

Testimony of Ned Helme
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before the
U.S. House of Representatives
Select Committee on Energy
Independence and Global Warming

**Preparing for Copenhagen:
How Developing Countries are Fighting
Climate Change**

March 4, 2009

Mr. Chairman, Ranking Member Sensenbrenner and Members of the Committee: I would like to thank you for the opportunity to testify before you today. My name is Ned Helme and I am the President of the Center for Clean Air Policy (CCAP), a Washington, DC and Brussels-based environmental think tank with on the ground programs in New York, San Francisco, Mexico City, Beijing, Jakarta and many other places.

Since 1985, CCAP has been a recognized world leader in climate and air quality policy and is the only independent, non-profit think-tank working exclusively on those issues at the local, national and international levels. CCAP helps policymakers around the world to develop, promote and implement innovative, market-based solutions to major climate, air quality and energy problems that balance both environmental and economic interests.

CCAP is actively working on national legislation in the United States (U.S.) and is advising European governments as well as developing countries such as China, Brazil, and Mexico on climate and energy policy. Our behind the scenes dialogues educate policymakers and help them find economically and politically workable solutions. Our Future Actions Dialogue provides in-depth analyses and a “shadow process” for climate negotiators from 30 nations from around the world to help them develop the post-2012 international response to climate change. We also facilitate policy dialogues with leading businesses, environmental groups and governments in the European Union and U.S. on designing the details of future national and transatlantic climate change mitigation, adaptation and transportation policies.

My testimony responds to three questions posed by the Committee:

- How will the climate negotiations in Copenhagen in December 2009 differ from those at Kyoto in 1997?
- What are the key elements of the Bali Action Plan and how will they affect developing country expectations and the negotiations?
- How will leadership by the U.S. influence the emerging economies to scale up their efforts on mitigation?

We are at an exciting and very productive time in the negotiations to reach a global agreement on the framework for reducing global greenhouse gases (GHG) to a level that will prevent dangerous anthropogenic interference with the climate system. Never before have the stakes been so high or the opportunity so great to reach a globally acceptable deal that involves both the developed and the major developing economies.

In my time today, I would like to emphasize a few key points:

- The Bali Roadmap is the breakthrough developed countries have been waiting for that makes the negotiations in Copenhagen very different from those in 1997 and will bring meaningful developing country actions into the agreement.
- Developing countries are taking action already and are prepared to take additional measurable, reportable and verifiable actions.
- U.S. willingness to propose and enact a meaningful domestic national emissions reduction target is a linchpin for a successful outcome in Copenhagen.
- The objective in Copenhagen is to agree on new GHG reduction goals along with a new architecture to govern developing country action in the post-2012 framework, and
- The U.S. can successfully protect domestic, internationally competitive industries from job losses associated with a carbon program, while also creating incentives for developing countries to take greater action than they have underway already.

Our extensive policy work in key developing countries has shown that they are doing more to reduce the growth in their emissions than conventional wisdom here in the United States would suggest. China, Brazil and Mexico have already put in place national laws that collectively, if fully implemented, will reduce the projected growth in emissions by more aggregate tons in 2010 than the reductions the Lieberman-Warner bill (S. 2191 of the 110th Congress) was projected to achieve by 2015 and by almost as many tons as the European Union's 30 percent reduction pledge for 2020 (Figure 1).

