

Question 4. Developing Country Participation

Submitter's Name/Affiliation: Eileen Claussen/Pew Center on Global Climate Change

If a key element of the proposed U.S. system is to “encourage comparable action by other nations that are major trading partners and key contributors to global emissions,” should the design concepts in the NCEP plan (i.e., to take some action and then make further steps contingent on a review of what these other nations do) be part of a mandatory market-based program? If so, how?

Pew Center Response

It is important to distinguish between two distinct but related policy objectives: 1) achieving adequate action by all major emitting countries, and 2) protecting U.S. firms against competitiveness impacts. Each requires a different set of policy approaches.

Ensuring that other countries act against climate change is important from a competitiveness standpoint. However, it is first and foremost an environmental imperative: without adequate action by all major emitters, the goal of climate protection cannot be met. Of steps the United States can take to encourage other nations to act, establishing a mandatory program to limit and reduce U.S. emissions may in and of itself be the most critical. Lack of action by the United States stands as the major impediment to stronger efforts by other countries. Demonstrating the will – and establishing the means – to reduce U.S. emissions will greatly alter the international political dynamic and improve prospects for international cooperation.

Making future U.S. action expressly contingent on the efforts of other countries may provide some further inducement for action. Alternatively, by appearing irresolute, it may deter others from commencing ambitious long-term efforts. A more effective means of achieving adequate and comparable effort by all major emitters would be the establishment of mutual commitments through multilateral negotiation and agreements. In the case of developing countries, this should include or be complemented by positive incentives, preferably through market mechanisms.

Ensuring that efforts are broadly comparable, however, will not necessarily achieve the second objective: protecting against competitiveness impacts. It is not the competitiveness of the U.S. economy as a whole that is at issue. Competitiveness at the national scale is largely a reflection of productivity, and the U.S. economy consistently ranks among the world's most competitive.¹ The cost of achieving mandatory GHG limits at the levels under consideration

¹ The United States ranked second only to Finland in the World Economic Forum's 2005-2006 Global Competitiveness Report. (World Economic Forum, *Global Competitiveness Report 2005-2006*. Available: <http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme%5CGlobal+Competitiveness+Report>)

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would only marginally affect projected economic growth and is unlikely to affect overall competitiveness.²

To the degree there are competitiveness impacts, they would fall on specific sectors – energy-intensive industries whose goods are traded internationally, a relatively small segment of the U.S. economy.³ However, these sectors could remain vulnerable even if efforts by all major emitters are broadly comparable because countries will choose to allocate effort differently.⁴ For instance, a country may reduce overall emissions but exempt a given sector from controls, giving that sector an advantage over foreign competitors that are subject to controls. In that case, a review of comparability, unless undertaken sector by sector, offers little assurance against competitiveness impacts.

A full assessment of policy options for addressing competitiveness would require a more thorough analysis of the potential impacts on vulnerable sectors than is presently available. Generally, the impacts on a given sector or firm would depend on its specific competitive positioning and its ability to substitute and innovate. Most analyses of U.S. industry experience with past environmental regulation find little evidence of competitive harm. One comprehensive review – synthesizing dozens of studies across a range of U.S. regulations and sectors – concluded that while environmental standards may impose significant costs on regulated industries, they do not appreciably affect patterns of trade.⁵ Some economic literature suggests that, to the contrary, innovation spurred by regulation may in fact confer a competitive advantage.⁶

In the design of a cap-and-trade system, the best way to protect broadly against competitiveness impacts is to set the caps at modest levels and minimize compliance costs by, for instance, allowing offsets and full banking of allowances. The choice of allocation approach also has implications. A free “grandfathering” of allowances based on historic emissions provides

² EIA projects that achieving the emission targets of the Climate Stewardship Act would diminish U.S. GDP by 0.4 percent in 2028, thus total GDP is projected to be 89.6 percent higher rather than 90 percent higher than GDP in 2006. (EIA, *Analysis of Senate Amendment 2028, the Climate Stewardship Act of 2003*. May 2004. Available: http://www.eia.doe.gov/oiaf/analysispaper/sacsa/pdf/s139amend_analysis.pdf)

³ Repetto et al. found in a 1997 analysis that, among all U.S. industries producing tradeable goods and services, roughly 90 percent of output and employment was in industries with energy costs representing 3 percent or less of output value. (Repetto, R., C. Maurer and G.C. Bird. “U.S. Competitiveness is Not at Risk in the Climate Negotiations.” *WRI Issue Brief*, October 1997.)

