

## EVENT SUMMARY

### Transatlantic Perspective on Climate Change Policy

Keynote Speaker: Nicholas Stern

Panel Discussants: Malachy Hargadon, Mun Ho, Trevor Houser, Gary Clyde Hufbauer, Bernice Lee, Thomas Legge, Jeffrey J. Schott, and Jacob Werksman

March 4, 2009

#### **Panel 1: The Impact of Climate Policy on Trade-Exposed Industries and Domestic Policy Options**

Mun Ho of Resources for the Future began the conference by presenting a recent study on trade leakage. In contrast to most studies, which conduct long-run analyses of countries at the expense of disaggregation by industry and time-frame, Ho's study analyzed a variety of trade-exposed industries over four time frames: the very short run, the short run, the medium run, and the long run. Over the very short run, Ho found that a unilateral \$10/ton carbon tax would increase costs and decrease profits by 8 percent for basic and inorganic chemicals. Nonferrous metals, cement, and refining would experience cost increases of less than two percent. In most sectors, long-run impact was less than short-run impact, due to the possibility of input substitution over the long run. The exception to this rule was petroleum refining, which suffered only a slight output drop in the short run but a 5 percent drop in the long run. Overall, leakage accounted for 25 percent of the drop in output of studied sectors, although the rate could reach over 40 percent for vulnerable industries. These results, however, assume that all other countries will maintain their current carbon intensity of production; if other countries, particularly Canada, adopt carbon caps, results will change dramatically.

Thomas Legge of the German Marshall Fund pointed out that CO<sub>2</sub> is a borderless pollutant, but its price will vary across countries, presenting the potential for leakage. While the European Union experiences competitiveness concerns, its decision-making structure makes it easier to coordinate the European response to climate change than it is to coordinate the US or the global response to climate change. Recently, the European Council and the European Parliament reached an agreement committing Europe to reducing emissions by at least 20 percent below 1990 levels by 2020, and the European Union has agreed to scale this goal up to 30 percent if other developed countries make similar commitments. Like the United States, the European Union faces internal opposition from those who believe that climate change mitigation will deindustrialize Europe, but internal European Commission studies show that costs are limited to certain sectors and that some of these costs can be alleviated through renewable energy and energy efficiency. According to Legge, the European package contains some measures to address competitiveness concerns, including emissions offsets, banking and borrowing, and free allocation to industries susceptible to leakage. Free allocations pose risks of windfall profits and continued use of carbon-intensive processes, however. The EU Solidarity Fund has been established to assist transition economies with climate change measures.

Trevor Houser of the Peterson Institute for International Economics presented an overview of three measures to address competitiveness: cost containment, trade measures, and a global agreement. Clearly, a global carbon tax or carbon market would best address both competitiveness and climate change, but this solution seems unlikely. Sectoral performance standard agreements have also lost momentum in the

past year. Thus, for the interim, heterogeneous carbon prices will likely be addressed through a domestic route. Most of the bills introduced in the US Congress last year contained free-rider provisions, which imposed a standard of “comparable action” on other countries; countries that failed to take such action would be subject to border measures. These trade measures would fail to directly address leakage, however, as they would not take into account the environmental practices of individual firms. The measures would also likely fail to place leverage on developing countries, as the United States imports a very low percentage of the carbon-intensive products manufactured in those nations. A second option would be to adjust prices on imports to reflect the carbon intensities of the particular goods being imported, but it would be difficult to calculate carbon intensities of goods from countries that did not enact stringent reporting standards for firms.

Another possibility, according to Houser, would be to impose cost containment measures for industries negatively affected by carbon measures. One option would be to include carve-outs for trade-exposed industries in legislation, but this would weaken environmental integrity while failing to deal with the cost of inputs, which would still be taxed further upstream. Another option would be free allocations of emissions permits, although there would be no guarantee that the money gained from the permit allocations would be used for green investment rather than windfall profits. A third option would be rebates for industries based on volume of output, which would maintain employment while still incentivizing green production methods.

