

CONSENSUS: 2016 U.S.-China Track II Energy Dialogue

The National Committee on U.S.-China Relations and the China Energy Fund Committee convened the third annual U.S.-China Energy Track II Dialogue in New York City on April 7 and 8, 2016. With generous support from the Starr Foundation, China CEFC Energy Company, Ltd., and Cornerstone Acquisition & Management Company, LLC, the dialogue brought together American and Chinese experts from academia, think tanks, and industry for off-the-record discussions and a public program exploring various issues in U.S.-China energy cooperation at a time of global energy transition. Together, the group discussed each country's energy outlook, the global energy market and the geopolitics of energy, and Sino-American cooperation in climate change and energy. This consensus document summarizes dialogue participants' policy recommendations for strengthening U.S.-China energy cooperation and also highlights some of the issues that were discussed, but that did not yield consensus.

As there are a multitude of different government entities, institutions, and enterprises working to improve U.S.-China relations, the consensus document provides recommendations for various efforts, including those at the national, sub-national/regional, multilateral, and industry/firm levels.

NATIONAL EFFORTS

1. **The United States and China should encourage each other's economic transition, as the reorganization of both economies is the single biggest driver of both countries' clean energy transition.** In both bilateral and multilateral fora like the U.S.-China Joint Commission on Commerce and Trade (JCCT) and the G20, the U.S. government should continue to encourage the success of China's economic rebalancing, as China's ability to deliver on its energy transition correlates directly with the success of its economic transition. China should continue to encourage the adoption of market reforms that would subject state-owned enterprises to greater market discipline and market competition. The United States should also re-organize its economy so that the development of clean energy is given greater precedence.
2. **Sustained bilateral efforts in climate change and energy cooperation at the federal and central government level should continue and be strengthened, as they have yielded important contributions.** Bilateral efforts like the Climate Change Working Group and the U.S.-China Clean Energy Research Center (CERC) have truly changed the dynamic of bilateral cooperation in the climate change and energy space. Strengthening bilateral efforts in these areas should continue to be a priority for both countries. In a relationship often given to mutual distrust and contention, climate change and energy cooperation are where the two countries can put forth constructive recommendations, which in turn can have positive spillover effects on the more contentious areas of the Sino-American relationship.
3. **Both countries should make economic, energy, and emissions data more accessible and standardized, as the quality of data will help determine whether the United States and China are able to achieve the ambitious goals laid out in the Paris Agreement.** The success of the Paris Agreement rests on the integrity of data, as the data indicates whether a country meets its targets. China is currently working on developing a national database, but it has a very limited window during which to do so. An improved understanding of the relationships between energy use and economic activity is also needed, as many projections regarding energy use are correlated with assumptions about economic growth. De-linking the two would have significant implications for energy use projections. Additionally, both countries should articulate the metrics of economic success that will

push them to make more sustainable decisions for the environment. For instance, it was discussed that GDP alone is an imprecise figure for gauging economic growth and that other figures, e.g. full employment, should be used, too.

