Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify on climate change technology deployment in developing countries, and, in particular, on the implementation of Section 1611 of the Energy Policy Act of 2005, authored by the chairman. My name is Eileen Claussen, and I am the President of the Pew Center on Global Climate Change.

The Pew Center on Global Climate Change is a non-profit, non-partisan and independent organization dedicated to providing credible information, straight answers and innovative solutions in the effort to address global climate change.\(^1\) Forty-one major companies in the Pew Center’s Business Environmental Leadership Council (BELC), most included in the Fortune 500, work with the Center to educate the public on the risks, challenges and solutions to climate change.

Global climate change is real and likely caused mostly by human activities. While uncertainties remain, they cannot be used as an excuse for inaction. To quote the National Academy of Sciences, in a statement signed by the academies of ten other nations, as well: “The scientific understanding of climate change is now sufficiently clear to justify nations taking prompt action. It is vital that all nations identify cost-effective steps that they can take now, to contribute to substantial and long-term reduction in net global greenhouse gas emissions.”

The Pew Center believes there are three things we in the United States must do to reduce the real and growing risks posed by global climate change: First, we must enact and implement a comprehensive national program to progressively and significantly reduce U.S. emissions of greenhouse gas emissions in a manner that contributes to

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\(^1\) For more on the Pew Center, see www.pewclimate.org.
sustained economic growth. While I am happy to elaborate on this point, that is not my intent today. Second, we must strengthen our efforts to develop and deploy climate-friendly technologies and to diffuse those technologies on a global scale. That is the primary thrust of Section 1611. And third, the United States must work with other countries to establish an international framework that engages all the major greenhouse gas-emitting nations in a fair and effective long-term effort to protect our global climate. I would like to return to this point later in my testimony. First, though, let me discuss the specifics of Sen. Hagel’s law and its implementation.

We must strengthen efforts to develop and deploy climate-friendly technologies on a global scale, and to do so quickly. Standards of living are expected to rise in developing countries over the next few decades, and, as they do, energy demand will rise. China, for example, expects to build 544 gigawatts of new coal capacity between 2003 and 2030, far more than current coal capacity in the United States. If these plants are not designed and operated to capture their carbon dioxide emissions, we could well lock ourselves into a level of climate change no one would want. Similarly, Shanghai predicts a quadrupling of cars and trucks by 2020, and car sales in Delhi have risen 10% per year since the mid-1970s. If we are going to address the climate change problem, the huge growth in energy demand in developing countries has to be as climate-friendly as possible.

Section 1611 is intended to address that challenge. The provision requires the Department of State to identify the top 25 energy users among developing countries, describing among other things the quantities and types of energy they use, and the greenhouse gas intensity of their energy, manufacturing, agricultural and transportation sectors. The provision also requires the development of a technology strategic plan, and authorizes at least ten demonstration projects to promote the adoption of technologies and practices that reduce greenhouse gas intensity in developing countries. Finally, the provision requires an identification of potential barriers to the export and adoption of climate-friendly technologies. All of these are useful activities.

The State Department is still at the early stages of implementing Section 1611. I believe the first deadline they face is production of the report on the 25 countries, due in February. Given this early stage, I would like to offer a few suggestions.

First, we should tailor the assistance provided to developing countries to their needs. The reality is that 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. Making climate change one of the drivers of energy policy, as the United Kingdom has done, will move us toward meeting our goal of a stable climate. We 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.
We 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 assistance under this provision, establish goals consistent with their development strategies, and periodically report progress towards meeting them.

Second, we would recommend tracking progress under Section 1611 not only in terms of greenhouse gas intensity, but in terms of actual greenhouse gas emissions. Measuring intensity is useful in that it allows us to distinguish a change in emissions that results from a genuine improvement in practices and technology from a change due to reduced production. Intensity reduction, however, is not a surrogate for emission reduction, and our objective of achieving a stable climate must entail actual emission reductions. We therefore should be tracking our progress in those terms, as well.

Third, like the many technology initiatives launched before it, Section 1611 can only be effective if it is adequately funded and managed, and implemented with some urgency. Section 1611 joins an already large crowd of climate-friendly technology initiatives. In addition to the programs with a largely international focus – the Methane-to-Markets Partnership, the Carbon Sequestration Leadership Forum, and the Partnership for a Hydrogen Economy – several other programs are intended to advance the climate-friendly technologies we would want deployed in developing countries, including: Climate VISION, Climate Leaders, Climate Challenge, Clean Cities, the Hydrogen Fuel Initiative, SmartWay Transport Partnership, FreedomCAR, Energy STAR, Generation IV Nuclear Initiative, Vision 21, 21st Century Truck, Nuclear Power 2010, ITER22, FutureGen, Future Fuel Cells, Industries of the Future, and Turbines of Tomorrow.

