

**U.N. CLIMATE TALKS AND POWER POLITICS:
IT'S NOT ABOUT THE TEMPERATURE**

HEARING
BEFORE THE
SUBCOMMITTEE ON OVERSIGHT AND
INVESTIGATIONS
OF THE
COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
FIRST SESSION

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CONTENTS

	Page
WITNESSES	
Mr. Todd D. Stern, Special Envoy for Climate Change, U.S. Department of State	10
Steven F. Hayward, Ph.D., F. K. Weyerhaeuser Fellow, American Enterprise Institute	26
Mr. Elliot Diringer, Vice President for International Strategies, Pew Center on Global Climate Change	32
Daniel Twining, Ph.D., Senior Fellow for Asia, German Marshall Fund of the United States	44
LETTERS, STATEMENTS, ETC., SUBMITTED FOR THE HEARING	
The Honorable Dana Rohrabacher, a Representative in Congress from the State of California, and chairman, Subcommittee on Oversight and Investigations:	
Material submitted for the record	2
Prepared statement	7
Mr. Todd D. Stern: Prepared statement	13
Steven F. Hayward, Ph.D.: Prepared statement	29
Mr. Elliot Diringer: Prepared statement	35
Daniel Twining, Ph.D.: Prepared statement	46
APPENDIX	
Hearing notice	62
Hearing minutes	63

U.N. CLIMATE TALKS AND POWER POLITICS: IT'S NOT ABOUT THE TEMPERATURE

WEDNESDAY, MAY 25, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to notice, at 3:10 p.m., in room 2172, Rayburn House Office Building, Hon. Dana Rohrabacher (chairman of the subcommittee) presiding.

Mr. ROHRABACHER. If you take a look at what I just did, it is very fascinating because it goes right to the hearing. What I did is I switched this button on so you could hear me, which brings to play energy that is created somewhere by something, which we are using to make this hearing more effective. And energy plays a part in things that we just take it for granted so often, so even as we are conversing there are technology machines and energy that is being brought to play as part of this communication.

So with that advance statement to my statement, I will proceed.

In December 2007, the U.N. Framework Convention on Climate Change met in Bali, Indonesia. There, in one of the most opulent resort areas of the world, a playground for the rich, I might add, a great place for surfers from around the world to go to, but there in this tropical paradise came people from all over the world on their private airplanes and chartered airplanes and met by limousines, and they were there while they were there, a plan was drawn up to impose what has to be looked at in retrospect as a lower standard of living for a large number of people on this planet.

The imperative was to be man-made, of course. The imperative behind all of this is alleged to be man-made global warming, which we are told poses a danger against which the whole world should unite.

In the years since then, the scientific assumptions of this supposed crisis have been increasingly challenged by prominent scientists throughout the world, although, again, we hear over and over again that the debate is closed, and thus those scientists who have something to say are being for the most part ignored.

But among them are Richard Lindzen of the Massachusetts Institute of Technology; Patrick Michaels of the University of Virginia; Freeman Dyson at the Institute for Advanced Study at Princeton; Frank Tipler, a professor of both mathematics and physics from Tulane University; and Roy Spencer, a climatologist and a principal research scientist for the University of Alabama in Huntsville.

All these are among the scientists, the many eminent scientists whose work has contradicted the U.N. orthodoxy of man-made global warming. I have a list of another 100 prominent scientists who agree with the five that I have just mentioned and they will now be placed in the record, without objection.

Hearing no objection so ordered.

[The information referred to follows:]

List of 100 scientists who agree that:

- The case for alarm regarding climate change is grossly overstated;
- Surface temperature changes over the past century have been episodic and modest;
- There has been no net global warming for over a decade;
- The computer models forecasting rapid temperature change abjectly fail to explain recent climate behavior; and
- Characterization of the scientific facts regarding climate change and the degree of certainty informing the scientific debate is simply incorrect.

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Mr. ROHRBACHER. Significantly, in determining what the heck is going on here is the fact that U.N. climate talks have not become a forum for global cooperation, which was expected; something as dramatic as a threat to the whole world but yet it was not forthcoming in any of these with global cooperation. Instead, what these meetings have tended to be like is an arena for competing national interests under the slogan "common but differential responsibilities"; and then "zero sum," world was created which pitted developed and developing countries against each other, and within each block of nations there were separate groupings.

Behind the debate over the supposed science of climate change, nations have fought for trade advantages, the transfer of technology, the flow of capital, and of course political and economic influence. Coalitions have formed that will affect the global balance of power and wealth far beyond the time when these conferences are ever remembered.

The stake here, and the stakes here are high, is nothing less than how the future growth of the world economy will be divided up and how much future growth will be permitted in the world economy, who will be allowed to prosper and who will be forced to slow down or even decline in their standard of living. These are all issues that are on the table.

The current talks aim at "a binding agreement" to be signed in December at a conference to be held in Durbin, South Africa. It is meant to replace the Kyoto Protocol of 1997 which will expire in 2012. The United States did not accept the Kyoto Protocol because it imposed restrictions only on developed countries, while leaving developing countries free to follow whatever strategy for economic growth they desired.

U.N. documents still call for the next agreement to follow this same pattern, protecting the right of some nations to rise while imposing a burden of debt on developed countries, especially the developed countries of North America, Europe, and Japan; and this debt burden, of course, is a penalty of modernization and being successful. I am not sure that is what we want to do to achieve progress among the human race is to penalize modernization and success.

This is a framework for restructuring the global economy and shifting the balance of wealth and power. The first manifestation of all this talk is the establishment of a green climate fund which is supposed to reach \$100 billion a year by the year 2020. One can only guess which countries will contribute to the fund and which countries will draw from it. With a Federal budget in massive deficit and an economy that still that has yet to pull itself out of a deep recession but is struggling to do so, the expectation that the United States will be footing a major share of the bill for such a U.N. fund is pure fantasy.

So what is all this talk about and where is it heading? The purpose of this hearing is to examine the U.N. climate talks and the swirling maneuvers and power plays observed in the wake of these global gatherings, whether they are in Cancún or whether they are in Bali or in whatever other wonderful resorts they plan to have these meetings at.

Our national interests are at stake. How could America protect its national interests against demands of rivals in meetings such as these? What coalitions confront us and how can we thwart the moves, the moves that are being made, that are hostile to the interests of the American people? Why do we not claim the same right to growth that other nations claim and act as if they—and act as they do when they are protecting their rights to have a decent standard of living for their people and to protect the well-being of their people?

With us today is our first witness, Todd Stern, the Special Envoy for climate change at the State Department. Mr. Stern has served at this post since 2009 and is the President's chief climate negotiator, representing the United States internationally at the ministerial level in all bilateral and multilateral negotiations regarding climate change. Before joining the Obama administration, he was a senior fellow at the Center for American Progress where he focused on climate change and environmental issues. He also served in the White House and at the Treasury during the Clinton administration, and that was from 1997 to 1998. He acted as senior White House negotiator at Kyoto and Buenos Aires for U.N. climate negotiations.

We will have a second panel today and they will be introduced as we move forward. And now Mr. Carnahan, the ranking member, may have an opening statement of his own.

[The prepared statement of Mr. Rohrabacher follows:]

OPENING STATEMENT
of
Chairman Dana Rohrabacher (R-CA)
Subcommittee on Oversight and Investigations
House Committee on Foreign Affairs

May 25, 2011

“UN Climate Talks and Power Politics: It’s Not about the Temperature”

In December 2007, the UN Framework Convention on Climate Change met in Bali, Indonesia. There, in one of the most opulent resort areas in the world, a playground for the rich, a plan was drawn up to impose a lower standard of living on the rest of us.

The imperative was alleged to be “Man-made global warming” which poses a danger against which the whole world should unite. In the years since, the scientific assumptions of this supposed crisis have increasingly been challenged by prominent scientists throughout the world. Richard Lindzen of MIT, Patrick Michaels of the University of Virginia, Freeman Dyson at the Institute for Advanced Study in Princeton, Frank Tipler, a Professor of both Mathematics and Physics at Tulane University, and Roy Spencer, a climatologist and a Principal Research Scientist for the University of Alabama in Huntsville are among the many eminent scientists whose work has contradicted the flawed UN orthodoxy of Man-made global warming. I have a list of 100 other prominent scientists who agree with the five I have just mentioned, which I will place in the record.

Significantly in determining what the heck is going on here is the fact that the UN climate talks have not become a forum for global cooperation, but an arena for competing national interests.

Under the slogan “common but differentiated responsibilities” a “zero sum” world was created which pitted developed and developing countries against each other and within each block of nations. Behind the debate over the supposed science of climate change, nations have fought for trade advantages, the transfer of technology, the flow of capital, and political influence. Coalitions have formed that will affect the global balance of power far beyond the conference halls.

The stakes are high; nothing less than how the future growth of the world economy will be divided up. Who will be allowed to prosper and who will be forced to slow down or even go into decline are issues on the table.

The current talks aim at a “binding agreement” to be signed in December at a conference in Durban, South Africa. It is meant to replace the Kyoto Protocol of 1997 which is to expire in 2012.

The United States did not accept the Kyoto Protocol because it imposed restrictions only on the developed countries while leaving the developing countries free to follow whatever strategy for economic growth they desired. UN documents still call for the next agreement to

Page 2 of 3

follow this same pattern, protecting the “right” of some nations to rise while imposing a debt burden on the developed countries of North America, Europe and Japan as a penalty for modernizing first and being successful.

This is a framework for restructuring the global economy and shifting the balance of wealth and power.

The first manifestation of all this talk is the establishment of a Green Climate Fund which is supposed to reach \$100 billion a year by 2020. One can only guess which countries will contribute to the fund and which countries will draw from it. With a Federal budget in massive deficit and an economy that is still trying to pull itself out of a deep recession, the expectation that the U.S. will be footing a major share of the bill for such a UN fund is pure fantasy.

So what is all this talk about, and where is it heading?

The purpose of this hearing is to examine the UN climate talks and the swirling maneuvers and power plays observed in the wake of these global gatherings. Are our national interests at stake? How can America protect its national interests against the demands of rivals? What coalitions confront us and how can we thwart moves hostile to our interests? Why do we not claim the same right to growth as other nation’s claim, and act as they do to protect that right?

With us today as our first witness is

Todd Stern, the Special Envoy for Climate Change at the State Department. Mr. Stern has served in this post since 2009 and is the President’s chief climate negotiator, representing the United States internationally at the ministerial level in all bilateral and multilateral negotiations regarding climate change. Before joining the Obama Administration he was a Senior Fellow at the Center for American Progress, where he focused on climate change and environmental issues. He also served in the White House and at the Treasury during the Clinton Administration. From 1997 to 1999, he acted as the senior White House negotiator at the Kyoto and Buenos Aires UN climate negotiations.

On our second panel today, we have

Steven Hayward is the F. K. Weyerhaeuser Fellow at the American Enterprise Institute and a senior fellow at the Pacific Research Institute. He is the author of the *Almanac of Environmental Trends*, and many other books and articles on environmental topics. He has also written biographies of Presidents Jimmy Carter and Ronald Reagan and of Winston Churchill. He holds a PhD in American Studies from Claremont Graduate School and has been a visiting professor at Georgetown University and Ashland University.

Daniel Twining is Senior Fellow for Asia at the German Marshall Fund of the United States. He has served as a Member of the State Department’s Policy Planning Staff, as Foreign Policy Advisor to Senator John McCain, and as a staff member of the U.S. Trade Representative. He holds a doctorate in International Relations from Oxford University. He has written widely for

Page 3 of 3

newspapers and magazines, and for policy and academic journals. He is completing a book on American grand strategy in Asia after the Cold War.

Elliot Diringer is Vice President for International Strategies at the Pew Center on Global Climate Change. He came to the Pew Center from the White House, where he was Deputy Assistant to President Bill Clinton and Deputy Press Secretary. He had previously served as Senior Policy Advisor and as Director of Communications at the Council on Environmental Quality, where he helped develop major policy initiatives, on the environment and participated in international climate change negotiations.

Mr. CARNAHAN. Thank you, Mr. Chairman. And you know you opened up your remarks talking about where this energy was coming from and the Red Bull energy drink that the chairman is trying to get me hooked on here today. But anyway, appreciate you continuing this important debate. We don't see eye to eye on some of these questions, but it is critical that we have this conversation. So thank you for having this hearing.

We are just a few months away since the last round of climate negotiations, so this hearing is not just important but it is timely. Active, constructive engagements are in our country's best interest. When dealing with large-scale global challenges like climate change, we need to be at the table, leading the discussion, working with other countries. We can't make a dent without joint international action.

Climate change is not a problem that is uniquely American; nor is it wrong that it affects only a few countries. It is a collective challenge, and it is a challenge that requires broad action. The U.N. provides the forum for addressing climate change. While not immune from problems and challenges in its own right, the U.N. is the largest and most comprehensive body in which to tackle these challenges.

We have already seen many of the positive effects of the U.N. involvement: Countries like India and China have come to the table and are making real commitments and making real progress. Being a responsible partner at the U.N. through these negotiations is also in our best national interests. It provides us with increased leverage to advocate for U.S. policies.

My State is home to some of the best biotech companies in the world. In order for U.S. businesses to fairly compete in the global marketplace, we have to ensure that we get the best intellectual property rights protections for our companies. Mr. Stern, I know this is something that has been central to negotiations, and I would like to hear you address this issue in particular today.

There is also a great opportunity to utilize these negotiations to increase exports and to support American businesses. Last week, I held a "Make it in America" event in my district. One of the components of this program is clean energy. Creating a framework and exporting prospects for U.S. businesses creates new markets, spurs growth, and creates jobs.

We absolutely have the intellectual capacity to outpace every other country in the world on manufacturing and technology. We should pursue all avenues to do this. By doing so we will not only help our economy, we will also help to build the capacity of many of these developing countries in order to help them mitigate the effects of climate change.

I know that there will be a healthy debate today about the U.S. financial commitments. We have an obligation to ensure that any investment of U.S. taxpayer funds are done in a cost-effective manner and done with strict accounting and broad consensus of the best scientists in the world.

Last year we held a hearing in this subcommittee on how public-private partnerships were helping to achieve the millennium development goals. That hearing showed how government investments were leveraged to meet the international challenges and they could be done cost effectively and could help meet U.S. interests. Government investment loans are simply not a viable option. We have to find ways to achieve our policy goals by spending more wisely.

I will be interested in hearing from our witnesses today how the proposed climate fund which would reach these same goals of being open and transparent, cost effective, and would leverage private financing. Over the course of the past 2 years this administration has been an active and engaged partner in dealing with many of the problems of the 21st century. This type of leadership is necessary in order to overcome many of the hurdles the world faces today. Bringing about real solutions to climate change relies on this continued engagement.

I look forward to hearing the witnesses today, and Mr. Chairman, I yield back.

Mr. ROHRABACHER. Thank you very much.

We will proceed with Mr. Stern and we want to thank you very much for being with us today. You have a very weighty background on these issues and I brought up some controversial things to talk about, and I am very very pleased that you have come here to talk to us and we will have a very fair exchange of ideas. So you may proceed with your opening statement.

STATEMENT OF MR. TODD D. STERN, SPECIAL ENVOY FOR CLIMATE CHANGE, U.S. DEPARTMENT OF STATE

Mr. STERN. Thank you very much, Mr. Chairman, and thank you, Mr. Ranking Member, for inviting me here today, and I look forward to our discussion.

At the time President Obama took office, there was a prevailing paradigm in the climate negotiations that came to be accepted by many, although not by us. That paradigm holds that there is in essence a firewall between developed and developing countries as they were defined in this 1992 Framework Convention on Climate Change with all specific obligations to address climate change assigned to developed countries.

There are multiple problems with this paradigm. First, it is wrong as a matter of textual analysis. The framework convention did not create such a firewall. But beyond this legal point, that Kyoto paradigm is unworkable as a matter of substance. You cannot address the global climate challenge by focusing only on devel-

oped countries. Developing countries already account for about 55 percent of global emissions and will account for some 65 percent by 2030. Instead, you need to start with all the major emitters, both developed and developing, accounting for some 80 percent of global emissions and build out from there.

