## "President Obama's Energy and Climate Policy" Speech to the Beijing Energy Club

## David Sandalow Assistant Secretary for Policy & International Affairs U.S. Department of Energy Tuesday, June 9, 2009

[Acknowledgements]

Thank you for inviting me to speak today. I'm delighted to be here.

Twenty-eight years ago, in the summer of 1981, I had the great privilege of living in Shanghai as a member of one of the first groups of U.S. exchange students in China following normalization of relations between our two countries. At the time, I recall, there was only one international telephone line in the entire city of Shanghai that we could use to call home. I remember taking cabs to the Heping Hotel every weekend to do just that.

Two days ago, in contrast, when I landed at Beijing Airport after the 14-hour nonstop flight from Washington, DC, my Blackberry automatically connected to a wireless network within moments of touching down. By the time we arrived at the terminal, I had already sent several emails back home. I started making phone calls just a few minutes later.

Now if you had told me 28 years ago that I would one day send written messages and make telephone calls around the world from a small box I could fit in my pocket, I would have been skeptical. If you had shown me a picture of the skyline of Shanghai as it is today, I would have been astonished.

Recalling the extraordinary changes in just 28 years gives me great hope for our energy future.

The energy challenges we face today are vast. In 2009, too many people around the world still lack access to basic energy services. Our patterns of energy use create geopolitical

instability. The ways we use energy are disrupting the climate system and threaten terrifying disruptions in decades to come. These problems can seem insurmountable.

Yet I believe we will revolutionize energy technologies in the decades ahead as much as we revolutionized communications technologies in decades past. I believe China's extraordinary growth will continue – and that this country will play a central role in solving the world's energy problems.

I believe that, working together, the United States and China can and will shape a bright energy future.

I'm in Beijing this week for talks on clean energy and climate change, along with Todd Stern, the United States' Special Envoy for Climate Change, John Holdren, President Obama's Science Advisor, and other colleagues in the Obama administration. I'm pleased to report that our talks yesterday were both fruitful and productive. I'm looking forward to further talks this afternoon. Our goals are to deepen our understanding of Chinese perspectives, chart a path for our two great countries to expand work together on these topics and help shape a successful outcome at the Copenhagen climate conference later this year.

From my visits to China over many years, I know there are suspicions here about the United States' motives when it comes to discussions on clean energy and climate change. Some of you may be surprised to learn that there are suspicions in my country about Chinese motives on these topics as well. I believe these mutual suspicions – in some cases even mistrust – must be recognized, discussed and, eventually, overcome.

Fortunately, our two countries have a tradition of leaders who put suspicion and mistrust aside to take a chance on a better future. It was the vision of President Jimmy Carter and Vice Premier Deng Xiaoping for a new era of U.S.-China relations when they met in 1979 that made it possible for me to visit Shanghai two years later. And the fact that the first thing these two men did after normalizing relations was sign an agreement on science and technology cooperation shows the insight they had into the shared challenges our two countries would face. That agreement, which focused on high energy physics, paved the way for the beginning of the Department of Energy's work in China, which began six months later, and has laid the foundation for three decades of energy and environmental cooperation between China and the U.S.

I believe our two countries are led today, just as they were 30 years ago, by men and women who know that, given the challenges we face, the only way forward is together.

I also believe that a central part of addressing suspicions on each side is, quite simply, to learn what the other is doing. Too often our suspicions are based on outmoded ideas or impressions. Yet with a solid foundation in the facts, understanding is deepened, capacities are increased and greater trust develops.

With this in mind, I want to use the rest of my time with you today to explain the latest developments on clean energy and climate change in the United States.

There is a lot to report.

In his first address to Congress, President Barack Obama said simply, "It begins with energy." President Obama places energy issues higher on his priority list than any U.S. President in many years, repeatedly making clear that energy issues are central to his agenda. With respect to clean energy and climate change in particular, the President often emphasizes that the United States is ready to lead and determined to make up for lost time.