While it is difficult to tell exactly how much has been budgeted for each of these programs, according to the Administration’s Federal Climate Change Expenditures Report to Congress (March 2005), the total FY 2005 budget authority for all initiatives that have direct relevance to climate, as well as programs that benefit the climate indirectly (like grants to help low-income people weatherize their homes), amounts to about $5.2 billion.

Related to this is the challenge of implementing so many initiatives on a timely basis. Because it is far easier to explain to the press and public the launch of an initiative than to explain the boring details of its implementation, the political rewards of launching initiatives greatly outweigh those of implementation. The tendency of every recent administration has been, accordingly, to launch initiatives to much fanfare, but then provide them inadequate funding and management attention. Moreover, it would be an enormous challenge for any administration to manage such a collection of initiatives as a coherent whole or with any real urgency.
It would be a shame if three years from now, in another oversight hearing, we learned that Section 1611 had became one of several disjointed, underfunded and indifferently implemented initiatives. We simply can not afford to lose the time.

Fourth, an international technology deployment program, such as that established under Section 1611, can only be effective if complemented by an international framework that engages all major emitting countries in the effort against climate change. Therefore, most critical of all is the third challenge I identified at the outset: establishing a fair and effective international framework to engage all major emitting countries in the effort against climate change.

Through an initiative called the Climate Dialogue at Pocantico, the Pew Center has engaged with policymakers and stakeholders from around the world in a wide-ranging examination of specific options for advancing the international climate effort. The Pocantico dialogue was convened by the Pew Center to provide an opportunity for informal discussions among 25 participants from government, business, and civil society. Dialogue members, who participated in their personal capacities, included policymakers from Argentina, Australia, Brazil, Canada, China, Germany, Japan, Malta, Mexico, Tuvalu, the United Kingdom, and the United States; senior executives from Alcoa, BP, DuPont, Eskom (South Africa), Exelon, Rio Tinto, and Toyota; and experts from the Pew Center, The Energy and Resources Institute (India), and the World Economic Forum. The final report of the Dialogue will be released tomorrow in this hearing room with Senators Lugar and Biden, and presented to government Ministers at the upcoming climate change negotiations in Montreal.

I would like to share with you some of the insights and observations emerging from this ongoing dialogue.

First, there is no getting around national interest. Climate change is a collective challenge. However, the political reality is that nations will join in meeting this collective challenge only if they perceive it to be in their national interests. A multilateral framework must therefore recognize and accommodate the very real and significant differences among nations. The key here is flexibility. We need a framework flexible enough to allow different countries to undertake the different types of strategies best suited to their national circumstances. To accommodate different types of strategies, we must allow for different types of commitments. For instance, a quantified emissions limit may be appropriate for some countries, while for others some form of non-quantified

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2 The Climate Dialogue at Pocantico is a series of off-line discussions among 25 senior policymakers, business leaders, and NGOs from 15 countries exploring options for next steps in the international climate effort. The dialogue provides an off-line opportunity for participants to consider specific options with the objective of identifying a set of options to be recommended for consideration by the broader policy community. Participants in the dialogue include policymakers from Australia, Brazil, Canada, China, Germany, Japan, Mexico, the United States and the United Kingdom; senior executives from Alcoa, BP, DuPont, Exelon, Rio Tinto, and Toyota; and NGO representatives from India and Switzerland. Recommendations from the dialogue, which concludes this fall, will be presented at numerous international fora. For more on the Dialogue, see http://www.pewclimate.org/pocantico.cfm.
policy commitment may be more feasible and effective. Also, commitments could apply economy-wide, or they could be structured around specific sectors.

