FIVE "GS":
LESSONS FROM WORLD TRADE FOR GOVERNING GLOBAL CLIMATE.

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ABSTRACT:
In taking the first steps toward a global climate regime, leading nations can learn from the experience of how the global trading regime built confidence in a self-regulating system. The GATT/WTO system built on a small *group* of states who, through a *general agreement*, were able to *gear up* domestic action over a *generation.* The advantages of this approach are that it does not pose a direct challenge to national sovereignty. Instead, it coordinates the work of states in a way that respects a diversity of local governance, and has a greater chance of getting buy-in from the key players. The challenges of such an approach are that it does not guarantee fast domestic action, that many smaller states will feel left out of the process, and that the transition into the system for many of these states may be difficult. Lastly, as with the trade regime, it must overcome the biggest challenge for global governance in today's world: how to *graduate* nations when they emerge from being developing nations into industrialized ones.

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I - INTRODUCTION

Reversing the greenhouse gas (GHG) emissions of the world's $60 trillion economy will be among the most complex international governance challenges ever – rivaling the forty year effort to dramatically reduce tariffs and establish a rules-based trading system. Given that nearly 15 years have passed since the completion of the last global trade pact, it is easy to forget that the World Trade Organization stands tall among the great successes of global governance, precisely because it was so difficult to accomplish. A counterpart twin tower – a global system to address climate change – can mimic the trade regime's most successful governance principles, and learn from its structural weaknesses. Perhaps more important, as this volume's theme suggests, the two regimes need to work diligently to avoid colliding with one another. Indeed, it would be both unfortunate and ironic if a global climate regime only could succeed at the expense of the global trade regime – or vice versa. What lessons should the climate regime learn from the trade regime? It may be helpful to break the issue down into five core questions for any attempt to govern: Who governs? What is the structure of the basic governing agreement? Where is it "binding"? When can we expect the agreement to take effect? How does it bring new nations in? For each question, preliminary answers can be found in what we might think of as the five "G's" that should govern climate change. By looking to the lessons from the WTO, I try to make the case for a climate regime that:

1. starts with a *group* of major emitters, which together
2. forge a *general agreement* to tackle the issue, one that
3. *gears up* nations' domestic action and that
4. organizes itself around a *generational* goal that
5. allows for the *graduation* of developing countries into full commitments.

In a few of these areas, such an approach can provide a roadmap to resolving potential conflicts between the two regimes.

II – WHO GOVERNS? THE RIGHT *GROUP* OF NATIONS, MATCHED TO THE CHALLENGE.

International regimes need to be designed to their purposes. Are they debating forums? Are they negotiated agreements that govern in particular fields? Trade and climate change have both benefited considerably from both kinds of organizations. This chapter assumes that concerned nations are moving toward a governing regime for GHG emissions, and that they need mechanisms equipped to address that challenge.

Since the formation of the UN system, two bodies have existed along side one another on the issue of global trade, one for discourse, the other for governance. The UN Conference on Trade and Development (UNCTAD) has largely functioned as a forum for assessing the twin goals and accomplishments of trade and development. Alongside it, the General Agreement on Tariffs and Trade (GATT) and its successor the World Trade Organization (WTO) have been the governing body for global trade. Though some might find it odd to point to the WTO as a successful model of international governance (especially given recent difficulties in completing the Doha Round of multilateral negotiations), it is easy to forget how significant its contributions have been to both international cooperation and to economic growth over the last sixty years.[2] The GATT/WTO system began as both a smaller (in terms of membership) and more ambitious (in terms of governance) world body than the UNCTAD when a group of the right countries decided to work together.

Lesson learned: size matters. When it comes to global governance, it was and is easier to get things done with a smaller number of the right countries. The GATT process was managed by the biggest and most technically competent trade players – the co-called "Quad" of the U.S., Japan, Canada and Europe. Occasionally, when formal negotiations bogged down, the Group of Seven (and later Group of Eight) would weigh in to give the talks a boost, such as in 1978 and 2001 when the leaders themselves helped spur

[2] That success was apparent twenty-five years ago, when the GATT system was held up as the model for global governance – including among "realist" theorists of international relations, who tend to hold a dim view for institutions. See John Ruggie, "International regimes, transactions, and change: embedded liberalism in the postwar economic order," in *International Regimes edited by* Stephen Krasner (Ithaca: Cornell University Press, 1983), p. 195-231. While Ruggie would not classify himself as a realist, his general argument was accepted by realists such as Krasner. In the real world of politics, the GATT and WTO's acceptance among American political conservatives – including their willingness to accept binding decisions by international tribunals – is striking.

breakthroughs leading, respectively, to the close of the Tokyo Round and the launch of the Doha Round.

