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Taking Advantage of Innovation, Technology, and Investment to Address Climate Change and Grow Economies

U.S. Ambassador William R. Timken, Jr.

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Good evening ladies and gentlemen. I want to thank the Atlantik-Brücke for giving me the opportunity to discuss the twin challenges of combating climate change and fostering economic growth. Around the world, but especially here in Europe, the issue of climate change shapes public attitudes about the United States. Unfortunately, for many people the debate begins and ends at the Kyoto Protocol. But that is not factually the end of the story.

This evening, I'd like to take this opportunity to discuss what the United States is doing about climate change -- and what we can do about it together. I can't think of a better forum than the Atlantik-Brücke. As an organization, you have demonstrated your commitment to fostering transatlantic understanding many times over. On behalf of the Embassy of the United States, I want to thank you for your support.

This is an extraordinary time in the German-American relationship. Our two countries are working together as never before to deal with global challenges. Germany is providing exceptional leadership to the European Union and the G8. One of the goals Chancellor Merkel has set for the German EU presidency is to advance new technologies to promote energy efficiency and environmental protection.

This was one of the issues that President Bush and Chancellor Merkel discussed at their meeting in Washington at the beginning of January. I have attended all the meetings to date between the President and the Chancellor. Let me say that this was the best one yet, with the Chancellor there speaking for both Germany and the EU.

Both President Bush and Chancellor Merkel agree that the bottom line in any energy debate is the need to diversify our energy supplies in a cost-effective, environmentally responsible manner. We're on the same page here.

The challenge is to increase the number and variety of clean, reliable, affordable sources of energy around the world. Sustained investment is key. Both the government and the private

sector are funding scientific research on new sources of energy and production methods. There are technologies out there on the verge of major breakthroughs that will prove that environmental protection and economic growth are not mutually exclusive.

I know many people believe that because the United States didn't sign the Kyoto Protocol, we are not doing anything at all to reduce greenhouse gas emissions. Those people are confusing means and objectives. The Kyoto Protocol is one means that some nations, but not all, have chosen to achieve their objective of reducing greenhouse gas emissions. There are other ways to proceed. We need multiple approaches to solve this complex problem.

Let me make clear, the United States and the Bush Administration are committed to reducing greenhouse gas emissions and combating climate change. We support the recent IPCC report's finding that human activity is a major contributor to climate change. American scientists are active members of the panel and, in fact, the United States paid nearly half of the costs of the IPCC research. This reflects our belief that climate change is a serious, long-term challenge that requires sustainable, effective policies. We have made tremendous investments in reducing emissions. We continue to work with domestic and international partners to do so. These efforts are producing results that stand up favorably against any nation in the world. Just because we haven't joined the Kyoto Protocol does not make any of these statements less true.

The U.S. approach to climate change, energy efficiency and energy security combines a variety of mandatory, voluntary and incentive-based efforts to stimulate both the way we produce and use energy. We have developed specific incentives for the development of new technologies such as biofuels, fuel cells, and clean coal. We know also that clean, safe nuclear energy must be an essential element of a realistic global greenhouse gas reduction strategy.

At the same time, we have worked with industry and consumers to develop energy efficiency standards in construction , transportation, and the whole range of day-to-day consumer goods and appliances on the marketplace. By adopting such a flexible approach, we are striving to engage all three hundred million Americans in this great endeavor – and as demonstrated by changing consumer spending habits, it is working.

Our energy strategy brings together the U.S. Federal government, state and local governments, America's private sector and nongovernmental organizations with a clear purpose. That purpose is to develop transformational technologies that will address climate change, reduce our reliance on oil, promote energy security, and reduce environmental pollution.

Tonight. I can tell you this strategy is working. I am not going to go into detail on too many greenhouse gas emission statistics. Last year, Jim Connaughton, Chairman of the Council on Environmental Quality, did just that at another forum in Berlin. I have provided a handout with more factual information which you can pick up later.

Everyone knows that the U.S. is currently the number one producer of green house gases. We are, after all, the world's largest economy. But it's important to look at the trend lines. According to data from the UN Framework Convention on Climate Change, from 2000-2004 – the most recent period for which we have good, comparative data – U.S. greenhouse gas

emissions increased by only 1.3 percent. This is an increase, but a very modest increase and less than the EU-25 emissions growth rate of 2.1 percent.

Greenhouse gas intensity, which is basically greenhouse emissions per unit of GDP, is, however, a better indicator of what is really happening. The period of 2000 to 2004 was a time of both rapid economic and population growth in the United States unlike in Europe. Still we reduced the greenhouse gas intensity of the U.S. economy by 7.5 percent. How did the EU-25 countries perform? Combined, the rate of reduction in greenhouse gas intensity was just a little over half the rate of decrease in the United States. At 4.5 percent, also a good result, but not as much of a decrease achieved in the United States.

So how is the United States able to enjoy lower emissions intensity and job producing economic growth -- without signing on to Kyoto? The answer lies in national commitment and cost-competitive, cleaner energy technologies. Since 2001, the U.S. Government has devoted more than $29 billion to climate science, technology, international assistance, and incentive programs related to energy. That is far far more than any other country in the world.

Our investment is paying off, but we are just beginning. Today's energy and climate policies alone cannot drive clean energy markets at the scale or pace necessary to solidify energy security and stabilize the climate by 2050. We will be more creative in deploying new, innovative strategies for low-carbon options in the future. We need to unleash the private sector, not cap it.