This understanding led the Obama administration to pick up on a 2007 initiative by President Bush, the Major Economies Meeting, comprising the 16 leading developed and developing countries, plus the EU, in order to address energy and climate change. We slightly changed the name to Major Economies Forum and changed the focus, but we retained the basic group. We have held 11 meetings at the ministerial level and one at the leader level and this group, this organization, has proved to be quite useful.

Recognizing the flaws in the firewall, we favored a different approach from the time we came into office, in which all major economies, developed and developing, would make commitments to limit their emissions and base those commitments on their own national plans and circumstances rather than having targets that seemed to be imposed from outside. This approach was new. It contradicted the received wisdom that developed country action was mandatory, while action by even the largest developing countries was strictly voluntary.

The Copenhagen Accord marked the first time that all major economies agreed to implement targets or actions to limit their emissions and to do so in an internationally transparent manner. In this sense, it represented the first break in the traditional firewall.

The Cancún meeting confirmed and substantially extended the Copenhagen Accord. Moreover, the Cancún agreements, unlike Copenhagen, were formally adopted by the parties of the U.N. FCCC. Part of what made the Copenhagen and Cancún deals possible, I must say, was a commitment to aid poor countries. And I want to tell you why I think such funding is in our national interest.

Our program is built on three pillars. First, clean energy to help put developing countries on a low-carbon path; second, preserving and managing forests; and third, building resilience against extreme weather events. Each of these efforts serves important purposes beyond reducing emissions. Helping countries get on a clean energy path can create markets for U.S. technology.

Tropical forests are home to some 80 percent of terrestrial species, including for example, 70 percent of plants with anti-cancer characteristics, and the World Bank estimates that every dollar we spend in disaster preparedness saves \$7 in disaster response. Moreover, countries around the world see climate change as a core challenge. Whether you agree or disagree with that, it is vital to U.S. diplomatic leverage and to U.S. long-term interests to be seen as part of the solution.

Finally, our climate funding provides real bang for the buck. The overall U.S. foreign operations budget is about 1 percent of the total U.S. Government budget, and our climate funding is only about 3 percent of that.

So where we do stand now in the negotiations? The first priority for the work leading up to this year's conference in Durban, South Africa should be to implement the key agreements reached last

year in Cancún on transparency, financing, technology, and adaptation. If we do that, COP 17 in Durbin will be a solid success. Whether we will manage to do that is by no means clear. Many developing countries, including large ones, continue to be fixated on preserving that 1992 firewall, and we won't accept that. After all, the world has changed. As of 2009, 4 of the top 10 and 9 of the top 20 emitters in the world were developing countries, from so-called non-Annex 1. China's GDP is nearly six times larger than it was in 1992, and its CO2 emissions are nearly three times larger.

Beyond the firewall question there are other difficult issues, including whether parties to Kyoto—which does not include the United States—will agree to a second so-called commitment period. And there are other perennial issues that will no doubt be raised, including intellectual property.

Mr. Chairman, I told you at a hearing in November 2009, that we would stand strong for intellectual property rights and we have and we will.

The question for the U.N. negotiations at the end of the day is what parties want. The U.N. FCCC has the potential to be a useful pragmatic body that can help address climate change, not the only one, but an important one. We have made some good progress in the past 2 years, especially in working to knock down the firewall I have discussed and insisting on a new level of international transparency. But much work remains.

Thank you for inviting me to testify today, and I would be happy to take your questions.

Mr. ROHRABACHER. Well thank you very much.
[The prepared statement of Mr. Stern follows:]

Todd Stern
Special Envoy for Climate Change
Statement to the House Committee on Foreign Affairs
Hearing on "UN Climate Talks and Power Politics: It's Not About the Temperature"
May 25, 2011
Committee on Oversight and Investigations
House Committee on Foreign Affairs

Thank you Mr. Chairman, Mr. Ranking Member, and members of the Committee for inviting me here today. I look forward to our discussion.

Let me start at the start, with some brief background.

Background

The ongoing international climate negotiations take place under the UN Framework Convention on Climate Change (UNFCCC), a treaty signed in 1992 in the Bush Administration, and approved by the Senate that same year. The Framework Convention obligates Parties to work to address climate change, including by striving to mitigate greenhouse gas emissions and by regularly reporting national inventories of emissions. The Convention in effect divided the world into two broad categories of countries: Annex I Parties—consisting of circa-1990 OECD countries along with former Soviet bloc nations—and non-Annex I Parties, consisting of all other countries, including major emerging economies such as China and India.

Under the 1997 Kyoto Protocol to the UNFCCC, Annex I Parties were assigned specific, legally binding emissions reduction targets for the period 2008-2012. There were no such obligations for non-Annex I Parties. Although the United States signed the Kyoto Protocol in 1997, we announced in 2001 that we would not ratify Kyoto.

At the 2007 climate conference in Bali, a new mandate, which the George W. Bush Administration negotiated, established two negotiating tracks: first, a negotiation among Kyoto Protocol Parties over the post-2012 future of that agreement; and second, a negotiation under the so-called LCA track ("Long-term Cooperative Action") to cover all UNFCCC Parties, including the United States and non-Annex I Parties such as China and other developing countries. The mandate for the LCA negotiations did not specify whether the goal was a legally binding treaty or something else.

The Paradigm Shift

At the time President Obama took office, there was a prevailing paradigm in the climate negotiations that came to be accepted by many – although not by all and certainly not by the United States. That paradigm holds that there is and should continue to be a firewall between developed and developing countries (that is, Annex 1 and Non-Annex 1) as they were defined in the Framework Convention, with all specific obligations to address climate change assigned to developed countries. The principle from the Convention that is cited – wrongly in our view – as the foundation for this firewall is that parties have “common but differentiated responsibilities and respective capabilities.”

But there are multiple problems with this paradigm. First, although I won’t dwell on this point right now, it is wrong as a matter of textual analysis; the Framework Convention did initially give heightened commitments to a category of countries, but did not freeze that category for all time or create a firewall between those countries and all others.

Beyond this legal point, however, the Kyoto paradigm is unworkable as a matter of substance. You cannot address the global climate challenge by focusing only on developed countries when developing countries already account for around 55% of global emissions and will account for 65% by 2030. You cannot build a system that treats China like Chad when China is the world’s second largest economy, largest emitter, second largest historic emitter, will have emissions that are some 90% larger than the U.S. by 2020, and has even surpassed France in *per capita* emissions. Instead, you need to start with all the major emitters, both developed and developing, accounting for some 80% of global fossil fuel emissions and build out from there.

This understanding led the Obama Administration to support and further elaborate on a 2007 initiative by President Bush – the Major Economies Meeting, comprising the 16 leading developed and developing countries plus the EU – to address energy and climate change. We slightly changed the name – to Major Economies Forum – and changed the focus, but retained the basic group. We have held 11 meetings at the ministerial level and one at the leader level, and it has proved to be quite useful. We also pursue very active and important bilateral diplomacy.

Recognizing the flaws in the conventional wisdom about Kyoto, we favored a different approach. First, we thought it essential that all major economies, both developed and developing, make commitments to limit their emissions. Second, we believed that countries should base those commitments on their own national plans and circumstances, rather than having targets that seem to be imposed from outside. We saw this as essential for the United States, but also as crucial to bringing major developing countries on board, since most countries – developed and developing – are more likely to commit to and implement a set of targets or actions that they designed. This approach was new. It contradicted the received wisdom that developed country action was mandatory while developing country action –

even for the largest developing countries – was strictly voluntary. And it replaced Kyoto-style negotiated targets with nationally determined undertakings.

In the fall of 2009, Denmark, as the President of the 15th Conference of the Parties, concluded that a new legally binding agreement was unattainable, and so, to break that stalemate, proposed that we start with a strong but non-legally binding accord.

The Copenhagen Accord, agreed to by a large majority of the Parties to the UNFCCC, marked the first time that all major economies, developed and developing, agreed to implement targets or actions to limit their emissions, and to do so in an internationally transparent manner. The transparency element was essential in our view, both so that all relevant countries have confidence that others are acting and so that the international community can see the level and the trajectory of global emissions. In this sense, the Copenhagen Accord represented the first break in the traditional firewall. In the end, a small, but vocal minority of countries blocked the formal adoption of the Copenhagen Accord – it was “taken note of.” But the Cancun meeting confirmed and substantially extended the Copenhagen Accord, and the Cancun agreements were formally adopted by the Parties to the UNFCCC.

I should also say that part of what made the Copenhagen and Cancun deals possible was a commitment to aid poor countries. I want to tell you why I think such funding is a sound investment, very much in our national interest. It will strengthen our international posture, contribute to our own economic growth, and help build a clean-energy world less exposed and more resilient to the very real dangers of climate change. Our program – the Global Climate Change Initiative – is built on three pillars:

- First, clean energy, to help put developing countries on a low-carbon path, decrease pollution globally, bolster international energy security by strengthening reliance on domestic and renewable resources and create increased trade and investment in clean technologies and new opportunities for U.S. business and workers;
- Second, sustainable landscapes, which entails conserving forests, fostering sustainable land management, and combating illegal logging around the world. We do this not only to limit climate change, but also to preserve the home of at least 80 percent of the world’s terrestrial species, including 70 percent of plants identified as having anti-cancer characteristics; and
- Third, adaptation, which means building resilience against extreme weather events to reduce the risk of damage, loss of life and broader instability that can result from extreme weather and climate events, such as droughts, floods, and extreme storms. Whatever your views on climate change, the United States needs to – and always does – stand ready to help countries victimized by such events. It is who we are, and it is in our own interest to do these things. It is part of why people around the world

look with favor on America. Likewise, helping countries take action in advance that reduces damage from extreme events makes good sense and is cost-effective: the World Bank estimates that every dollar spent on disaster preparedness saves \$7 in disaster response.

A great many countries around the world, particularly vulnerable ones facing real danger, see climate change as one of the fundamental challenges facing humanity. Whether you agree or disagree, it is vital to U.S. diplomatic leverage generally, and to long-term U.S. interests in the world, to be seen as meeting our responsibilities in this regard.

Finally, our climate funding provides real bang for the buck. The overall U.S. foreign operations budget is about 1% of the total USG budget, and our climate funding is only about 3% of that. In short, all these benefits come from a budget that amounts to only about three one hundreds of one percent of the total USG budget.

Going forward

So where do we stand now in the negotiations and what is the outlook? The first priority for the work leading up to this year's conference in Durban, South Africa, should be to implement the key agreements reached in Cancun -- to draft guidelines establishing a transparency and accountability system; to design the new Green Fund that was agreed to in principle; to set up a Climate Technology Center and Network; and to create a new Adaptation Committee. If we take these steps and start building the new institutions needed for a pragmatic international regime, COP 17 will be a solid success.

Whether we will manage this, however, is by no means clear. This year's first negotiator-level meeting for all 192 countries in Bangkok was marked by struggles over the agenda. The tensions running through these negotiations may have abated a bit, but they are still very much with us. Most fundamentally, many developing countries, including large ones, continue to be fixated on preserving the firewall between developed and developing countries. As I have explained, we see this as both unjustified and incompatible with solving the problem. As I have said repeatedly, we are not going to be part of a new agreement with a fixed, bright-line, 1992-vintage firewall.

After all, the notion that the world should be indefinitely divided for climate change purposes into categories established in 1992 makes no sense. The world has changed dramatically since that time. Look at some basic facts and figures. As of 2009, 4 of the top 10, and 9 of the top 20 emitters of CO₂ from fossil fuels were non-Annex 1. China's GDP is nearly 6 times larger than in 1992; its *per capita* GDP is more than 5 times larger; its CO₂ emissions are nearly 3 times larger and its *per capita* CO₂ emissions are 2.5 times larger.

Beyond the firewall question, there are other difficult issues that could derail the international negotiations. The most obvious is the ongoing puzzle of the Kyoto Protocol, which still

exists, though the United States is not a party. In a word, developing countries insist on a second Kyoto period, starting in 2013, in which developed country parties alone would make legally binding commitments to reduce their emissions. Many developed country parties oppose such a second Kyoto period since the U.S. isn't in Kyoto and the emerging economies have no meaningful obligations. This issue, once again, goes back to that old firewall problem.

And there are other perennial issues more likely to divert and divide than to produce results, such as notions of apportioning the atmosphere or weakening protection for intellectual property. Such ideas are non-starters, from our perspective. Mr. Chairman, as I prepared for this hearing today, I noted that you asked me in a hearing in November 2009 whether we would stand strong for intellectual property rights in the course of our negotiations. I assured you we would, and am pleased to report today that we have followed through on that commitment and will continue to do so.

The question for the UN climate negotiations, at the end of the day, is what parties want. The UNFCCC has the potential to be a cooperative, mutually beneficial platform – though not the sole platform – for combating climate change. It also has the potential to be a platform focused mostly on rhetorical thrust and parry, with a thick overlay of accusation and blame. The one vision is useful. The other is not.

We will continue working to support that first, cooperative vision, always bearing in mind that the central mission of our discussions must be to try to address the climate challenge, not to settle old scores. The ongoing challenge for the UNFCCC is to be the kind of body that remains relevant to that task. We have made some good progress, especially in working to knock down the firewall I've discussed, and in insisting on a new level of international transparency. But much work remains.

Thank you again for inviting me to testify today. I'll be happy to take your questions.

Mr. ROHRABACHER. When is the next major session that we are going to be preparing for again?

Mr. STERN. That is in Durbin, South Africa. We will start at the very end of November, I think the 27th or 28th, and we will run for 2 weeks.

Mr. ROHRABACHER. Okay. So we are coming up on that. That is what we are preparing for right now.

Mr. STERN. Correct.

Mr. ROHRABACHER. All right. And you believe that there will be this green climate fund being proposed there that I was referring to in my opening statement, the \$100 billion a year to be collected from various countries?

Mr. STERN. Let me, if I may, Mr. Chairman, just disentangle a couple of elements of the overall financing issue. There is—there was an agreement in Cancún to establish a green fund. That is independent of the \$100 billion, which I will get to in a second. So that is to set up green fund. There was an agreement to do that.

Now, the work this year involves—there is actually something called a transitional committee that was established in order to work out the actual operating guidelines, how it is going to work, how the board is going to be chosen, what financial instruments will be used, and a whole array of technical issues that need to be—and sometimes political issues that need to be resolved. That committee has met once now. We were quite keen—the reason that there is a transitional committee, quite frankly, is that we were quite keen in having this thing set up in a professional way, outside of the control of the U.N. FCCC, outside of the control of climate negotiators. Even though I am one, I know that when we are setting up financial institutions we ought to have financial people engaged.

So our lead representative from the U.S. Government is from Treasury. State is also involved. So that work to set up the entity is going on this year.

There is also a commitment to a goal of mobilizing \$100 billion from all sources. Some of that will go through—

Mr. ROHRABACHER. \$100 billion annually, or \$100 billion?

Mr. STERN. \$100 billion annually by 2020. Some of that will run through the green fund; a great deal of it won't.

Mr. ROHRABACHER. Are you suggesting that this \$100 billion annual goal is different than the green fund?

Mr. STERN. They overlap. And I would guess that there would be some amount, and I don't know what the amount will be of that funding, assuming that the various contingencies come into play.

Mr. ROHRABACHER. I am not understanding.

Mr. STERN. Some it will run through the green fund.

Mr. ROHRABACHER. Two entities. One is going to be a green fund and then there is going to be another entity.

Mr. STERN. No, not another entity. What I am saying, imagine that, first of all, the \$100 billion is contingent on there being adequate mitigation and transparency from developing countries. So let's assume that we have got that.

Mr. ROHRABACHER. \$100 billion a year.

Mr. STERN. Yeah, that is right. And there will be a lot of that will come through ordinary bilateral channels. I would say the

great majority, I would think, would come from the private sector. So using government policy measures to try to leverage private investment, for example, things like risk insurance, loan guarantees, those kinds of things. So there will be some combination of actual government funding and some significant—and, again, I would think the great majority, given the fiscal condition of the United States and Europe and other countries, the great majority of it I would guess will come from the private sector, with some government policies—

Mr. ROHRABACHER. That is to the \$100 billion fund.