As the WTO's membership grew in size over its first five decades, negotiations became more unwieldy. The greatest number of new entrants came from developing countries. After an initial sorting out, the lesson of size was relearned: a new Quad was established, where India and Brazil joined the U.S. and EU as the principal negotiators.

Further complicating matters, over the years, a plethora of regional and bilateral agreements have advanced trade liberalization world-wide. The EU has led the pack in depth of integration and effectiveness, but the last forty years have seen the rise of a South American commercial union (MERCOSUR), the North American Free Trade Agreement, the Southern African Customs Union (SACU), and the Association of Southeast Asian Nations Free Trade Area. Of course, there is considerable debate about whether this spaghetti soup of different agreements has been good for the global trading system. Supporters of the three way street (i.e. global, regional and bilateral), have found "competitive liberalization" to be a positive force. Regional agreements help drive reluctant countries to the global negotiations for fear of missing gains from trade. Opponents see the growing complexity and difficulty of multiple trade talks to exceed the negotiating capacity of diplomats and the political will of elected officials. Complexity is unavoidable, to be sure. That the complexity has been at all manageable is due, in part, to the bedrock of a rules-based system that was established sixty years ago, and the committed leadership of a relatively small number of players.

So what does this mean for the climate change regime? The half-true cliché about climate change is that it is a global problem that requires a global solution. Still, moving forward does not require all countries to be part of the solution – at least not at first. The UN-sponsored Kyoto Protocol process was slowed down by trying to conduct a global research initiative on the nature of the challenge (largely led by the UN's Intergovernmental Panel on Climate Change or IPCC) while also debating who was responsible for addressing the challenge and negotiating an agreement among 140 nations under the UN's Framework Convention on Climate Change (UNFCCC). Though data, debate and dialogue were critical to convincing these nations of the challenge at hand, the negotiations over what to do about it became rancorous and left many questions unanswered. They gave way to several more years of disputed talks on how to implement the agreement, a lengthy and unsuccessful

ratification discussion in the U.S., and uninspiring results on the ground – even from enthusiastic backers like the EU and Japan, which face an uphill battle to in meeting their 2008–12 GHG emission targets. Meanwhile, the main developing country bloc is an eclectic group, including nations ranging from giant powerhouses such as Brazil, China, and India to small, poor, landlocked nations in Africa to small island nations. With the exception of these island countries – who literally could get washed away if there is no progress – most have been quite comfortable with the UN's penchant for discussion, so long as those discussions don't lead to binding obligations for their own economies.

In short, we have a potentially large problem coupled with a complicated, bureaucratic and torpid negotiating mechanism. If size matters when setting up a governing regime, then the climate system needs to separate the broad and inclusive dialogue about the challenge from the more narrow and detailed challenge of negotiating an agreement. The latter task is best taken by a smaller group of nations.[3]

The great bulk of GHG emissions likely to spew into the atmosphere over the next three decades – not to mention the economic and technical capacity to reverse course – can be found in fewer than two dozen countries. The creation of smaller groupings – such as a Major Emitters (E-8) – could help to address these challenges.[4] The United States, European Union, China, Russia, Japan and India are the top six emitters of GHGs, and South Africa and Brazil rank 10th and 13th, respectively, but their contributions are significant in representing their regions – especially Brazil, where protecting the Amazon is a major priority in storing carbon. This same logic lies behind the major emitters meeting that President Bush hosted in September 2007, which adds to my list of eight and included

[3] One commentator questioned whether the problem of protecting the earth's climate is analogous to that of expanding free trade. As a general matter, most analysts would agree that protecting the climate is a non-excludable public good, while free trade has been less so, since only the participants in a trading regime enjoy the benefits. Some might even question whether free trade is a public good, though cf. Charles P. Kindleberger, **"**International Public Goods without International Government," *The American Economic Review* 1, no. 76, 1986, p. 2-13. Indeed, a strong argument can be made that both a climate regime and a trade regime offer both excludable and non-excludable public goods. In trade, the excludable public goods are the lower tariffs and trade barriers offered to the members of the regime; the non-excludable good is the stable international economic order that has economic and political benefits for all countries. In climate change, the non-excludable good would be climate protection. The excludable good would be an emissions trading regime. Many thanks to Lael Brainard for helping clarify this distinction.

[4] Todd Stern and William Antholis, "Creating an E-8", *The American Interest,* vol. 2:3 (January 2007), pg. 43-48.

