China's Geostrategic Search for Oil

In 2000, Asia analyst Robert A. Manning presciently argued that the likelihood of future conflict over energy resources would increase as rising Asian giants such as China shifted away from an economic toward a strategic approach to energy security. Since then, as China's energy consumption has expanded and its rise has become the dominant geopolitical issue of our time, Beijing's energy security policy has become one of the major discussion topics.

The evidence that China has primarily chosen a politically-driven and geostrategic (rather than economic) approach to energy security policy is based on two factors, one domestic and the other external. First, the domestic structure of China's political economy, especially in the energy sector, means that it relies heavily on state-owned enterprises (SOEs) to achieve the country's national economic objectives, namely securing foreign supplies of oil and refining oil products for domestic use. Within this state-dominated approach, commercial decisions take place within a framework designed to entrench the dominance of SOEs, and the Chinese Communist Party's (CCP) influence within these SOEs. One upshot of this politicized approach to energy policy is that the role of market forces in determining supply, pricing, and distribution of energy resources throughout its economy is limited.

Second, Beijing pragmatically participates in international commodity markets, but simultaneously attempts to guard against supply and price disruptions. Unwilling to trust and rely on these markets to fulfill ongoing and future energy needs, subsequent attempts to hedge against sub-optimal developments in the international oil market have led Beijing to pursue an economic nationalist, or "China-first," agenda in many parts of the world. This

Dr. John Lee is the Michael Hintze Fellow for Energy Security and an Associate Professor at the Center for International Security Studies, Sydney University. He is also a non-resident scholar at the Hudson Institute. He can be reached at j.lee@sydney.edu.au.

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China's geostrategic energy security strategy is based on one domestic and one external factor.

is evident in Beijing offering extensive political and economic assistance to its SOEs in the search to own offshore oil assets in many sidelined or pariah states, or else conclude deals to lock up guaranteed supplies from offshore oil fields.

Even so, and despite legitimate international concern about Beijing's uncompromising China-first energy security mindset, the actual capacity for Beijing to deliberately or inadvertently exacerbate the

energy insecurity of other countries is limited. Nevertheless, China pursuing a geostrategic approach to energy security will detrimentally affect efforts by Western governments to improve governance standards, human rights, and economic reform in resource-rich authoritarian states around the world. In other words, although competing for energy resources is unlikely in itself to lead to conflict over territory (with the possible exception of competing claims in the South China Sea), Beijing's China-first geostrategic approach will exacerbate relations between China and Western liberal democracies over resource-rich states.

China's Rising Dependence on Foreign Oil

Coal still meets the majority of Chinese energy needs—providing about 70 percent of total energy consumption for the country in 2011.² Currently, oil makes up only around 20 percent of the country's energy requirements. Even so, China's external search to secure an oil supply rightly dominates discussion of its energy security policies—largely because the country's growing dependence on foreign oil is seen by Beijing as an area of potential strategic vulnerability.

While coal is sufficiently abundant in China to meet its current and future needs, China's self-sufficiency in oil ended in 1993. This is a concern to China because renewable and other resources such as solar and hydro power will provide China with only a tiny fraction of its current and future energy needs, and oil is a significantly cleaner and more efficient energy resource than coal. It is estimated that its 20.4 billion barrels of proven domestic reserves amounts to only around 1.2 percent of the world's proven total reserves. Today, China relies on foreign imports for over 50 percent of the oil it consumes, expected to rise to 60–70 percent of total consumption by 2015, according to International Energy Agency (IEA) estimates. Outpacing overall rates of Chinese GDP growth, consumption of oil has increased by around 12 percent each year since 1980. In 2009, China overtook Japan to become the second largest importer of oil after

the United States, and the increase in demand for oil over the next few years will exceed 1.1 million barrels per day. To place this in context, such an increase in Chinese demand represents around 40 percent of the projected increase in global demand over the next few years.⁵

The first kind of vulnerability this breeds in China is strategic, which is frequently highlighted by military planners. Around 80 percent of China's oil imports already come from the Middle East and Africa, with all but 10 percent

Beijing's actual capacity to exacerbate other countries' energy insecurity is limited.

of the oil on foreign-owned tankers headed to China passing through U.S. patrolled laneways of the Indian Ocean, into the Straits of Malacca and through the South China Sea. The fear of interdiction of China-bound oil tankers by the U.S. Navy is acute and real, with many Chinese strategists recalling Imperial Japan's vulnerability to maritime strangulation of its oil imports by the United States and allied navies in the Pacific Ocean leading up to World War II.⁶

While this scenario is imaginable, it is only plausible in the event of a major war between the United States and China. The interdiction of China-bound oil tankers by the U.S. Navy would be otherwise unthinkable. Note that this potential vulnerability would only be erased, in China's eyes, by ending U.S. naval dominance in the Indian Ocean and South China Sea. Although it is arguable that China's sense of vulnerability is a significant driver of the ambitious expansion of the People's Liberation Army Navy's (PLAN) capabilities, U.S. control of these vital shipping lanes is better seen as an ongoing but long-term feature of a broader strategic regional landscape. Naval competition aside, Chinese energy security is defined by ensuring reliable foreign supplies of oil at stable prices.

