**August 4, 2006**
**Statement of Erica S. Downs**
**China Energy Fellow**
**The Brookings Institution**
**Before the US-China Economic and Security Review Commission**
**China's Role in the World: Is China a Responsible Stakeholder?**

Let me begin by saying thank you to the members of the Commission for the opportunity to testify. It is an honor to participate in this hearing.

I have been asked to speak about China's energy requirements and policies. I am going to focus my remarks today to oil. Oil is currently the only fuel which China imports in substantial quantities and, consequently, it is the fuel that has had the largest impact on China's international behavior in recent years.

My testimony today will briefly address several issues:

- First, I will discuss China's energy demand, domestic supply and imports.
- Second, I will examine some of the measures China is taking to ensure its oil requirements are met.
- Third, I will address some of the implications of these measures for the United States.

## China's Energy Demand, Domestic Supply and Imports

China is the world's second largest consumer of primary energy behind the United States and the third largest producer of primary energy after the United States and Russia. China is able to meet more than 90% of its primary energy requirements with domestic supplies, largely because of the country's abundant coal reserves and coal-based economy. Coal accounts for more than two-thirds of China's primary energy consumption and production. China imports small quantities of coal to supply southern China, which is located far from the country's coal producing regions, and China began to import liquefied natural gas (LNG) in May 2006. However, natural gas imports probably will be negligible until after 2010 because of the lead-times for the construction of transnational pipelines and additional LNG receiving terminals. Oil is the only fuel that China imports in substantial quantities.

### *China's Oil Balance*

China, which was self-sufficient in oil until 1993, is now the world's second largest oil consumer behind the United States and the world's third largest oil importer behind the United States and Japan. According to the International Energy Agency, between 2000 and 2005 China accounted for 27% percent of the growth in world oil demand. In 2005, China consumed 6.6 million barrels per day (b/d) of oil, about one-third of the US level of 20.8 million b/d, and imported 3.0 million b/d, about one-quarter of the US level of 13.5 million b/d, also according to the IEA.

China's oil demand and imports will continue to increase; the only question is by how much. Recent projections by Chinese and international energy experts indicate that by 2020 China's oil demand will range from 10 to 13.6 million b/d and China's domestic oil production will range from 2.7 to 4 million b/d. These estimates indicate that China's oil imports in 2020 will be 6 to 11 million b/d, accounting for 60 to 80% of total domestic consumption.

## China's Efforts to Meet Its Oil Requirements

Over the past decade, the measures that China has pursued to ensure its oil requirements are met have emphasized supply expansion over demand moderation. This supply-side bias is explained in part by factors that impede demand side management in other countries. These include the existence of bureaucratic champions for increasing supply and the absence of bureaucratic champions for constraining demand, the limited financial resources devoted to demand side management, and the fact that measures to slow demand growth tend to be more difficult to implement, politically, than measures to expand supply.

In terms of moderating demand, the Chinese government has been reluctant to remove state-set caps on oil product prices because of concerns about the impact of price volatility on the economy and on certain segments of society, such as farmers and taxi drivers. The imposition of a fuel tax, under discussion for more than a decade, has been delayed not only because of concerns about the burden it would impose on the agricultural sector but also because of conflicts between central and local governments over revenue-sharing. Beijing, however, has taken steps to encourage consumers to buy fuel efficient cars, implementing fuel economy standards in July 2005 and a large engine car tax in March 2006.

In terms of expanding supply, China is following in the footsteps of other major oil consumers in its efforts to diversify its oil suppliers and oil import routes, acquire equity stakes in exploration and production assets abroad, and cultivate closer diplomatic relations with major oil exporters to help China's national oil companies (NOCs) secure trade and investment deals.

### *Diversification of Oil Suppliers and Import Routes*

The Chinese government recognizes that the diversification of China's oil suppliers and import routes can enhance the security of the country's oil supply. In terms of oil suppliers, China has sought not only to expand the number of countries and regions from which it imports oil but also to limit its dependence on the Persian Gulf, which in 2005 provided China with almost half of its crude oil imports. However, Chinese and international energy experts expect that the country's reliance on the Persian Gulf will increase because of the region's large oil reserves. In terms of import routes, China wants to reduce its dependence on the sea lines of communication through which almost

90% of the country's crude oil imports travel because of their vulnerability to disruption on the high seas by various modern navies.

The construction of oil pipelines from Kazakhstan and Russia to China plays an important role in China's diversification plans not only because these two countries are located outside of the Persian Gulf region, but also because their exports to China are delivered overland. The easternmost leg of a multi-phase 400,000 b/d pipeline from western Kazakhstan to western China began operation in 2006. The fate of a proposed 600,000-b/d pipeline from Eastern Siberia to northeastern China, under discussion for more than a decade, is in the hands of Moscow. If both of the pipelines are built and operated at design capacity, the combined throughput of 1 million b/d would constitute 9 to 17% of the 6-11 million b/d China is projected to import in 2020.

*Foreign Oil Investment*

China's growing domestic oil deficit has propelled China's national oil companies (NOCs) to search for oil abroad. The NOCs select projects according to their respective capabilities and corporate objectives, not necessarily because of a state-directed set of national policy priorities. China's NOCs produced about 450,000 b/d of equity oil -- the companies' share of the oil they produce – abroad in 2005, constituting 15% of total imports. Although the NOCs have invested in many countries, most of their production is concentrated in a few countries and under the control of one company, China National Petroleum Corporation.