⁴ The Carbon Trust recently suggested that differences between National Allocation Plans within the EU Emissions Trading system has significant implications on sectoral competitiveness even though country efforts under the overall system are widely viewed as compatible (Carbon Trust, “The European Emissions Trading Scheme: Implications for Industrial Competitiveness.” June, 2004. See also IISD, “Climate Change and Competitiveness: A Survey of the Issues,” March 2005; and European Commission, “International Trade and Competitiveness Effects,” Emissions Trading Policy Brief No. 6, 2003.)

⁵ Jaffe, A.B., S.R. Peterson, P.R. Portney, and R.N. Stavins. “Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?” *Journal of Economic Literature*. Vol. XXXIII, March 1995.

⁶ Porter, M. “America’s Green Strategy,” *Scientific American*, 264, 4: 96, 1991; Porter, M. and C. van der Linde, “Toward a New Conception of the Environment-Competitiveness Relationship,” *Journal of Economic Perspectives* 9, 4:97-118, 1995.

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inherent protection for potentially vulnerable firms by conferring assets whose sale can offset losses.

One option to mitigate potential competitiveness impacts is to provide supplemental allowances to sectors deemed to be vulnerable. Another is to dedicate funds — possibly by auctioning a portion of allowances — to assist vulnerable sectors. Assistance could include:

- Incentives for the deployment of cleaner or more efficient technologies, such as accelerated depreciation of existing stock, or tax credits for the deployment of specific technologies or the production of less emissions-intensive products.
- Support for research and development of long-term technology.
- Transition assistance for workers in sectors likely to experience job losses.

Further steps to address competitiveness would require some mechanism to identify vulnerable sectors based on an analysis of export patterns among energy-intensive industries and relative energy pricing in competing countries.

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Clarifying Question 4a:

- What metrics are most valuable for comparison of developed and developing country mitigation efforts to U.S. efforts?

Pew Center Response

Apart from its limited value in addressing competitiveness, a periodic review of other countries' overall climate efforts would pose serious methodological challenges. No metric is straightforward and all rely at least in part on qualitative assessment or assumptions. Comparing government expenditures is difficult because not all governments tally their climate-related spending and, among those that do, each does it differently. A 2004 GAO report showed, for example, that even in the United States it is difficult to track climate-related expenditures over time.⁷ Adoption and implementation of policies that directly or indirectly reduce emissions is another measure of effort, but only a qualitative one, unless the policies' emissions impacts can be reliably quantified.

Even with reliable emissions data, however, any comparison hinges heavily on the chosen indicator. If the measure is emissions intensity, a country like China can show tremendous improvement (a 47% reduction from 1990 to 2000) even as its absolute emissions soar.⁸ In per capita terms, India's emissions are projected to rise 50% by 2025, nearly twice the world average, yet will still be just one-fourteenth those of the United States.⁹ The measure of "effort" that translates most directly into "result" is absolute emissions. However, among the major emitters, the absolute emission increases projected for 2025 vary tremendously – from roughly 10 percent in the European Union to 130 percent in China.¹⁰ Any reasonable comparison must take into account wide disparities in natural endowment, economic structure, stage of development, and other national circumstances. While such analysis can and should inform the policy process, any determination of "comparability" is ultimately subjective.

If periodic Congressional review is to be mandated, it should also take into account new scientific and technological developments and other factors bearing on the feasibility, cost, and urgency of emissions reduction.

⁷ While reported federal spending rose from \$3.3 billion in 1993 to \$5.1 billion in 2004, the GAO found, the government's accounting had changed considerably over that period as successive administrations added programs not previously counted as climate-related. (US GAO, "Climate Change: Federal Reports on Climate Change Funding Should be Clearer and More Complete." GAO-05-461, August 2005.)