Canada (7th), South Korea (8th), Mexico (9th), Indonesia (12th), and Australia (15th). Together, these thirteen countries produce more than 80 percent of all GHGs.

Keeping the core group of negotiating nations small – and occasionally involving heads of state in the conversations – has one other signal virtue. The same set of players is at the center of WTO negotiations. As the two regimes begin to bump into each other on a range of issues – from border-surcharges to energy subsidies – resolution can be reached more easily if the same players from both regimes are talking. That is especially true if heads of state themselves are aware of the need to coordinate, and the perils of the failure to do so.

III - WHAT IS THE FORM OF GOVERNANCE? A *GENERAL* AGREEMENT.

One of the keys to the GATT/WTO's success is that it did not start as a global body, but rather as a less formal arrangement. If this distinction seems unimportant, keep in mind that the WTO started not as the successful WTO, or even the successful GATT, but as the failed International Trade Organization – which was envisioned at Bretton Woods along with the World Bank and the International Monetary Fund and whose treaty died on the U.S. Senate floor, because two thirds of that august body was not prepared to hand over highly political decisions regarding trade policy to an international organization. The negotiators went back to the drawing board. Only after the International Trade Organization's high profile failure did they come up with the *General* Agreement on Tariffs and Trade (GATT).

The core lesson: do not start with an international treaty organization responsible for data, debate, and enforcing compliance. And when it comes to enforcement, build confidence through general agreements, which are "binding" in that they synchronize and increase the ambition of domestic action that states see as being in their best interest. For nearly fifty years, the GATT was able to negotiate and adjudicate agreements that bound nations in a way that less directly called national sovereignty into question. Each participating nation pledged to cut tariffs and other trade barriers in a coordinated way. Countries could choose what counted as significant reductions, and they would often trade fast action in one area for slow action in another. Once commitments were made, they had to be enforced. An adjudicative body was established to resolve trade disputes.

Technically speaking, the adjudicative trade body did not enforce the treaty. Member nations did. Countries monitored one another's behavior – including the most economically

powerful trading nations. When a plaintiff country had a complaint, it brought it to the GATT/WTO's dispute resolution mechanism. If a defendant country lost a dispute, it had a choice: change its domestic law, or allow a retaliatory tariff or other action by the plaintiff country. In this way, all countries felt the system to be self-enforcing. All of this gave negotiators the ability to say convincingly to their political masters – including general publics – that the agreement was not a sacrifice of sovereignty.

The fear that nations will lose their sovereignty similarly has plagued the climate change discussions. If the U.S. had ratified the Kyoto Protocol, it would have been a "binding treaty". Opponents of Kyoto claimed that the U.S. would have been liable for some set of sanctions that would be administered and enforced by the mandates of the UN. America's sovereignty over its energy future – and by extension, its national security – would be subject to external intervention. As a political matter, few American politicians want to be told that they must do something, or else face sanction by a global body.

Whether or not those concerns have any factual merit, "sovereignty hawk" nations around the world (particularly in the United States and much of the developing world) have feared Kyoto-style obligations. Political leaders in the U.S., China, India and Brazil also have refused to sacrifice their ability to control their economic destinies to a global energy regime – at least, not give up that sovereignty in a way that diverges from national interest. Only the European Union – whose members have grown comfortable sharing or even pooling their sovereignty – seems to like the idea of using an international agreement to compel domestic action.

There is another way, of course. Building on the successful GATT model, negotiators could seek a General Agreement to Reduce Emissions (GARE). Like the GATT, the GARE would effectively link domestic action with an international agreement.[5] It would avoid moving too quickly to a full blown international institution, such as a World Environment Organization. If a "treaty" suggests that nations are tying their fates to one another, "general agreements" suggest that nations acknowledge one another's interdependence, but also their autonomy. As they build confidence in their ability to work together under such agreements, they may become more willing to strengthen the regime.

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[5] See the first suggestion for such an approach in Todd Stern and William Antholis, "A Changing Climate: The Road Ahead for the United States," *The Washington Quarterly,* Vol 31:1 (Winter 2007-2008), p. 175-188.

A GARE system could be built on the E8 or major emitters group outlined above. A core set of the most important countries could start the process, and this ultimately would be compatible with regional and bilateral agreements. On an annual basis, leaders of this group could meet at the summit level to evaluate progress and to help give a boost to the ongoing negotiations.