The Chinese Politicization of Energy Security

It is trite to mention that reliable supplies of energy are essential for any economy to smoothly function. Governments in all major economies, democratic and authoritarian, view energy security as an inherent component of their national interest. Yet, defining energy security—and the gray line that differentiates it from insecurity—varies from country to country. In China, the definition is much stricter than in other energy-importing countries (such as the United States and Japan) since Beijing considers not just reliable and uninterrupted but also cheap supply of energy as essential to its national and domestic political interest. Moreover, while securing cheap and reliable access to foreign oil is seen as essential for mitigating economic risk in all oil-importing

Beijing's geostrategic approach will exacerbate relations with Western liberal democracies. countries, securing such access is also essential for mitigating risks to the survival of the regime in China. In other words, the politicization of energy security in China occurs in a manner that does not apply to oil-importing democracies.

Conflating economic risk and risk to the regime in China stems from the fact that the modern CCP largely stakes its legitimacy on the capacity to continually deliver rapid

economic growth. A disruption of China's supply of oil could lead to twin forces of mass discontent: a stagnating economy and inflation caused by spikes in domestic energy prices. As Premier Wen Jiabao explained to colleagues during the National People's Congress in March 2011, ensuring GDP growth of around 8 percent each year and keeping inflation below 4–5 percent is linked to social stability imperatives required for regime security. At a minimum, such rapid growth is required to generate sufficient jobs to keep unemployment (and therefore discontent) under control; it is not lost on modern Chinese authorities that double-digit inflation was one of the major reasons behind countrywide protests in 1989 leading up to Tiananmen Square.

The link between energy security and maintaining rapid growth has deepened due to the evolving drivers of China's growth in place since the mid-1990s. In the first decade of economic reform (1979–1989), growth was largely driven by land reforms, which led to dramatic productivity increases in rural China. It was not until the mid-1990s that mass, large-scale industrialization took place. From the late 1990s onwards, fixed-asset investment (and exports) replaced domestic consumption as the driver of economic growth.

Indeed, fixed-asset investment was behind around 40 percent of Chinese growth at the turn of this century, rising to current levels of around 50–60 percent. During the global financial crisis (2008–2010), it drove over three quarters of GDP growth. At current levels, the contribution made by fixed-asset investment is the highest of any major economy in recorded history. China is literally building its way to sustaining its economic miracle. Fixed-asset investment is an immensely energy-intensive form of economic activity, especially in an economy that still uses energy extremely inefficiently compared to Western industrialized ones. Examining Chinese oil consumption over the last two decades makes this clear. From 1993–2010, oil consumption increased from about 140 million tons to about 440 million tons.

China's gradual realization that access to foreign oil was becoming an issue of utmost importance must be understood alongside the evolution of the Chinese political economy from being largely private-sector driven (prior to 1989) to

state-sector driven (since the mid-1990s). This is where the structure of China's authoritarian, state-dominated political economy tends to conflate political with commercial interests, and in doing so more intimately links energy policy, regime security, and national interest.

The Return of the State in China's Political Economy

China's economic success over more than three decades might lead some to conclude that it has become a vibrant, private-sector-driven capitalist economy. In fact, the role and dominance of SOEs is unprecedented for any economy in

recent history. As detailed in documents such as the 12th Five-Year Plan (2011–2015), released in March 2011, energy security domestically is largely about building a more cost-effective national system, including infrastructure to distribute energy to domestic users and reduce the amount of energy needed to achieve rapid economic growth. However, due to the domestic structure of the Chinese political economy, particularly the energy sector, commercial decision-making also takes

Dependence on foreign oil is seen by Beijing as an area of potential strategic vulnerability.

place within a framework designed to entrench the dominance of SOEs and the CCP's influence within SOEs. In such a politicized framework of economic activity, Beijing does not leave it to markets to determine supply, pricing, and distribution of energy. This has a profound consequence for energy security policy abroad.

The CCP's plan to retake control of the levers of economic power and privilege was gradually cobbled together from the mid-1990s onwards. The plan was specifically designed to preserve the Party's economic relevance and minimize the prospect of 1989-type protests occurring again. Although the private sector expanded from the 1990s onwards, and the number of centrally-managed SOEs declined dramatically, around one dozen of the most important and lucrative sectors of the economy were largely reserved to competition among SOEs. These sectors included banking and finance, insurance, construction, infrastructure, chemicals, media, information technology, telecommunications, and energy. Although China encouraged foreign direct investment (FDI) in the export—manufacturing sectors, private domestic companies were actively discriminated against in access to markets, capital, and land. 11

Today, China has approximately 150 centrally-managed SOEs and 120,000 provincial- and locally-managed SOEs. When subsidiaries are included, those numbers probably double. This compares to around 4 million private corporations and tens of millions of small, informal private businesses. On the

face of it, China appears to be a private-sector driven success story. But upon closer inspection, the return of the state in the Chinese political economy is evident from a number of measurements and observations.

