

Madame Chair, Vice Chairman, Members of the Commission, good morning and thank you for inviting me to testify about Chinese energy collaboration. I am Jeffrey Logan, Senior Associate at the World Resources Institute and former China Program Manger at the IEA.

One of the greatest challenges over the coming decades will be for countries to act in concert to address global climate change and energy security meaningfully. These are linked problems. They cannot be solved in isolation from one another. The U.S. and China are key to any solution as they together consume one-third of global oil supply and emit four-tenths of total greenhouse gas emissions.

I am here today to talk about U.S.-China energy cooperation. The most important thing the U.S. can do to mitigate the impacts of China's recent enormous growth in energy demand is to lead by example. The U.S. must demonstrate that it can address energy security and climate change simultaneously within a thriving economic context. This is our most powerful tool. Without this leadership, no incremental shift in technical assistance or policy dialogue will get the traction it needs to move China on a fundamentally different course. Given greater U.S. wealth, cumulative emissions, and reliance on global energy markets, this leadership is a prerequisite.

I'd like to make one point about cumulative emissions before moving on to more practical areas of collaboration. It is widely acknowledged that China will surpass the U.S. as the world's largest emitter of carbon dioxide very soon. But, it is important to remember that carbon dioxide emitted to the atmosphere exists for 100 years or more. The fact is that the U.S. will have emitted over twice as much carbon dioxide as China over the period 1920 to 2020. It will thus be many decades before China passes us in this measure. The chart in my written testimony illustrates this vividly.



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I would like to touch on 4 selected areas of potential U.S.-China cooperation this morning: energy efficiency, energy security, clean coal, and renewables. There are other sectoral approaches and strategies.

Efforts to improve the efficient use of energy are the most powerful measures China can take to meet development goals, improve global energy security, and reduce greenhouse gas emissions. Benefits of improved efficiency accumulate over time. China's uniquely low energy-to-GDP growth ratio during the 1980s and 90s helped offset the need to burn millions of tons of coal. Some of that benefit has been offset in recent years, but China has placed efficiency, now in a political way, back at the top of its domestic energy policy.

China's efficiency efforts are tied to larger global interests. The electricity shortages of 2003-2005, as we now know, resulted in the need for substantial oil-fired back-up power generation at Chinese factories, and contributed to the surge in imported oil products in 2004. This phenomenon demonstrates that China's largely home-grown and internationally-insulated power sector can affect the price of corn in Iowa.

It is in the U.S. national interest to help China meet its ambitious energy efficiency target: to lower energy intensity 20% by 2010. The U.S. should support capacity building efforts to provide the business, financial and regulatory skills needed to promote market-based energy efficiency projects and performance standards in China. Special emphasis is needed to improve transparency in the relationship between energy, economic activity and greenhouse gas emissions. WRI recently initiated a project to introduce the Greenhouse Gas Protocol in China. The Protocol—developed by WRI and the WBCSD—is a widely-used methodology to measure energy use and GHG emissions, and serves as a foundation for carbon markets and trade. We are getting surprising interest in this product from the Chinese.



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On energy security, there is a clear need to better integrate China into the global energy system. Greater participation in the IEA, G-8 and other global bodies that coordinate energy and climate dialogue would give China a greater stake in the outcomes. The US needs to accelerate high-level dialogue with China to ensure that each others' intentions and concerns are understood more clearly. Without more action, China will likely continue investing in and courting relations with countries that have dramatically different world views than our own. China will also continue trying to build energy security through partial solutions, like coal-to-liquids. And it will use its newly built strategic petroleum reserves not in concert with other stockpilers to maximize shared public good, but to influence narrower interests at home.

The U.S. has several efforts underway to discuss energy security concerns with China. To be frank, we lack credibility with the Chinese because we don't always walk the talk. UNOCAL, CAFÉ, and Kyoto are examples. The U.S. needs to demonstrate sincerity through domestic action before China will be compelled to act. Confidence building measures are needed to regain traction. The U.S. could link a significant increase in its corporate average fuel economy standard, for example, with a reciprocal action in China, such as greater energy data transparency. Follow-on measures could build from these starting points.

China's use of coal is key to our ability to hold greenhouse gas concentrations at a level that avoids the most devastating impacts of climate change. In the last 3 years alone, China has installed about 200 gigawatts of new coal-fired power plants that emit a billion tons of carbon dioxide each year. This is long-lived infrastructure and our global carbon budget can't absorb this level of expansion for long.

A number of bi- and multi-lateral efforts are underway to speed the deployment of carbon capture and sequestration in China. Before we can



expect China to deploy CCS widely, industrialized countries like the U.S. must first prove that it can be done so safely and under a viable business model. The U.S. should thus support on a much larger scale the domestic demonstration projects and policies that are needed to answer remaining questions about CCS.

China is actively developing industries around renewable energy technology and has set aggressive targets for its deployment. The national renewable energy law offers some incentives for its use. Despite this progress, renewables will continue to make up a relatively small fraction of the energy mix in China over the next few decades. International collaboration with China to further commercialize wind, solar, biomass and other renewable energy technologies could pay significant dividends. Chinese manufacturers can drive cost reductions that make possible more wide-scale penetration of these clean options around the world. Many existing international fora, such as the UNFCCC and the WTO, are being underutilized as opportunities to discuss key issues surrounding renewable energy technology transfer, including the role governments can play in facilitating the sharing and the protection of intellectual property rights.

In conclusion, China must be part of any global response to climate change and energy insecurity. The U.S. will almost certainly need to act first, however, given its greater wealth, resource endowments, and historical emissions. While there is growing federal support to put a binding cap on greenhouse gas emissions, China presents both real and perceived threats to U.S. “unilateral” action. The potential impacts on trade that would result from an asymmetrical carbon regime, for example, must be more thoroughly considered. Early studies suggest that only a few U.S. sectors would be affected by carbon-intensive Chinese imports. Policies could be developed to address these impacts.



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The U.S. could intensify cooperation with China on a variety of clean energy options. Four have been discussed here. But successful collaboration will require confidence building measures that overcome mistrust and a sense of insincerity. By demonstrating domestic action to improve global energy security and mitigate greenhouse gas emissions, the U.S. could initiate that new-found trust.



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