

**STATEMENT FOR THE RECORD OF**

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SECRETARY OF COMMERCE**

**BEFORE THE**

**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE**

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Chairwoman Boxer, Ranking Member Inhofe, and members of the Committee, I appreciate this opportunity to submit a statement for the record on S. 1733, the Clean Energy Jobs and American Power Act, and the Department of Commerce's role in fostering America's transition to a new clean energy economy. I am pleased that the Senate is moving forward in its consideration of this important bill, and want to thank Senator Kerry and Chairwoman Boxer for their leadership and hard work on this legislation.

Home to world-class climate scientists, economic development experts, and trade and investment specialists, the Department of Commerce is uniquely situated to help unleash the economic opportunity presented by America's transition to cleaner sources of energy. For the past one-hundred years, American businesses have experienced unprecedented growth. Throughout that period, fossil fuels were available at low costs, and the greenhouse gas externalities associated with using fossil fuels were not addressed. Unequivocally, that business environment has shifted. The methods by which we produce and consume energy are environmentally unsustainable and pose a risk to our nation's security and stability. The transition to a clean energy economy should help to mitigate many of the consequences of climate change, and would also be an engine of job creation and economic growth for decades to come.

Let's be clear. American businesses are stepping up to the challenges posed by climate change – developing innovative solutions to reduce greenhouse gas emissions, utilize energy more efficiently, and adapt to some of the climate changes already occurring. For example, in 2007,

not one U.S. company was listed in the top ten global solar companies. Today, First Solar, based in Tempe, AZ, is the largest solar company in the world.

But businesses are not investing in clean energy for only altruistic reasons. They know international competition for the clean energy market – and the good jobs it can provide – is fierce. I am not able to be with you in person because I am co-chairing the 20th session of the U.S.-China Joint Commission on Commerce and Trade (JCCT) in Hangzhou, China. China is currently the second largest energy consumer behind the United States, and China's demand for energy continues to increase exponentially. As such, the Chinese market presents tremendous opportunity for U.S. clean energy businesses. To capitalize on this opportunity, just this week, the Department of Commerce facilitated a Memorandum of Understanding (MOU) between the U.S. Trade and Development Agency and China's Ministry of Commerce to support the U.S.-China Energy Cooperation Program (ECP), an innovative new public-private partnership that will deploy the expertise of U.S. companies to help develop clean energy solutions in China.

But, we cannot ignore the race to lead in this competitive market. China is investing more than \$12 billion an hour in clean energy and efficiency. These investments are not just to meet its own domestic energy needs and climate challenges, they are designed to turn China into the global destination for clean energy innovation. The Chinese government is supporting the development of clean energy and energy efficiency industries to meet the demands of the world. The United States must step up if we do not want to witness the capital, the businesses and the good-paying jobs associated with the clean energy economy ending up overseas rather than in communities across America.

As Secretary of Commerce, I speak daily with business leaders, innovators and entrepreneurs eager to capitalize on the opportunities presented by clean energy but stymied by the uncertainties in the marketplace. Too many companies and entrepreneurs and investors are sitting on the sidelines because of the lack of certainty in U.S. policy. The Congress needs to pass energy and climate change legislation as soon as possible to provide that certainty. The longer the United States waits, the bigger the headstart other countries will have in establishing dominant clean energy and energy efficiency industries to serve the world.

Just last week, I hosted approximately 100 clean energy business leaders at the White House for a discussion on American competitiveness in the clean energy economy. We heard from a Michigan company that partners with the Department of Commerce's Sustainable Manufacturing Initiative to help manufacturers become more energy efficient and reduce their power costs. And, we heard from the CEO of Easy Energy based in Welcome, Minnesota, how a modular ethanol production system could translate renewable energy into economic opportunity for rural communities. The conversation that ensued was lively but the message was clear: American business needs proper market incentives that encourage long-term investment in clean energy.

We need comprehensive energy legislation to send a signal to private capital that it is safe to invest for the long-term in clean energy technologies and compete with the rest of the world in this area. To support the creation of good, well-paying jobs in this new economy, we also need to start training our workers now. Finally, we need comprehensive energy legislation to begin to address the potential for environmental damage that will severely and negatively impact the business environment if left unchecked.

To be successful in this endeavor, we need not only to give businesses the certainty of a coherent national framework, we must be sure this framework is built on the underpinnings of sound climate science. We must also deliver timely and reliable climate information to aid public and private sector decision-makers in making sound economic and social choices. That is where the Department's National Oceanic and Atmospheric Administration (NOAA) is indispensable.

NOAA is one of the world's leaders in providing the scientific understanding of climate change and its impacts. NOAA's broad climate mandate was established in 1978, and its capabilities span operational climate observing networks, global greenhouse gas monitoring, climate predictions and projections, climate research and climate data stewardship. With these capabilities, and in partnership with other Federal agencies, NOAA continues to provide successful leadership and support to domestic and global scientific assessments of climate change science and impacts, including the recent U.S. Climate Impacts report and those of the U.S. Global Change Research Program and the Intergovernmental Panel on Climate Change.

NOAA is responsible for monitoring and predicting global and national climate conditions. NOAA's climate data provide information about changes and variations in climate dating back

many decades to hundreds of thousands of years. These data are critical to predicting and projecting future climate using some of the world's best climate models.

NOAA also monitors the carbon cycle in the atmosphere and oceans, and has been doing so for 40 years, taking observations on the ground, under the sea, and in space. NOAA's measurements and modeling of carbon dioxide and other greenhouse gas concentrations in the atmosphere are among the most comprehensive in the world – and are widely considered among the best available modeling of carbon sources and sinks. These measurements are also fundamental to understanding and monitoring ocean acidification.

This information is not merely of academic interest. These measurements will play an important role in verifying the effectiveness of our domestic and international policies through independent verification of bottom-up emissions – from both domestic and international sources – and allow us to understand whether emissions reductions are having their intended effects on our climate.

In addition, the Department's National Institute of Standards and Technology (NIST) supports climate research and monitoring systems by providing the traceable measurements necessary to ensure accuracy and comparability. NIST also has programs aimed at improving industrial processes to reduce carbon at the source. For example, NIST focuses on documentary standards, test beds for developing new and existing technology, and testing and verification programs.

More and more, decision-makers from the private and public sectors are demanding improved information to understand the changing climate, impacts to the economy and the environment, and emerging opportunities. For example, until now, the Nation's systems and infrastructure for water, energy, transportation, agriculture, and other sectors have been designed and built based on knowledge about local conditions and our understanding of the past. As climate changes, much of this infrastructure will become obsolete unless it is reconfigured in light of new patterns of wind, water, temperature and other factors.

To bridge climate science and these needs of decision makers now and in the future, NOAA, through partnerships and user engagement, is continuing to lead the way by providing an evolving suite of climate information and services to other federal agencies, state and local governments, and the private sector as they make decisions about adjusting to climate change.

For example, the climate data from NOAA's air freezing index program provides information to allow building foundations to be more economically constructed, reducing the materials costs of the U.S. construction industry by approximately \$300 million per year. (*Economic Value for the Nation*, U. S. Department of Commerce, National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Service, September 2001.)

To respond to these demands for climate information, our national climate policy should include the establishment of a National Climate Service. A national climate service should provide credible and authoritative climate information and services across sectors and geographic regions to assist the Nation in making informed decisions related to climate change mitigation and adaptation.

Chairwoman Boxer, Ranking Member Inhofe, and members of the Committee, thank you for your attention and the Department of Commerce looks forward to providing the Committee with additional information or input as you move ahead in your deliberations.