“Business and Climate Change: Designing Integrated Strategies”

Sponsored by
The Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise
of the School of Natural Resources & Environment
and the Ross School of Business

On May 4-5, 2006, the Erb Institute sponsored the second in a series of annual conferences on business and climate change. Twenty-two speakers—from a cross-section of business, government, academia and environmental groups—gathered to discuss the forces that motivate or deter business from acting vigorously to mitigate climate change.

Steve Percy, former CEO of BP America, kicked off the event Thursday evening with a keynote address that gave an insiders’ view of BP’s strategy on climate change. As the first major corporation to publicly acknowledge the need to address climate change, BP has garnered a variety of advantages from its first-mover position. Among them, said Percy, was an enhanced corporate reputation, which smoothed the path of the 1998 merger between BP and Amoco, at the time the largest industrial merger in history. In addition, recruiting top talent from universities in Britain was made easier by the reputational improvement.

The conference organizers, Professors Thomas Lyon and Martin Zimmerman, opened Friday’s proceedings with the observation that recent votes in Congress and rising public pressure for climate change regulation means that businesses must develop strategies for dealing with this possibility. (Last year’s Erb Institute conference on “Reframing the Climate Change Debate: Jobs, Trade, Security, and a Revised Research Agenda” revealed that, while opposition remains, there is a broad spectrum of interests supporting stronger U.S. policy action on climate change, including businesses, labor unions, national security hawks, state governors, environmental groups, and a growing number of Christian evangelicals.) They stressed that the Erb Institute aims to provide a space where open, non-partisan dialogue can take place without the posturing that often occurs in the political arena or the media.

Policy Options

The first panel on Friday morning laid out a range of policy options that are currently under consideration in the U.S. All panelists—whose “inside the beltway” views included perspectives from the U.S. Senate, the EPA, and the White House—agreed that the U.S. needs to spend more on energy R&D. Most agreed that the U.S. also needs a market-based system of tradable emissions permits for carbon dioxide, which would create price signals for industry to take action. However, there was lively debate about whether permit prices can be high enough to induce needed actions without causing U.S. manufacturing industry to move overseas.

Sarah Wade, a partner at AJW Inc., opened the panel by surveying actions that firms have taken and the technologies that can be used to mitigate greenhouse gas emissions, from improved energy efficiency in buildings and vehicles to increased use of nuclear power to the storage of carbon dioxide in wells deep beneath the Earth’s surface. Jason Grumet, Executive Director of the National Commission on Energy Policy (NCEP), emphasized that the NCEP proposal includes both a market-based tradable permits policy that creates price signals for
industry, a “safety valve” that provides cost certainty for business, and greater government support of energy R&D. Jonathan Black, staff member for the Senate Energy and Resources Committee, reported on the Committee’s April 4 hearings on climate change and two key questions that emerged from them: 1) where in the energy production and consumption chain should greenhouse gases be regulated?, and 2) how should emission permits be allocated? Chris Grundler, Deputy Director for Transportation and Air Quality, U.S. Environmental Protection Agency, argued that 30 years of policy failure on climate teaches that government should support a broad portfolio of energy R&D, and fight the urge to “pick winners.” Finally, Bryan Hannegan, former Chief of Staff at the White House Council on Environmental Quality, pointed out that the U.S. already has many sector-specific policies to address climate change. He favored sector-specific approaches, since he felt that a market-based policy with sufficiently strong price signals would cause U.S. industry to move overseas.

**Electric Utilities**

The industry sector with the single biggest impact on climate is electric utilities, with about a third of U.S. greenhouse gas emissions. Some companies, such as Duke Energy, have taken public positions in support of a mandatory, economy-wide, market-based policy to control carbon dioxide emissions. These companies argue that they need regulatory certainty when making investments in new plants that may last for 50 years or more. Others, especially in the Southeast part of the U.S., still resist such a policy, in part because they fear public utility regulators may not allow them to recover the full costs of policy compliance. Nevertheless, state regulators in California, the Northeast, and other parts of the country are moving forward with a “patchwork quilt” of policies that may eventually lead large multi-state utilities to demand a single federal system rather than a collection of 50 different state systems.