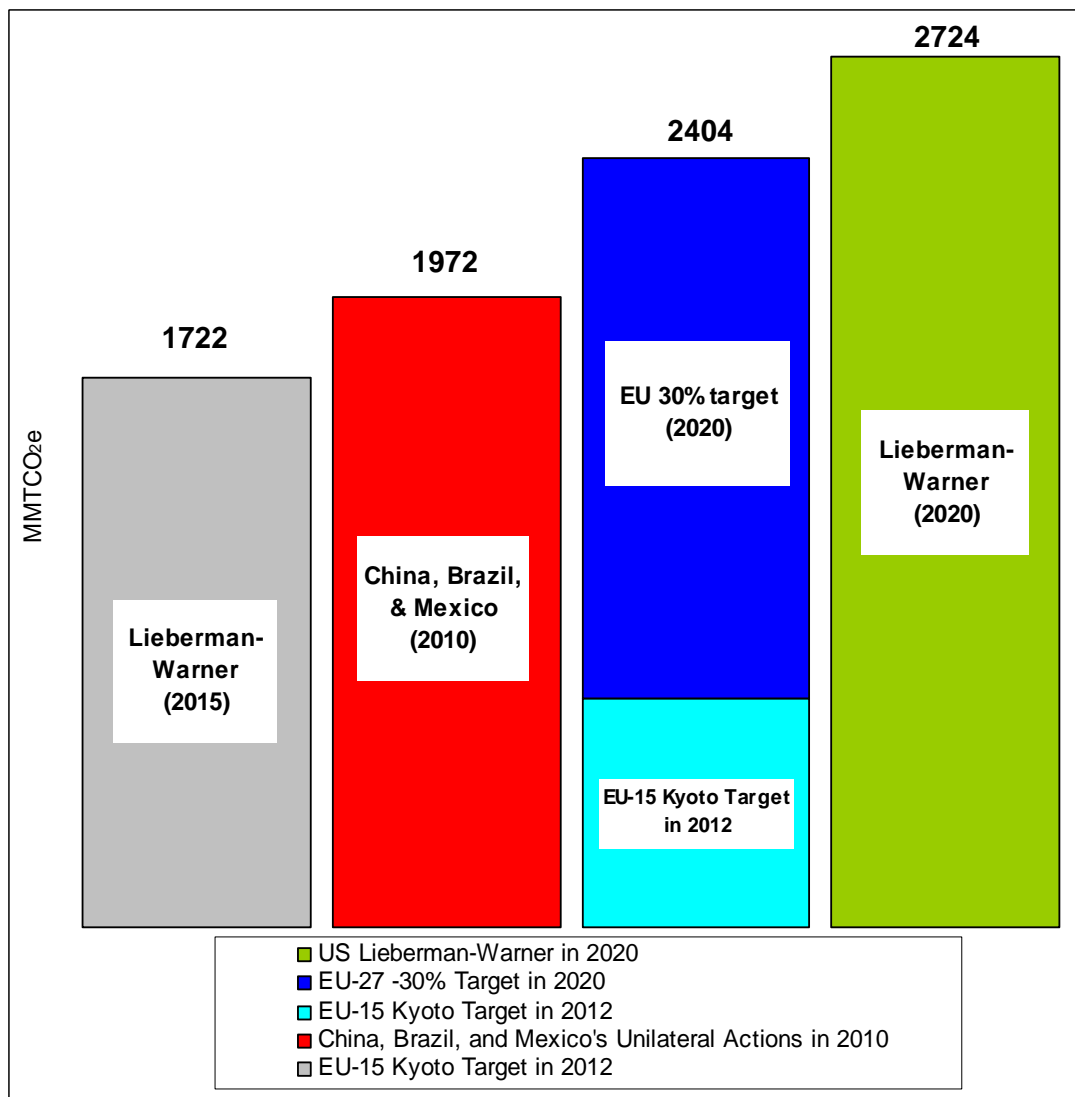


Figure 1. Emissions reductions from BAU for full implementation of proposed measures (CCAP, 2009).

Nevertheless, the outlook for developing country CO₂ emissions growth remains substantial in the aggregate and as a percentage of global emissions (Figure 2). In 2000, developed country emissions from fossil fuels and industrial processes were roughly 40 percent of global emissions. By 2050, developing country emissions are expected to grow to 64 percent of global emissions.