The global energy system is the most capital-intensive industry in the world. The costs of transformation will be enormous but the historical experience of innovation in market societies shows us that with every new option in technology, the economy becomes more flexible and efficient. Improving energy efficiency in using fossil fuels will not be sufficient for achieving climate protection goals. The transformation that needs to take place will have to be equivalent in scale to the energy-fueled technological transformation of the last 100 years.

This was a period that saw a transition from waterwheels, wood, kerosene, and horse-drawn transportation to near-universal electricity networks, the dominance of coal for electric production, millions of gas- and diesel-fueled vehicles, jet travel, and, eventually, the microchip and the digital economy of today. We now need unprecedented, massive innovation to develop low-carbon technologies, to commercialize them, and bring them to market on a large scale. We must make the marketplace work for us on this crucial issue, not restrict it.

Over a century ago, my great-grandfather took a risk and transformed his business in horse-drawn carriages into the automobile industry. He invented and sold the first axle equipped with tapered roller bearings to an automobile producer in 1900. His invention and the company he established were a part of the technological revolution of the last century. He saw the elimination of friction as a way to conserve energy. Over one hundred years later, the Timken Company still produces roller bearings for cars, but also for wind turbines and any number of other applications. The roller bearing industry as a whole plays a major role in energy efficiency in almost every manufacturing industry. Additional innovation improved the results. Today a typical bearing today reduces the frictional energy waste by more than 50 percent when compared to 50 years ago. The energy savings are huge. There are a lot of business

opportunities out there – in many industries, including the automobile sector. Today's higher prices are accelerating the desires of users for more efficiency. The free market is doing its part.

Seven-eighths of the world's population does not own an automobile – today. Car ownership statistics in China and Africa are about what they were in America in 1915. To satisfy that market as well as our own without adding a heavy burden to the environment, we will need better vehicles. Four million new cars are expected to be sold in China alone over the next few years. That's a huge number of new vehicles – and a huge opportunity to address energy efficiency.

The EU has introduced new automobile efficiency standards. In his State of the Union Address in January, President Bush also addressed this topic. He outlined an additional strategy to reduce gasoline usage in the United States by 20 percent over one decade – 20 in 10. The plan sets new targets in fuel efficiency standards for automobiles that will force technological development. It also rapidly accelerates the deployment of renewable fuels. The measures announced in the State of the Union could cut annual carbon dioxide emissions by 10 percent by 2017. This would be the equivalent of taking 26 million automobiles off the road today.

It is very clear that in the 21st century, the global demand for energy will rise rapidly. Demand goes along with economic growth. Economic growth in turn is vital to maintaining and raising living standards. The challenge is to make our economies cleaner even as they grow. In the developing world, new growth and human development is literally a matter of life and death. We are all giving billions of dollars to help countries in Africa, Asia and Latin America reduce poverty, improve education and health conditions, and protect the environment. But aid is not enough. The only way for these countries to advance is through economic growth.

Yet, these regions also include some of the greatest emitters of greenhouse gases. Overall, the carbon dioxide emissions from non-OECD countries will top those from OECD countries by 2010. By 2009, China is expected to exceed U.S. greenhouse gas emissions.

In China, it is estimated that a new coal plant is built at a rate of one per week. For the most part, these are out-dated, old technology, not state of the art, highly efficient plants.

The United States is trying to change this situation. Last year, we started the Asia Pacific Partnership on Clean Development and Climate, APP for short. It is designed to bring China, India, Japan, South Korea and Australia together with the United States to tackle complementary energy, economic and environmental goals. These partnership countries account for about 50 percent of the global population, 50 percent of the economy, and 50 percent of the energy use. An example of an APP success story was China's recent decision to purchase 60 methane-gas-powered generator sets from Caterpillar to capture the gas and convert it into power. The state-of-the-art machinery will reduce greenhouse gas emissions by 4.5 million tons over a 20-year period while improving the capacity of the Chinese power grid.

In just six months, APP task forces have identified almost 100 projects that will deliver the multiple benefits of reduced greenhouse gas emission, cleaner air quality, and reduced poverty levels. This growth-based approach to reduced emissions is appealing. Simply shifting our

emissions problems to other parts of the world creates a false sense of achievement. China and India's active engagement underscores the importance of involving these two countries in any real solution to the climate change challenge. I am proud of our efforts in Asia.

This is an example of how we can engage China and India in the global debate on climate change. There are tremendous opportunities for the U.S., Germany, and the rest of Europe to lead in this area through investment in clean energy. Innovation offers the best path to bold, new energy solutions. Our private sectors have long been the most dynamic sectors for investment and innovation. Companies are realizing that they can make money in the alternative energy business. By mobilizing venture capital investments on both sides of the Atlantic to work together to develop clean technologies, we can lead the way to a brighter future for the entire world.

The role of government is to facilitate a quick and aggressive transition to alternatives. The world awaits our technological innovations.

Let me conclude by again emphasizing America's commitment to the objective of cutting greenhouse gas emissions. Our policies and actions are producing good, concrete results. We are cutting the growth rate of emissions in a way that also favors human development. We are working with partners around the world. We are eager to go further under the German EU and G8 Presidencies. The United States has a stake in international cooperation on energy-technology innovation.

The bottom line is this: Slow the growth of emissions significantly, then stop it, and finally reverse it. If we work together, if we promote the understanding and collaboration at which our transatlantic partnership excels, we will succeed.