Mr. STERN. That is right.

Mr. ROHRABACHER. I am not getting the structure here.

Mr. STERN. Because it is not a fund per se. It is a total of \$100 billion of resources that will be mobilized for climate change.

Mr. ROHRABACHER. Who would be overseeing?

Mr. STERN. Nobody would be overseeing the fund. There would be somebody overseeing the green fund, so maybe you would have \$10 billion or \$20 billion or whatever going to the green fund.

Mr. ROHRABACHER. Nobody overseeing the fund, but there will be people overseeing the green fund. I am sorry that I am getting a little confused when there are only two funds we are talking about here. You can't afford to get me confused.

Mr. STERN. I am sorry, Chairman, maybe it is a little bit confusing. But the \$100 billion is a goal for an amount. Right now there is a much smaller amount.

Mr. ROHRABACHER. To go into the green fund.

Mr. STERN. Not to go into the green fund per se; some of it will go into the green fund.

Mr. ROHRABACHER. Where is the \$100 billion going to go?

Mr. STERN. Some of it will go into the green fund. Some it will flow through U.S. bilateral channels that go to—

Mr. ROHRABACHER. And who will be making the determinations as to where that flow is going?

Mr. STERN. The United States will make determination with respect to United States bilateral giving. There will be the same for countries in Europe, the same for countries like Japan. And, by the way, we don't think that it is excluded at all that some of that funding should come from major developing countries themselves. I mean Mexico was the one who originally proposed the green fund, and in Mexico's original proposal it explicitly called for contributions from all countries.

Mr. ROHRABACHER. Is it the whole United Nations that is going to determine where these funds go?

Mr. STERN. No, no. I think it will fundamentally either be bilateral and be individual countries deciding where their own funding is going to go, or through the green fund. But again also through—it can be bilateral. It is U.S. Government-appropriated money. There can also be the—

Mr. ROHRABACHER. Appropriated money. And who then will be responsible for the spending of the money?

Mr. STERN. Think about what happens right now. There is appropriated money that goes right now, much smaller amount, that goes to various countries for—just the way I talked about in my testimony. So there will still be some of that, and there will be

some of that in countries all over the world, and there will also be, as I said, I think mechanisms like the use of things like loan guarantees and risk insurance and so forth that will help trigger investments from private sources of capital.

Mr. ROHRABACHER. I am just trying to fix responsibility here. We are talking about—\$100 billion in and of itself is a lot of money—but \$100 billion a year.

Mr. STERN. I agree with that.

Mr. ROHRABACHER. This is an enormous amount of money. And, frankly, from what you have described, I don't know, maybe other people are able to catch this more than I am, but it doesn't seem that you have got this plan as to who has got authority and responsibility and whether it is one fund or two funds; where the money goes; who is going to make the decision. It doesn't sound like you have that—

Mr. STERN. We wouldn't actually want this to be one top-down massive superstructure. We want there to be control through the United States to decide on where a lot of our funds go. So some of it will go to the green fund, some of it will go through channels that—

Mr. ROHRABACHER. How much do you predict will be the contribution of the United States? It is \$100 billion annually. How much of this will be taken from the United States, the people of the United States?

Mr. STERN. I think that is hard to say right now, Congressman. I mean right now, if you look at where we are right now, funding the appropriated funds in Fiscal Year 2010 was a little short of \$1 billion, if you look at State, Treasury, and USAID. I would think that would ramp up somewhat but that U.S. appropriated money is not going to be huge.

Mr. ROHRABACHER. Could you give us a guesstimate? You are the main negotiator here. You are on the table telling how much we are willing to put in here when you are negotiating with the other countries. How much are you telling them we are willing to put in?

Mr. STERN. We are not making commitments about how much we are willing to put in. I think that—

Mr. ROHRABACHER. Is that just not known now? Or by November when you have this meeting with all these other countries, will you know then?

Mr. STERN. I don't anticipate that we would make any commitment to any particular amounts of money in November. I don't anticipate that as being part of the discussion.

Mr. ROHRABACHER. If we are not willing to make a commitment, I don't understand how we are expecting other countries to make commitments.

Let me ask you, is China going to have any of this money coming from this fund? I mean, will they be able to take money from the green fund?

Mr. STERN. Congressman, look, I said about an hour or 2 after I arrived in Copenhagen in 2009, I did my first press conference. And I was asked about funding for China. And I said I didn't really anticipate that U.S. funds, which are limited in any event, would be most wisely spent going to China.

Mr. ROHRABACHER. I have your quote right here, and I was just wondering about if that is still your same position.

Mr. STERN. Yes, it is my same position. I wasn't popular with everybody when I said that, but that is my same position.

Mr. ROHRABACHER. You weren't popular with the Chinese, I am sure.

Mr. STERN. That is what I meant.

Mr. ROHRABACHER. All right. We will have a second round of questions, but I have already used an allotment of time here, so why don't I let Ranking Member Mr. Carnahan have his shot?

Mr. CARNAHAN. Thank you, Mr. Chairman. And I wanted to jump in to my questions, really, talking about the U.N. specifically. There are some discussions in this whole conversation about the proper forum for some of these things to happen. Is the U.N. only and our most effective forum for these negotiations to take place? And if so, tell us why.

Mr. STERN. It is a good question Congressman. Look, I think that it is not the only forum. I think that one of the reasons that we were quite interested in picking up on the group that President Bush put together and, as I say, changing it some into the Major Economies Forum, is because we believe it would be a very useful thing to have a smaller group of the major players responsible for about 80 percent of global emissions, who could meet together in a more informal and more intimate kind of discussion at a more senior level than typically happens in the U.N. FCCC, to be able to discuss these issues. And I do think that is a good idea.

I actually, back before I was in any of these jobs, I wrote about the need for a smaller group back several years ago. So I think it is very good to do that.

I think that the U.N. is an important body. I think that the U.N. FCCC has been seized with this issue for a long time, has a certain amount of credibility in the world in working on the issue. I think it can do a lot of good and we should continue to try to work through it.

I also think that the thing that matters is dealing with the problem, and so we are never going to be focused first and foremost on what body we work with. We think it should be the U.N. It has got credibility and history on its side but, you know, it is going to depend on what develops going forward, and what matters to us is that we do something about this problem and make progress. So however—sort of whatever works is my view.

Mr. CARNAHAN. And describe, if you would, the impact of the U.S. being at the table and being more actively involved in these negotiations.

Mr. STERN. Well, I think that there is just no question that the U.S. is always a very important voice. I think that, you know, there are things which could have happened here on the domestic policy front that could have made our—could have strengthened our hand and given us greater leverage than we do have, but even despite some of those things not having happened, the United States is an enormously important player. And there are many important issues that get wrestled with, from the mitigation itself to transparency and funding and assistance and so forth, and whether we are dealing with other developed countries or we are dealing with

major developing or Africans, Islanders, Latin Americans and so forth, the U.S. I think is an indispensable voice.

And, you know, what I said in my testimony I think is maybe bears repeating. An enormous number of countries are extremely concerned about climate change, see it as a high priority. If the United States were not engaged, apart from climate change itself, which is in and of itself very important, it would hurt us. It would hurt us diplomatically. It would hurt us in terms of the leverage that we have in the world on a raft of issues. So it matters that we are seen to be engaged and trying to be part of the solution.

Mr. CARNAHAN. Let me thank you. I want to turn now to the economic perspective that you mentioned with regard to disaster preparedness and that statistic for every dollar spent on disaster preparedness, we save \$7 in disaster relief. Is there any data or estimates on how that concept looks in terms of investments in the proposed green climate fund, how that would impact disaster relief costs on the back end in terms of climate?

Mr. STERN. Well, I think it is much the same, much the same with respect to the adaptation side. So I would see the green climate fund as providing funding both for adaptation and for mitigation. I actually think if you imagine two parts of the green fund, one purely public money, appropriated money from governments on the one hand, and then money that is leveraged from the private sector on the other, I would assume that a lot of the straight public funding will end up going to adaptation, because it will be easier to draw private sector funding into building big energy projects, the mitigation side, I would think.

So that same kind of metric that the World Bank study showed of, you know, \$7 of saving for every dollar you invest on the adaptation side, I think would be the same kind of dynamic with respect to green fund investments and adaptation.

Mr. CARNAHAN. All right. Just one last question. In relation to U.S. business exports to new international markets, what kind—

Mr. STERN. I am sorry?

Mr. CARNAHAN. In terms of how would these agreements affect U.S. business exports to new international markets in areas, in particular with regard to clean energy technology?

Mr. STERN. Well, I think that they could be a very good thing. I mean, I think that there is a huge—there is going to be a huge amount of funding invested in energy infrastructure in the world if you look out over the next 2, 3, 4 decades. I mean that is just a fact of life. And a great deal of that is inevitably going to be invested in the clean or green side, whether it is in all manner of renewables, energy efficiency, et cetera.

So I think that as you increase the amount of money that can be provided, that can be leveraged from the private sector, that is going to create markets for whoever is smart enough, may I say, to develop their own domestic industries in this area. Three years ago, we had 80 percent larger—I think I have the right number—about 80 percent larger investing in clean tech than China did, and it is reversed now. So we have got to provide the right incentives and the right stimulus to our green industries in order to—not just because it is good for the environment and good for climate change, but also because there are huge markets out there and if we don't

get in the game we are not going to participate and we are not going to get the economic growth and the job growth and so forth that will come from those markets. And there are countries, and China is chief among them, that are running fast on this track right now.

Mr. CARNAHAN. Thank you very much.

Mr. ROHRABACHER. We will have a short second round as well. Obviously from my opening statement and from things that we have been through before, I am highly skeptical of the global warming theory—not the global warming, the man-made global warming theory, because we all know that there are changes in the climate that happen, and it has happened for millennia, and whether or not mankind is involved in this is something that we have a disagreement on.

That is not the purpose of the hearing today. But because of the theory being accepted here—and know that if there is climate change going on and if mankind is going—we also know that nature causes this. And when you talk about being prepared for natural disasters as being part of the agenda, I was wondering about two issues that seem to elude so many people who are looking at the issue of global warming. That is that rainforests and the rotting wood and the insects in rainforests produce an enormous amount of greenhouse gases. I am not sure what proportion that would be to industrialization, but it is huge. Also, we also know that older trees are actually part of the problem as compared to part of the solution, where younger trees, by the theory, are sucking in this pollution and bringing out oxygen. I mean, this is the basis of this whole theory, plant theory.

Is there some thought being given to subsidizing the clearing of rainforests in order to—for some countries, in order to eliminate that production of greenhouse gases which is huge? Or, would the people be supportive of cutting down older trees in order to plant younger trees as a means to prevent this disaster from happening?

Mr. STERN. Well, what I can say about that, Mr. Chairman, is that first of all, the notion that the forests are an important part of this problem is absolutely right, and I have seen different numbers sort of ranging from 15 to 20 percent of the total amount of CO₂ emitted. That mostly comes from cutting trees down.

Mr. ROHRABACHER. It is rotting wood.

Mr. STERN. Well, it may be—that may be the case. And there may be steps—I am not expert on that—with respect to clearing out such rot, but I think the fundamental objective and fundamental action that can be taken to reduce emissions from forests is too slow and ultimately stop deforestation in—

Mr. ROHRABACHER. Even though that is contributing to the overall level of CO₂?

Mr. STERN. No, no, no. Again, I am not going to—I am not a technical specialist with respect to the forest CO₂ issues, but the main point is to reduce the level of—the deforestation is the biggest driver of CO₂ coming from forests, and it comes from fundamentally three, the three large forest bases in the world, which are the Amazon, the Congo Basin, and then in Indonesia.

Mr. ROHRABACHER. So deforestation and not natural occurrence of rotting wood in rainforests and bugs that give off these greenhouse gases; it is human-kind again?

Mr. STERN. No, no. Look, I am certain that there are natural cycles and natural development.

Mr. ROHRABACHER. Which by the way, that is the question. The question is there are natural things; 80 percent at least, perhaps 90 percent, of all greenhouse gases are generated by nature itself. There is no scientific fight on that, okay. So if 80–90 percent are Mother Nature’s products, and you said that we are going to have this fund of \$100 billion, part of which will go to tackling some natural calamities which are—I mean sea raising up, et cetera, are we going to use that fund as well to restrain natural sources of greenhouse gases, for example older trees being planted by—being changed to younger trees and the clearing away of the rotting wood in rainforests?

Mr. STERN. I think the best thing I could tell you is I would be happy to have people from my staff who are expert in that talk with your staff so I think that the effort will be to do things that can reduce emissions. I would be happy to do that.

Mr. ROHRABACHER. Thank you very much for that. And let me just ask a couple of other things now. Again, we are heading toward Durbin, and we are talking about November of this year, you are going to start really preparing yourself and you will have a program. Will America’s program, will it include—you are talking about \$100 billion a year. There will be a plan, you are saying, by November of where this \$100 billion a year will appear from; is that correct?

Mr. STERN. I am actually not saying that.

Mr. ROHRABACHER. Okay.

Mr. STERN. I think, the immediate focus on the financing side of things this year is going to be on getting the operational guidelines, if you will, agreed to with respect to the green fund. That may get done this year. It may take this year and so 1 more year, I don’t know.

Mr. ROHRABACHER. Where did the \$100 billion figure come from?

Mr. STERN. It came from—that was done in Copenhagen. That was part of the Copenhagen Accord. And again it was not—it was in the context of adequate mitigation, you know, reducing emissions and transparency on the part of developing countries. The developed countries would agree to a goal of mobilizing that amount of money from public and private sources, from private markets, from many sources. And again, as I said, we don’t exclude the notion that part of what will be mobilized would come from wealthier developing countries, particularly over time, because this is a dynamic—

Mr. ROHRABACHER. When we are talking about wealthier other countries, these are countries that are producing more wealth per person than is being produced in the less developed countries. Talking about the control of CO₂, it seems to me that the criteria that we have been operating on—and I say “we,” meaning our own Government as well as in conjunction with the others—is based on the actual amount of CO₂ per person of the people who reside in

the country, rather than per \$1,000 of wealth that we produce; that the system actually comes from our system as it functions.

In the case of how many—how much CO₂ is produced per \$1,000 of production, we actually have a very low rate of contribution to the greenhouse gases as compared if you only do it per person. So shouldn't we be basing our—if we are watching out for the standard of living and well-being of our own people, shouldn't we be basing our own positions on that criteria, rather than accepting the idea of just per person, what their—you know, what the CO₂ production is.

Mr. STERN. Mr. Chairman, we don't actually base our views on per-person or per-capita emissions. We tend to look at the emissions of the country. There are many countries that talk about per capita. That is a factor, but—

Mr. ROHRABACHER. If you have emissions of a country and that country produces, you know, \$10,000 worth of wealth per person, that country then—we are \$20,000 of wealth per person—but the CO₂, if you are doing it per production, that CO₂ is actually less. I mean, it seems to me that we are basing our negotiations on something that negates any consideration of the standard of living that we have produced by the production of wealth.

Mr. STERN. Well, I hear you, but we don't mean to be doing that. I mean you are raising a metric that has to do essentially with the efficiency with which energy is used which is a—

Mr. ROHRABACHER. Part of it.

Mr. STERN [continuing]. Perfectly valid point and an important one. Look, I think, and I heard your comments in some of the statements in your opening comments with respect to standard of living. I would like to say one thing, which is that we do not think that you can approach this problem from the point of view of saying that you are going to clamp down on anybody's standard of living. Not a developed country, not a developing country, not the United States, not India. It is not going to work that way.

The way that this problem is going to be solved, if it is going to be solved, is to break—and it is not going to be done overnight—but to break the iron link between the growth of an economy and the growth of emissions. And you do that by getting more and more efficient with respect to the energy you use and, over time, by having other sources of energy that are cleaner, become bigger and bigger parts of the economy, and ultimately the biggest parts. That is the way—we are not going to get—nobody is going to support clamping down on our standard of living. We don't think that is going to happen, and they are not going to agree to that in the developing world either.