Dallas Burtraw, a Senior Fellow at Resources for the Future, presented research showing that a tradable permit system like the NCEP proposal would have a modest negative impact on the utility industry as a whole; some individual companies would gain substantially, while others would lose. Fortunately, the losers could be compensated by giving to them at no cost about 10% of the total permits issued by the government. Kate Zyla, Research Fellow at the Pew Center on Global Climate Change, described the many climate and clean energy activities going on at the state and regional levels across the U.S., and showed that action of some kind is taking place in almost every state in the country. John Stowell, Vice President of Duke Energy, expressed serious concern about a patchwork quilt of state policies, and about policies that focus only on the utility sector; he argued instead for a mandatory, economy-wide, market-based policy on greenhouse gases. Skiles Boyd, Vice President of DTE Energy, agreed that if we were to have a federal policy, it should be economy-wide and market-based, but argued that it should start with a moderate level of stringency, and should include forest restoration as one means of coping with climate change.

**Transportation**

Transportation accounts for more than a quarter of U.S. greenhouse gas emissions, and is the second-largest source of emissions. Corporate Average Fuel Economy (CAFE) standards require automakers to produce new vehicles that achieve a certain minimum average level of fuel efficiency. However, most automakers find CAFE burdensome, and most economists agree that a system of marketable emission permits would be a better way to address climate concerns. Automakers and oil companies recognize that some sort of government climate policy is probably necessary, but they have difficulty agreeing upon exactly what that policy
should look like. One possible step forward would be to link CAFE with permit trading, thereby bringing automobiles into an economy-wide, market-based policy. Still, the question of how to bring petroleum into an emissions trading program was controversial, with some panelists questioning whether carbon prices under a trading regime would ever be high enough to affect consumer demand, and therefore advocating alternatives such as regulations on vehicle design, fuel characteristics, and consumer education.

Martin Zimmerman, Ford Clinical Professor at the Ross School of Business, presented an innovative proposal to link CAFE standards with an emissions trading program. Zimmerman argued that the costs of carbon reduction from vehicles is higher than costs likely to emerge in the main candidate cap-and-trade programs. By allowing trading between autos and other sectors, marginal costs of carbon mitigation will be equalized and total costs will be minimized. Under this scheme, if automakers failed to reach the CAFE standard they would be required to buy permits equal to the difference between the actual lifetime emissions of their fleet and what those emissions would be at the CAFE standard. If they exceeded CAFE standards, they could sell some permits to, say, electric utilities. Tim O’Brien, Deputy Chief of Staff at Ford, described Ford’s recent efforts on climate change, including its special report on the topic, its production of hybrid vehicles, and its participation in the Chicago Climate Exchange. Mike Brien, General Manager of Federal and International Affairs at BP, supported government regulation to limit global temperature increases to 2 degrees Celsius, but argued against an economy-wide approach to caps, and that carbon caps should not be applied to petroleum refiners. He also favored sector-specific approaches. John DeCicco, of Environmental Defense, argued for better measurement tools for tracking transport sector greenhouse gas impacts, since “what gets measured gets managed,” and to enable actors in the sector to derive value from emission reduction. The panelists agreed that moving new fuel efficiency technologies into the marketplace is critical, and that simply developing new technology is not enough; policy needs to focus on consumer behavior, as well.

