



CLIMATE CHANGE, TRADE AND COMPETITIVENESS  
IS A COLLISION INEVITABLE?

---

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

William Antholis<sup>1</sup>  
(DRAFT 2)

**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.

---

Preliminary Draft – Not for citation or public circulation

---

<sup>1</sup> Managing Director, Brookings Institution.

## I - INTRODUCTION

Reversing the greenhouse gas 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 importantly, as this conference’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, who 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 paper assumes that leading nations are moving toward a governing regime for emissions, and that we 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. 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 G-7 (and later G-8) would weigh in to give the talks a boost, such as in 1978 and 2001 when the leaders themselves helped spur breakthroughs leading, respectively, to the close of the Tokyo Round and the launch of the Doha Round.

As the WTO 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, 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, Southern African Customs Union (SACU), and the ASEAN Free Trade Area (AFTA). 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 process was slowed down by trying to both 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 to address the challenge and negotiating an agreement among 140 nations to do so under the UN’s Framework Convention on Climate Change (UNFCCC). While data, debate and dialogue were critical to convincing these nations of the challenge at hand, the negotiation over what to do about it became rancorous and left many questions unanswered. It 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, who face an uphill battle to meet their 2008–12 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 the latter 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.

The great bulk of 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 less than two dozen countries. The creation of smaller groupings – such as an E8 – could help to address these challenges.<sup>2</sup> The United States, European Union, China, Russia, Japan and India are the top six emitters of greenhouse gases, and South Africa and Brazil rank 10th and 13th, respectively, but whose 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 Canada (7<sup>th</sup>), South Korea (8<sup>th</sup>), Mexico (9<sup>th</sup>), Indonesia (12<sup>th</sup>), and Australia (15<sup>th</sup>). Together, these thirteen countries produce more than 80 percent of all greenhouse gases.

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 are 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 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 General Agreement on Tariffs and Trade, but as the failed International Trade Organization. The ITO was envisioned at Breton Woods along with the World Bank and the International Monetary Fund. The ITO treaty died on the Senate floor, since 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 ITO's high

---

<sup>2</sup> Todd Stern and William Antholis, "Creating an E-8", *The American Interest*, January 2007.

profile failure did they come up with a 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. When it comes to the latter, 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 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. 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 Kyoto, the treaty 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.<sup>3</sup> 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.

A GARE system could be built on the E8 or major emitters group outlined above. A core set of 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 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 of 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 there is no difference between a Treaty, a Congressional-Executive Agreement, or 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

---

<sup>3</sup> 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*, Winter 2007-2008, Vol 31:1, p. 175-188.

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. While 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 bind? 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 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. Lastly, 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.”<sup>4</sup> 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.

---

<sup>4</sup> See Hedley Bull, *The Anarchical Society* (New York: Columbia University Press, 1977), p. 131, and Ch. 6 generally.



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 into 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 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* ends as a general matter across national boundaries, but also accepted that national legislation was central to moving forward. While *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. The system recognized the domestic political and economic constraints that nations face in moving toward a globally integrated goal.<sup>5</sup>

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 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 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 protection of forests is a worthwhile goal in itself, and that they should act to prevent irreversible climate change.

---

<sup>5</sup> Perhaps the best description of the evolution of this system remains John Ruggie, “International regimes, transactions, and change: embedded liberalism in the postwar economic order,” in Stephen Krasner, ed., *International Regimes* (Ithaca: Cornell University Press, 1983), p. 195-231.

Almost all nations have taken some steps in this regard. And diversity of approaches is appropriate. Countries use energy and regulate pollution so 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, on the other hand, has huge sources of renewable resources such as hydro and bio-fuels, but also is struggling to save its 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 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; third, how to establish sanctions that nations can choose to accept as appropriate.

First, a GARE should begin in domestic 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.<sup>6</sup> One way to make sure that that is the case is to legislate first, 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 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

This is in slight, but significant, contrast to the Kyoto approach of binding oneself to an international organization’s decision-making.<sup>7</sup> The treaty process not only requires the supermajority in one house, 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

---

<sup>6</sup> For an overview of what a domestic and international approach for the U.S. might look like, see Stern and Antholis, “A Changing Climate.”