Mr. ROHRABACHER. Constantly in this debate what we have heard, the rich countries, the developed countries, versus the undeveloped countries and the poor countries. And the fact is that people who are here in the United States of America, yeah, our country produces more "greenhouse gases," but in terms of the standard of living of the people that it supports, there is no comparison. We actually are very efficient and very small in the amount of greenhouse gases that we produce per wealth that permits our people to have a higher standard of living. And it just seems to me that quite often—well, not quite often—I am always hearing this, the rich

countries versus the poor countries, and that is not what it is all about.

Mr. Carnahan, would you like to have a second round and we will move on to our second panel? Thank you very much.

Mr. STERN. Thank you, Mr. Chairman.

Mr. CARNAHAN. Mr. Chairman, I got my questions in on the first round and so I think I am ready to go.

Mr. ROHRABACHER. I want to especially thank our witness for coming today. We had a very good exchange, and I am sure we will continue to have this open exchange.

Mr. STERN. Thank you very much, Mr. Chairman, Mr. Ranking Member. Appreciate it.

Mr. ROHRABACHER. If the next panel will be seated, please.

All right. We are called to order. I will introduce all three panelists, and we will proceed with the testimony.

First, we have Steven Hayward. He is the F.K. Weyerhaeuser fellow at the American Enterprise Institute and a senior fellow at the Pacific Research Institute. He is author of the "Almanac of Environmental Trends," and many other books and articles on environmental topics. He has also written biographies of President Jimmy Carter and Ronald Reagan and of Winston Churchill.

He holds a Ph.D. in American studies from Claremont Graduate School. I, too, have a graduate degree in American studies. And he has been a visiting professor at Georgetown University and Ashland University.

Then we have Daniel Twining, a senior fellow for Asia at the German Marshall Fund of the United States. He has served as a member of the State Department's policy planning staff, a foreign policy advisor to Senator John McCain, and as a staff member of the U.S. Trade Representative.

He holds a doctorate in international relations from Oxford University and has written widely for newspapers and magazines and for policy and academic journals. He is completing a book on American grand strategy in Asia after the Cold War. That is fascinating.

We also have Elliot Diringer. He is vice president for international strategies at the Pew Center on Global Climate Change. He came to the Pew Center from the White House, where he was Deputy Assistant to President Bill Clinton and Deputy Press Secretary as well. He had previously served as a senior policy advisor and as director of communications at the Council on Environmental Quality, where he helped develop major policy initiatives on the environment and participated in international climate change negotiations, which we are talking about today.

So, Mr. Hayward, you may proceed, and we will go to Mr. Diringer and Mr. Twining.

STATEMENT OF STEVEN F. HAYWARD, PH.D., F. K. WEYERHAEUSER FELLOW, AMERICAN ENTERPRISE INSTITUTE

Mr. HAYWARD. Thank you, Mr. Chairman, Ranking Member Carnahan.

I will begin with my contentious conclusion, which is that the international diplomacy of climate change is the most implausible and unpromising initiative since the disarmament talks of the 1930s, and for many of the same reasons, that the Kyoto Protocol

and its progeny are the climate diplomacy equivalent of the Kellogg-Briand Pact of 1928 which promised to end the war, and that future historians are going to look back at this entire period of what I call first-generation climate diplomacy as the climate equivalent of wage and price controls to fight inflation in the '70s, a once popular idea that was completely discarded and no one proposes to bring back. I think the Kyoto approach will not be proposed to be brought back for a very long time either.

I think the whole U.N. process is on life support, and I think it is worth reviewing briefly the reasons why we got to this pass before we can understand that there is a better way forward.

When the issue of climate change first came to the fore in the late 1980s, the diplomatic community approached it in a seemingly sensible way. They asked what diplomatic frameworks have worked for similar kinds of problems in the past. In other words, what do we have on the shelf?

There are basically three models for problems of a global reach that have shown varying degrees of success. The first would be the arms control and anti-proliferation regimes. The second would be the long-running and painstaking trade liberalization process that had been going on for the whole war since the end of World War II. And third and perhaps most applicable was the Montreal Protocol of 1987 that facilitated the organized phaseout of chlorofluorocarbons.

It is those last two in particular that former Vice President Gore used to like to cite as reasons for his enthusiasm and support for the Kyoto process. On the surface, the logic seems straightforward and plausible. If we can reach a binding and enforceable agreement to phase out chlorofluorocarbons, why not a similarly structured agreement to phase out hydrocarbons?

But once you poke beneath the surface, a number of fundamental asymmetries between the precedents and the problems of climate change become apparent but whose implications I think were resisted from the very beginning for the understandable reasons of diplomatic and institutional inertia. I will confine myself to just a couple of the many that come into play.

First, the problem of climate change is orders of magnitude more difficult than the problem of ozone depletion. It is not necessary at all to be a skeptic about climate science to suggest that the same kind of policy dynamic that worked for the ozone layer would not work for a warming planet. The case of chlorofluorocarbons was pretty straightforward. The science was fairly simple. The time frame was short. Most importantly, there were scalable substitutes for chlorofluorocarbons available at a reasonable cost.

By contrast, the climate science is more complex, and even if all the complexities wash out, the focus on near-term reductions in greenhouse gas emissions, unlike the near-term reductions of the Montreal Protocol, fall short for a blindingly simple reason. There are simply no economically scale able substitutes to fossil fuels available on the global level and in the relatively short timeframe contemplated by climate orthodoxy.

The second asymmetry concerns the divide between wealthy nations and developing nations. I was pleased that Mr. Stern's comments actually track very closely with my own perception of the

matter, which is that old dichotomy which really was an artifact of the post-war years was coming to be obsolete at the very time we started in the Kyoto process.

And I was also pleased that Mr. Stern talked about how the Obama administration had decided to pick up with the Bush administration initiative, which Bush had called the Asia-Pacific Partnership. It is worth pointing out that when the Bush administration lost the Asia-Pacific Partnership 5 or 6 years ago, many people in the U.N. climate process and in the climate advocacy community were very critical of the Bush administration for doing that because they said what Bush is trying to do is go around the U.N. process. And now you just heard the Obama administration's climate representative say we have embraced that approach, which I think is much more promising.

I will come back to that for a moment at the end.

But now the issue that was discussed in the previous panel with Mr. Stern was what we have got left right now, which is climate assistance. On the merits, it seems to me this policy is incommensurate with the nature and scale of the problem. If you took seriously the scale of what you are trying to do to match the demands of climate orthodoxy, you would need trillions of dollars in climate assistance, not hundreds of billions of dollars.

Secondly—this is the life support aspect of it—I think that a lot of developing nations are happy to go along with this whole charade if they think we are going to send the cash.

Now, one of the problems here with having the U.N. do it is that it revives again the problem of climate change, which is that it has become something of an all-purpose issue that advocates for all kinds of causes can grab onto. And so back in the '70s, the U.N. was very enthusiastic about what they called the "New International Economic Order," or as Chancellor Willy Brandt described it then, we need to have "a large-scale transfer of resources to developing countries." Well, President Reagan pulled the plug on that very forcefully in the early '80s at a U.N. summit, coincidentally, in Cancún.

But now the idea is back, and you hear a lot of climate people saying, like one U.N. official, Ottmar Edenhoffer of West Germany,

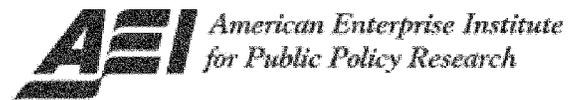
"One must say clearly that we redistribute de facto the world's wealth by climate policy. One has to free oneself from the illusion that international climate policy is environmental policy. This has almost nothing to do with environmental policy anymore."

That is the kind of loose talk and unseriousness that brings discredit to the entire cause of U.N. international climate diplomacy, but it is very popular with a lot of the U.N.'s constituency, and I think that is unfortunate for the whole process.

I will just say—and I will close here since I am over time already—I am an enthusiast that the major economies formed with the Obama administration is actually doing more seriously I think than the Bush administration did. In that regard, I think you will see an interesting continuity between the last administration and this one.

Thank you.

[The prepared statement of Mr. Hayward follows:]



Statement before the House Committee on Foreign Affairs, Subcommittee on
Oversight and Investigations On UN Climate Talks and Power Politics: It's Not
about the Temperature

Time for Climate Pragmatism

Steven F. Hayward

F. K. Weyerhaeuser Fellow American Enterprise Institute

May 25, 2011

The views expressed in this testimony are those of the author alone and do not necessarily represent those of the American Enterprise Institute.

Chairman Rohrabacher, Ranking member Carnahan, and members of the committee:

I will begin with my contentious conclusion, which is that the international diplomacy of climate change is the most implausible and unpromising initiative since the disarmament talks of the 1930s, and for many of the same reasons; that the Kyoto Protocol and its progeny are the climate diplomacy equivalent of the Kellogg-Briand Pact of 1928 that promised to end war (a treaty that is still on the books, by the way), and finally, that future historians are going to look back on this whole period as the climate policy equivalent of wage and price controls to fight inflation in the 1970s.

The diplomatic approach—the United Nations Framework Convention on Climate Change UNFCCC—first set in motion formally at the Rio Earth Summit in 1992 has reached a dead end. I think the dead end of what might be called “first generation climate diplomacy” was tacitly on view at the last major climate summit in Cancun a few months ago. It is important to understand the deeper reasons why if we are going to chart a new course on climate that has a better chance of making real progress.

When the issue of climate change came to the fore in the late 1980s, the diplomatic community approached it in a way that seemed eminently sensible on the surface: what diplomatic frameworks have worked before for similar kinds of global problems? In other words, diplomats reached for what was on the shelf. There were basically three models for problems of global reach that had shown varying degrees of success: the arms control and anti-proliferation regimes; the long-running and painstaking trade liberalization process; and third and perhaps most applicable, the Montreal Protocol that facilitated the organized phase out of chloroflourocarbons. The last two, especially the Montreal Protocol, are the precedents that former Vice President Gore liked to cite as reasons for his support and enthusiasm for the Kyoto Protocol. And on the surface the comparative logic seems plausible: if we can reach a binding and enforceable agreement to phase out chloroflourocarbons, why not a similarly-structured agreement to phase out hydrocarbons?

But once you poke beneath the surface, a number of fundamental asymmetries between these precedents and the problem of climate change become apparent, but whose implications were resisted for the understandable reasons of diplomatic and institutional inertia. I'll confine myself to just a few of the many that came into play.

First, the problem of climate change is orders of magnitude more complex and difficult than the problem of ozone depletion. It is not necessary to embrace the skeptical position about “uncertainty” in climate science to suggest that the same kind of policy dynamic found in the problem of the ozone layer would work equally well for a warming planet. In the case of chloroflourocarbons and the ozone layer, the scientific evidence was straightforward, the time scale was relatively short, and, most importantly, there were scalable substitutes for CFCs available at a reasonable cost. By contrast, the climate science is much more complex, and even if the complexities wash out, the focus on near-term reductions in greenhouse gas emissions is unlike the near-term reduction in CFCs under the Montreal

Protocol for a blindingly simple reason: *There are no economically-scalable substitutes to fossil fuels available on the global level and in the relatively short time frame contemplated by climate orthodoxy.*

The second asymmetry concerns the divide in interests between wealthy nations and poorer developing nations. Poor nations have an overriding interest in affordable energy, which means cheap energy, which means fossil fuel energy. The architects of the Kyoto Protocol recognized this, just as we have recognized this in the trade liberalization process and in the phase out schedules of the Montreal Protocol. But the two-tiered structure of emission limit commitments contemplated in Kyoto came at the very moment that the mid-20th century's conceptual dichotomy between "developed" and "developing" nations was breaking down very rapidly. The hazard of potentially costly emissions limits for wealthy nations was that it would accelerate the globalizing trend of driving manufacturing activity to the developing nations. In fact, the two-tiered architecture of the climate emissions restrictions actually *increased* the near-term incentives for developing nations to resist emission limits. We should not have been surprised that many developing nations, especially China and India, made it clear that they will not go along with binding emission limits for future iterations of the Kyoto Protocol. In this respect climate diplomacy floundered on the same kind of problems that have made the trade liberalization process so slow and excruciating, even though it is a process that promises to make everyone richer. A process that entails slowing down economic growth, even marginally, is going to be much more difficult to achieve.

The more recent answer to this problem was climate assistance to developing nations. On the merits this policy is incommensurate with the nature and scale of the problem, and appears more as an attempt simply to bribe developing nations into going along with the preferred agenda of wealthy nations. Many developing nations are happy to go along with the charade if we'll actually send the cash.

One of the problems of the sheer sprawling nature of climate change science and policy is that it became something of an all-purpose issue on which advocates could attach their pet ideas and concerns. The idea of climate adjustment assistance has revived at the UN an old idea from the 1970s—what was called then the "New International Economic Order." The premise of the New International Economic Order, as explained at the time by West Germany's Chancellor Willy Brandt, was that there needed to be "a large scale transfer of resources to developing countries." This was back in the hey-day of post-colonial Western guilt, and it came to an abrupt end in the 1980s when President Reagan forcefully repudiated it at a UN summit in, coincidentally, Cancun.

But climate assistance has revived the old idea of requiring wealthy nations to indemnify poor nations. The German newspaper *Neue Zürcher Zeitung* observed shortly before the Cancun summit last year: "The next world climate summit in Cancun is actually an economy summit during which the distribution of the world's resources will be negotiated." What prompted this conclusion was a candid admission from a UN official closely involved with the climate negotiations, German economist Ottmar Edenhofer: "But one must say clearly that we redistribute de facto the world's wealth by climate policy. Obviously, the owners of

coal and oil will not be enthusiastic about this. One has to free oneself from the illusion that international climate policy is environmental policy. This has almost nothing to do with environmental policy anymore.”

This is the kind of loose and unserious talk that brings discredit to the UN and to international climate diplomacy. But it is very popular with much of the UN's constituency, and America's diplomatic corps indulges this mentality with polite indifference. With only a few exceptions, such as under Pat Moynihan in the 1970s and Jeane Kirkpatrick in the 1980s, American diplomats do not call out this kind of redistributionist enthusiasm, or if they have, that fact goes un-advertised to the American public, which quite sensibly hears these kinds of sentiments and forms a low opinion of the UN.

I conclude briefly with two observations. First, the nation that made the largest climate assistance commitment at Cancun—to the tune of \$15 billion—was Japan. I don't think there is anyone who thinks Japan should make good on that commitment right now. This suggests how events may rapidly change our perceptions and priorities of risk.

Second, what approach can replace the UN diplomatic track? This is a long subject, but a more likely path to more significant climate outcomes would focus not on emissions limits but an emphasis on cheap decarbonization of energy through innovation, the approach we at AEI have recommended in collaboration with the Brookings Institution and the Progressive-leaning Breakthrough Institute in California in a report called “Post-Partisan Power.” And the diplomatic framework for this would ignore the UN and start with the leading economies of the OECD nations, a process begun tentatively by the Bush Administration, but which now appears to have been embraced by the Obama Administration in the aftermath of the failures of Copenhagen and Cancun.

For a more detailed explanation of this strategy, I recommend “The Hartwell Paper,” a very thoughtful analysis of the issue produced by the Institute for Science, Innovation, and Society at Oxford University in 2009 (<http://www2.jse.ac.uk/researchAndExpertise/units/mackinder/theHartwellPaper/Home.aspx>). A follow-up paper from the Hartwell group, which I have joined, is being finished this afternoon, in fact. I'd also recommend the recent book from Roger Pielke Jr. of the University of Colorado entitled *The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming*.

Mr. ROHRBACHER. Mr. Diring.

STATEMENT OF MR. ELLIOT DIRINGER, VICE PRESIDENT FOR INTERNATIONAL STRATEGIES, PEW CENTER ON GLOBAL CLIMATE CHANGE

Mr. DIRINGER. Thank you, Mr. Chairman, Mr. Carnahan, for the opportunity to appear before you today.

In summarizing my prepared statement, I will focus on the status of the U.N. climate talks, the efforts being taken by other countries to address climate change, and the reasons we believe stronger U.S. action is very much in our national interest.

An effective global response to climate change is possible only if countries can find ways to align their respective national interests with our common interest in a stable climate. President Bush—the first President

Bush—and the Senate were right in helping to establish the U.N. Framework Convention as a forum for multilateral action. After years of stalemate, we are encouraged by the movement over the

past 2 years toward a more realistic and more balanced global approach, and this is thanks in no small measure to the efforts of U.S. negotiators.