What then of the UN? An important role remains for the UN in continuing to sponsor the broader climate talks as a forum for helping nations share information and best practices with one another. The UN also has been path-breaking in supporting the critical work of the Intergovernmental Panel on Climate Change -- the scientific body that has helped establish that climate change is real, and that human action is contributing dramatically. Both these functions help support the negotiation and conflict resolution functions of a binding agreement. Eventually, once confidence is built in a self-enforcing agreement, the UN can be brought in to maintain the relationships.

IV - WHERE DOES IT BIND NATIONS? IT *GEARS UP* DOMESTIC STEPS NATIONS ARE WILLING TO TAKE.

Ask a State Department lawyer, and she will tell you that there is no difference between a Treaty, a Congressional-Executive Agreement, and a Presidential bilateral statement with a foreign head of state. The United States is honor-bound to live up to its agreements, whatever form they take. If the agreement includes consequences for violation, the U.S. is obligated to accept those. Yet in practice, nations (including the U.S.) frequently violate or ignore agreements – and either suffer the consequences or do not. Though the UN Charter provides some instances when states may be physically compelled to act in accord with violating international norms, in practice this rarely is the case for non-military agreements.

What makes some international agreements binding? What makes some "bindings" succeed and others fail? There are at least three ways to discuss the success of binding agreements. First, some pacts succeed because states feel no need to violate them. These agreements succeed because they create a structure that allows states to do what they would prefer to do, but might not do because they fear non-compliance by others. By giving states confidence that other states will live up to their end of the bargain, agreements allow states

to do what is in their best interest. This is what de Tocqueville called "self-interest rightly understood."

Second, some agreements succeed because nations realize, upon violating an agreement, that the net costs of doing so are not worth it. This is usually the case when nations contemplate sanctions from an agreement – and the political impact those sanctions could have domestically and internationally – and choose to get right by the law. Third and last, agreements work when nations suffer appropriate consequences for their violations, and both the violating nation and the nation that applies the sanction feels the consequences to be appropriate and adequate.

In theory, all three cases do not require an outside enforcing body. It is governance without government, or what the great international relations theorist Hedley Bull called "the efficacy of international law" which "depend[s] on measures of self-help."[6] The GATT/WTO succeeded because, for its first fifty years, all three forms of self-help worked. First, the commitments were sufficiently robust that countries could plan to cut trade barriers – that is, gear up their commitment – knowing that counterpart nations would do the same. GATT/WTO negotiations helped nations to cut their own trade barriers further than they otherwise would. In return, counterpart nations also lowered their barriers. Consumers benefited from cheaper imports, and exporters benefited from wider markets. Nations understood the tough domestic challenges other nations felt in trying to lower trade barriers.

This worked in practice, particularly when Congress signaled its willingness to lower barriers in specific product areas in advance of a negotiation. Making a priority of domestic action is actually enshrined in the domestic legal architecture of American trade diplomacy. From an American perspective, one reason that the United States is more easily bound by trade negotiations is that it uses Congressional-Executive Agreements, which require passing relatively detailed trade promotion authority in advance of negotiations. As a result, the trading system aspired toward laissez-faire goals as a general matter across national boundaries, but also accepted that national legislation was central to moving forward. Though laissez-faire remained a long-term goal, no single round or negotiation ever proposed to complete the process and each successive round depended on national action.

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[6] Hedley Bull, *The Anarchical Society* (Columbia University Press, 1977), p. 131, and Ch. 6 generally.

The system recognized the domestic political and economic constraints that nations face in moving toward a globally integrated goal.[7]

Second, the GATT's enforcement system sustained national cuts without appearing to undermine sovereignty. When a nation was found to be in violation of a trade rule, it had a choice: change its trade practice, or accept reciprocal trade sanctions on other goods. Even under trying circumstances, nations were willing to go back and change domestic law in order to come into compliance. In these instances, countries have avoided the imposition of sanctions, and they have been unwilling to sustain extended tit-for-tat sanctions. Third, in those few cases where sanctions have been applied, nations have generally been willing to accept them without counter-sanctions. Rather than starting trade wars, the GATT/WTO system has prevented them.

A similar logic can guide a GARE: countries can choose domestically to cut their GHG emissions in the way that makes most sense, given their domestic constraints. Rather than prioritize a "treaty" as a goal in and of itself, a GARE would start with domestic legislation and help nations strengthen – that is, gear up – their ambition.

Nearly all nations recognize that cleaner energy production and the protection of forests are a worthwhile goals in themselves, and that they should act to prevent irreversible climate change. Almost all nations have taken some steps in this regard. And a diversity of approaches is appropriate. Countries use energy and regulate pollution very differently, and they also differ widely in their capacity to track emissions and enforce compliance. The United States and China, for instance, are particularly dependent on carbon intensive industries such as coal. Brazil, conversely, has huge sources of renewable resources such as hydropower and bio-fuels, but also is struggling to save its rain forest – one of the great carbon reserves and "sinks" in the world. It is clear that a one-size fits all approach will not work.