⁸ Baumert, K. and J.Pershing, with T. Herzog and M. Markoff. "Climate Data: Insights and Observations." Prepared for the Pew Center on Global Climate Change, November 2004.

⁹ EIA. *2005 International Energy Outlook*. DOE/EIA-0484, July 2005.

¹⁰ EIA. *2005 International Energy Outlook*. DOE/EIA-0484, July 2005.

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Clarifying Question 4b:

- What process should be used to evaluate the efforts of other nations and how frequently should such an evaluation take place?

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Clarifying Question 4c:

- Are there additional incentives that can be adopted to encourage developing country emission reductions?

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Pew Center Response

Three strategies can provide additional incentive to developing countries to reduce emissions: direct bilateral assistance; multilateral agreements that recognize developing country actions; and market-based incentives through a domestic and/or an international emissions trading system

Bilateral assistance – Direct U.S. support for developing country efforts should be expanded, better targeted, and tailored to the needs of developing countries. The highest priority for most developing countries is economic growth and development. Rather than viewing climate-friendly technology deployment solely as an exercise in increasing exports or funding demonstration projects, our objective should be to integrate climate-friendly activities into national strategies for economic growth, poverty reduction, and sustainable development. For instance, energy policies and plans are critical to achieving economic and development objectives. U.S. assistance should help developing countries build their capacity to assess clean energy options and establish policy frameworks that will favor such options even after our funding assistance is gone.

U.S. assistance also should support and promote efforts by the largest developing countries to identify specific goals for limiting their emissions of greenhouse gases – recognizing that their goals may vary in form, content and timing. One way to do that would be to require that the largest developing countries, in agreeing to receive bilateral assistance, establish goals consistent with their development strategies, and periodically report progress towards meeting them.

Developing country commitments – Achieving broad participation in a strengthened multilateral effort will require a more flexible framework allowing different countries to take on different types of commitments best suited to their national circumstances. In the case of developing countries, this could mean allowing for non-target approaches such as policy commitments in which governments commit to undertake national policies that will advance core economic and development priorities, such as energy access or security, while contributing to climate mitigation. These could include energy efficiency standards, renewable energy targets,

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technology standards phasing in advanced electrical generation technologies, or policies to preserve forests and promote sequestration practices.¹¹

A multilateral framework allowing such commitments would provide international recognition of developing country efforts and, thereby, an incentive for strengthening these efforts.

Market incentives – An important driver for developing country efforts to reduce emissions is access to emissions trading markets. The Clean Development Mechanism (CDM) established under the Kyoto Protocol enables developing countries to market certified emission reduction credits resulting from projects that reduce emissions below business as usual. Despite a slow startup, the CDM is now operational, with nearly 150 projects approved and several hundred more in the pipeline.

As presently structured, however, the CDM allows crediting only of discrete projects, limiting its potential reach. Kyoto parties agreed recently to open consideration of a more “programmatic” approach that could potentially allow crediting of reductions resulting from a much broader range of activities. One possibility would be crediting of reductions across an entire sector driven by policies such as energy efficiency standards (reductions would have to be quantified and verified). Such an approach could complement the type of policy commitments described above, providing a powerful market incentive for developing countries to enact and faithfully implement such policies.¹²

A programmatic crediting mechanism of this type could be established as an adjunct to a domestic emissions trading system or as a feature of a future multilateral approach.

¹¹ Pew Center on Global Climate Change. “International Climate Efforts Beyond 2012: Report of the Climate Dialogue at Pocantico.” November 15, 2005.

¹² Pew Center on Global Climate Change. “International Climate Efforts Beyond 2012: Report of the Climate Dialogue at Pocantico.” November 15, 2005; Figueres, C. “Draft Proposal for the Implementation of Programmatic CDM Project Activities within the Existing Regulatory Framework of CDM Project Activities.” Prepared for the Carbon Finance Business Unit of the World Bank, November 29, 2005. Available: http://carbonfinance.org/docs/Programmatic_CDM_Implementation_Paper.pdf.