Bernice Lee of the Chatham House warned that the financial crisis would continue to play a major role in the debate over climate legislation; while businesses have come to accept the necessity of a cap, they will continue to fight over allocation of emissions permits. The policy community will continue to argue over the possibility of leakage, and there are those in Europe who are afraid that the United States will do too little on climate change. Due to these fears, WTO litigation to address competitiveness measures will likely be a major issue. Lee suggested that the solution might be to “enlarge the problem,” thinking about competitiveness in a carbon-constrained future rather than competitiveness for existing carbon-intensive industries. For example, Poland, afraid of losing its power industry to Belgium and Denmark, has provided a grant for a clean coal demonstration plant. China has also shown a “conservative but enthusiastic” response to proposed technology demonstration sites. Because the global response to climate change will be one of the biggest economic changes in history, the world might not have the time or the resources to tailor policies to protect a small number of industries.

### **Question and Answer Session**

In answer to a question by William Martin of the World Bank, Trevor Houser said that while the environmental impact of production and consumption taxation would be similar if the entire world were under an emissions cap, developing countries are not capped; therefore, emissions leakage is a real concern.

Joel Yudkin of High Road Strategies asked how to control the emissions of countries like China and India and how to incentivize the kind of dramatic technological and infrastructural improvement needed to make deep emissions cuts. In answer to the second question, Houser said that the way to accomplish technological innovation would be to impose equalized, stringent carbon caps across the world. In response to this comment, Lee said that there was a conflict between equal international carbon prices and the principle of common and differentiated treatment.

Frank Ackerman of the Stockholm Environmental Institute argued that a low carbon intensity should not preclude export competitiveness, pointing out that Germany has attained high export levels with

low carbon intensities and that China's trade competitiveness has not been a function of carbon intensity so much as labor prices. Houser replied that while this might be true in aggregate, climate legislation will have distributional impacts that must be addressed, and Ho said that the expected impact of climate legislation on even a small portion of vulnerable industries will greatly affect the positions of key congressmen on climate bills. Fred also pointed out that German exports are less resistant to currency changes than other countries, and that perhaps this fact could be extrapolated to apply to price elasticity of its exports in general.

William Cline of the Peterson Institute for International Economics argued that common and differentiated treatment applied to the magnitude of cuts for developing countries, not the price of emissions. Cline suggested that revenue sharing for poor countries might be implemented in order to mimic a global carbon tax without imposing the cost on countries that could not afford such a tax. Cline also asked Legge to clarify how the relatively small coverage of the European program—50 percent of the economy—would affect the climate and the economy as a whole. Lee answered that her comments were in response to a world in which there were differentiated prices and agreed that measures to mimic a carbon tax for poor countries would be a good idea. Legge responded that areas of the economy not covered by the cap were covered by other policy measures.

Finally, Jason Bordoff asked the panel to characterize the expected environmental benefit of border adjustments on imports. Ho reminded the audience that the aggregate leakage effect was expected to be small, so measures to address leakage would be equally insignificant. Without action by other Annex I countries, however, leakage could be substantial. Moreover, by using less oil, the United States could make oil cheaper for China; this type of leakage could not be addressed through border adjustments. Lee added that a broader approach was needed in order to ensure that developing countries themselves address climate change.

## **Panel 2: Reconciling Climate Policy with the International Trading System**

Gary Clyde Hufbauer, Reginald Jones Senior Fellow at the Peterson Institute for International Economics, discussed national measures designed to limit greenhouse gas (GHG) emissions within the context of the world trading system and shared his views on US domestic action and the post-Kyoto regime. While many economists have found that there is no basic difference between taxation at a product's origin and taxation at a product's destination in terms of ultimate economic impact, the history of value-added taxes (VAT) shows that politics has been quite different from economics. Border adjustments have been decisively important for political acceptance of the VAT, and have thus become accepted across the world. For this reason, most countries that adopted value added taxes have used the destination system. A parallel argument can be made in the acceptance of decisive measures on carbon. Hufbauer argued that it is very important to reconcile climate policy and trade measures under consideration with the world trading system so as not to hammer the trade system, which has been recently under massive stress.

