

## China's Energy Policies and Their Environmental Impacts

China, Energy Security, Energy Security, Environment, Environmental Regulation

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U.S.-China Economic & Security Review Commission

AUGUST 13, 2008 — I first would like to thank the members of the Commission for the opportunity to testify. It is an honor to participate in this hearing. My remarks today will focus on the changes to China's energy policymaking structure approved by the National People's Congress (NPC) in March 2008.

- First, I will outline China's previous energy policymaking apparatus and why its reform has been a hot topic of debate in China.
- Second, I will explain the new changes to China's energy policymaking structure and why those changes are unlikely to substantially improve energy governance.
- Third, I will discuss some implications for the United States.

A plant which will produce oil from coal, known as coal-to-liquid (CTL), nears completion in Erdos, in China's Inner Mongolia region.



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### I. China's "old" energy policymaking structure

China suffers from a disconnect between the increasingly prominent position of energy issues on its domestic and foreign policy agendas and the capacity of the country's institutions to manage the energy sector. Some Chinese commentators have even argued that the biggest threat to China's energy security is posed by the very institutions responsible for enhancing it. Consequently, restructuring China's energy policymaking apparatus has been a subject of intense debate in recent years as the country has grappled with an unexpected surge in energy demand, growing dependence on energy imports, rising global energy prices and periodic domestic energy supply shortages.

Authority over China's energy sector at the national level is fractured among more than a dozen government agencies, the most important of which is the National Development and Reform Commission (NDRC). Within the NDRC itself, responsibility for energy is similarly scattered among multiple

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departments. Prior to the restructuring in March 2008, the key component was the Energy Bureau, which had a broad mandate but lacked the authority, tools and manpower to fulfill it. In 2005, the government added another cook to the kitchen with the establishment of the National Energy Leading Group, an advisory body headed by Premier Wen Jiabao. While the leading group's creation reflected recognition of the need to strengthen energy sector management, it did not eradicate China's energy governance woes.

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China's fragmented energy policymaking structure has impeded energy governance because there is no single institution, such as a Ministry of Energy, with the authority to coordinate the interests of the various stakeholders. For example, the implementation of energy laws is hampered by the fact that those laws often do not specify the government agencies responsible for implementation because of disputes over who should be in charge. Similarly, the fuel tax that the NPC approved in 1999 has not been implemented because of the failure of the relevant stakeholders to reach an agreement.

The policy paralysis within the energy bureaucracy stands in sharp contrast to the activism of China's state-owned energy companies. These firms are powerful and relatively autonomous actors. Their influence is derived from their full and vice ministerial ranks, the membership of some top executives in the Central Committee of the Chinese Communist Party, industry expertise, internationally listed subsidiaries and profitability (at least until recently). More often than not, it is China's energy firms who initiate major energy projects and policies that are later embraced by the government, such as the West-East Pipeline and the acquisition of foreign energy assets.

The companies also have some capacity to advance corporate interests at the expense of national ones. For example, oil and power generating companies have periodically reduced their output to pressure the government to raise the state-set prices of refined products and electricity, which have not kept pace with increases in the market-determined prices of crude oil and coal. Similarly, China's national oil companies have ignored guidance from the central government about where they should invest overseas.

## **II. China's "new" energy policymaking structure**

The recent changes to China's energy policymaking apparatus are the latest in a series of institutional reforms aimed at improving energy governance. In March 2008, the NPC approved two additions to China's energy bureaucracy – the State Energy Commission (SEC) and the National Energy Administration (NEA). The SEC, a high-level discussion and coordination body whose specific functions, organization and staffing have not yet been determined, will replace the National Energy Leading Group. The daily affairs of the SEC will be handled by the NEA, a vice-ministerial component of the NDRC, which is the successor to the NDRC's Energy Bureau. In addition to the Energy Bureau, the NEA is also comprised of other energy offices from the NDRC, the Office of the National Leading Group, and the nuclear power administration of the Commission of Science, Technology and Industry for National Defense. The NEA has a broad mandate, which includes managing the country's energy industries, drafting energy plans and policies, negotiating with international energy agencies

and approving foreign energy investments.

The NEA, like its predecessor, will struggle to fulfill its mandate because it lacks the authority, autonomy, manpower and tools to deal with the country's energy challenges. Although the NEA's capabilities in each of these areas are greater than those possessed by the NDRC Energy Bureau, they still fall short of what the NEA needs to do its job.

Authority: The NEA has more political clout than its predecessor, but not enough to mitigate the bureaucratic infighting that undermines energy decision-making. The NEA is a vice-ministerial body, which is a step above that of the Energy Bureau, which was a bureau-level organization. However, the NEA still does not have the authority it needs to coordinate the interests of ministries, commissions and state-owned energy companies. One of the frustrations of officials in the NDRC Energy Bureau was that the energy companies often undercut their authority by circumventing the Bureau to hold face-to-face discussions with China's senior leadership.

The authority of the NEA is somewhat enhanced by the appointment of Zhang Guobao, a Vice-Chairman of the NDRC with full ministerial rank, as head of the NEA. While it was widely expected that Zhang would retire, his new position is a reflection of his substantial energy expertise. Zhang, who has worked at the NDRC since 1983, is a smart and skillful bureaucrat with encyclopedic knowledge of China's energy sector. He has overseen the development of some of the country's major infrastructure projects, including the West-East Pipeline, the transmission of electricity from west to east, the Qinghai-Tibet Railway and the expansion of Beijing Capital International Airport.