Near-Term Actions

The fourth panel addressed the question of appropriate business strategy during the interim before the U.S. adopts mandatory greenhouse gas controls. In this regard, companies are pursuing a variety of strategies. Many, such as Alcoa and Honda, are already taking steps to reduce the carbon impact of their operations and products. Many others are at least beginning to inventory their own greenhouse gas emissions. According to the panel, this process is being encouraged by large financial corporations such as Citigroup, a company which is innovatively working with its energy suppliers to source 10% of its own energy from cost-competitive renewable power in four states. Developing countries will clearly have a huge impact on global climate in the coming years, and the time to engage them in international carbon trading is now, while they have many cost-effective opportunities to improve energy efficiency.

Randy Overbey, President, Primary Metals Development for Alcoa, described how Alcoa has cut its carbon dioxide emission over 25% from 1990 levels, while continually increasing output; he also explained Alcoa’s desire to work with governments, NGOs, customers, and other stakeholders for addressing the climate issue. John German, Manager of Environmental and Energy Analyses for Honda, argued that the real cost of driving 10,000 miles a year---as a percentage of disposable income---has fallen from 9% in 1980 to 4% today; since gas is cheap from this perspective, we should not be surprised that consumers don’t much care about fuel efficiency. Jennifer Layke, Director of Business Engagement for the World Resources Institute, described GE’s Ecoimagination campaign, the development of greenhouse gas inventories, and the increasing pressure from large investors for companies
to take action on climate. Finally, Thomas Rutherford, an economic consultant, described research showing that China has strong incentives to participate in an international emissions trading program, especially if it is set up sooner rather than later.

**What Do We Need to Know?**

The conference wrapped up with a session highlighting gaps in our understanding of business and climate change. One important challenge is how to link regional carbon trading programs, e.g. the European Union Emissions Trading System with any system imposed in the U.S. Similar issues arise in linking the state programs that are cropping up in California, the northeast U.S., and other parts of the country. The wealth transfers and resulting political challenges involved in such linkages mean there is great value in creating an overarching trading “architecture” that includes a broad array of participants from the very outset. Whether corporate reputation is enough to drive meaningful greenhouse gas reductions proved to be a highly contentious subject among the panelists, and provoked a lively discussion with audience members. There were also real differences of opinion regarding how much effort should be devoted to adaptation to inevitable climate changes, as opposed to efforts designing to mitigate those changes.

Ray Kopp, Senior Fellow at Resources for the Future, detailed the many difficulties involved in linking trading systems, especially when they are trading at very different prices. Daniel Diermeier, Professor at Northwestern University’s Kellogg School of Management, argued that corporate reputation is an increasingly important driver of business strategy, and that pressure from environmental groups may induce companies to undertake voluntary self-regulation of greenhouse gas emissions. David Levy, Professor of Management at University of Massachusetts, Boston, argued that corporate carbon strategies are driven more by political pressures rather than an attempt to appease environmental groups. The ensuing questions from the audience made clear that more work is needed to really understand corporate motivations for voluntary action on climate. Finally, Joseph Fiksel, Co-Director of the Center for Resilience at Ohio State, reminded the audience that our understanding of the global climate system remains very limited, and emphasized the importance of learning how to adapt to climate change, as well as to mitigate it.

**Summary**

Overall, the conference underscored the fact that mounting scientific evidence, heightened public awareness, and a recent Sense of the Senate Resolution all suggest an increased likelihood of action in the United States aimed at regulating greenhouse gas emissions. In response to this changing environment, many businesses have begun to position their products and processes for a carbon-constrained future. Yet large uncertainties remain about what type of climate regime will emerge. Further, the risks and opportunities associated with climate policy vary widely across US industry—regulated electric utilities likely can pass carbon costs through to consumers, while automobile manufacturers worry that climate policy will add yet another burden to the enormous economic challenges they already face.

In this dynamic environment, simply opposing climate policy is to cede the opportunity for influence to players offering possible alternatives. A successful business strategy calls for integrating core market activities with activities in the public arena. Different companies will inevitably come to different positions regarding appropriate public policies. Yet they all can benefit from being able to discuss their views with representatives from government, environmental groups, and scholars in a non-partisan environment such as that provided by the Erb Institute.