in Pennsylvania.").

¹⁸ See Sunstein, *supra* note 10, at 10-11 (detailing harm from ozone depletion and salience of issue).

¹⁹ See Daniel H. Cole, *Climate Change, Adaptation, and Development*, 26 UCLA J. ENVTL. L. & POL'Y 1, 4-5 (2007-2008) (describing how global warming might not have devastating effect on U.S. economy); Johnston, *supra* note 12, at 21-41 (detailing the benefits that some predictions suggest might accrue to large regions of the United States by virtue of

expect more countries to choose outlier status with respect to a global warming regime since the cost of not entering into the regime might not be that high, while the economic costs of complying with such a regime might be predicted to be quite severe.

II. OUTLIERS AND CLIMATE CHANGE

In this Part, I discuss the importance of outliers to the success of a post-Kyoto regime. I also discuss methods by which a post-Kyoto regime might deal with outliers, and highlight and briefly analyze some obstacles that these methods would have to overcome.

The previous Part explained the necessity of minimizing the number of nation outliers in order to deal effectively with the challenge of climate change. But there is a “catch-22” situation here: the greater the pressure to minimize the number of outliers, the more of an incentive there is for nations to threaten outlier status in order to extract rents. Thus, it is important to limit the number of outliers and to develop strategies to limit the incentives for nations to opt for outlier status.

To begin, consider the following taxonomy of treaty (or protocol) parties and outliers. First, treaty parties might be developed countries while outliers might be developing countries. This was the original setting of the Montreal Protocol, where the problem of ozone-depleting substances was originally thought to implicate only the developed world. As I have noted above, the challenge for the treaty parties with respect to outliers was unitary: how to prevent non-parties – who were developing countries who at the time had virtually no ODS industries – from starting or expanding nascent ODS industries. To this end, the Montreal Protocol bans parties from importing ozone-depleting substances from non-parties; to the extent that imports of such chemicals are allowed, they are allowed only from other party states.²⁰

A second possible arrangement would see developing countries as parties and developed countries as outliers. Such scenarios are hardly common in the international environmental law setting, perhaps because environmental protection and amenities tend to be luxuries that developing countries are less likely to be able to afford. If it were to occur, however, one can anticipate that the challenge to design a regime that discouraged outliers would not have the added complexity of heterogeneity among potential outliers insofar as the outliers would be similarly situated in economic terms.

temperature increases resulting from global warming).

²⁰ See Montreal Protocol, *supra* note 14, art. 4, ¶ 6.

A third possible situation is one where treaty parties and outliers are both a mix of developed and developing countries. This is the setting of the Kyoto Protocol where, for example, the United States, Turkey, and Afghanistan are all outliers (all three have ratified the FCCC). The challenges here are greater, since it is unlikely that the same strategy that will be successful for developing country outliers will also work for developed country outliers.²¹ Developing country parties may also be unable to implement or take advantage of the same strategies to deal with outliers as developed country parties. For example, a developed country party will likely be better positioned to successfully enlist a trade sanction against an outlier than will a developing country.

Whatever difficulties may plague the differential treatment of outliers, the nature of the global climate change challenge makes it tantamount to find a way to discourage countries from choosing outlier status. As I have explained above, even a small number of outliers could undermine the efforts undertaken by treaty parties to ameliorate global warming.²² Real relief requires full, or very nearly full, participation among countries. At the same time, the prospect for successfully pressuring outliers is made more difficult by the fact that climate change relief will likely require sacrifices that span the range of economic activities. It is one thing, as under the Montreal Protocol, to punish a single industry, and especially a nascent one. It is quite another thing to propose to punish a country's entire economy.

In short, then, one would expect that the pressure to discourage countries from being outliers will be great. However, one also should anticipate that the difficulty in successfully pressuring outliers will be great as well.

Let us turn to the question of how the international community, through a treaty regime, might treat outliers. Parties might (i) do nothing,²³ (ii)

²¹ See Michael P. Vandenbergh, *Climate Change: The China Problem*, 81 S. CAL. L. REV. 905, 914-28 (2008) (discussing different incentives for China and United States with respect to climate change, and explaining incentives for each country not to frustrate one another).

²² See *supra* text accompanying note 12.