For the first time, all of the world's major economies have made explicit pledges to limit or reduce their emissions; and parties have agreed to strengthen transparency so we can better assess whether the countries are keeping their promises. It is vital that the United States remain fully engaged in the U.N. climate talks. Our near-term aim should be to put in place the transparency, finance, and other mechanisms agreed to in Cancún. Our longer-term objective should be fair, effective, and binding commitments among all of the world's major economies.

While international agreements are critical, a more important measure of efforts to date are the steps countries are undertaking domestically. A growing number are implementing policies contributing in one way or another to reducing greenhouse gas emissions. Many see this challenge as an important opportunity as well. A number of our major trading partners are moving aggressively to grow their clean energy technology industries, creating jobs and high-value exports.

Europe, which continues to lead the world in green energy investments, is succeeding in reducing its emissions while growing its economy. From 2004, the year before the EU instituted its emissions trading system, through 2008, the year before the global financial crisis, emissions were down 4.1 percent in the EU, while GDP grew 9.8 percent.

China also is investing heavily and employing strong policies to build its clean energy industry, which is already the world's leading producer of wind turbines and solar panels. China's new 5-year plan includes energy efficiency, emissions intensity, and renewable energy targets. It also includes policies to promote innovation in strategic and emerging technologies, including nuclear, solar, wind, biomass, and hybrid and electric vehicles. To be certain, China continues to build coal-fired power plants and its emissions continue to rise. But it is moving forward with domestic policies in line with its international pledge, and many of these policies will help China retain a competitive edge in the rapidly expanding clean energy market.

Mr. Chairman, while other countries are stepping up their efforts, the U.S. has barely begun. This inaction exposes our Nation to real and rising risks. We are already witnessing the impacts of climate change here in the United States. The widespread flooding now inflicting communities along the Mississippi River shows how painfully vulnerable we are to the rising risks associated with climate change.

Looking beyond our borders, our military warns that the added stresses of climate change in unstable regions could mean further demands on our strained military resources.

Our inaction also risks our economic well-being. The United States remains the world's leading manufacturer, but in the growing clean energy sector we risk falling further behind our competitors.

The recent experience of the U.S. auto industry illustrates how the right policies can help improve efficiency and reduce emissions

while creating jobs and profits. Spurred by fuel economy standards enacted under President Bush, car makers are now offering more fuel-efficient cars. With gas prices rising, consumers are buying them.

In reporting strong sales and profits last quarter, all three U.S. auto makers cited higher sales of fuel-efficient models. Last year, only one conventional car sold in America got 40 miles to the gallon. Today, there are nine. Three of them—the Cruise, Elantra, and Focus—were among the top 10 sellers last month. All three are made in the U.S.

If we want our clean energy firms to invest in jobs at home and compete effectively overseas, we must ensure strong, sustained demand for their goods here in the United States. Mr. Chairman, the longer we wait to act, the harder it will be to avert the worst consequences of warming, the higher the cost of coping with those that cannot be avoided, the more we undermine our security and the further we fall behind other countries in the clean energy race. We must strengthen our efforts here at home and we must continue working with other nations toward strong and lasting global agreements.

I again thank you for the opportunity to appear before you today and will be pleased to answer your questions.

[The prepared statement of Mr. Diringer follows:]

**Statement of Elliot Diringer
Vice President for International Strategies
Pew Center on Global Climate Change**

**Hearing on
“UN Climate Talks and Power Politics – It’s Not About the Temperature”
Subcommittee on Oversight and Investigations
Committee on Foreign Affairs
United States House of Representatives
May 25, 2011**

Mr. Chairman, Ranking Member Carnahan, and members of the Committee, thank you for the opportunity to testify on the critical issues confronting the United States and other nations in the effort to address global climate change. My name is Elliot Diringer, and I am Vice President for International Strategies at the Pew Center on Global Climate Change.

The Pew Center is an independent non-profit, non-partisan organization dedicated to advancing practical and effective policies and actions to address global climate change. Our work is informed by our Business Environmental Leadership Council (BELC), a group of 46 major companies, most in the Fortune 500, that work with the Center on climate change risks, challenges, and solutions.¹

Mr. Chairman, climate change poses a serious long-term threat to our nation’s resources, our economic well-being, and our national security. While action to address climate change must begin at home, this is a quintessentially global challenge, which therefore requires a global solution. I would like to focus my testimony today on three topics: 1) the status of the international climate negotiations, and the objectives that should guide U.S. climate diplomacy; 2) the policies being implemented in other countries – including our major trading partners – to reduce greenhouse gas emissions; and 3) the environmental, economic and security rationales for stronger climate action.

My principal points are as follows:

- The past two years have seen the emergence of a more realistic and balanced approach in the international climate negotiations, thanks in large measure to the efforts of U.S. negotiators. The United States must remain fully engaged in the talks with the aim of strengthening multilateral support and transparency, thereby promoting action while laying the groundwork for a future binding agreement.
- A growing number of countries are pursuing policies that help reduce greenhouse gas emissions. Many see the challenge as an important opportunity as well. Some of our major trading partners are moving aggressively to grow their clean energy technology industries, which create domestic jobs and high-value exports. Without stronger

¹ For more on the Pew Center on Global Climate Change and the Business Environmental Leadership Council, see www.pewclimate.org.

policies creating similar incentives here, the United States risks falling further behind in the rapidly expanding clean energy market.

- U.S. inaction on climate change exposes our nation to real and rising risks. The longer we delay action, the harder it will be to avert the worst consequences of warming, the higher the cost of coping with those that can not be avoided, and the further we fall behind in the clean energy race. Taking steps now to expand clean energy and reduce greenhouse gas emissions is squarely in our strong national interest.

Moving the Negotiations Forward

Multilateral regimes do not generally spring forth fully formed – rather, they evolve over time.² The international climate effort is no different. It began with the 1992 United Nations Framework Convention on Climate Change (UNFCCC), which was signed by the President George H. W. Bush and unanimously ratified by the U.S. Senate. The UNFCCC, now ratified by 195 parties, established a long-term objective of preventing “dangerous anthropogenic interference with the climate system” and a framework within which countries can work together to achieve it. To be certain, countries’ positions in the climate negotiations are heavily conditioned by their respective national interests. But underlying the Framework Convention is a clear recognition that countries share a common interest in averting dangerous climate change. And a fundamental principle of the Convention is that while our respective responsibilities are differentiated, depending on nations’ circumstances, we all share a common responsibility for meeting this common challenge.

Since the signing of the Framework Convention, the climate regime has evolved in fits and starts. While the Convention is largely voluntary in nature, countries resolved shortly after its entry into force that stronger action was needed, and initiated a new round of negotiations aimed at establishing binding emission targets for developed countries. This led in 1997 to the Kyoto Protocol. Although the United States chose not to participate, Kyoto entered into force in 2005, and most other industrialized countries are on track to meeting their obligations. For many countries, the principal aim since 2005 has been to extend this legally-binding regime through a second round of targets. But many of the countries with targets have made clear that they will not assume new binding obligations without commensurate commitments by the United States and the major developing economies. Through this prolonged stalemate, the negotiations were stuck in a mode of binding-or-nothing, and consequently produced virtually nothing.

Over the past two years, however, we have seen the emergence of a more realistic, more balanced and more constructive approach, in large measure through the efforts of the United States. Many viewed the Copenhagen summit in 2009 as a major failure because they had hoped – unrealistically – that it would produce a binding agreement. In our view, the Copenhagen

²Bodansky, Daniel and Elliot Diringer. “The Evolution of Multilateral Regimes: Implications for Climate Change.” Pew Center on Global Climate Change. December 2010. Available at <http://www.pewclimate.org/publications/report/evolution-multilateral-regimes-implications-climate-change>.

Accord, negotiated personally by President Obama and other world leaders, represented genuine progress. Among other things, the Accord set an aspirational goal of limiting global temperature increase to 2 degrees Celsius; set goals for mobilizing financial support to help developing countries reduce emissions, preserve forests, and adapt to climate change; and established the broad parameters of a system to ensure transparency and accountability. What's more, it provided for mitigation pledges from both developed and developing countries. As a result, for the first time ever, all of the world's major economies – including China and India – have now made explicit pledges to reduce or limit their greenhouse gas emissions.

In the chaotic final hours in Copenhagen, the Accord was not formally adopted by the UNFCCC Conference of the Parties. However, at the 16th Conference of the Parties last year in Cancún, parties adopted a package of decisions incorporating the essential elements of the Copenhagen Accord into the UNFCCC framework, and taking initial steps to implement them. The Cancún Agreements represent the most tangible progress within the UNFCCC negotiations in nearly a decade. First, they memorialize the pledges taken under the Copenhagen Accord by more than 80 countries accounting for more than 80 percent of global emissions. Second, the Agreements establish the fundamentals of a stronger support system for developing countries, and a stronger transparency system enabling countries to verify whether others are fulfilling their pledges.

The Agreements also reflect a more flexible and realistic framework for enshrining countries' actions. Unlike the Kyoto Protocol, which allows only one type of commitment (a binding emissions target with a prescribed, common base year), the Agreements allow for a diversity of approaches. In the case of developed countries, pledges take the form of economy-wide emission targets, but with flexibility on base year and accounting. Developing countries have even broader discretion in defining their "nationally appropriate mitigation actions." China and India, for instance, have pledged reductions in emissions intensity (emissions per unit of GDP), while Brazil, South Africa, Mexico and the Republic of Korea have pledged to reduce emissions below "business as usual." This more realistic and balanced approach reflected in the Cancún Agreements, as well as the movement toward greater transparency for all major economies, are direct consequences of U.S. engagement and leadership in the climate negotiations.

It is important to emphasize that the pledges countries have made at this stage are voluntary in nature. We continue to believe that the global response to climate change should ultimately be enshrined in fair, effective and binding commitments among all of the world's major economies. Countries will deliver their strongest possible efforts only if they are confident that others are also contributing their fair share, and this confidence is best maintained through mutual and binding commitments. We also recognize, however, that it will be a number of years before the United States, China and other key countries are prepared to assume binding commitments. Under these circumstances, we believe the United States must remain fully engaged in the climate negotiations with the aim of strengthening the UNFCCC as a means of delivering support and transparency, thereby promoting near-term action while laying the groundwork for a future legal agreement.

At the 17th Conference of the Parties later this year in Durban, we believe the aim should be further progress on the operational issues addressed in the Cancún Agreements, including the launch of a new Green Climate Fund to support developing country efforts and significant progress in strengthening transparency through new “measurement, reporting and verification” practices; and a clear declaration by parties of their intent to work toward legally binding outcomes. This outcome would build on the achievements of the past two years and continue the incremental progress needed to strengthen confidence in the regime and among parties.

Efforts in Other Countries

While international agreements and commitments are critical to our success in addressing global climate change, a more important measure of efforts to date are the policies and actions countries are undertaking domestically. A growing number of countries are developing or implementing policies contributing in one way or another to reducing greenhouse gas emissions. Many see the challenge as an important opportunity as well. A number of our major trading partners are moving aggressively to grow their clean energy technology industries, which create domestic jobs and high-value exports. Without stronger policies creating similar incentives here, the United States risks falling further behind our competitors in the rapidly expanding clean energy market.

The European Union is a clear leader in the development, manufacture, and deployment of clean technologies. The EU has set mandatory targets to reduce greenhouse gas emissions 20 percent below 1990 levels, and to increase renewables to 20 percent of its energy mix, by 2020. The centerpiece of EU climate policy is the Emissions Trading System (ETS) launched in 2005, which regulates carbon dioxide emissions (CO₂) in the power and major industrial sectors generating about half of the EU’s CO₂ emissions. Having overcome the early complications typical of a new compliance market, the system is set to expand in 2012 to cover other gases and the aviation sector. Europe’s clean energy investments, the world’s largest, doubled from 2009 to 2010, reaching nearly \$81 billion.³ From 2004, the year before the ETS began, through 2008, the year before the global financial crisis, the European Union reduced its emissions 4.1 percent, while its GDP grew 9.8 percent.

China also has taken major steps towards increasing its manufacture and use of clean energy technologies. Under the Cancún Agreements, China pledged that by 2020 it will reduce the CO₂ intensity of its economy 40 to 45 percent below 2005 levels; increase the share of non-fossil fuels in primary energy consumption to 15 percent by 2020; and increase forest coverage by 40 million hectares and forest stock volume by 1.3 billion cubic meters. These targets are reflected in domestic policy as well. Additional policies include: a national target for renewables to provide 15 percent of primary energy by 2020, with specific targets for wind, solar, biomass, and hydropower; feed-in tariffs for onshore wind power; and proposed fuel efficiency standards requiring urban cars and light trucks to achieve an average of 36.9 miles per gallon by 2015. The 12th Five-Year Plan adopted by the Chinese leadership in March devotes considerable attention

³ “Who’s Winning the Clean Energy Race?” Pew Environment Group, 2010. Available at <http://www.pewenvironment.org/uploadedFiles/PEWG/Publications/Report/G-20Report-LOWRes-FINAL.pdf>.

to energy and climate, establishing a series of targets and policies for 2011-2015.⁴ These include a suite of policies to promote innovation in new strategic and emerging technologies, including nuclear, solar, wind, biomass, and hybrid and electric vehicles. The plan also includes a goal to "gradually establish a carbon trade market."

To be certain, China continues to build coal-fired power plants as well, and its emissions continue to rise. A recent analysis by the Lawrence Berkeley National Laboratory projects that on the present path China's emissions will peak between 2030 and 2035.⁵ But the climate and energy provisions of the new Five-Year Plan show how China is moving forward with domestic policies in line with the pledge it offered in Copenhagen and formalized in the Cancún Agreements. Many of the policies also are clearly calculated to help ensure that China – which recently surpassed the United States and other countries to become the leading manufacturer of wind turbines and solar panels – retains a strong competitive edge going forward.

Other major developing countries are also stepping up their efforts to limit emissions growth and transition to cleaner energy. India, which pledged to reduce its emissions intensity (excluding the agricultural sector) 20 to 25 percent below 2005 levels by 2020, is pursuing a range of policies under its 2008 National Action Plan on Climate Change, including: a renewable energy target; a feed-in tariff for renewable energy; a market-based system of tradable energy savings certificates in industrial sectors; and a coal levy generating finance for clean energy research and innovation. Brazil and Indonesia have set goals to reduce deforestation. South Africa has set national renewable energy and energy efficiency targets and established a renewable energy feed-in tariff. Meanwhile, the governments of Mexico and South Korea have proposed establishing emissions trading systems.

While the global picture is uneven, these examples demonstrate a growing will among countries to undertake a wide variety of measures to promote clean energy and to reduce greenhouse gas emissions.

Addressing Climate Change is in Our National Interest

Earlier I emphasized that all nations share a common interest in averting dangerous climate change. It is important to understand why stronger efforts to address climate change and pursue clean energy are in our direct national interest as well. There are many reasons, whether from an environmental, national security or economic perspective.

Environmental Risks

The scientific and environmental rationale for lowering our greenhouse gas emissions is clear and compelling. As again underscored two weeks ago in *America's Climate Choices*, a

⁴ Lewis, Joanna. "Energy and Climate Goals of China's 12th Five-Year Plan." Pew Center on Global Climate Change. March 2011. Available at <http://www.pewclimate.org/international/factsheet/energy-climate-goals-china-twelfth-five-year-plan>.

⁵ Zhou, Nan et al. "China's Energy and Carbon Emissions Outlook to 2050." Lawrence Berkeley National Laboratory. April 2011. Available at <http://china.lbl.gov/publications/2050-outlook>.

report produced by the U.S. National Academy of Sciences at the request of Congress, “Climate change is occurring, is very likely caused by human activities, and poses significant risks for a broad range of human and natural systems.”⁶ On these fundamental points, there is very strong consensus within the scientific community.