There are many possibilities and the time to begin considering them is right now. In its present form, the Kyoto Protocol commitments expire after 2012. In Montreal, governments will consider initiating a formal process to consider next steps in the international climate effort. Under the terms of the Protocol, Kyoto parties must begin consideration of new commitments this year. There is broad international support for simultaneously initiating a parallel process to consider next steps under the Framework Convention, to which the United States is a party. Other countries would very much welcome the United States’ engagement. Most have come to accept that the United States will never be a party to the Kyoto Protocol. And they understand that a truly effective international approach – one with the full engagement of the United States and the major developing countries – will require moving beyond Kyoto. It is our understanding that the Administration opposes any decision to consider next steps under the Convention, maintaining that it is premature to discuss post-2012 options. Quite to the contrary, it is essential that we begin now, with the United States fully and constructively engaged.

Toward that end, we believe the most powerful step the Senate could take to reestablish U.S. leadership on this vital global issue would be to revisit and update the sense of the Senate on the future of the international climate effort. As we all know, Senate Resolution 98 of the One Hundred Fifth Congress – the Byrd-Hagel resolution – has had a profound influence on the climate debate here and abroad. As the international climate effort enters a new stage, a new Senate resolution can again shape the debate. It can help ensure that the United States is at the table and define the terms of U.S. engagement; and, in so doing, it can help achieve the best possible outcome.

As you will recall, the Senate in June approved a resolution sponsored by Senator Bingaman recognizing the need for mandatory steps to limit and reduce U.S. greenhouse gas emissions. This was an important statement. However, we believe it represents only half the equation. While meant to encourage comparable efforts by key trading partners, the resolution provides no guidance on the terms of an equitable climate agreement. Standing on its own, it might even be interpreted as supporting unilateral mandatory action by the United States.

Given all this, we would strongly encourage the Foreign Relations Committee to consider, and to report to the full Senate, a resolution advising the Executive Branch to work with other nations, both under the Framework Convention and in other international fora, with the aim of securing U.S. participation in agreements consistent with the following four objectives:

First, to advance and protect the economic and national security interests of the United States. Potential climate change impacts such as chronic drought, famine, mass migration, and abrupt climatic shifts may trigger regional instabilities and pose a growing threat to our national security interests. Addressing climate change, on the other
hand, can greatly strengthen U.S. security by reducing our reliance on energy imports. Sea-level rise and other climate impacts pose a direct economic threat as well, to U.S. communities and to U.S. businesses. On the other hand, our response to climate change, if not well conceived, could pose a different sort of economic burden. It is imperative that we both avoid the economic consequences of climate change, and minimize the costs of addressing climate change.

Second, to establish mitigation commitments by all countries that are major emitters of greenhouse gases. Ideally, a global challenge such as climate change should be met with a fully global response. What is most critical at this stage, however, is getting the largest emitters on board. Twenty-five countries account for 83 percent of global greenhouse gas emissions. Seventeen of them are also among the world’s most populous countries, and twenty-two are among those with the highest GDPs. To be truly effective, these major emitters must be part of the solution. While we cannot expect all these countries to act in the same way, or necessarily in the same timeframe, we believe that all must commit to take action.

Third, to establish flexible international mechanisms to minimize the cost of efforts by participating countries. The United States has led the world in demonstrating that well-designed market-based approaches can achieve the greatest environmental benefit at the lowest cost. U.S. negotiators fought rightly and successfully to build market mechanisms into the Kyoto architecture. U.S. economic and business interests will be best served by an international climate strategy that uses emissions trading and other mechanisms to ensure that our efforts are as cost-effective as possible.

And, fourth, to achieve a significant long-term reduction in global greenhouse gas emissions. Our initial efforts to address climate change, both domestically and internationally, can be at best first steps. But in taking these steps, we must remain cognizant of our ultimate objective – stabilizing the global climate – and we should craft policies and agreements robust enough to drive and sustain the long-term efforts needed to achieve it.

We believe these four principles form a solid foundation for constructive U.S. engagement and urge that they be incorporated in a new Sense of the Senate resolution.

In closing, the most important thing Sen. Hagel has done in writing Section 1611 of the Energy Policy Act of 2005, and that the subcommittee has done in holding this hearing, is to join the question of how best to address climate change. As Senator Hagel has said, “Achieving reductions in greenhouse gas emissions is one of the important challenges of our time.” And: “We all agree on the need for a clean environment and stable climate. The debate is about solutions. The question we face is not whether we should take action, but what kind of action we should take.”

I thank and commend Sen. Hagel for placing these issues before you, and thank the subcommittee for the opportunity to testify. The Pew Center looks forward to working with the committee and Sen. Hagel on the implementation of Section 1611 and
on the development, enactment and implementation of any future climate change legislation.