<sup>7</sup> 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).

“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.<sup>8</sup> In a real sense, for the United States a GARE would start with domestic action, and seek to ratchet it upwards, 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 analysts have called for a common global carbon tax. Others have called for a “pledge and review” process, in which nations pledge to reduce greenhouse gases, 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.<sup>9</sup>

One approach, in theory, does accomplish these goals: international emissions trading. 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. While 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 greenhouse gas 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

---

<sup>8</sup> 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* (Washington: Brookings Institution Press, 2007), p. 63-7.

<sup>9</sup> 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: Cambridge University Press, 2007), especially p. 74-76.

not exceed a fixed amount. As long as both nations comply in 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.

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 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. By 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 must 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 through reducing its emissions or buying permits, it would forfeit the right to continue in the GARE in future time periods.<sup>10</sup>

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 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

---

<sup>10</sup> See Stern and Antholis, "A Changing Climate," p. 183.

States for not joining Kyoto. Now that the United States is contemplating joining a post-Kyoto system, Americans are considering applying the same approach to developing countries who do not take binding targets. These “border permits” would be a way of placing some sanction on nations who refuse to join or comply with an emissions agreement – and thereby help share the cost of compliance.

This has potential for being a constructive way to think through the problem, but also is a potential challenge that could 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 target 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. Since the standing global consensus is industrial nations must take action first, any effort to use the trade regime to shift that burden would be 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 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 international 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 WTO-illegal, since they will feel their competitiveness further eroded.

Avoiding this clash of global governance regimes should be a priority for not only leading nations, but 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 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 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 greenhouse gas 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 greenhouse gas emissions by industrial nations. This was seen as a first

step toward the longer goal. But since 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 as to 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 greenhouse gas concentration levels at 550 parts per million (ppm) by 2050.

If the E8 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 go to work negotiating over relatively short-term emissions cuts they would be better able to explain to their political leaders and publics how each short-term step 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 to 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. While 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 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 – a so-called “development round.” One of the main reasons why it has been so difficult to conclude is that it is trying to address the regime's core weakness: that the main players – industrial and developing countries – have differing sets of obligations. Developing countries enjoy “special and differential treatment,” which means 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, while the addition of these 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, developing countries will ultimately need to graduate and become part of the post-Kyoto climate system. Kyoto was problematic in several regards, but perhaps the biggest drawback was that developing countries did not commit to cut their emissions – in fact, the treaty actually prevents developing countries 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 was prevented from doing so by developing countries.

It certainly makes sense for developing countries to have different obligations, or obligations that kick in later, given the historic responsibility and much greater wealth of the industrialized world, as well as the generational nature of the problem. But there is simply no way to solve the climate problem without the active involvement of countries that,



according to current projections, will account for over 70% of greenhouse gas growth in next 25 years. Yet developing 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 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 industrial countries will keep seeking ever deeper reductions in greenhouse gas emissions, the more likely they will be to commit that kind of capital up front. The key is for industrial countries to signal the long-term cuts. But they are less likely to do so long as developing country action is not a sure thing. Right now developing countries say that they will not act, and refuse to address the long-term challenge.

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

Second, industrial countries should appeal to developing countries' own self-interest. Climate change is most likely to hurt poor countries, accentuating drought and severe storms, for which poorer 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 at 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 developing countries for adopting country-wide emissions policies, linked to the GARE.

Lastly, industrial countries should not be shy about public diplomacy on climate change. Right now, developing countries do not feel any public pressure to act to address climate change – which is probably not surprising, given the development challenge that many of these nations face. A public diplomacy strategy that stressed each of the topics 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 those efforts require that the real first steps be taken in the industrial world.

## **VII - CONCLUSION**

Political will has begun to develop in the United States and even a few key developing countries on a global effort to reduce emissions. That 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 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, 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 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 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.