Due largely to the combustion of fossil fuels, atmospheric concentrations of carbon dioxide are at their highest level in at least 800,000 years. Over the last century, average global temperatures rose more than 1 degree Fahrenheit and in some places, including parts of the United States, temperatures rose more than 4 degrees.⁷ If greenhouse gas emissions continue to grow, average global temperatures are projected to reach 2.0°F to 11.5°F (1.1°C to 6.4°C) above pre-industrial levels by 2100, with warming in the U.S. expected to be even higher.

We are already witnessing the impacts of climate change here in the United States; the widespread flooding now inflicting communities along the Mississippi River vividly illustrates how vulnerable we are to the rising risks associated with climate change. Most of North America is experiencing increasing numbers of unusually warm days and nights and a decreasing number of unusually cool ones. At the same time, droughts are occurring more frequently while snowpacks are melting earlier in the year. Sea-level rise of 8 inches or more has been recorded in some coastal areas of the country.⁸ Continued warming will mean further sea-level rise, elevating storm surges and gradually inundating low-lying coastal areas along all U.S. coastlines; increased frequency and severity of extreme weather events; increased risk of droughts and floods; significant threats to ecosystems and biodiversity; and increased public health risks. Beyond such readily foreseeable impacts, the longer warming persists and the greater its magnitude, the greater the risk of abrupt or catastrophic changes in the global climate.⁹

Actions to reduce the risks of climate change by lowering greenhouse gas emissions have other environmental co-benefits as well. Lower-carbon technologies such as natural gas and renewable energy also emit less of other pollutants including nitrogen dioxide, particulates, sulfur dioxide, lead, carbon monoxide, mercury, and other hazardous pollutants that have a wide range of harmful health effects, from asthma to cancer and premature death. Past regulatory efforts to reduce these pollutants have proven highly successful and cost-effective. The Office of Management and Budget (OMB) found that from 1992 to 2002 “major rules” enacted under the Clean Air Act produced benefits of between \$145 billion and \$218 billion a year, far exceeding the annual costs \$22 billion to \$25 billion.¹⁰ A study by researchers at MIT found total annual

⁶ Committee on America's Climate Choices; National Research Council. *America's Climate Choices*. 2011. Available at http://www.nap.edu/catalog.php?record_id=12781

⁷ “Climate Change 101: Science and Impacts.” Pew Center on Global Climate Change. January 2011. Available at <http://www.pewclimate.org/docUploads/climate101-science.pdf>

⁸ *Global Climate Change Impacts in the United States*. Global Change Research Program. 2009. Available at <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/full-report>

⁹ Committee on America's Climate Choices; National Research Council. *America's Climate Choices*. 2011. Available at http://www.nap.edu/catalog.php?record_id=12781

¹⁰ Office of Management and Budget. “Informing Regulatory Decisions: 2003 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities. 2003. Available at http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/2003_cost-ben_final_rpt.pdf

benefits rising from \$50 billion in 1975 to \$400 billion in 2000.¹¹ We can expand these benefits by moving towards cleaner energy sources.

Security Risks

America's military leaders recognize that climate change also poses increasing risks to our national security and new demands on our military resources. According to the Pentagon's latest Quadrennial Defense Review, climate change may act as "an accelerant of instability or conflict, placing a burden to respond on civilian institutions and militaries around the world."¹²

Indeed, climate change will be a threat multiplier, further destabilizing regions of the world already burdened with countless other problems. Chronic drought, rising seas, extreme weather and other climate impacts could undermine weak governments, induce mass migrations, and trigger or heighten resource competition, contributing to social instability and, potentially, armed conflict. Rising seas could displace as many as 30 million people in Bangladesh, creating additional tensions on the Indian subcontinent. Receding glaciers could leave millions across Asia facing chronic water shortages. A distinguished group of retired three- and four-star U.S. military officers warns that drought, thirst, and hunger are already exacerbating the conflicts and humanitarian disasters in Darfur and Somalia, and climate change portends more situations like these.¹³

Within the past year, devastating floods in Pakistan have strained the resources and stability of a key U.S. ally in the battle against international terrorism, and an intense drought and heat wave has diminished food production in Eastern Europe and Central Asia, causing a spike in global wheat prices. Yemen, where the CIA says Al Qaeda is of greatest concern today, is running out of groundwater for its under-employed population.¹⁴ While these events cannot be directly attributed to climate change, scientists are very clear that these types of events will occur more frequently in a warming world.

Other security issues are arising closer to home. The Arctic has long been a place where defense issues were minimized because the waterways were largely frozen over year-round. With warming now occurring there at twice the average global rate, the Arctic Ocean is opening to military and civilian transportation, and the potential security implications are already apparent. Receding sea ice is creating increased competition over territory and resources in a region where the United States is currently unprepared to address potential military situations.¹⁵

¹¹ Yang, T., K. Matus, S. Paltsev and J. Reilly, "Economic Benefits of Air Pollution Regulation in the USA: An Integrated Approach." The MIT Joint Program on the Science and Policy of Global Change. July 2004. Available at http://globalchange.mit.edu/pubs/abstract.php?publication_id=685

¹² *Quadrennial Defense Review*. United States Department of Defense. February 2010. Available at http://www.defense.gov/qdr/images/ODR_as_of_12Feb10_1000.pdf

¹³ Military Advisory Board. "National Security and the Threat of Climate Change." CNA. April 2007. Available at <http://SecurityAndClimate.cna.org>

¹⁴ Rogers, W. and J. Gullede, "Lost in Translation: Closing the Gap Between Climate Science and National Security Policy." Center for a New American Security. April 2010. Available at <http://cnas.org/node/4391>

¹⁵ Burke, Sharon; Jay Gullede, Michael Horowitz, Christine Parthemore, and Nirav Patel. "Uncharted Waters: The U.S. Navy and Navigating Climate Change." Center for a New American Security. December 2008. Available at http://www.cnas.org/files/documents/publications/CNAS_Working%20Paper_CNO_ClimateChange_BurkePatel_IDec2008.pdf

Protecting our nation's security necessarily involves being prepared to deal with an uncertain future. Indeed, planning under uncertainty is business as usual for the defense community. The fact that military and security experts are increasingly concerned about the risks associated with climate change should serve as an important wake-up call to us all.

Economic Risks

Finally, addressing climate change is very much in our economic interest. The United States is the world's leading manufacturer, producing 21 percent of global output while supporting 18.6 million domestic jobs.¹⁶ Yet in the growing clean energy sector, we risk falling further behind our competitors because the demand for these goods is not as strong at home as it is overseas.

China and other countries are investing heavily in clean energy technologies, positioning themselves to compete in a growing global market projected to reach \$106 billion to \$230 billion a year in 2020, and as much as \$424 billion a year in 2030. In order for the United States to develop a successful, profitable, and competitive clean energy sector, companies need clear regulatory frameworks ensuring a strong domestic market for these goods.

The recent experience of the U.S. auto industry provides an instructive case study. While the technology in our cars has advanced significantly in the last two decades, the typical new vehicle today consumes gasoline at about the same rate as one produced in the late 1980s.¹⁷ But with gas prices again rising, consumers are increasingly turning to more fuel-efficient vehicles. Spurred by fuel economy standards enacted in 2007, American automakers have been ready to meet their customers' needs. U.S. automakers reported strong sales and combined profits of nearly \$5.9 billion in the first quarter of 2011, and all three cited higher sales of fuel-efficient vehicles as a contributing factor. Last year, the Smart car was the only conventional car available in the United States with a fuel economy rating of 40 miles per gallon or better. Today there are nine, and three of them – the Cruze, Elantra, and Focus – were among the 10 top-selling vehicles last month. All three are made in the United States.

Unfortunately, similar examples in the clean energy field must be found outside the United States. In Germany, for instance, renewable energy policies helped boost jobs in the renewable energy sector from 160,000 in 2004 to 370,000 in 2010.¹⁸ The German government credits this dramatic growth in clean energy jobs as a major factor in its relatively fast recovery

¹⁶ National Association of Manufacturers. "Facts About Manufacturing." Available at <http://www.nam.org/Statistics-And-Data/Facts-About-Manufacturing/Landing.aspx>

¹⁷ Greene, David L., and Steven P. Plotkin. "Reducing Greenhouse Gas Emissions from U.S. Transportation." Pew Center on Global Climate Change. January 2011. Available at <http://www.pewclimate.org/publications/reducing-ghg-emissions-from-transportation>.

¹⁸ German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety, March 16, 2011. German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety, "Gross employment from renewable energy in 2010," March 18, 2011.

from the 2008 recession.¹⁹ Germany's renewable energy sector is projected to employ about 450,000 to 580,000 workers by 2020, and between 500,000 and 600,000 in 2030.²⁰

By contrast, U.S. clean energy manufacturers are increasingly finding their biggest growth opportunities overseas. First Solar, Inc., of Arizona, the world's second largest solar manufacturer, plans to build a 2,000-megawatt solar photovoltaic power plant in China – the largest planned project of its kind in the world.²¹ While First Solar will also add new manufacturing jobs at its U.S. facilities, at least 71 percent of its planned growth is outside the United States. U.S. firms remain among the world's top innovators. But if our clean energy firms are to invest and create jobs at home, and compete effectively overseas, we must provide the regulatory certainty that creates strong, sustained demand for their goods here in the United States. Doing so will strengthen our economy while protecting the United States against the risks of climate change.

Conclusion

Mr. Chairman, U.S. inaction on climate change exposes our nation to real and rising risks. The longer we delay action, the harder it will be to avert the worst consequences of warming, the higher the cost of coping with those that can not be avoided, and the further we fall behind other countries in the clean energy race. Taking steps now to expand clean energy and reduce greenhouse gas emissions is quite clearly in our strong national interest.

As the world's largest economy, leading innovator, and largest cumulative emitter, the United States also has a responsibility to to the international community. Thanks to U.S. efforts, the global climate effort now appears headed on a more reasonable course. Our ability to continue to shape that effort in the years ahead depends heavily on a demonstrated commitment to address climate change here at home.

¹⁹ <http://www.reuters.com/article/2009/02/24/us-climate-germany-jobs-idUSTRE51N2F920090224>

²⁰ German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety, "[Renewably employed! Short and long-term impacts of the expansion of renewable energy on the German labour market.](#)" September 2010.

²¹ IEA 2010, and Woody, Todd. "[U.S. Solar Firm Cracks Chinese Market.](#)" The New York Times, September 8, 2009.

Mr. ROHRABACHER. And Dr. Twining.

STATEMENT OF DANIEL TWINING, PH.D., SENIOR FELLOW FOR ASIA, GERMAN MARSHALL FUND OF THE UNITED STATES

Mr. TWINING. Thanks very much, Mr. Chairman, Mr. Carnahan, for having me here today. The views that follow are mine and not those of the German Marshall Fund.

U.S. climate diplomacy should ideally be a bridge rather than a wedge between America and key partners. Arguably, poor American diplomacy combined with the flaws of U.N.-led climate negotiations have had the effect of isolating the U.S. from friends and allies, rather than enabling it to build like-minded coalitions on environmental issues of shared concern.

A more effective approach would integrate U.S. interests in mitigating climate change with broader strategic concerns. It would work to produce positive sum outcomes to climate negotiations facilitated by joint development and employment of key environmental technologies, rather than succumbing to a zero sum logic pitting the developed world against the developing world in multinational arenas.

An instructive example of an unfortunate outcome for broader U.S. interest was the Copenhagen Conference. Its end game produced a crisis in transatlantic relations. Faced with the collapse of the talks, President Obama ended up forging the agreement in backroom talks with the leaders of Brazil, South Africa, India, and China—the BASIC countries.

European leaders were shocked that, after decades in which Europe was the global pacesetter in managing climate change, the decisive agreement on a post-Kyoto framework was struck without Europe in the room. European leaders were relegated to being briefed by President Obama after his conclave with the leaders of the BASIC group. Many European officials openly pondered a future in which the U.S. and China managed a G2 consortium to handle global issues or one in which Washington conclave with other rising powers, even as it decoupled from its traditional allies to set the global governance agenda. In this way, Copenhagen weakened transatlantic comity even as it produced an outcome unlikely to substantially mitigate climate change.

The developed versus developing world dynamic of multilateral climate negotiations with universal membership also compromises U.S. interests with key emerging powers. Among the most damaging spillover is the G-77 dynamic. That is shorthand for the broader set of discussions that have been going on on climate. It enabled South Africa and other nonaligned ringleaders to exercise power without responsibility, organizing opposition to the developed States by mobilizing a large coalition of developing nations to oppose U.S. and European climate goals.

G-77 dynamics create opportunities for our competitors to make mischief. In Copenhagen, China took an early strategic decision to conclave with the G-77 grouping. China's stand served multiple objectives that earned Beijing considerable goodwill among developing nations, tweaked the U.S., and created cleavages between Washington and other important powers, obscured China's status as the world's leading polluter and second-largest economy by posi-

tioning it as a developing economy alongside Sudan and other poor states, gave China critical leverage in the Copenhagen end game.

A third negative dynamic around these universal climate negotiations under the U.N. framework is the unnatural wedge it introduces into U.S.-India relations. In the run-up to Copenhagen, India had a revealing internal debate over how to balance its growing role as a partner of the West and an international stakeholder with its older identity as a non-aligned developing power.

In my view, U.S. diplomacy could have been more effective in developing a program of activities to generate green technologies and alternative energy investments in a way that kept India on side during the Copenhagen negotiations. Looking back, India should have been the centerpiece of the strategy to disaggregate the developing world in a way that split the G-77 and decoupled key rising democracies that have serious equities in collaborating with us from less constructive players. Instead, by virtue of India's own shortsighted calculations and the shortcomings of U.S. and U.N. diplomacy, India was pushed into making common cause with its leading strategic competitor, China, against arguably its most important international ally and friend, the United States.

A few thoughts on looking ahead. Both U.S. diplomacy and the cause of managing climate change would benefit from a different approach to tackling global warming, one that was not U.N.-led with universal membership in which small countries can play the role of spoilers and global consensus is achieved with really lowest common denominator outcomes that don't please anyone. Climate negotiations instead could take the form of smaller groupings led by the great powers in closed-door negotiations that can encourage even countries like China to be more constructive than to grandstand.

Joint development and application of key energy and environmental technologies with friendly emerging economies could replace the setting of vague environmental targets without action plans to meet them. Our diplomacy could also expand climate mitigation partnerships as part of broader bilateral agendas with key emergency powers, rather than attempting to bring them on side in the more difficult global multilateral context.

Finally, prioritizing climate concerns at the expense of broader strategic ties arguably puts the cart before the horse. In the case of countries like India, maybe Brazil, our interests in the wider climate agenda might be better served by building comprehensive partnerships over time that develop the mutual trust necessary to manage the climate issue.

Thank you.

[The prepared statement of Mr. Twining follows:]

Daniel Twining
Senior Fellow for Asia, The German Marshall Fund of the United States
“UN Climate Talks and Power Politics: It’s Not About the Weather”
May 25, 2011
Subcommittee on Oversight and Investigations
House Committee on Foreign Affairs

Must U.S. climate diplomacy be a wedge rather than a bridge between the United States and key international partners? Arguably, poor American diplomacy combined with the flaws of the United Nations-led climate-change negotiations have had the effect of isolating the United States from important friends and allies rather than enabling it to build like-minded coalitions on environmental issues of shared concern. A more effective approach would integrate U.S. interests in mitigating climate change with broader strategic concerns vis-à-vis both allies and rising powers. It would work to produce positive-sum outcomes to climate negotiations facilitated by joint development and deployment of key energy and environmental technologies, rather than succumbing to a zero-sum logic pitting the developed world against the developing world in global, U.N.-led multinational arenas.

Transatlantic relations: Copenhagen’s negative example

An instructive example of an unfortunate outcome for broader U.S. interests was the United Nations’ Copenhagen climate conference of December 2009. American diplomacy and the flaws inherent in a multilateral conference with universal membership undermined Washington’s ties with its European allies and with rising powers including China, Brazil, and India. The merits of such an approach would be debatable if a binding international framework with tangible provisions to mitigate the effects of global climate change had resulted. Such an outcome did not come to fruition, with a weak agreement failing to compensate for the diplomatic cleavages produced by the negotiations process.