The threefold challenge for the international negotiations is, first, how to get countries to take reciprocal domestic actions; second, how to structure compliance so that it reinforces or returns states to mutual action; and third, how to establish sanctions that nations can choose to accept as appropriate. Thus, first, a GARE should begin in domestic

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[7] See Ruggie, "International regimes, transactions, and change: embedded liberalism in the postwar economic order.".

action, and use the negotiating process to gear up the ambition of states. States are "bound" to follow thru on actions they are likely to take on their own.[8] One way to make sure that that is the case is to legislate first and negotiate later. In the American context, GARE would take advantage of Congressional-Executive agreements, and avoid the treaty process. In a GARE, the domestic political hurdle to passage is whether to pass and implement domestic law. With the framework of such a domestic law in place, the international negotiations can focus on the level of ambition that all countries take, so as to help ratchet up ambition. The diplomatic challenge becomes whether that level of commitment is acceptable to counterpart nations.[9]

This is in slight, but significant, contrast to the Kyoto Protocol's approach of binding a state to an international organization's decision-making.[10] For instance, in the United States, the treaty process not only requires the supermajority in one house of Congress, it also requires passage of implementing legislation in both houses. Agreements, by contrast, require majorities in both houses – first for authorization to negotiate, second for the final agreement itself. The authorization to negotiate – so-called "Fast Track" in trade talks – gives negotiators a road-map for what can be negotiated, and as a result begins to involve members of congress in the talks themselves.[11] In a real sense, for the United States a GARE would start with domestic action, and seek to ratchet it upward, in sync with other nations.

Second, a GARE would need to be "binding" by addressing non-compliance. As with the early GATT system, it should include avenues for self-enforced sanctions by nations. Exactly how nations will self-enforce an agreement is still being debated. Some

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[8] For an overview of what a domestic and international approach for the U.S. might look like, see Stern and Antholis, "A Changing Climate."

[9] One model example for this would be the EU's proposal to unilaterally cut their emissions by 20% below 1990 levels in the post-Kyoto commitment period, and to extend those cuts to 30% if an international agreement is reached.

[10] One advantage by not being a treaty, the GARE would avoid another major drawback of Kyoto: it would not need a two-thirds majority in the United States Senate, a minefield where countless treaties have gone to die. Indeed, by the treaty process, internationally agreed emissions targets and timetables the policies and regulations needed to comply with them become deeply enshrined in domestic law as they have been passed by a supermajority in the Senate. By contrast, the GARE would only require simple majorities in both the House and the Senate, putting the domestic legislation horse in front of the global treaty cart – just the way it should be. See both Stern and Antholis, "The Road Ahead," and also Nigel Purvis, "Treat Climate Like Trade: The Case for Climate Protection Authority" (unpublished policy brief manuscript).

[11] See William Antholis and Strobe Talbott, "Tackling Trade and Climate Change: Leadership on the Home Front of Foreign Policy," in Michael O'Hanlon, ed., *Opportunity 08* (Brookings Institution Press, 2007), p. 63-67.

analysts have called for a common global carbon tax. Others have called for a "pledge and review" process, in which nations pledge to reduce GHGs, and then review one another's progress on a regular basis. There may be merit to both kinds of agreements. Yet neither one, on its face, appears to encourage the gearing up of domestic commitments, while also discouraging nations from breaking those commitments by imposing sanctions that deny nations the benefits of the agreement.[12]

One approach, in theory, does accomplish these goals: international trading of GHG emissions. As a domestic matter, the EU has already adopted emissions trading, and the United States is considering such legislation, having successfully pioneered a sulfur dioxide system under George Herbert Walker Bush in the late 1980s. Though there have been some initial problems with the EU's system, it has now done largely what it intended to do: put a price on carbon emissions, and create incentives for the private sector to find emissions cuts where most efficient to do so.

International emissions trading would extend these advantages across national borders. The United States insisted on GHG emissions trading at Kyoto, and for nearly two years afterwards haggled with the European Union over the rules. Ironically enough, once the United States walked away from emissions trading during the George W. Bush presidency, the EU began to aggressively pursue international emissions trading.