- 4. The lack of a Bilateral Investment Treaty (BIT) hinders both countries' ability to cooperate in energy investment; both countries should prioritize concluding negotiations on the BIT and enacting the treaty.** Though the bilateral investment environment has greatly improved in recent years, there remains a need to improve investment access in both countries so that the potential for U.S.-China energy investment can be further unlocked. In 2015, Chinese direct investment in the United States exceeded \$15 billion, setting a new record; a BIT would certainly increase this figure. There is an enduring misperception that the Committee on Foreign Investment in the United States (CFIUS) precludes Chinese investment, particularly in energy. The reality is that the ratio of CFIUS reviews to completed Chinese investment deals in the United States overall has actually declined: for every CFIUS review, five deals are completed. Additionally, from 2000 to 2015, Chinese companies have invested over \$13.76 billion in the United States in the energy sector alone, accounting for nearly 22 percent of overall Chinese direct investment in this period. As Chinese companies look to expand or diversify their businesses, they will continue to look towards the American market for investments in oil and gas, as well as in renewables and clean energy. Concluding negotiations on the BIT, with an emphasis on the mutual benefits of investment in energy, would provide greater guidance to those seeking to invest in both countries and also help dispel misperceptions about lack of market access.
- 5. Both countries should prioritize successful negotiation of the Environmental Goods Agreement (EGA), which will encourage the uptake of environmental goods and benefit both countries.** Combating climate change and other environmental challenges requires that environmental goods be offered at cost-competitive prices. While China has made some progress in reducing tariffs on environmental goods from the United States, some tariffs still remain. Likewise, the United States also maintains several tariffs on environmental goods from China, e.g. solar panels. The United States and China should prioritize successful negotiation of the EGA at the WTO, as the removal of trade barriers for such goods would benefit not only global environmental efforts but also the U.S. and Chinese economies by boosting environmental goods exports and imports. Consumers would also benefit, as the cost of environmental goods would decrease.
- 6. The United States and China should continue to implement policies that contribute to the global clean energy transition and, even when it is challenging, support government agencies that do so.** While some of the projected growth in renewables in the United States comes from reductions in the cost of renewables, growth also comes from the multi-year extension of federal production and investment tax credits, passed in December 2015. Continued policy support gives investors the confidence to continue investing in renewables. Additionally, where there are opportunities to accelerate a transition to clean energy and there is little private sector investment, the U.S. and Chinese governments should provide public financing of energy projects. For the United States, this means that federal agencies like the Export-Import Bank and the Overseas Private Investment Corporation should receive support, precisely because they fill existing financing gaps at no net cost to U.S. taxpayers. Other forms of government finance in clean energy should continue, as well.
- 7. The United States and China should lead on managing the transitional effects of deep de-carbonization.** As both economies transition to clean energy, employees of displaced or shrinking industries, and the local economies that rely on these industries, will require assistance in retraining employees or rebuilding communities. China's coal industry employs over 5.2 million and its oil industry employs over 3 million. In the first two months of this year alone, China's largest oil field Daqing lost over \$800 million, setting a historic record. In the United States, the oil industry employs approximately 500,000 people. In the first quarter of this year, 23,200 oil industry workers were laid off, 50 U.S. energy companies have filed for bankruptcy (surpassing the number filing for bankruptcy during the

financial crisis of 2007-08), and 75 percent of U.S. drilling rigs have been sidelined. There is a unique opportunity for the United States and China to develop solutions to the challenges facing these industries, their employees, and their communities: for example, leaders in post-industrial cities in America that have seen revitalization can share their learnings with Chinese counterparts and together, the United States and China can develop recommendations and best practices for crucial issues like employee retraining and community rejuvenation.

8. **To speed up the adoption of renewable energy and improve grid resilience and reliability, the United States and China should develop ways to improve storage capacity and grid integration.** Currently, much of electricity power generation comes from traditional power sources like coal and gas because of their relatively stable supply. Developing storage capacity in the grid infrastructure or modernizing it will help solve the issue of intermittent renewable energy. Even grids around the world that have 30 to 50 percent of intermittent renewables are operating with very little storage. This is unsustainable in the long-term, particularly if there is a desire to increase the proportion of renewables in the global energy mix. Europe, for example, does not have the grid infrastructure in place to take advantage of its large capacity in renewables. There is also an issue particular to China in the adoption of renewable energy: curtailment. As much as 30 to 40 percent of renewable energy production in China is being curtailed. This occurs for a number of reasons: coal continues to receive priority over renewables in energy contracts; renewable energy production far exceeds its consumption; and a lack of infrastructure to deliver renewable energy to consumers. While it is encouraging that China's National Energy Administration issued new rules in March to prevent curtailment, effective enforcement of these rules is critically important.

SUB-NATIONAL/REGIONAL EFFORTS

9. **Chinese direct investment in the U.S. energy sector provides mutual benefits, and should continue to be encouraged.** As mentioned above, the timely conclusion of the negotiations for a BIT and its enactment would provide mutual benefits for both countries, particularly for local U.S. economies that would benefit from greater investment. At the sub-national level, however, governors can develop state-wide policies, especially with the design of implementation plans for the Clean Power Plan (CPP), that would encourage greater investment in clean energy in their states.
10. **City and local governments in the United States and China should share best practices in mitigating and preventing smog and pollution.** Many U.S. cities have had demonstrated success in cleaning up air pollution and are at the forefront of efforts to ensure better living environments for their citizens. U.S. and Chinese regional and local leaders should seek out forums like the U.S.-China Climate-Smart/Low-Carbon Cities Summit and other opportunities to share best practices with one another on relevant issues like smart urban planning, pollution mitigation, and transportation infrastructure.