The United States entered the conference aligned with Europe on key goals, including securing binding commitments on greenhouse-gas reductions from rising economies like China and India which had been exempt from such obligations under the Kyoto Accord. Indeed, President Obama’s strong commitment to climate-change mitigation was touted in Europe following his election as an issue that would bring the transatlantic allies back together after the cleavages caused by different approaches to climate change during the George W. Bush administration. In turn, American and European unity at Copenhagen was expected to produce a more environmentally robust outcome than the flawed Kyoto framework that preceded it.

Unfortunately, the Copenhagen endgame produced a crisis in transatlantic relations. Faced with the collapse of the talks, President Obama ended up forging the Copenhagen agreement in back-room talks from which America’s core European allies were excluded. In negotiations with the leaders of Brazil, South Africa, India, and China – the “BASIC” countries – the U.S. president struck the key outlines of the Copenhagen Accord: major emitting nations agreed to limit temperature increases to two degrees Celsius, to implement mitigation actions toward this goal, and to register and report their actions to the international community,

developed nations pledged to register mitigation targets for 2020 and to mobilize public and private funds to assist developing nations in stemming global warming.

European leaders were shocked that, after decades in which Europe was the global pacesetter in managing climate change, the decisive agreement on a post-Kyoto framework was struck without Europe in the room. European leaders were relegated to being briefed by President Obama after his conclave with the leaders of the BASIC group. Many European officials openly pondered a global future in which the United States and China managed a “G2” consortium to handle global issues, or one in which Washington conclave with other rising powers even as it decoupled from its traditional allies to set the global governance agenda. In this way, the Copenhagen process weakened transatlantic comity even as it produced an outcome that was unlikely to substantially mitigate global climate change.

The toxic G-77 dynamic in global climate negotiations

The “developed versus developing world” quality of multilateral climate change negotiations with universal membership also compromises U.S. interests with a range of key emerging powers. Among the most damaging spillover from such global processes under the U.N. mandate is the G-77 dynamic, a phenomenon familiar to those who follow the workings of the United Nations General Assembly. The Copenhagen process enabled South Africa and other “non-aligned” ringleaders to generate and organize opposition to the developed Western nations by mobilizing a large coalition of developing states to oppose U.S. and European climate goals.

As at the General Assembly, a U.N.-led multilateral process with universal membership creates a situation in which smaller states can exercise power without responsibility – employing opposition to the objectives of the United States and its traditional allies as a mobilizational tool to disproportionately exercise international clout in ways non-global processes and forums render more difficult. By effectively giving smaller nations veto power and enabling them to obstruct great-power leadership, the Copenhagen framework in some respects turns the international order on its head, rendering great powers susceptible to pressure from lesser states and giving smaller countries a blocking role they would not normally have in international politics. These phenomena, in turn, complicate U.S. relations with important developing states and can flip smaller nations generally friendly to America into an oppositional role.

G-77 dynamics also create opportunities for great power competitors to the United States to make mischief. In Copenhagen, China took an early strategic position to conclave with the South Africa-led G-77 grouping, extending rhetorical support for its oppositional stand against the United States and Europe and providing the coalition with an important measure of legitimacy. China’s stance served multiple objectives: it earned Beijing considerable goodwill among smaller developing nations; tweaked the United States and created cleavages between Washington and other important powers; obscured China’s status as the world’s leading polluter and second-largest economy by positioning it as a “developing” economy alongside Nicaragua, Cuba, and other poor states; and gave China critical leverage as a spokesman for a large bloc of states in the Copenhagen endgame. Of course, these strategic benefits accrued to China because it opposed the goals of the United States and its allies; G-77 dynamics may be said to have

encouraged Chinese obstreperousness, as seen when a lower-ranking Chinese negotiator had a heated, finger-wagging exchange with the President of the United States, a hitherto unforeseen occurrence at such global conclaves.

Unnecessary cleavages with India and other potentially like-minded rising powers

A third negative dynamic produced by global climate change negotiations in a United Nations context is the unnatural wedge it introduces into U.S.-India relations. For over a decade, Presidents Clinton, Bush, and Obama invested significantly in constructing a new strategic partnership with the world's largest democracy following half a century of troubled relations stemming from disputes over Cold War politics and India's nuclear program. For their part, successive Indian administrations of different political persuasions have gradually re-oriented their country's foreign policy away from outdated notions of non-alignment and in the direction of strategic cooperation with the United States. Prime Minister Manmohan Singh even subjected his government to a no-confidence vote in parliament over deepening India's relations with America through the civil-nuclear agreement, an unprecedented development in Indian politics.

From managing China's rise to defeating Islamic terrorism to building a stable Afghanistan to sustaining freedom of the seas, few countries have such a congruence of long-term interests as do the United States and India. The possibilities for partnership between the world's biggest democracies – and the role of Indo-American entente in sustaining a world safe for free peoples and free markets – are promising indeed. It is therefore unfortunate that U.S. climate diplomacy has created unnecessary cleavages between India and the United States that have spilled over into other areas of the relationship.

In the run-up to Copenhagen, India had a revealing internal debate over how to balance its growing role as a partner of the West and an international stakeholder with its older identity as a non-aligned developing power. Would India play its traditional role as obstructionist to the West in a global conclave, or would it assume its seat at the high table of world politics by helping shape a positive-sum outcome that would align it more closely with the developed democracies? In an internal memo, Environment Minister Jairam Ramesh spelled out the tensions between India's G-20 identity as an increasingly prosperous, responsible global steward and India's G-77 identity as a poor, non-aligned nation that defines its interests in opposition to the West. He favored the G-20 approach, given India's equities with the West and with a Western-led international order that lately has been highly conducive to India's economic development. But Indian politics and the pressures of a global multilateral process combined with a missed opportunity for American diplomacy to move India into the BASIC camp at Copenhagen.

India's tactical alliance with China and smaller developing countries at Copenhagen was unnatural. China is the world's largest carbon emitter; the scale of manufacturing in China dwarfs that of India, which registers a much lower share of carbon emissions. India would have benefited more from China's isolation at Copenhagen rather than giving China the cover of avoiding binding climate commitments by aligning with it. New Delhi could have spoken for large parts of the developing world that are not significant carbon emitters; it could have led an

alternative coalition focused on expanding technology transfer between the West and poorer countries interested in acquiring energy technologies to offset fossil fuel consumption.

Technology transfer and joint development, including in the realms of energy and the environment, has been an important element of Indo-U.S. relations since 2005. U.S. diplomacy could have been more effective in developing with India a program of activities to generate green technologies and alternative energy investments in a way that kept India onside during the Copenhagen negotiations. The same is true with Brazil, Indonesia, and other friendly states with which Washington is comfortable sharing technologies; none of these countries are necessary adversaries in climate talks but could be constructive players if given the right incentives.

In the run-up to Copenhagen, the West, led by the United States, could have been more effective in disaggregating the developing world in a way that split the G-77 and decoupled key rising democracies with serious equities in collaborating with the West from less constructive players. Given its size and status, India should have been the centerpiece of such a strategy. Instead, by virtue of its own short-sighted calculations and the shortcomings of U.S. and U.N. diplomacy, India was pushed into making common cause with its leading strategic competitor – China – against its most important international friend and ally – the United States.

Looking ahead

Both U.S. diplomacy and the cause of managing climate change would benefit from a different approach to tackling global warming: one that was not U.N.-led with universal membership in which small countries can play the role of spoilers and global consensus is achieved only with lowest-common-denominator results that please no one. Climate negotiations instead could take the form of smaller groupings led by the great powers, as the world's largest emitters, in closed-door negotiations that could encourage countries like China to be constructive rather than to grand-stand. From a U.S. perspective, joint development and application of key energy and environmental technologies with friendly emerging economies could replace the setting of vague environmental targets without action plans to meet them. Although tech-transfer concerns unquestionably apply to China, American businesses and officials are far more comfortable with the possibilities for collaboration and talent-sharing with Indian, Brazilian, Indonesian, and other counterparts in ways that could produce new flows of clean energy and protect natural resources in these countries.

American diplomacy could also expand climate-mitigation partnerships as part of its broader bilateral agendas with key powers like China, India, and Brazil, rather than attempting to bring these countries onside in the more difficult context of global, multilateral climate negotiations. Finally, prioritizing climate concerns at the expense of broader strategic ties puts the cart before the horse: in the case of countries like India, both U.S. interests and the wider climate agenda might be better served by building comprehensive strategic partnerships that develop over time the mutual trust necessary for hard but necessary collaboration on managing climate change. Because climate change is expected to hit countries like India especially hard, New Delhi and other emerging centers of power do have an incentive to become constructive players on this issue. The United States can and should help them do so.

Mr. ROHRABACHER. Well, I think you hit on an alternative right there at the last part of your statement. We will discuss that.

I will proceed with my questions.

First of all—I guess it gets to the point you just made—is the United Nations the vehicle to uplift the actual production of wealth in these societies, the developing societies, in a way that would be more environmentally friendly? Is the United Nations the way to do this or is it a better approach to be working bilaterally with countries that are committed to human progress when progress has to be based on more efficient use of energy?

We will just go down the line there.

Dr. Hayward.

Mr. HAYWARD. I think the analogy in my mind is one actually I made brief reference to, which is trade liberalization, which we did not run through the United Nations. We set up a whole separate global institution, ultimately culminating in the World Trade Organization. But we set up the whole track largely outside the U.N. to pursue that one particular goal. We have done similar things with the World Bank and the International Monetary Fund.

I think that the U.N., for some of the reasons I briefly alluded to and others that we can go on about at great length, is not necessarily the best forum for an issue that has so many economic implications, especially when you have so many of these cross-cutting ideological differences between different kinds of countries and different—

Mr. ROHRABACHER. It might be harder to reach a consensus upon people so diverse as everybody in the United Nations or even the major players of the United Nations as compared to a bilateral agreement between the countries like the United States and others who have advanced technology versus those who do not.

Mr. HAYWARD. I don't want to monopolize the panel.

Mr. ROHRABACHER. Go right ahead.

Mr. DIRINGER. I have a suggestion, Mr. Chairman. It is not an either/or proposition. This is something we need to be addressing on multiple fronts.

I think there is certainly a role for the Framework Convention. Certainly this should be a central issue in our relations with other major economies. We have heard reference already to the major economies forum.

Mr. Stern gave some credit to the Bush administration. I would like to note that the Bush administration actually gave some credit to the Pew Center for having recommended as far back as 2005 the establishment of a major economies dialogue as a forum for political discussion among the major economies, which then has helped to translate into progress in the U.N. I think, in fact, the discussions were held—

Mr. ROHRABACHER. I think the Bush administration was criticized for that.

Mr. DIRINGER. They were indeed, although they were very explicit at the time that this was not meant as an alternative to the U.N. but rather meant as a complement to the U.N.

Mr. ROHRABACHER. But we really knew it was not a complement. We know knew it was an alternative. So we deserved that criticism.

Mr. DIRINGER. What we have seen in fact is that there was consensus reached within the major economies forum that then did translate into the Copenhagen Accord and has now translated into the Cancún Agreements. So they do play a complementary role. And I think that we should pursue all of those forums.

Mr. ROHRBACHER. I would suggest that when we have success it is not judged by other international agreements but instead by actual changes on the ground to somewhere on the planet.

For example, I am sure that the amount of CO₂ that was emitted just going to these global resorts for their opulent meetings, there hasn't been enough change generated from the agreements that they have reached to even make up for the contribution they made to global warming and greenhouse gases on the way to the meetings, not to mention the greenhouse gases in producing the energy needed to get to the meetings, the energy needed to build the airplanes and the limousines that had to be transferred over to these various places around the world.

Mr. HAYWARD. I think it is very limiting and maybe a mistake to try and reduce the problem to just the process and what form we are going to use. I think ultimately you need to ask the question—And that is what went wrong with arms control I think for many years. I think what you need to do is also ask what is the policy orientation of whatever process or forum going to be.

The reason I think the major economies forum is more promising is not simply that it represents the countries that account for 80 percent of emissions but if they can adopt a process that doesn't focus in on Kyoto-style caps, which are going to be problematic for everyone, but a look at the idea of how do we accelerate decarbonization of energy. I think the Obama administration is thinking—they may not put it that way—but I think they are thinking that way. I think Mr. Stern suggested that is the track they might be thinking on.

Mr. ROHRBACHER. Mr. Twining.

Mr. TWINING. Sir, just going back to your original question, you are a long-standing U.N. watcher. And if there is a part of the U.N. that works, it is probably the Security Council—small group, serious equities on the table among the great powers, closed-door discussions.

I would argue that the problem with the global U.N. framework on climate process is that it resembles the U.N. General Assembly, not the Security Council, which as you know is kind of a free-for-all. It brings out some of the worst tendencies, even among really many countries that are friends and allies of the U.S., smaller developing states that rely on us but that see the opportunity to kind of seize the podium and make rhetorical points grandstanding on key issues.

So part of my reaction to your question is to assume that the idea is you would like climate negotiations to look more like the Security Council than more like the UNGA.

The other point, just very quickly, is in terms of the lateral relationships. I have worked a lot on the U.S.-India relationship over the last few years, and a key pillar of our relationship there is the sense of kind of joint development of technologies, a degree of tech-

nology sharing with India after years of sanctioning it around nuclear issues, which are now off the table.

I think the U.S. Government, U.S. businesses would be much more comfortable collaborating with a set of Indian scientists and researchers on green energy technologies versus a group in China perhaps with connections to the PLA or other government body. So as we think about some of the innovation and technology solutions looking kind of far ahead, there will be gradations between countries and our comfort level in working with them.

Mr. ROHRABACHER. I would suggest that things get better when there is a profit for people to do things more efficiently and you sell this to someone. Selling them something specific because you are going to make a profit in doing it is much more efficient at actual change than making mandates, especially the bigger the government gets, the more inefficient it becomes enforcing mandates. If it does get efficient at enforcing mandates, then you have got a problem with freedom in the world.

I have problems with trusting the Security Council, considering the fact that the world's worst human rights abuser, China, has a veto power. And the General Assembly is filled with countries that are governed by lunatics and gangsters who have the same vote as the United States. So we have got some very serious problems if we go about that route.

Mr. Carnahan, you may proceed with your questions.

Mr. CARNAHAN. Thank you, Mr. Chairman, and thanks to the panel.

I wanted to direct my first question to Mr. Diringer and Dr. Twining. I would like you to really expand a little bit about—you both have kind of made reference to this—but how Europe has really taken the lead in many ways in terms of really getting green technology out there, reducing emissions but also growing their economy. We have heard that that is one of the fastest-growing parts of their economy. Talk about what we can learn from that in terms of how we can step up to the plate in really a larger way.

Why don't we start with Mr. Diringer.

Mr. DIRINGER. I think the most important lesson from the European experience is the value of policy in driving innovation and deployment in the clean energy field and consequently leading to the growth of domestic jobs and the growth of exports.

Among the policies in place in the European Union is a renewable energy target. They aim to increase renewable energy in their primary energy mix to 20 percent by 2020.

There are also policies in place at the member state level. Germany has increased its renewable jobs from 160,000 in 2004 to 370,000 in 2010. The German Government believes that strong job growth within that sector was part of the reason they were able to recover so quickly from the recent recession.

So I think the real takeaway is that we need to give our domestic industries the incentive to produce by creating markets at home, the incentives to innovate and produce. Europe is doing that, and at the moment is the world's leader in terms of clean energy investments.

Mr. CARNAHAN. Dr. Twining.

Mr. TWINING. Mr. Carnahan, I agree on the point about creating market incentives for companies to invest in a different kind of energy future going forward.

Your very interesting question about Europe and kind of its leadership on this issue gets into a very interesting kind of theological debate about the role of Europe in the post-Cold War world. Without getting deeply into that, I think European leaders on this issue and others thought really since the Wall came down that Europe could actually offer a model for the world, not just on climate but all sorts of things, a kind of demilitarized soft power, kind of thought leader model, setting an example that other countries could follow.

And that explains why, after really getting climate change on the agenda, it is kind of a leading global issue. Many European leaders were shell-shocked, particularly after Copenhagen. And I say that because I was in Europe just after it all ended. And there was the sense that this was a European issue that they had owned. They had put in place a carbon market in Europe—or were putting one in place. They had set these tangible 20–20–20 goals about the mix of renewables in their own domestic economies. And what happened was the key agreement, as I mentioned in my testimony, was made without them in the room.