Trading can happen in two forms – in either a closed or an open system. In a closed system, two different national economies agree that total emissions in both economies will not exceed a fixed amount. As long as both nations comply in the aggregate, permits would remain of equal value and freely tradable between countries. If one country violates its emissions limits, however, the permits in that country become less valuable. In an open system, nations are responsible only for their own reductions, though investors or companies may seek certifiable reductions in other countries, and simply be free to invest in such reductions.[13]

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[12] For a useful discussion on this, see Jonathan Wiener, "Incentives and Meta-Architecture," in Joseph Aldy and Robert Stavins, *Architectures for Agreement: Addressing Global Climate Change in a Post-Kyoto World,* (Cambridge University Press, 2007), especially p. 74-76.

[13] As mentioned earlier, establishing an emissions trading system would move from the non-excludable public good system of climate protection to a system with excludable benefits: access to trading with other parties, with the enhanced efficiency and reduced compliance costs this implies. See fn. 3, above.

Both approaches have strengths and weaknesses from a "compliance as self-help" standpoint. The strength of the closed system is that it raises the stakes for compliance – and the penalties for non-compliance. In such a system, it is highly advantageous for nations to make broad progress on their GARE reduction commitments, as it would either force nations to seek permits from firms that have successfully cut GHG emissions in other nations, or provide incentives for nations to have the most number of such firms in their own territory. If it were possible to set up such a system, the incentives for success should be high. Yet the cost of failure should also be high, as less successful countries would be forced to pay dearly for emissions permits across borders. In contrast an open system would create incentives for investing across borders. That said, it would provide few downsides if nations failed to comply with the international agreement – other than the greater risk of failing to stabilize the climate.

The joint challenges for a GARE that relied on trading for compliance would be to determine whether a member country seeking to join had proposed a strong enough target, and whether preexisting members had come close enough to their previous commitments in each successive round of negotiations. The first task would need to fall to member states. The second task could fall to a joint review panel established by GARE countries. If a country failed to meet its target by reducing its emissions or buying permits, it would forfeit the right to continue in the GARE in future periods.[14]

Third, establishing a successful binding agreement requires addressing how to deal with those who refuse to join. A growing chorus is raising the idea of using actual trade protections – such as demanding that imported goods from countries that have not adopted sufficient emission reductions would need to purchase emissions permits equivalent to their carbon footprints. The idea first arose in countries such as France, directed at the United States for not joining the Kyoto Protocol. Now that the United States is contemplating joining a post-Kyoto system, Americans are considering applying the same approach to developing countries that do not take binding targets. These "border permits" would be a way of placing some sanction on nations that refuse to join or comply with an emissions agreement – and thereby help share the cost of compliance.

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[14] See Stern and Antholis, "A Changing Climate," p. 183.

This has the potential both to be a constructive way to think through the problem, but also to undermine the trade regime, the climate regime, or both. The constructive element of such an approach would be to provide real leverage for nations to actually transfer the costs of non-compliance in an effort to address a global public good – something for which the trade regime allows exemptions.

The potential disruptive element is that all nations do not recognize the public good in the same way, let alone the means to address it. Developing countries, which likely would be the targets of such a system, are almost certain to claim that a) this is a violation of the WTO's rules against non-discrimination, and b) that it does not meet the standard for environmental exemption for those rules. The "global public good standard", developing countries would likely argue, is not met because the current international climate treaty already embodies how the international community defines the climate challenge. That treaty, they will claim, explicitly demands that industrial nations act first, and that developing countries are exempt from binding targets. Because the standing global consensus is that industrial nations must act first, any effort to use the trade regime to shift that burden would be seen as illegitimate.

So if industrial countries persist in imposing such tariffs in order to build a more effective climate regime, they might undermine the WTO – regardless of which way the dispute settlement system determines the merits of the case. If a developing country claimed that this was a violation of WTO rules but lost the dispute, the victory for industrial countries would come as an additional blow to developing nations, on the heels of the WTO's long-stalled Doha development round, which has failed to produce market openings to industrial markets. Conversely, a victory for developing countries might further undermine public support for the WTO within industrial nations – which continues to wane. Likewise, the effect on the climate regime could be enervating. Emerging market players such as Brazil, China and India will feel that they are being forced into a climate agreement by being denied access to an international trading regime that they have worked hard to enter as full participants. And industrial countries might be less inclined to join the climate regime if border adjustments are found to be illegal vis-à-vis the WTO, because they will feel their competitiveness further eroded.