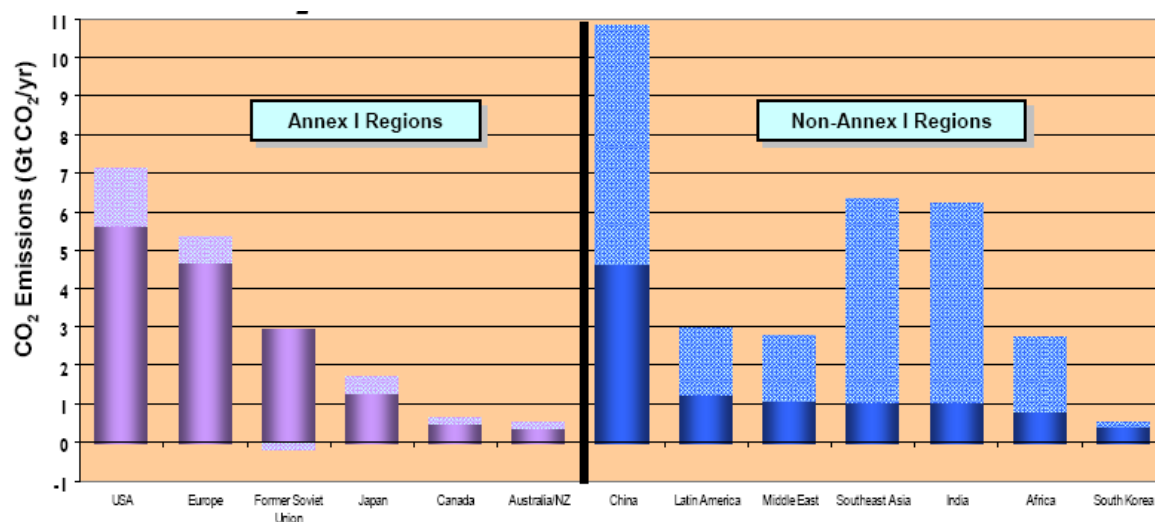


Figure 2. Fossil Fuel and Industrial Process CO₂ Emissions by Region in 2000 (solid bars) and 2050 (checkered bars) (U.S. Climate Change Science Program. 2007. *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations*; MINICAM Results).

The negotiations going into Copenhagen are notably different than the 1997 Kyoto negotiations because we now have in place the Bali Action Plan, which the U.S. and other developed and developing countries agreed to in December 2007. The Action Plan builds on the key principle in Article 3 of the United Nations Framework Convention on Climate Change (UNFCCC), “The Parties should protect the climate system...on the basis of equity and in accordance with their *common but differentiated responsibilities and respective capabilities*.” However, it goes much farther and establishes for the first time that the negotiation process will cover both developed and developing country actions to mitigate climate change. It also importantly sets up much stronger accountability by calling for developing countries to consider: “Nationally appropriate mitigation actions ... in the context of sustainable development, supported and enabled by technology, financing and capacity-building, **in a measurable, reportable and verifiable manner**”. In effect, both the actions and the support are to be measured, reported, and verified.

In keeping with this new framework, the discussions since Bali have begun to define a menu of options for what are referred to as “Nationally Appropriate Mitigation Actions”

(NAMAs). It is expected that each developing country will choose those actions that make the most sense for its own circumstances, just as we will do in the U.S.

NAMAs could take three distinct forms: *unilateral actions* that developing countries will take on their own without any assistance; *conditional actions* they will take conditioned on receiving financial and technology assistance from developed countries; and *emission credit generating policies* — where credits may be earned and sold in the international market if the country exceeds the goal it has set.

Although all developing countries will be encouraged to implement actions, the main focus appropriately will be on the six to ten largest emitting countries in the developing world which are responsible for 80-90 percent of the emissions in key industrial sectors. Reaching agreement on specific actions in these countries and on the support for those actions from developed nations will be the key to the Copenhagen agreement.

The Kyoto Protocol has long been criticized in the U.S. and elsewhere for the fact that it does not require explicit emission reductions by developing countries. Instead, it rewards developing countries who implement specific emission-reducing projects with emission credits through the Clean Development Mechanism (CDM) that can be sold to developed countries or to companies and individuals within such countries. These credits can be used to meet domestic carbon reduction requirements in developed nations. In effect, these reductions are paid for by developed nations.