MULTILATERAL EFFORTS

11. **The private sector and big financial institutions in the United States, China, and other nations should work together to develop a global green financing framework, as this is critical to a global transition to low-carbon energy.** Such efforts could build on existing multilateral initiatives, like the U.N. Environment Program's Inquiry into the Design of a Sustainable Financial System and the work of the Financial Stability Board. Deutsche Bank, Barclays, and other European institutions already have some green financing standards in place; many U.S. and Chinese financial institutions do not. An effective green financing framework will determine appropriate risk standards, premiums, and lending standards. As there are many players and considerations within this space, the United States and China should clarify what is most important to address in green finance and articulate what standards would be most

effective in speeding up the global transition to clean energy. In particular, the United States should consider how it can become involved with standard-setting with the Asian Infrastructure and Investment Bank (AIIB) and the Silk Road Fund. It was also proposed that the United States and China set up a green fund that cooperates on commercializing green technologies in targeted sectors, with both countries contributing start-up funds. The G20 could serve as an action-forcing event for participating countries to agree to prioritize green finance.

- 12. The United States and China should work together to develop a global energy governance structure that better reflects the needs of energy consumers and producers, in both developing and developed countries.** Major energy consumers no longer consist solely of OECD countries, and today's major energy producers are not fully represented by OPEC's membership. For instance, future energy demand growth will come from developing markets, particularly developing Asia. Further, while the United States has become a leading energy producer and China is the world's leading energy consumer, the global governance structure does not reflect this. Recent trends in global energy consumption and production require a re-thinking of global energy governance, in a way that gives consideration to both consumers and producers, as well as countries in various stages of development. One potential way of addressing this is to encourage greater G20 representation in the International Energy Agency.
- 13. The United States and China should launch a discussion on energy production and consumption with other key countries.** The U.S. and Chinese governments have already undertaken many different bilateral initiatives, and can supplement these efforts by requesting the input of other countries who are big players in the energy space, e.g. Saudi Arabia, Russia, etc. – as other countries' energy outlooks and efforts to transition to clean energy have implications for U.S.-China energy cooperation. This should be done both at the government-to-government level and at the NGO level, too.

INDUSTRY/FIRM-LEVEL EFFORTS

- 14. The United States and China could leverage cooperation in energy to help solve political issues or areas of strategic mistrust.** An idea was proposed to encourage U.S., Chinese, and Vietnamese companies to cooperate on resource exploration and drilling together in disputed territory and splitting the revenue, perhaps in the Spratlys. Commercial cooperation could help diminish strategic mistrust and ease tension of highly-politicized issues.
- 15. China should continue playing a large role in commercializing low-carbon technology.** Due to its market size and market power, China's uniquely positioned to help commercialize low-carbon technology: with the necessary growth capital and the right partners, innovative technologies can be commercialized in China and exported to the United States.

MATTERS OF DEBATE

Dialogue participants debated the below ideas, but did not come to a consensus. They are included in this document to illustrate where there is room for further discussion.

- 1. Participants discussed whether the United States has the capacity to become a swing producer and whether it could serve as a substitute for Saudi Arabia's spare capacity.** Those who proposed that the United States can do so noted this is because (1) the United States' shale production yields short-cycle barrels compared to projects that develop new non-shale resources in onshore and offshore locations, so it can respond to price much more quickly and be ramped up or turned down accordingly; (2) many other exporters tend to produce at their maximum already, so they are not truly swing producers; and (3) Saudi Arabia does not seem to want to hold spare capacity. One potential pathway is for the government to mass deploy an idle fleet of drill rigs when needed. Another participant suggested that one way of thinking of the United States as a swing producer is to reframe the thinking around its strategic reserve, to conceptualize strategic reserve as spare capacity.