Avoiding this clash of global governance regimes should be a priority for not only leading nations but also for the heads of both global regimes. It is perhaps the best

argument for the world's leading economies to not treat these issues in isolation from one another, or from broader global economic developments. Indeed, one of the ironies of the spread of democracy has been that those governments have to work so hard to accomplish domestic regulation and, as a result, are often the least inclined to take direction from international organizations. The relatively fragile support for international regimes should not be easily challenged – particularly in the name of establishing other regimes.

V - WHEN CAN WE EXPECT THE NEW CLIMATE REGIME TO TAKE EFFECT? OVER A *GENERATION*.

The idea of extending the enforcement of commitments over time gets at a central element of any governance challenge. One of the great successes of the trade regime was that it built itself gradually. Only after forty-five years of operating did it lead to a treaty organization.

The long-term nature of the climate challenge means that solutions must also be long-term. Today's warmer climate is the result of GHG emissions accumulated over the last half century. Today's emissions add to those historic concentrations, and are already locking in warmer temperatures well past the middle of this century. Little can be done now to stop that warming from happening. So the effort to slow emissions over the next several decades will most affect temperature in the second half of this century.

What is the appropriate long-term goal? The starting point for all climate negotiations, the 1992 Rio Treaty (ratified by the U.S. Senate, and adopted world-wide), included an abstract long-term goal: "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". The Kyoto Protocol was a practical attempt to implement Rio, yet it only set one target – a short term reduction of GHG emissions by industrial nations. This was seen as a first step toward the longer-term goal. But because it lacked any second or third step, it was widely criticized for not getting at the longer-term challenges.

As with the trade regime, the climate regime should keep this long-term focus that was part of Rio's plan and be geared around a portfolio of long-term targets – including concentration levels and global temperature change. As with any law or diplomatic agreement, those targets could be adjusted later as scientific and economic evidence is

collected. But the key is to get some agreement on the long-term goals so that short term steps can be seen in their broader context.

Right now, many scientists believe that dangerous interference with the climate could be avoided if temperature increase is limited to two degrees centigrade. Consensus estimates predict that doing so requires at least stabilizing GHG concentration levels at 550 parts per million (ppm) by 2050.

If the E-8 or a major emitters group adopted 2˚C and 550ppm as global goals – and urged other nations to do the same – countries could then target their short-term and long-term emissions cuts at levels that they felt to be effective and fair steps toward that goal. When diplomats try to negotiate over relatively short-term emissions cuts they would be better able to explain to their political leaders and publics how each short-term stop contributes to a longer-term effort. (Indeed, in the recent proposed Lieberman-Warner climate legislation, a series of emissions cuts are written in, extending out to 2050.) As nations reach their shorter term benchmarks, they could assess how they are doing toward that longer-term goal. Among other things, this will help industrial countries signal to developing countries what they consider to be fair burden-sharing for all nations over a future term, and that it is possible to achieve these marks without hurting economic growth.

Setting targets for temperature increase and gas concentrations can also help politicians, the media, and the public stay focused on the purpose of the undertaking: whether emission cuts are sufficient to slow and eventually stop global warming. Though scientists now overwhelmingly agree that human activities are leading to global warming, new evidence is coming in constantly. The consensus is being affirmed, but also challenged and updated on a nearly daily basis – mostly in the direction of sending more dire warning signals. Some scientists, for instance, now think that stabilization at 450 ppm is needed to prevent two degrees of warming. Of greater concern, 2˚C of warming may not be so safe. Recent research, for instance, finds that the current level of warming is melting the Arctic ice cap faster than had been anticipated, potentially weakening the ice cap's ability to reflect sunlight and cool the planet. If the ice cap were to disappear with less than 2˚C of warming, it could be a tipping point that would lead to a more dramatic and dangerous shock to the earth's climate.

VI - HOW DOES IT BRING NEW NATIONS INTO THE AGREEMENT? IT MUST PROVIDE A PATH FOR *GRADUATION*.

Perhaps the greatest lesson the climate regime can learn from the trade regime is something that the latter has failed, so far, to entirely address: how to bring the developing countries into the regime in a way that acknowledges their development challenge, but also allows them to graduate to full responsibility as their economies grow.

The trading regime is now in the midst of its longest negotiating round in its sixty year history – the so-called WTO Doha development round. One of the main reasons why it has been so difficult to conclude this round is that it is trying to address the regime's core weakness: that the two basic groups – the industrial countries and the developing countries – have differing sets of obligations. The developing countries enjoy "special and differential treatment," which means that they are exempt from the more drastic tariff reductions taken by industrial nations. Not only is the regime asymmetrical, but it is also unclear how any developing nation would graduate to taking on an industrial-strength obligation, when the time was right. Thus, although the addition of these developing countries has been critical to achieving global scope for the organization, it also has added to the complexity of the process – and the current stalemate in negotiations.