²³ An additional strategy that might fall under the "do nothing" rubric insofar as it would not be effectuated pursuant to the treaty regime is to try to "reframe" the perception of the would-be outlier states that it is not in their interest to join the regime (or indeed in their interest not to or at least to threaten not to). See generally Jonathan Remy Nash, *Framing Effects and Regulatory Choice*, 82 NOTRE DAME L. REV. 313, 355-69 (2006) (discussing how frame through which environmental regulatory regime is presented might affect its acceptance); *Id.* at 370-71 (discussing how reframing might be able to alter status quo). Strategies that endeavor to reframe perceptions might take different forms. First, one could argue that a country is misapprehending the benefits and costs of entering the treaty regime, such that entry into the regime is in a country's self-interest. See Cass R. Sunstein, *The World vs. The United States and China? The Complex Climate Change Incentives of the Leading Greenhouse Gas Emitters*, 55 UCLA L. REV. 1675, 1691-95 (2008) (arguing that countries

reward participation, or (iii) punish non-participation. In light of the discussion above, option (i) seems suboptimal; to the extent that the law allows it, some action should be taken to discourage countries from electing to be outliers.

Consider first, then, how a treaty regime might reward participation. Existing international environmental treaty regimes do this by creating funding mechanisms for developing countries, and also by facilitating the transfer of knowledge and technologies that will help countries to comply with treaty obligations.²⁴ The U.S. implementation of the Montreal Protocol goes beyond this, and offers some lessons as to means member states might use to reward other countries for participating in the relevant treaty regime. Under the Clean Air Act, Congress specifically directed the EPA Administrator to “support global participation in the Montreal Protocol by providing technical and financial assistance to developing countries.”²⁵ Moreover, Congress by statute authorized appropriations for this purpose. Interestingly, Congress expressly increased the amounts authorized in the event that China and India were to become parties to the Protocol.²⁶ This provided a tangible carrot – even more tangible than a fund amorphously authorized under the Protocol itself – for China and India to join the Protocol.

It is important to observe that there are problems with translating this approach directly to the climate change context. First, basic funding and transfer of technologies may be insufficient to coax participation in the relevant treaty. Indeed, the cost of convincing outliers to participate may be quite large. Moreover, returning to the taxonomy of outliers in the global warming context, it may be that larger, industrialized countries, not developing countries (or at least not developing countries alone) are the ones that are to receive compensation. Even if it made logical sense to compensate the United States to join the global warming treaty regime, the compensation required may be large, and the mere notion of compensating the United States is itself highly controversial.²⁷

Existing international environmental regimes, the Montreal Protocol

may misapprehend benefits and costs of climate change treaties); Wiener, *supra* note 12, at 1816-26 (arguing that changing circumstances may make it in China’s self-interest to enter post-Kyoto protocol). Second, one might imagine moral suasion playing a role in reframing a country’s attitude toward a global warming treaty. See Sunstein, *supra*, at 1696-98; *But cf.* Wiener, *supra* note 12, at 1812-16 (questioning the promise of this strategy as applied to China).

²⁴ See, e.g., Sunstein, *supra* note 10, at 17, 29.

²⁵ Clean Air Act § 617(b), 42 U.S.C. § 7671p(b) (1990).

²⁶ See *id.*

²⁷ See Eric A. Posner & Cass R. Sunstein, *Climate Change Justice*, 96 GEO. L.J. 1565, 1610 (2008).

among them, offer lessons for how to implement option (iii): to punish non-participants. As I have noted above, Article 4 of the Montreal Protocol mandates the imposition of trade bans against non-party countries that try to import or export ODSs.²⁸ The Convention on International Trade in Endangered Species of Wildlife and Fauna, or CITES,²⁹ similarly restricts trade with non-parties.³⁰ One might imagine a post-Kyoto regime mandating similar action with respect to non-parties trying to import or export GHGs themselves, products that emit GHGs, and possibly also products that cause emissions of GHGs when they are manufactured.³¹

As with the “carrot” approach, there are problems that one can envision arising if one were to import the Montreal Protocol’s trade “stick” to the climate change context. First, the threat of sanctions that might induce a developing country to enter into the treaty regime might not work for a country with developed economies. Insofar as developing and developed countries have vastly different economies and economic interests, one might have to craft sanctions that would be effective on a more individualized basis.

Second, it would likely be harder to enforce trade bans with respect to GHGs than with respect to ODSs. The Montreal Protocol bans trade in ODSs with non-parties, and the number of potential products is fairly limited. Consider, in contrast, the broader economic swath, and range of products, implicated by GHG trade sanctions. The list of substances potentially subject to post-Kyoto trade restrictions could be sizeable indeed. And the larger number of products that may run afoul of GHG trade sanctions will make it more costly and challenging for customs enforcement agents to enforce the GHG sanctions.³²

Third, consider the consistency of trade restrictions under an international environmental law treaty with the General Agreement on

²⁸ See *supra* text accompanying note 19.