In the US legislation, border measures are almost certain to be adopted in order to address "leakage" and "leverage" concerns. Many US climate bills include border measures that impose export rebates and taxes on imports of goods from countries that do not have comparable climate policies. Such import restrictions, however, risk being incompatible with existing WTO rules. For this reason, there is a high likelihood of trade conflicts due to differences in climate measures adopted by countries. One way to deal with the potential conflict would be to let the WTO dispute settlement process run its course to solve trade frictions, but this would be a time-consuming process. Hufbauer thus recommended a new code by plurilateral agreement under Annex 4 of the WTO, or a new code adopted outside of the

WTO. Such a code seems practical and could define the policy space for climate control measures that are consistent with core WTO principles. Also, a “peace clause” among key emitting countries would suspend border measures to allow WTO negotiations on a new code or other approaches.

Malanchy Hargadon, Environmental Counselor of Delegation of the European Commission, provided an EU perspective on trade measures. Carbon leakage issues have been taken seriously in the European Commission. Even though the European Union did not include border measures into the actual text of its climate package for phase III, the concerns have been envisaged in the package. Hargadon said that even though border measures will remain one of the options for mitigating carbon leakage in the climate policy of the European Union, the decisions on adopting those measures would not be made until an international post-Kyoto regime is in place and proper analysis of carbon leakage and the impact and effectiveness of trade measures is done. Hargadon agreed that in the absence of a broad international climate agreement, border measures would risk WTO incompatibility and hinder trade. More importantly, any signal of adopting unilateral border measures could disrupt international negotiations of a post-Kyoto regime. The European Union will assume a leading role in international negotiations on the post Kyoto-regime and seek to build a bridge, especially with developing countries.

Jacob Werksman, director of the Institutions and Governance Program at the World Resources Institute, presented historical perspectives of the UNFCCC and interaction between the UNFCCC and trade issues. He argued that the UNFCCC was aware of trade issues when negotiated. Chapter 1 of the UNFCCC states that “measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.” However, the UNFCCC may implicitly permit unilateral use of trade measures in order to achieve its environmental objectives and may be in a position to police WTO principles by including language in the text. Werksman argued that previous MEAs, such as the Montreal Protocol, used trade measures successfully as a way to promote their implementations. UNFCCC Chapter 2 also says that restrictions on carbon offsets and allowances do not violate WTO rules. According to Chapter 4, if the international community could define comparability of international laws, it would provide some room for trade measures under WTO rules.

Werksman said that the potential use of border measures was not discussed much within the UNFCCC when it was negotiated for several reasons. One of reasons could be that the negotiators did not expect countries like the United States and the European Union to consider use of border measures. Another reason might be that developing countries saw the border measures as a subject to be discussed under the WTO, not in a climate agreement. Werksman suggested that the next international climate agreement would explicitly address border measure issues and define comparable action.

Jeffrey Schott, senior fellow at the Peterson Institute for International Economics, began by arguing that WTO litigation would pose significant problems for climate change legislation, as the dispute settlement panel will not undercut WTO discipline in favor of climate change. For this reason, it is very important to address climate change within the WTO, as suggested earlier by Hufbauer. Schott continued that the United States has signed more than a dozen free trade agreements, almost all of which contain environmental provisions. These bilateral relationships, particularly with developing countries, can be used constructively to address climate change. The first free trade agreement to include an environmental side treaty, NAFTA, is well suited to be a laboratory for North-South collaboration on climate change. Unlike the European Union, which includes a unified political arm that has established cross-cutting climate change responsibilities, North America features a variety of political institutions at different levels that have adopted myriad approaches to the problem. For this

reason, integration issues across North America are more profound than those across the European Union, and competitiveness concerns are real.

The nature of the American political process means that jobs affected in key districts will determine the fate of climate change legislation. What has not been discussed at enough length, however, is carrots rather than sticks for developing countries. In this area, NAFTA institutions such as NADBank can be modified to serve a more useful role in technology transfer and capacity building. The Institute has already begun building a foundation for NAFTA cooperation on climate change by publishing a catalogue of existing North American environmental legislation.