The Kyoto Protocol does not contain any explicit system for recognizing actions taken by developing countries to reduce GHG emissions outside the CDM. One of the tests of any agreement in Copenhagen will be whether it creates a system for recognizing unilateral actions by developing nations to reduce their emissions that constitute their contribution toward protecting the climate. A large portion of the more than 2 billion tons of projected reductions in emissions growth by China, Brazil, and Mexico that I detailed for you earlier in Figure 1 of my testimony are unilateral reductions that contribute to protection of the climate, not reductions that generate credits for sale to developed

nations. These unilateral actions are one form of a NAMA. Negotiators have proposed creating a formal registry in the UNFCCC that will record these and other NAMAs proposed by developing nations.

Recent actions by key developing countries give us a sense of what some of these actions or NAMAs might look like. For example, in Poznan, Poland, in December 2008, Mexico took a significant step, announcing its plans to set a national aspirational goal to reduce absolute emissions by 50 percent below 2000 levels by 2050. It also announced plans to set emission goals for four key industrial sectors — cement, steel, aluminum and electricity — and to achieve these goals through a domestic cap and trade program. It suggested an initial reduction target that it would undertake unilaterally in each sector and suggested that each sectoral target could be made more stringent if developed nations provided focused loan support (to overcome domestic financing barriers) in the post-2012 agreement. Mexico has also created and financed its own Energy Transition Fund of three billion Mexican pesos a year for three years (about \$210 million annually) to provide incentives for more aggressive emissions reduction activities.

There are two key elements here that distinguish this from today's CDM approach: 1) the support for a more stringent sector-wide policy involves loans, not full payment for the incremental emissions reductions, and 2) it does not involve any generation of offset credits for developed nations in meeting the new more stringent target. All of these reductions will help reduce global aggregate emissions to safe levels rather than replacing or offsetting required reductions by developed nations. Offset credits would be generated only if the sector (e.g. Mexican oil refining) reduces its emissions in aggregate below the sectoral cap level. The heart of this program is then to generate a Mexican net contribution to the protection of the climate.

China also has taken bold action to reduce emissions. The government released its climate plan in 2007 and has set an aggressive goal to reduce its energy use per unit of GDP by 20 percent between 2006 and 2010. In the plan's first year in 2006, China fell short of its 4 percent per year goal, but in 2007 and 2008 it has reached the aggregate 8

percent reduction for those two years. If fully achieved, this goal alone would reduce GHG emissions by more than 1.5 billion metric tons of CO₂ from business-as-usual annually by 2010. The plan also includes measures to: increase the use of renewable and nuclear energy; recover and use methane from coal beds, coal mines and landfills; increase the development and use of bio-energy; utilize clean coal technologies; improve agricultural practices; and plant forests.

South Africa has analyzed a number of long-term mitigation scenarios. It has announced its intent to peak its emissions no later than 2025 and expects to have a final domestic climate policy adopted by the end of 2010. South Africa also continues to implement sustainable development policies and measures that will reduce GHG emissions. These policies and measures include moving from traditional coal-fired electricity production to renewables, nuclear power and clean coal technologies, improving energy efficiency and improving the efficiency of the transportation system.

Brazil has released a climate plan that emphasizes energy efficiency and reducing emissions from deforestation, including a goal to reduce the average deforestation rate by 70 percent over the period 2006-2017. It would lower CO₂ emissions by about 413 million metric tons CO₂ in 2010 (roughly one quarter of the emissions reduction expected in the Lieberman-Warner bill by 2015) and by a total of 4.8 billion metric tons CO₂ over the 12-year life of the program.

South Korea intends to announce a long-term, economy-wide target for emissions reductions later this year.

What will the global climate deal look like and how will international negotiations unfold?

In Copenhagen, developed or Annex I countries, including the U.S., are expected to agree to national, quantified GHG emission reduction targets. The European Union has already

committed to reduce emissions 20 percent below 1990 levels in 2020 on its own, and increase its target to 30 percent below 1990 levels if other countries join.