As with the global trading system, the developing countries will ultimately need to graduate and become part of the post-Kyoto Protocol climate system. Kyoto was problematic in several regards, but perhaps its biggest drawback was that the developing countries did not commit to cut their GHG emissions – in fact, the treaty actually prevents them from taking a binding target even if they want to do so. Argentina, for instance, tried to take on a binding target in 1998, but it was prevented from doing so by other developing countries.

It certainly makes sense for the developing countries to have different obligations, or obligations that kick in later, given the industrial world's historic responsibility and much greater wealth of the industrialized world, along with the generational nature of the problem. But there is simply no way to solve the climate problem without the active involvement of the developing countries – which, according to current projections, will account for more than 70% of GHG growth in next twenty-five years. Yet these countries show no willingness to accept Kyoto-style targets.

This catch-22 is not just a political problem; it is an economic one that goes to the heart of getting clean energy markets up and running. Most industrial countries are now poised to take near-term and middle-term efforts to cut GHG emissions, which is already leading to some increased investment in clean energy. However, if the world economy is going to cut its carbon emissions by as much as 80%, enormous amounts of capital investment will be required to find transformative, carbon-free sources of energy. The more certain investors feel that the industrial countries will keep seeking ever deeper reductions in GHG emissions, the more likely they will be to commit that kind of capital up front. The key is for the industrial countries to signal their long-term cuts. But they are less likely to do so long as developing country action is not a sure thing. Right now, the developing countries are saying that they will not act, and they are refusing to address the long-term challenge.

How can the international community break out of this box? The effort must begin with the industrial world, by responding realistically to developing country concerns about equity. The developing countries rightfully feel that the rich countries are largely responsible for the problem to date, and probably for the global warming that will take place over the next fifty years. The industrial countries should not dismiss these concerns, particularly because the developing countries, particularly China and India, despite their recent economic gains, still have a nearly unfathomable number of their citizens living in extreme poverty – well over a billion people combined in those two countries alone. In addition to taking seriously efforts to estimate how much the industrial countries have contributed to current GHG concentration levels, these nations should also consider very long-term targets on a per-capita basis.

Second, the industrial countries should appeal to the developing countries' own self-interest. Climate change is most likely to hurt poor countries the worst, accentuating droughts and severe storms, for which these nations are least prepared. Moreover, many of these countries are facing the local air-pollution that comes in the early stages of industrialization, and the health care challenges of clean air and water that could be lessened by early adoption of clean energy technology. Moreover, investing in energy efficiency and clean energy is ultimately cost-effective.

One possible motive for joining a GARE would be the potential to earn emissions trading credits on a sizeable scale. In the near term, this would mean continuing to explore

opportunities to earn emissions reduction credits on a project by project basis. This could potentially build support within the developing countries for adopting country-wide emissions policies, linked to the GARE.

And last, the industrial countries should not be shy about public diplomacy on climate change. Right now, the developing countries do not feel any public pressure to respond to climate change – which is probably not surprising, given the development challenges many of them are facing. Thus, a public diplomacy strategy is needed that stresses each topic noted above – from equity to self-interest to the power of global markets to help transfer technology and capital to developing countries. Of course, all of these efforts require that the real first steps be taken in the industrial world.

VII - CONCLUSION

The political will has begun to develop in the United States and even in a few key developing countries for a global effort to reduce GHG emissions. This public support, however, still remains far from the dramatic shift in consensus needed to establish a full-blown global institution to address the climate challenge. In addition to the costs associated with acting, a core concern is a familiar one in global governance: loss of sovereignty. There is some good reason for this. Even for the most committed nations, the climate change challenge is of such great economic and environmental complexity that few politicians are likely to simply turn over the keys of their national policy-making to an international treaty organization.

In taking the first steps toward a global climate regime, the industrial nations can learn from the experience of how the global trading regime built confidence in a self-regulating system. The GATT/WTO system built on a small group of states that, through a general agreement, were able to gear up domestic action over a generation. The advantages of this approach are that it does not pose a direct challenge to national sovereignty. Instead, it coordinates the work of states in a way that respects the diversity of local governance, and has a greater chance of getting buy-in from the key players. The challenge of such an approach is that it does not guarantee fast domestic action, that many smaller states will feel left out of the process, and that the transition to the system may be difficult for many participating states. Last, as with the trade regime, it must overcome the biggest challenge

for global governance in today's world: how to graduate nations when they emerge from the development process into the industrial world.