However, others argued that a number of factors suggest that the United States would not be a swing producer: (1) the slowness with which shale production responds to price, despite shale's shorter timeframe for development when compared to conventional production; (2) uncertainties about whether shale will bounce back, both from a structural and financial standpoint; and (3) most importantly, the fact that the U.S. government cannot directly affect spare capacity or order more shale production to come online because U.S. production is market-driven rather than policy-driven. Moreover, it is too early to accurately approximate the supply elasticity of U.S. tight oil. Additionally, while the cost of producing tight oil in the United States has dropped in some places, it has not dropped across the board. Further, while Saudi Arabia may not seek to hold spare capacity in the future, it may decide to hold more in an environment in which U.S. shale producers do not respond to price as quickly as it had expected.

- 2. Participants debated whether lower global oil prices could lead to lower global oil demand growth.** Those who argued that lower oil prices could lead to lower global oil demand growth offered two main reasons for this: (1) oil-producing countries' oil is mostly destined for export, and a lower oil price results in a slowdown in economic growth, which leads to an overall slowdown in local demand; (2) oil-producing countries in Southeast Asia, the Middle East, and elsewhere have provided subsidies to consumers buying gas and diesel, but with lower oil prices, these governments receive lower oil revenue and can no longer afford to provide these subsidies – so they would look to cut them. The removal of these subsidies causes higher prices, which drive down oil demand growth. On the other hand, others argued, lower oil prices have led to higher oil demand in other parts of the world, like in the United States. Moreover, lower demand from China stems, in part, from macroeconomic issues and rebalancing its economy. Further, policies in OECD countries and demographic trends (fuel efficiency standards, greater urbanization, reliance on public transportation, etc.) essentially force oil demand down.
- 3. Participants discussed whether the United States and China should cooperate on technical standards now to prevent trade barriers in the future.** While China is the dominant player in ultra-high voltage grids and will likely play a big role in manufacturing electric vehicles and hybrids, there is some uncertainty regarding whether its standards will converge on international standards. Participants debated whether conforming standards across renewable energy technology and clean energy products could prevent non-tariff or other trade barriers in the future, or whether establishing such standards now would create greater unforeseen issues down the line. There was also a question of whether the U.S. federal and Chinese central governments are the best conduits for international standard-setting or whether this would be better served by the private sector, as many standards are the result of non-governmental decision-making.

2016 U.S.-CHINA ENERGY TRACK II DIALOGUE

CHINESE PARTICIPANTS

Chen Weidong	Former Chief Energy Researcher, Energy Economics Institute, China National Offshore Oil Corporation (CNOOC); Chairman, DFS Energy Consultant (Beijing), Ltd.
Guo Sujian	Professor and Director, Environmental & Energy Policy Center, Zhejiang University
Jin Canrong	Associate Dean, School of International Studies, Renmin University
Liu Yadong	Director, China Energy Fund Committee (CEFC) U.S.; General Manager, CEFC Global Strategic Investment Holdings
Xu Xiaojie	Director, World Energy Division, Institute of World Economics and Politics, Chinese Academy of Social Sciences (CASS)
Yu Hongyuan	Professor and Deputy Director, Institute for Comparative Politics & Public Policy, Shanghai Institute for International Studies (SIIS)
Zhu Dajian	Director, Institute of Sustainable Development and Management, Tongji University
Zhuang Jianzhong	Deputy Director, CEFC International Center; Deputy Director, International Energy Research Center

AMERICAN PARTICIPANTS

Sarah Ladislaw	Director and Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies (CSIS)
Joanna I. Lewis	Associate Professor, Science, Technology and International Affairs, Edmund A. Walsh School of Foreign Service, Georgetown University; Faculty Affiliate, China Energy Group, Lawrence Berkeley National Laboratory
Damien Ma	Fellow and Associate Director, Think Tank, Paulson Institute
Stephen Orlins	President, National Committee on U.S.-China Relations
David Sandalow	Inaugural Fellow, Center on Global Energy Policy, Columbia University, and former U.S. Under Secretary of Energy (Acting)
Meghan O'Sullivan	Professor, Practice of International Affairs; Director, Geopolitics of Energy Project, Harvard Kennedy School
Emily Tang-Lee	Reporteur and Program Officer, National Committee on U.S.-China Relations
Anthony Yuen	Director, Global Energy Strategist, Commodities, Citi Research

Excepting the "Matters of Debate" section, dialogue members agree with the broad conclusions of this consensus document. However, this should not be interpreted as each participant's full agreement with every point made in the consensus section of this document.