U.S. engagement and commitment is critical for reaching a deal in Copenhagen. One only needs to look at the impact of the United States' recent decision to reverse its position and support the development of a new international agreement to reduce mercury emissions¹ to understand the implications of U.S. engagement. Almost immediately after the U.S. decided to support the development of a new agreement, China and then India supported the process as well.

Both developed and developing countries will judge U.S. leadership and commitment at Copenhagen on two criteria. First, has the U.S. committed to significant emission reduction targets? The stronger the proposed U.S. target, the greater the likelihood of stronger developing country actions. Although it would be ideal if the U.S. could pass domestic legislation setting out its emissions reduction targets before Copenhagen, in my view that is not necessary to reach a deal in Copenhagen. What is needed is sufficient action in both the House and Senate to give our negotiators a good sense of where our national cap is likely to be set.

The debate on acid rain legislation and the original cap and trade program for sulfur dioxide in 1990 may offer some useful historical insight. Senate and House legislative proposals quickly converged on the President's proposed cap level in 1989, the first year of President George H.W. Bush's term. The real battle raged over distribution of the allowance value among companies and regions which required another full year of debate, a pattern that could be repeated in the carbon debate this year. But the bottom line is that the critical piece for the international process is a consistent signal from the Congress on the cap level for U.S. negotiators to bring to the rest of the world to help reach the needed agreement in Copenhagen.

¹ "Final Omnibus Decision on Chemicals Management" (UNEP/GC/25/CW/L.4) adopted by Twenty-fifth session of the Governing Council/Global Ministerial Environment Forum.

Second, has the U.S. committed to providing meaningful financing, technology and capacity building assistance to developing countries as it agreed to consider in the Bali Action Plan? As discussed earlier, each developing country is expected to take NAMAs — some unilateral and others conditioned on assistance. The specific details of what actions they will take in exchange for assistance will be addressed after the agreement in Copenhagen. The agreement in Copenhagen will establish the framework and policy architecture for developing country actions.

Some observers incorrectly assume that any financing agreement in the Bali Action Plan must mean large unrestricted amounts of funding. However, the behind the scenes negotiations are more likely to focus on specific and tailored financial mechanisms like support to “write down” the cost of advanced but not yet commercial technologies like carbon capture and storage, and financing for special purpose entities that can help overcome resistance from banks in developing countries to make financing available for energy efficiency. The European Commission has proposed the creation of a “facilitative mechanism” by which developing country proposals for action and specific requests for assistance can be evaluated based on objective criteria. The idea of “block grants” and the like are not under serious consideration.

Two additional issues will play an important role in the negotiations of the post-2012 framework: Reduced Emissions from Deforestation and Degradation (REDD) and adaptation. These issues will be important because they touch a much larger group of developing countries compared to industrial mitigation, where six to ten of the largest emitters will likely dominate the field. In addition, emissions related to deforestation and degradation are responsible for approximately 20 percent of global GHG emissions. Addressing these problems in a constructive way in the post-2012 climate agreement will be critical to solving the climate problem and will provide an important avenue for many developing countries to participate in the international effort to fight global warming. Likewise, adaptation affects virtually all countries, but has a particularly large impact on the poorest developing countries since they face the largest adverse impacts and have the least capacity to adapt to climate change. At Poznan, negotiators made progress on both

REDD and adaptation. Reaching early agreement on the approach to these two issues early in 2009 will be an important building block for the larger Copenhagen agreement.

The level and extent of actions to reduce GHGs by developing nations in the post-2012 agreement is not only a critical question for the international debate, but also central to the outcome of the domestic debate here in the U.S. There is a great deal of concern in the U.S. with ensuring that U.S. companies are not placed at a competitive disadvantage if the U.S. takes action and other countries do not. The European Union has similar concerns.