So I think a question going forward for us is: Is Europe a model on these issues? Can it be? Or do we look to a future in which it really is about kind of great powers competing around resource and economy issues in a more traditional sense. And I don't think we know the answer yet.

Mr. CARNAHAN. I didn't mean to leave you out, Dr. Hayward.

Mr. HAYWARD. Well, a couple of things. I am not hugely impressed with the European experience as a model for the rest of the world for the simple reason the European economies are mature, wealthy economies. They have stable or even falling populations, unlike countries like India and China, where you still have hundreds of millions of people with no electricity at all.

The big problem is that climate orthodoxy says they have to go about 10 times further than they have gone so far, and what they have done so far is fairly expensive. It is essential whole foods energy, which rich countries can afford but poor countries can't.

For example, in the case of China, their pledge to try and increase their emissions intensity faster than they have been means their greenhouse gas emissions will grow—instead of 40 percent over the next 30 years, they will grow by 35 percent. Well, that is good, but that means that the increase in emissions goes like this, something like this, when climate orthodoxy says during that time period they need to go like that. And that is why these climate negotiations aren't getting very far, is that gap in reality means we are trying to comfort ourselves with some pledges and aspirations and notions, but the math isn't adding up very well.

Mr. CARNAHAN. I will reverse this on my second round of questions here, but I will start with Dr. Hayward.

You have obviously raised a lot of questions about the scientific evidence about climate change. You question the cost. Nevertheless, a report released last week by the National Research Council of the National Academy of Sciences, the Nation's preeminent sci-

entific research institution, was unambiguous in assessing the seriousness of the threat posed by climate change.

The report requested by Congress concluded,

“Climate change is occurring, is very likely caused primarily by the emission of greenhouse gases from human activities, imposes significant risk for a range of human and natural systems.”

I would like to get your comment on that recent report, and we will go to the other witnesses after that.

Mr. HAYWARD. I haven't read beyond a couple of pages of the executive summary. I see no reason to dispute it at all. The question in my mind is it does not prescribe what policy you have to fix that.

My comments, most of my work is detailed on the energy side of the question, which is, all right, let's accept the most extreme scenario—and, by the way, then the energy problem becomes even harder and makes some of the way we talk about these negotiations even more unreal, from my point of view.

Mr. CARNAHAN. Mr. Diring.

Mr. DIRINGER. The report you cited is just the latest affirmation from the Academy of Sciences of the consensus that climate change is real, human activity is largely the reason why, and that it will intensify unless we take some action.

I think whether or not one believes that the buildup of CO₂ in the atmosphere is in fact driving warming and climate change, I think it is important to recognize the co-benefits of addressing the issue. If we act to reduce CO₂ emissions, we help to address local air pollution problems, we help to address ocean acidification, we help to improve our efficiency, we will reduce our reliance on imported oil. So there is a whole range of co-benefits to the kind of action we are talking about.

On the question of costs, we have seen historically in the United States that the benefits of our environmental actions have greatly exceeded the costs. A report by OMB in 2003 under the previous administration concluded that the major rules enacted under the Clean Air Act between 1992 and 2002 produced annual benefits of \$145 billion to \$218 billion, six to eight times greater than the annual costs. So you get a whole range of co-benefits, and these benefits far outweigh the costs.

Mr. CARNAHAN. Thank you.

Dr. Twining.

Mr. TWINING. Just a quick point. It is a very good question. Sometimes it helps, at least to me, to kind of focus in on tangible impacts of climate change. I do some work with our National Intelligence Council, and they have done a series of forecasts around how some of the climate predictions impact key powers in the international system.

Just to sketch out in a sentence: South Asia gets hit very badly in some of these projections. Bangladesh is under water. You have 150 million from that side trying to get into India, almost 200 million. You have calamitous impacts in India.

Again, for all of us who have great hope for U.S.-India relations in terms of managing and Asian balance and supporting our values

in the world, India gets hit really harder than any other great power under some of these projections.

So I think there is an interesting conversation to be had about the national security implications of some of these forecasts that we should all really be thinking about.

Mr. CARNAHAN. Thank you all.

Mr. ROHRABACHER. All right. Again, I want to thank everyone on the panel for coming today and participating in this interesting discussion.

Let me note that I think that China, to the degree that it has been engaged in what we would call positive behavior in better uses or better technologies in terms of producing energy, has been doing so not because they want to save the planet from climate change but instead because they have a real human rights problem with human health that their people—massive numbers of people—are being damaged, their bodies are being damaged by pollution in the air.

And let me note that CO₂ is not, no matter what the EPA says, a pollutant that affects human health. They in fact, in order to declare it a pollutant, had to claim, well, the climate will change and then that will cause human health to be affected. Thus, it is a pollutant.

That convoluted reasoning is—it may justify a power grab to someone who wants to give them the power, but it certainly doesn't justify—it is not common sense. CO₂ is plant food. We pump CO₂ into the greenhouses throughout California to produce better plants.

I am very concerned about—for the same reason the Chinese are concerned—about pollution, and it does not—Mr. Diringer, it does not cross all the time. Sometimes it runs parallel. Other times it doesn't. Sometimes you have people who are so adamant about global warming that they are taking us away from things that might be effective for health.

Let me go back to the fact that we are talking about climate change over and over again here today, and the fact that we are talking climate change indicates that the predictions have been wrong. We have been following this for 20 years. Ten years ago, no one used the word climate change. The word global warming was what it was described over and over and over again. And the reason we now hear climate change is because it is not. The 10 major scientists that—the major scientists that I put into the record in the beginning of the hearing, plus the hundred other major scientists, just do not go along with that finding.

So I would just suggest that, for example, in my own case in California, because those people who are dominating certain parts of the scientific community, we are talking about how global warming was still a factor, and they predicted a dry and a warm winter for the United States, especially California, and it has been one of the wettest, coldest winters that we have had in my adult life.

If you look back at the predictions by those claiming to understand how CO₂ affects the climate, they were saying that the Midwest would not be flooding but would be parched.

So that is why I am somewhat of a skeptic on human activity causing something. Because then that gives us the excuse to con-

trol human activity, rather than suggesting that we have had climate changes throughout the history of the world. And we know that those other changes were not caused by human beings. However, to grant the other side of the argument their due, we should also be concerned about human adaptation even if it is natural to climate change, which may or may not be the case.

So I would focus and say, yes, let's take a look at human adaptation and how that is going to—if indeed we are going to have seas rising throughout the Pacific or see Bangladesh going underwater, is that actually going to happen? Are we really going to have a warm, dry winter? We have got to make sure we know what we are talking about and not just accepting somebody who is without challenging their dire predictions.

Again, it used to be global warming. Now it is global climate change, for obvious reasons.

Let's get back to, first of all, the United Nations and the economy of this of what we are talking about here. Mr. Diring, you did mention Europe as a success. My reading shows me that Spain has actually been hurt dramatically. I think I read that in *The Economist*. Is *The Economist* wrong about that, that Spain has not benefited by their focus on solar power and in fact it has contributed to their national economic upheaval?

Mr. DIRINGER. Certainly, Spain is experiencing some dire economic difficulties. I can't speak to whether or not their efforts to expand their renewable energy industry have contributed to that. I am not familiar.

Mr. ROHRBACHER. There have been several reports.

What about you, Dr. Hayward?

Mr. HAYWARD. I don't like to get into the contentious methodological arguments about how many jobs, because you can always argue about those until the cows come home.

I think what you do see, though, clearly is—I will give you Germany as an example. Germany is trying to promote solar power with their feed-in tariff idea. So if you put solar panels on your buildings, they will pay 45 cents a kilowatt hour. Pretty nice. The average price of electricity here in this country is 10 to 12 to 14 cents.

So, yeah, if you subsidize something, you will get a lot more of it. But you cannot scale that up to 10, 15, 20 percent of your electricity, given the fiscal realities of modern economies. That is the limiting factor.

Mr. ROHRBACHER. Plus, you are taking wealth from somewhere else in your society.

Mr. HAYWARD. Well, you know our mutual hero liked to say, pretty soon you run out of other people's money. They are running out of other people's money in Europe now.

Mr. ROHRBACHER. Finally, let's just get back to the United Nations.

Do you trust the United Nations? You were making some comparisons there to the United Nations. Can the United Nations be trusted with \$100 billion a year to oversee that properly? Are you confident that the U.N. will oversee it and that that would be the best use put for \$100 billion of wealth to be directed by the United Nations in the name of this problem, solving this problem?

Mr. TWINING. No, sir. I just want to qualify my comment on the Security Council, which is that I didn't mean to suggest that it works brilliantly. It was just to compare its relative merits to other U.N. bodies.

My sense on this, just is very quickly, is that you probably want a climate process that looks more like a multinational corporation or a market that somehow looks like a big market. And whether you talk about that in terms of government subsidies or a carbon tax or more positive forms, you probably want this to look less like a bureaucracy and more like something you would see in the private sector in which peoples and countries actually have some ownership and some stakes in innovating and conserving resources.

Mr. ROHRABACHER. I would suggest that I see that happening in the world economy already. I would suggest that all over the world we see great examples of people pushing forward.

For example, even though I reject this whole theory of man-made global warming, I am certainly someone who is pushing here in Congress the development of these new modular nuclear reactors and high-temperature gas-cooled reactors that eat the waste from other reactors so it doesn't have that problem. This would certainly not have any greenhouse gases as a result. But it seems to me that that is a marketplace decision which motivates me and other people in that arena, rather than thinking about this as a bureaucratic approach to we are going to mandate things and plan out this change in energy for mankind that will save the planet from climate change, which will elevate the human condition.

Mr. Diringer.

Mr. DIRINGER. Well, to your question would I trust the U.N., no, but let me clarify. There has been no agreement to establish a single fund to be managed by the U.N. or anybody else to mobilize this \$100 billion. This figure of \$100 billion is an aspirational collective goal that countries have set for themselves. And the aim is to mobilize these funds—a combination of public funds, private funds, bilateral, multilateral. They will be flowing through multiple channels.

Countries will probably be reporting on the funds that they have expended, whether through bilateral or multilateral channels, whether it is through public or private channels; and there will be some tallying at some point to see how well we are doing toward meeting that goal. But there is not going to be any single mechanism that would ever attempt to try to deliver funds on that scale. And I am quite certain that if there were to be such a mechanism contemplated, the United States would certainly oppose it.

Mr. ROHRABACHER. Well, this is a good point, because I would suggest if what you are describing is what evolves and emerges, that we already have that. For example, when I just gave the example of a high-temperature gas-cooled reactor or the new modular nuclear reactors, which are incredibly safe and cost-effective, et cetera, still taking care of the problem of leftover waste, which these new reactors do, I would say if we move forward with that strategy in building these reactors here in the United States, it will be a \$100 billion project. Just that in and of itself will be a project in which hundreds of billions dollars are being spent building these

new reactors that can be placed all over the United States and all over the world.

If that counts toward what we are talking about, because that is just a number of which all of us contribute to, well, then no one has much to worry about. I think that is already in the process.

But I will have to tell you, when you get all these bureaucrats from all over the world flying in on their jets and being met at the airport by their limousines and being shepherded off to these glamorous resorts and talking as if they are the elite and they are going to make the decisions, it worries me a bit that maybe what they really have in mind is something that they would control and start directing personally. And that is one of the reasons we are having this hearing today.

Mr. Hayward.

Mr. HAYWARD. Well, I can thrash the U.N. with the best of them, but I think you need to ask the question: What do they do well and what do they do badly and can we derive a lesson from that?

What they do well I think is refugee assistance, food assistance, some of their education programs, some not. They have a very mixed record on peacekeeping and conflict resolution. And if the U.N. had lived up to its original aspirations in 1945, I think we wouldn't have needed NATO, for example.

Now, the one precise precedent I think for the green fund that is being talked about would be the U.N. population fund. I believe that is what it called. From about 1970 to the mid-'90s population growth from the population bomb coming out of the enthusiasm of that time, that was thought to be the preeminent global threat that the world community had to deal with. I will just state my opinion—I have read a lot of literature on this—is that the U.N. population fund record is not an encouraging precedent for a green fund. If the United States is going to participate I think probably close to what Elliot is suggesting, we will probably want to do it ourselves through USAID, and that is another can of worms.

Mr. ROHRBACHER. Mr. Carnahan has told me that he doesn't have any follow-up questions. But out of courtesy, because I have been kibitzing with Mr. Diring on global warming, I am going to give you the last say in the hearing today.

Mr. DIRINGER. Well, I appreciate that, Mr. Chairman.

I think there is one point that we haven't yet raised in all our discussion about what are the best or most appropriate forums for international discussion or negotiations, and that is the question of political will. The best forum will accomplish nothing if countries do not come to it with sufficient political will.

In looking back over the past two decades of negotiation within the U.N. Framework Convention, I don't think we have yet actually given it an honest chance, because countries have not yet come to that process prepared to take the actions at home that would enable them to actually reach strong agreements. This is a long-term process, and I think we need to view the climate framework as an evolutionary framework, one that hopefully will grow in strength over time as our political understanding and political consensus grows and solidifies within our domestic context.

So my hope is that here in the United States we can continue to reach a stronger understanding of the causes and consequences

of climate change, work our way toward meaningful policies to address our emissions, and thereby put ourselves in the position to help lead to stronger global agreements.

Mr. ROHRABACHER. I want to thank all of our witnesses. Thank you very much. I think we have had a very fine exchange of ideas.

This hearing is now adjourned.

[Whereupon, at 5:01 p.m., the subcommittee was adjourned.]

A P P E N D I X



MATERIAL SUBMITTED FOR THE HEARING RECORD

SUBCOMMITTEE HEARING NOTICE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

Subcommittee on Oversight and Investigations
Dana Rohrabacher (R-CA), Chairman

May 17, 2011

You are respectfully requested to attend an OPEN hearing of the Subcommittee on Oversight and Investigations, to be held in **Room 2172 of the Rayburn House Office Building** **(and available live, via the WEBCAST link on the Committee website at <http://www.hcfa.house.gov>)**:

DATE: Wednesday, May 25, 2011

TIME: 2:30 p.m.

SUBJECT: UN Climate Talks and Power Politics: It's Not about the Temperature.

WITNESSES: Panel I
Mr. Todd D. Stern
Special Envoy for Climate Change
U.S. Department of State

Panel II
Mr. Elliot Diring
Vice President for International Strategies
Pew Center on Global Climate Change

Daniel Twining, Ph.D.
Senior Fellow for Asia
German Marshall Fund of the United States

Steven F. Hayward, Ph.D.
F. K. Weyerhaeuser Fellow
American Enterprise Institute

By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF SUBCOMMITTEE ON Oversight and Investigations HEARING

Day Wednesday Date 5/25/2011 Room 2172

Starting Time 3:12 pm Ending Time 4:57 pm

Recesses (4:04 to 4:06) (to) (to) (to) (to) (to)

Presiding Member(s)

Chairman Dana Rohrabacher

Check all of the following that apply:

Open Session

Electronically Recorded (taped)

Executive (closed) Session

Stenographic Record

Televised

TITLE OF HEARING:

UN Climate Talks and Power Politics: It's Not about the Temperature.

SUBCOMMITTEE MEMBERS PRESENT:

Chairman Rohrabacher and Ranking Member Russ Carnahan

NON-SUBCOMMITTEE MEMBERS PRESENT: (Mark with an * if they are not members of full committee.)

none.

HEARING WITNESSES: Same as meeting notice attached? Yes No

(If "no", please list below and include title, agency, department, or organization.)

STATEMENTS FOR THE RECORD: (List any statements submitted for the record.)

- Prepared Statement of Elliot Diringer
- Prepared Statement of Steven Hayward
- Prepared Statement of Daniel Twining
- Prepared Statement of Todd Stern

Chairman Rohrabacher also submitted for the record a "List of 100 scientists."

TIME SCHEDULED TO RECONVENE _____

or TIME ADJOURNED 4:57 pm



Subcommittee Staff Director