- Sudan, Kazakhstan and Indonesia accounted for 79% of the overseas equity oil production of China's oil companies of 372,370 b/d in 2004.

- CNPC accounted for 89% of the foreign equity oil production of China's oil companies in 2004.

However, recent investments in Angola by China National Petrochemical Corporation (Sinopec) and in Nigeria by China National Offshore Oil Corporation Ltd. (CNOOC Ltd.) should make these countries substantial sources of foreign equity production.

The idea that the acquisition of oil assets abroad can enhance China's energy security is rooted in the assumption that oil obtained through foreign investment is more secure and less expensive than that purchased on the international market. Proponents of this idea are skeptical of the assumption held by Western oil industry analysts that oil will always be available, albeit at a fluctuating price, on the world market. These proponents recommend the acquisition of equity oil so that if China ever finds itself in a situation where it has money but is unable to buy the oil it needs on the world market, then China's NOCs can send their foreign equity production to China. Some proponents also maintain that barrels of oil produced by Chinese companies abroad are insulated from fluctuations in world oil prices and can provide Chinese consumers with oil cheaper than that available on the international market.

The Chinese public debate on energy security indicates that participants have begun to question the relationship between the foreign acquisitions of China's national oil companies and China's energy security. While in the past there appeared to be virtually universal support for the acquisition of equity oil to meet China's oil requirements, dissenting voices have begun to emerge. Some Chinese analysts are now arguing that overseas oil investment is not a panacea, noting that the foreign equity oil of China's NOCs only constitutes a fraction of the country's oil imports and will do little to help China deal with a supply disruption and its consequences.

*Oil Diplomacy*

The Chinese government is cultivating closer diplomatic relations with the governments of oil producing states to facilitate trade and investment opportunities for China's NOCs. Both the Chinese government and the NOCs maintain that developing such relationships are necessary not only because the governments of many oil producing states have considerable influence over which foreign companies are allowed to invest but also because other national and international oil companies receive varying degrees of home government support. Consequently, the Chinese government, like other major oil importing countries, has wielded a variety of financial and political tools to help China's NOCs secure deals.

Financially, the Chinese government has provided oil producing states with a variety of financial incentives to offer investment opportunities to China's oil companies, including the construction of basic infrastructure by Chinese firms and the provision of foreign aid. Many of the acquisitions made by China's national oil companies are linked to investments in non-oil infrastructure by other Chinese firms. This is especially true in Africa, where there is a tremendous need for basic infrastructure and certain oil producers, notably Nigeria and Angola, have indicated that they will give preferences to foreign oil companies that can offer attractive economic packages.

Politically, the Chinese government has supported China's oil companies with summit meetings between Chinese leaders and their counterparts in oil producing states, which provide Chinese leaders with the opportunity to lobby on behalf of the oil companies for projects and for the oil companies to sign previously negotiated agreements. China leaders have been directly involved in the negotiations for some projects, and, in at least one case, have used China's seat on the United Nations Security Council (UNSC) to deflect international diplomatic pressure on a country in which a Chinese oil company has substantial investments.

**Implications for the United States**

Energy is undoubtedly playing an increasingly important role in Chinese foreign policy, although where energy ranks as a priority in China's foreign policy varies by country. China's energy interests, like those of many other countries, including the United States, shape China's policies on non-energy issues. Beijing is probably more willing to pursue foreign policies to gain and maintain access to oil that run afoul of US interests when those interests are not top US foreign policy objectives.

China's energy requirements and efforts to satisfy those requirements have generated friction with the United States. Sudan and Iran the most high profile cases and are often grouped together by analysts as examples of how China's energy interests are shaping China's international behavior in ways inimical to US interests. However, there are differences between China's energy ties with these two countries and the extent to which China's energy interests have impacted Chinese foreign policy toward these countries on other issues.

China's energy relationships with Sudan and Iran differ, with investment playing a substantially larger role in the case of Sudan and trade dominating in the case of Iran. Sudan is the largest source of foreign oil production of China's NOCs and was China's seventh largest supplier of crude oil in 2005, providing China with 133,000 b/d, about 5% of China's crude imports. Iran was China's third largest supplier of crude oil in 2005, supplying China with 287,000 b/d, about 11% of China's crude imports. The investments of China's NOCs in oil and natural gas exploration and development projects in Iran are extremely modest to date, but Sinopec and CNPC are interested in making substantially larger investments. In the future, Iran is likely to play a more important role in meeting China's energy requirements because of its large resource base; Iran holds the world's second largest proved reserves of oil and natural gas.

China has devoted more effort to protecting its energy relationship with Sudan than with Iran. In the case of Sudan, Beijing weakened the language of at least one UNSC resolution which included an automatic trigger for sanctions if Khartoum failed to stop the atrocities in Darfur. The two main drivers of China's behavior were energy and the Chinese government's longstanding opposition to the use of sanctions, especially to punish violations of human rights.

In the case of Iran, China has to balance several competing interests, including energy and other economic interests and its relationship with the United States. In February 2006, under substantial pressure from Washington, Beijing voted as a member of the board of governors of the International Atomic Energy Agency to report the Iran nuclear issue to the UNSC, a step that might lead to the imposition of economic sanctions and jeopardize China's energy trade with and investment in Iran.

Although the foreign investments of China's NOCs have posed some diplomatic challenges for the United States, these investments are also helping to increase the global supply of oil, which benefits all consumers, including the United States.