Autonomy: The NEA is a creature of the NDRC. Some Chinese media reports speculated that the fact that the NEA's offices will be separate from those of the NDRC and that the NEA will have its own Party Group – which will give the NEA greater autonomy in managing its affairs, including personnel decisions – are signs of the NEA's independence. However, the fact that Zhang Guobao – an NDRC “lifer” – is head of the NEA and its Party Group indicates that the NEA's room to maneuver will be constrained by the NDRC. Moreover, the NEA's independence is limited by the fact that key tools it needs to effectively manage the energy sector are in the hands of the NDRC.

Tools: Arguably the greatest constraint on the NEA's ability to fulfill its mandate is the fact that it does not possess the authority to set energy prices, which remain the purview of the NDRC's Pricing Department. The issue of who would end up with the power to determine energy prices was, in the words of Zhang Guobao, a subject of “constant dispute” during the bureaucratic reorganization. Although the NEA can make suggestions about energy price adjustments and should be consulted by the NDRC on any proposed changes, the shots are still being called by the NDRC (and ultimately the State Council, whose approval is needed for any major energy price changes). The fact that the NDRC retained control over energy prices is hardly surprising. The power to set prices is one of the NDRC's main instruments of macroeconomic control, which it understandably is reluctant to relinquish, especially to a subordinate component which might be tempted to adjust energy prices in ways that run counter to broader NDRC objectives, such as combating inflation.

The NEA's lack of authority over energy prices makes its task of mitigating the current electricity shortages, which are partly rooted in price controls, especially challenging. Electricity prices are set by the state, while

coal prices are determined by the market. The failure of electricity price increases to keep pace with soaring coal prices has contributed to the national power shortage because some electricity producers can't afford coal while others are unwilling to operate at a loss. With no pricing power, the NEA has little choice but to resort to administrative measures to achieve an objective that would be more effectively realized by raising and ultimately liberalizing electricity prices.

Personnel: The central government is still managing the energy sector with a skeleton crew. Contrary to rumors that the NEA's staff would be as large as 200, it ended up with just 112 people. This staff quota is certainly larger than that of the NDRC Energy Bureau, which had only 50 people, but it does not represent a major increase in the number of people directly involved in managing the energy sector at the national level. Moreover, some Chinese media reports have speculated that the NEA may face the problem of "too many generals and not enough soldiers" because at least half of the 112 slots at the NEA are for positions at the deputy department head level and above. The Party organ that determines the functions, internal structure and staff quotas for government institutions probably resisted calls for more personnel out of concern that if it approved a large staff for the NEA, then other government bodies would also press for more manpower at a time when the State Council is trying to streamline the bureaucracy.

In sum, China's new energy administration is unlikely to substantially improve energy governance. The organizational changes are tantamount to rearranging deck chairs on the Titanic. Although the energy bureaucracy looks a bit different, its limited capacities remain largely unchanged. Consequently, we can expect to see a continuation of business as usual: conflicts of interest will impede decision-making; the energy companies will remain important drivers of projects and policies; state-set energy prices will continue to contribute to periodic domestic energy supply shortfalls; and the NEA, with no authority to adjust energy prices, probably will resort to "second best" administrative measures to try to eradicate those shortages.

The modest tinkering to China's energy policymaking apparatus unveiled during the March 2008 NPC meeting reflects the conflicts of interest that stymie energy decision-making. Despite widespread recognition among Chinese officials and energy experts of the need to get the country's energy institutions "right" and the growing chorus of voices calling for the establishment of a Ministry of Energy (MOE), there are powerful ministerial and corporate interests that favor the status quo. The opposition to the creation of a MOE, a hot topic of debate in Chinese energy circles in recent years, was led by the NDRC and the state-owned energy companies. The mere specter of a MOE strikes fear in the heart of the NDRC because it would deprive the NDRC of a substantial portion of its portfolio and important tools of macroeconomic control. The NDRC's aversion is shared by the energy firms who are reluctant to have another political master and afraid that a MOE would limit their direct access to China's leadership. Such opposition helps explain why the government was unable to forge a consensus in favor of more robust changes to China's energy policymaking apparatus.

### **Implications for the United States**

First, US policymakers should recognize that China's fractured energy policymaking apparatus may constrain the Chinese government from doing all that US policymakers would like it to do – and indeed what Chinese leaders themselves might want to do – to enhance international energy security and combat climate change. If China falls short of our expectations it may not reflect a conscious decision by Beijing to shirk its global

responsibilities but rather the limited capacity of its national energy institutions to bend other actors, notably firms and local governments, to its will.

Second, US institutions that plan to cooperate with China on energy issues have a plethora of partners to choose from. While the NDRC is often the partner of choice because of its authority and convening power, engagement with other actors can also be productive. Local governments or corporations may be more appropriate partners for some issues.

Third, US policymakers should recognize that the “China, Inc.” model often used to describe the foreign investments of China’s national oil companies is less coherent than is often assumed. Beijing has certainly encouraged the companies to go abroad, provided them with varying levels of diplomatic and financial support and occasionally intervened in their decision-making. However, when it comes to choosing where to invest, the companies are almost always in the driver’s seat.