To help confront this immense challenge, the President has surrounded himself with world-class energy and climate experts. One of them – Dr. Steve Chu – is my boss at the Department of Energy. Another – Dr. John Holdren, a former Harvard professor and renowned expert on energy and climate – is here with me on this trip. Another – Dr. Jane Lubchenco – runs our National Oceanic and Air Administration.

For me, the appointment of Dr. Chu as Secretary of Energy was profound proof of the President's commitment to fundamentally transforming America's energy policy. Dr. Chu is unlike any Secretary of Energy we've had before and a rare commodity in Washington: not a politician or lawyer, but a Nobel Prize-winning scientist and professor of physics. Like the President, Secretary Chu has demonstrated a deep commitment to tackling the interlinked problems of energy and climate change. Five years ago, Secretary Chu changed the course of his distinguished career to focus on energy, leaving Stanford University to direct the Lawrence Berkeley National Laboratory. He brings to the Obama administration a depth of scientific and technological knowledge that will help us address this immense global challenge.

Secretary Chu is working to transform the Department of Energy to achieve President Obama's vision and to spend wisely the vast new resources that now come with it. The American Recovery and Reinvestment Act – the historic economic stimulus bill signed by President Obama in February – included the largest investment in clean energy ever in the United States. The Act provides more than \$60 billion for clean energy, including \$11 billion to make our electrical grid smarter and connect it to sources of renewable power, \$2 billion in competitive grants for battery research and development, \$5 billion to weatherize low-income homes, \$3.4 billion for carbon capture and storage, \$4.5 billion to improve the energy efficiency of federal buildings – the list goes on. The Department of Energy alone received more than \$32 billion for a variety of clean-energy grants and saw its loan guarantee authority expanded to \$60 billion.

Secretary Chu has made spending these funds quickly and well a top priority. As of this week, the Department of Energy has announced nearly all of the funding opportunities for its Recovery Act grants; applications have already started coming in, and we've started reviewing them for funding. The Department also approved its first loan guarantee (to the California manufacturer of an innovative cylindrical solar panel) within two months of the new administration taking office – something that hadn't been accomplished in the first two years of the program. We are processing loan guarantee applications at a record pace and will have more announcements in the weeks and months to come.

This unprecedented investment in clean energy is part of the President's broader commitment to reducing our carbon emissions more than 83 percent by 2050. In his first address to Congress, President Obama challenged Congress to pass legislation that puts a market-based cap on carbon pollution. And in a historic moment just a few weeks ago, the House Energy and Commerce Committee approved a bill to do just that. The American Clean Energy and Security Act – often called the Waxman-Markey bill – has won support from a broad coalition, including many leading U.S. businesses, labor unions and environmental groups.

The bill would reduce U.S. emissions 17 percent below 2005 levels by 2020 and 83 percent below 2005 levels by 2050. It would use a cap-and-trade program, similar to the successful program launched in the United States in 1990 to control acid rain. The bill would require utilities to generate increasing percentages of their electricity from renewable energy and require investments in energy efficiency. The bill would strengthen building efficiency standards 50% by 2016, while also creating and strengthening energy efficiency standards for lighting and appliances. And finally, the bill directs substantial resources toward investments in

renewable energy and energy efficiency, clean electric vehicles, carbon capture and sequestration, adaptation and international clean technology transfer. The final vote on the bill in our House of Representatives is expected in the weeks ahead.

Yet even more is happening in Washington in this area. In a historic announcement just few weeks ago, President Obama announced tough new fuel-economy standards that will help to dramatically improve the fuel-efficiency of our auto fleet. The new standards require an average fuel economy of 35.5 miles per gallon by 2016, an increase of more than eight miles per gallon. This will save nearly 2 billion barrels of oil over the lifetime of the vehicles sold in the next five years and is equivalent to taking 58 million cars off the road for an entire year.

In addition, Secretary Ken Salazar of the U.S. Department of the Interior recently announced steps to accelerate development of offshore renewable energy projects – harnessing the power of wind, waves and ocean tides. It's estimated that wind, both onshore and off, has the potential to provide as much as 20 percent of the United States' electricity by 2030, creating a quarter-million jobs in the process. The Obama administration is committed to developing offshore wind, in particular in the Atlantic, where winds are strong and access to the grid is near. A few weeks ago, a proposed 170MW wind farm off the coast of Massachusetts won state permitting approval and now awaits federal approval. This would likely be the first offshore wind project in the United States and could power up to 400,000 homes.