²⁹ Convention of International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, art. II, 27 U.S.T. 1087, 993 U.N.T.S. 243, 12 I.L.M. 1085 (entered into force July 1, 1975).

³⁰ See generally The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 28 I.L.M. 649 (1989) (also provides for non-party trade restrictions); Robert Hausman & Durwood Zaelke, *Trade, Environment, and Sustainable Development: A Primer*, 15 HASTINGS INT’L & COMP. L. REV. 535, 580-84 (1992).

³¹ The effectiveness of such measures is subject to question. See, e.g., Chris Wold, *Multilateral Environmental Agreements and the GATT: Conflict and Resolution?*, 26 ENVTL. L. 841, 844 & n.8 (1996) (noting that United Nations Environment Programme had commissioned investigations into “economic efficiency” of such regimes and also into their consistency with the GATT regime).

³² Cf. Bruce Zagaris & David R. Stepp, *Criminal and Quasi-Criminal Customs Enforcement among the U.S., Canada and Mexico*, 2 IND. INT’L & COMP. L. REV. 337, 376 (1992) (noting difficulties in, and failures of, CITES enforcement).

Tariffs and Trade (“GATT”) international trade regime. GATT Article III generally prohibits trade restrictions that discriminate against products from one country in favor of products from other countries or products produced domestically.³³ Article XX provides for limited exceptions to that rule. Pertinent for environmental regulation are the exceptions provided for measures “necessary to protect human . . . health”³⁴ as well as measures “relating to the conservation of living and non-living exhaustible natural resources.”³⁵

No World Trade Organization case has yet tested the validity of the Montreal Protocol (or CITES or any other international environmental treaty regime) trade restriction provisions.³⁶ At the time they were drafted, a GATT legal expert was consulted and indicated that the Montreal Protocol sanctions were consistent with GATT requirements.³⁷ The measure, however, has never been challenged before the WTO or the Appellate Body.

In contrast, there are several reasons to expect a challenge with respect to GHG treaty-approved trade sanctions (“GHG trade sanctions”). As discussed above, GHGs implicate a far broader swath of the world’s economy, and of most country’s economies,³⁸ than do ODSs. This means, first, that it is more likely for outlier countries to run afoul of GHG trade sanctions than ODS trade sanctions. This may especially (though not necessarily) be the case for developed countries which, as discussed above, were not outliers with respect to the ODS treaty regime.³⁹ Second, the broader scope of the economy resting upon GHG emissions also means that there is likely to be more pressure brought to bear on outlier countries to pursue a WTO challenge by those economic actors whose trade and livelihoods are infringed by GHG trade sanctions.

³³ See Agreement Establishing the World Trade Organization, art III, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments — Results of the Uruguay Round, 33 I.L.M. 81 (1994).

³⁴ General Agreement on Tariffs and Trade art. XX(b), Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereafter GATT]; GATT, Annex, art. XXI. GATT 1947 is incorporated into GATT 1994. See General Agreement on Tariffs and Trade 1994 art. 1(a), Apr. 15, 1994, 33 I.L.M. 1154 (incorporating all provisions from GATT 1947 into GATT 1994).

³⁵ *Id.* art. XX(g).

³⁶ See, e.g., Sabrina Safrin, *Treaties in Collision? The Biosafety Protocol and the World Trade Organization Agreements*, 96 AM. J. INT’L L. 606, 623-24 (2002).

³⁷ See Hausman & Zaelke, *supra* note 30, at 580 (“A legal expert from the GATT Secretariat advised the Protocol’s negotiators that these measures would be compatible with the GATT by virtue of article XX’s exceptions because the conditions present in the party nations would be substantially different from those in non-party nations — allowing the parties to draw non-arbitrary distinctions between products from party nations and non-party nations.”).

³⁸ See *supra* pp. 3-5.

³⁹ See *supra* p. 4.