### **Question and Answer Session**

In response to questions raised by Steve Charnovitz, law professor at George Washington University, Werksman said that WTO-based text included in the UNFCCC would give some authority to the climate regime parties themselves to interpret and apply those principles. In contrast to the UNFCCC and the Kyoto protocol, subsequent MEAs have referred to the WTO either explicitly or indirectly as being an international agreement that MEAs should be applied in accordance with. The climate regime does not have a compulsory dispute settlement mechanism, but it has compliance enforcement procedures. He also said that the climate regime has a provision to suspend offset trading for noncompliant countries to make sure the countries meet their obligations.

In response to the question raised by Arvind Subramanian, senior fellow at the Peterson Institute for International Economics, on how we can secure cooperation from developing countries, Hufbauer said that it is a very difficult task to resolve issues such as comparability of emissions targets. In the United States, it will be hard to pass domestic legislation without a destination adjustment provision (border measures).

Andrew Shoyer from Sidley & Austin gave a short explanation about two criteria that have been widely discussed in terms of judging “comparability.” One is whether the other countries, compared to the United States, achieve similar or greater level of absolute carbon emissions reductions in a relevant period of time through any means. The other is qualitative criteria that determine whether the country uses some sort of technology to reduce carbon emissions.

### **Remarks by Lord Nicholas Stern**

Lord Stern began by urging Copenhagen negotiators to aim to cut GHG emissions by 50 percent by 2050 relative to 1990, entailing per capita emissions of two tons in 2050. This ambitious goal can not be achieved without cooperation of developing countries. 2020 is in the middle of the time path toward the long-term objective by 2050, but developed and developing countries hold different views on the middle-term target. The central tension is that while developing countries are aware of the importance of carbon reductions, the only visible historical model for development involves carbon-intensive industrialization; for this reason, developing countries see low-carbon development as a contradiction in terms. Because developing countries argue that they need to develop before they begin to decarbonize, carbon trading will be one sided for a while. Developing countries will not join the low-carbon future until they see some examples of low-carbon growth and technology and financial support actually flowing into countries. The period from now to 2020 or 2025 should be seen as a transition period for developing countries rather than a period of delayed action. Technology transfer and financial support will be a key issue in upcoming international negotiations on the post Kyoto climate regime. Another

issue to be addressed in upcoming negotiations will be deforestation, a key issue for developing countries.

Immediate action by developed countries is very important to induce action from developing countries and to achieve the long-term goal of substantial reductions by mid-century. The United States now aims at reducing GHG emissions to 1990 levels by 2020. While this target itself will be difficult to attain, other countries expect more. The United States can find ways to cut more elsewhere—for example, by contributing to carbon financing (e.g., Amazon fund). Some might gain windfall profits from carbon trading due to differences in prices. We need to think creatively about different forms of carbon finance in order to deal with these problems.

Lord Stern emphasized that we also should think about conditions on sharing technology. Beyond discussions on the intellectual property rights, we have to find and expand ways to incentivize sharing technology. One example can be a joint venture. He also shared his views on the relationship between climate change and international trade and made three points. First, it is very important to have an international climate agreement that includes as many countries as possible. We should not start by using sticks on developing countries. Second, empirical evidence suggests that leakage would have only a limited aggregate impact on the economy, so trade measures should be avoided. Third, to address those industries that are hard-hit by the climate regime, countries might want to discuss industrial standards. However, we should not let issues related to a limited number of industries drag down an international agreement on climate change.

Lord Stern stressed that we have to begin decarbonizing our economy in order to enhance energy security and manage the risk of climate change. Trade growth should be part of the low-carbon growth story. Trade liberalization in green technology and green products will help more countries move toward a low-carbon future.

### **Question and Answer Session**

In response to a question raised by C. Fred Bergsten, director of the Peterson Institute for International Economics, Lord Stern emphasized that the financial crisis should not delay climate change action because delay will cause significant additional costs in years to come.

In response to a question by William Cline, senior fellow of the Peterson Institute for International Economics, Lord Stern stressed that there have been changes in the attitude of developing countries toward climate change. Many developing countries such as China and India have strongly expressed their willingness to take action on climate change not only for their own interests but also because they feel a responsibility toward the rest of the world.