Just like China, the United States has abundant supplies of coal. But if we burn coal in the 21<sup>st</sup> century using 20<sup>th</sup>-century technologies, our air will be foul and disruptions to our climate will threaten us all. Secretary Chu has made carbon capture and storage (CCS) technology a priority and mobilized the Department of Energy's expertise and resources around this critical issue. Last month, he announced \$2.4 billion in Recovery Act funding for a variety of initiatives that will accelerate and expand the commercial deployment of CCS technology.

While coal accounts for nearly half of electricity generated in the United States, nuclear energy accounts for 70 percent of the United States' carbon-free electricity. President Obama has stated that nuclear must be "part of the energy mix." To this end, Secretary Chu is exploring ways to help re-start the U.S. nuclear industry and will establish a panel of experts to explore ways to safely store nuclear waste while preventing proliferation. The Department of Energy recently awarded \$44 million to more than 70 nuclear research projects at universities across the country.

These policies will go a long way toward reducing carbon emissions and ending our dependence on oil. However, in the short and medium term, conventional fossil fuels will still play a significant role in our energy supply. The Recovery Act included \$1 billion for fossil energy research and development, to be implemented by the Department of Energy. Recently, our ability to locate and extract fossil fuels has improved considerably – for instance, U.S. natural gas reserves have more than doubled in the past five years, thanks in large part to new technologies. President Obama has stated that he supports expanded domestic oil drilling as part of a comprehensive energy plan.

Internationally, the United States is committed to helping lead the world in promoting clean energy and fighting climate change. As Special Climate Envoy Todd Stern said in a recent speech to a meeting of the UN Framework Convention on Climate Change, "the U.S. is back." Our policy is guided by a combination of science and pragmatism – doing what the science requires while delivering concrete results. We are working hard with partners from around the world to achieve a successful outcome at the Copenhagen conference this December and protect the planet for our children and grandchildren.

This will of course require the work of both our great countries.

In recent years, China has taken significant steps to improve its energy efficiency and reduce its emissions. As you all know, the 11<sup>th</sup> Five-Year Plan includes the goal of reducing the energy intensity of the economy 20 percent by 2010, and the aim of increasing the share of renewable energy in the primary energy supply to 15 percent by 2020. China has implemented stringent auto emissions standards, stronger than our own, and its domestic stimulus package contained substantial clean energy investments. And there are many other initiatives underway, with respect to electric vehicles, renewable energy and more.

China deserves significant credit for these actions, which are both strengthening its economy and contributing to the solution to a global problem.

Yet China can do much more – and will need to if the world is going to have any hope of containing climate change.

China is such a large and important force in the global economy that, according to one recent analysis, even if every other country in the world cut its emissions 80% by 2050 – which is very unlikely, to say the least – China's business-as-usual emissions alone would cause global average temperatures to increase by 2.7 degrees Centigrade – far above dangerous levels, according to scientists.

China does not need to take the same actions that developed countries are taking, but it does need to take significant action. When it comes to climate change, China must be part of the solution.

This is in fact the road to prosperity and success. China has abundant opportunities to cut emissions by improving energy efficiency and promoting low-carbon economic growth. In the years ahead, the economic race will be won by those who have responded best to the imperative of low-carbon growth.

In sum -- clean energy and climate change are top priorities for the Obama administration. With expert guidance and broad support, the President is showing historic leadership on these issues. And just as my colleagues and I hope to learn more this week about China's goals, concerns and capabilities in energy and climate, I hope that you now have a deeper understanding of the United States' new approach. The stakes on the climate/energy issue have never been higher.

Twenty-eight years from now, I hope to visit China again. The world will be far different. Perhaps I will be joined by my grandchildren, who will look back on 2009 with astonishment, wondering how people in both our countries got along without electric vehicles or widespread renewable energy. And they will be grateful we didn't succumb to mistrust of each other in the face of shared challenges, but rather joined hands to find common solutions.