There are two approaches under consideration in the U.S. and in Europe to address competitiveness. One would require border allowance purchase requirements (essentially a border tax) on imports from countries or sectors that have not taken comparable action to regulate GHG emissions. The other involves giving free allocations of allowances to those domestic companies in sectors facing considerable international competition, such as iron and steel, cement, pulp and paper and aluminum. The most interesting of these approaches in the U.S. is a proposal, H.R. 7146, that Congressmen Inslee and Doyle introduced in the 110th Congress, which would compensate domestic industries for the direct and indirect (energy) cost increases from carbon regulation they face until developing countries require the same industries in their countries to take comparable action to reduce GHGs. One benefit of this approach is the positive incentive it sends to cleaner companies within the U.S.

I believe both of these approaches could level the carbon cost playing field and can be viewed as complimentary, though under WTO rules we need to insure that the use of these measures either in combination or sequentially does not overcompensate U.S. industry and constitute protectionism. It is probably best to think about using the output based free allocation as the first line of defense with the border adjustment as a backstop. This is how the European Union is approaching these two strategies, as the border tax adjustment is seen as provocative and could potentially trigger larger trade disputes.

I believe that it could make sense to operate such a program on a sector basis. The program would begin with output based rebates covering both the direct and indirect energy price increases facing our domestic industries in internationally competitive sectors. The portion of the rebate associated with direct costs of carbon would be phased out on a sector basis as a majority of the major emitting countries in that sector took comparable action. At that point, the border allowance adjustment would phase in for those other countries whose sectors had not taken similar action. The indirect energy cost portion of the output based rebate would continue until developing countries take action to reduce GHGs from their electricity sector or to establish a carbon price across the economy.

Although both of these strategies individually or in tandem could effectively level the carbon playing field, they will not create incentives for developing countries to reduce their domestic emissions or to cooperate in the negotiations. For example, according to a recent World Resources Institute and Peterson Institute Study², China exports approximately 8 percent of its steel production and exports only 1 percent to the U.S. It is unrealistic to expect that a border adjustment on 1 percent of Chinese steel would be a sufficient motivator for China to regulate the emissions from its domestic steel industry.

In my view, U.S. domestic legislation must also include provisions to encourage developing countries to take additional actions. Initially, this will involve creating incentives for them to reduce the rate of growth of their emissions to lay the foundation for absolute emissions reductions in the future.

One framework for providing incentives that has been garnering support internationally would rely on establishing the NAMAs discussed earlier in my testimony in key internationally competitive industrial sectors. This concept is included in the Bali Action Plan as “cooperative sectoral approaches and sector-specific actions” which are part of

² Source: Peterson Institute and World Resources Institute 2008. *Leveling the Carbon Playing Field*.

the actions suggested for mitigation of climate change. Under such sectoral approaches, developing countries would be asked to take a new commitment to reduce GHG emissions in a given industry sector beyond any recent unilateral actions they may have already adopted. They could receive up-front financial and/or technology incentives from developed countries in return. Mexico's announcement in Poznan of sectoral targets for key industrial sectors coupled with a 4-sector cap and trade program is the first concrete example of how such an effort might proceed.

Technology and finance assistance could be provided to developing countries by developed countries for a number of purposes. For example, assistance could be dedicated to build first-of-a-kind advanced technologies, such as carbon capture and storage, which are not yet cost effective, to accelerate technology deployment by bringing down the cost of advanced technologies, and as an incentive for participating developing countries to establish more aggressive "performance goals." This approach also creates opportunities for leading U.S. companies to gain access to growing new markets (creating jobs at home) and moves toward leveling the playing field for carbon in internationally competitive sectors.

In conclusion, with timing running short to avoid the worst effects of a warming planet, reaching an agreement on a post-2012 global framework for reducing emissions is crucial. Never before has the opportunity for a true global accord, involving all nations, been so close. It is clear that developing countries are already taking significant actions and that for the first time they are willing to take additional actions as part of an international agreement. What is needed is strong U.S. leadership demonstrated by a significant commitment to reducing emissions and providing assistance to developing countries. One should not underestimate how firm U.S. action will induce strong developing country action. The U.S. holds the power to unleash a race to the top that could overcome years of international inertia and leave a legacy to future generations for which all of us can be proud.