If GHG sanctions are challenged before the WTO, would they survive? The question of course depends upon the final form of the GHG sanctions. In any event, it raises a myriad of issues beyond the scope of this Essay.⁴⁰ For the present, I will offer some preliminary thoughts on what will be one pressing issue: the question of whether GHG sanctions fulfill any “nexus” requirement that arises under GATT Article XX. In its 1998 *Shrimp-Turtle* decision,⁴¹ the WTO Appellate Body explained that it did not need to “pass upon the question of whether there is an implied jurisdictional limitation in Article XX(g), and if so, the nature or extent of that limitation.”⁴² Such an inquiry was not necessary because the United States legislation at issue sought to protect sea turtles in waters, at least *some* of which lay within United States jurisdiction. The Appellate Body explained, “there is a sufficient nexus between the migratory and endangered marine populations involved and the United States for purposes of Article XX(g).”⁴³ Some commentators have interpreted this language to mean that Article XX requires such a nexus for a national measure to survive Article XX review.⁴⁴ Assuming that the nexus requirement is an accurate interpretation of Article XX,⁴⁵ would a GHG trade sanction regime satisfy the nexus requirement? One can arrive at an affirmative answer to this question by reasoning that, insofar as GHGs are global pollutants, the nexus requirement is met *per se*. In other words, since the source of a GHG emission is irrelevant to its effect, the notion of a nexus between the regulating country and the harm must always be met.

This reasoning may be somewhat facile, however. Consider that, taken to its logical extreme, this would mean that the relevant nexus would be satisfied any time any country sought to regulate a global pollutant, whether or not it did so under the guise of an international treaty regime. That result would afford considerable power to interfere with other countries’ sovereign rights. Perhaps this result could be avoided by relying upon an international

⁴⁰ Tracey Epps and Andrew Green address some of these questions in their contribution to this Symposium.

⁴¹ Appellate Body Report, *United States — Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R (Oct. 12, 1998), 38 I.L.M. 118 (1999).

⁴² *Id.* ¶ 133.

⁴³ *Id.*

⁴⁴ See, e.g., Nancy L. Perkins, Introductory Note, *World Trade Organization: United States — Import Prohibition of Certain Shrimp and Shrimp Products*, 38 I.L.M. 118, 119 (1999); Patricia Isela Hansen, *Transparency, Standards Of Review, and the Use of Trade Measures to Protect the Global Environment*, 39 VA. J. INT’L L. 1017, 1057 (1999).

⁴⁵ See Howard F. Chang, *Environmental Trade Measures, The Shrimp-Turtle Rulings, and the Ordinary Meaning of the Text of the GATT*, 8 CHAP. L. REV. 25, 36 (2005); Howard F. Chang, *Toward a Greener GATT: Environmental Trade Measures and the Shrimp-Turtle Case*, 74 S. CAL. L. REV. 31, 35 (2000) (arguing that nexus requirement “would be inconsistent with the Appellate Body’s emphasis on the text of Article XX”).

treaty regime entered into by the vast majority of nations.

A distinct approach to the nexus requirement might look more closely not at the global nature of the pollutant, but at the nexus between the regulating country and the harm that might result absent regulation. It is generally understood that emissions from the countries of the global North are likely to cause harm that will be felt disproportionately in the global South.⁴⁶ Under this reasoning, countries facing particular harm from global warming – e.g., countries from the global South – would have greater freedom to impose sanctions upon outlier countries.

Another possibility is that a failure to comply with a GHG regime might one day be seen as a violation of customary international law. In other words, the requirement that nations take action with respect to global warming might be assimilated into customary international law. But there is a feedback loop here: the greater the number of outliers, the less likely it is that a customary international law requirement may arise.⁴⁷ Once again, the existence of outliers serves to frustrate the global goal.

CONCLUSION

In this Essay, I have argued that the challenge of climate change differs from many other global environmental problems, in that a successful strategy requires near unanimous participation by nations. However, the very facts that make it more important to limit the number of outliers also create an incentive for countries to threaten to be outliers in order to extract rents. Developing strategies to reduce the incentive for countries to threaten outlier status and to deal effectively with outliers is thus of paramount importance. At the same time, however, developing such strategies is likely to prove quite difficult.

⁴⁶ See, e.g., Sunstein, *supra* note 23, at 1678-90 (discussing mismatch between those who would suffer from global warming as opposed to those who would suffer by virtue of international regime that controlled greenhouse gas emissions).

⁴⁷ Even if there were such a requirement, it is unclear what form it would take or what the result of violating it would be. Cf., e.g., *Beanal v. Freeport McMoran, Inc.*, 197 F.3d 161, 167 & n.6 (5th Cir. 1999) (rejecting argument that there was right to healthful environment at customary international law, in part on ground that precise contours of any such obligation remained entirely unclear).