One measure is to trace the flow of capital within the Chinese system. Domestically funded fixed-investment is the dominant driver of Chinese GDP growth. China is unusual in that bank loans—drawn from the deposits of its citizens and funneled into state-controlled banks—constitute around 80 percent of all investment activity in the country. State-controlled banks dominate the formal finance sector—private domestic and foreign banks constitute only 2–5 percent of the sector. ¹²

The bias toward the state-controlled sector is clear given the relationship between the state-controlled banks and industrial SOEs. Even though state-controlled enterprises produce 30–50 percent of all output in the country (the precise figure is difficult to determine because of the lack of transparency of shareholding and ownership of Chinese enterprises), they receive over 75 percent of the country's capital, and the figure is rising. SOEs received well over 95 percent of the stimulus money lent out in 2008–2009, and an estimated 85 percent in 2010. The State-owned Assets Supervision and Administration Commission (SASAC) indicates that the assets of SOEs amount to over 66 percent of all assets in the country, up from 60 percent in 2003. Incidentally, this is the reverse of what occurred in China during the 1980s, when the majority of new fixed assets were effectively controlled by the emerging private sector (even if they were formally "community" enterprises), and private-sector businesses received over 70 percent of the country's capital.¹³

China generally regards the SOEs' domination of every important emerging sector within the Chinese economy as a strategic priority. For example, the SASAC's "Guiding Opinion on Promoting the Adjustment of State-Owned Capital and Reorganization of State-Owned Enterprises," which was issued in December 2006, expanded strategic sectors to include civil aviation, auto industries, and shipping, in addition to the dozen or so sectors previously designated as critical. According to the "Guiding Opinion," the state was to maintain a majority ownership stake in every major firm in those industry groupings. Although this particular document was not formally ratified by the State Council, it remains a de facto guiding framework for these emerging sectors.

Indeed, the 12th Five-Year Plan explicitly states that "national champions" are to take the lead in "strategic emerging industries" such as renewable energy, healthcare, biotechnology, high-end equipment manufacturing, energy-efficient vehicles, and information technology. It is made clear in the Plan that the government should "channel state capital into industries pertinent to national security and the economy through discretionary and rational capital injection or

withdrawal." This includes resources from the formal fiscal budget, but more importantly loans from state-owned banks as well.¹⁵

Other measures are also telling. The corporate giants emerging from China are almost all state-controlled enterprises. All but approximately 100 of the 2,037 firms listed on the two Chinese stock exchanges are majority-owned by SOEs. The ten largest Chinese firms by revenue and/or profit are all state-controlled. In 2009, two SOEs—China National Petroleum and China Mobile—made more profits than the top 500 private firms in China combined. Indeed, the revenues of the top 20 centrally-managed SOEs amount to more than 50 percent of China's GDP each year. ¹⁶

This state-dominated setup is replicated in the oil sector. In the first years after oil self-sufficiency ended in 1993, Beijing reorganized its oil (and gas) assets and entities into two state-owned firms: the China National Petroleum Corporation (CNPC) and the China Petroleum and Chemical Corporation (Sinopec). CNPC is the dominant upstream player in the sector, and along with its listed entity, PetroChina, accounts for over 66 percent of China's oil output. Sinopec accounts for at least half of the country's downstream activities such as refining and distribution. The state-owned China National Offshore Oil Corporation (CNOOC) is close to being a monopolistic player in offshore oil exploration and production, with other state-owned giants such as Sinochem Group becoming more prominent in offshore oil distribution.

China's onshore and offshore commercial activity in the oil sector is dominated by SOEs. CNPC, Sinopec, and CNOOC are among the 10 largest corporations in China, with a combined market capitalization of around \$500 billion. CNPC and Sinopec are in the top 10 of the 2011 *Fortune* Global 500 rankings.¹⁷ The SOEs' domination of the sector is enhanced not only through exclusive access to oil assets, development, and distribution, but also through ongoing financing agreements with the state-owned banking sector, which offers the SOEs privileged access to cheap and plentiful credit.

Mixing Politics, Business, and Geostrategy

Although SOEs are called upon to nominally behave as profit-making entities, they are viewed ultimately as instruments of the regime. The shares, and therefore assets, of SOEs are held by SASAC (the State Assets Supervision and Administration Commission), which in turn is subject to instructions offered by relevant ministries. The SASAC is controlled by and answerable to China's top administrative and legislative body, the State Council of the National People's Congress. This structure is replicated for provincially- and locally-managed SOEs. The higher strategic objectives and purpose of the SOEs are set by the leadership of the CCP. The vast, opaque, and complicated system of China's "corporate Leninism" means that it is not always easy to trace the chain of

decision-making throughout the country's political economy. But the case that SOEs ultimately remain instruments of the Party—or more precisely, have become one interlocking branch of CCP power—is strengthened by examining links between SOE executives and the CCP.

Meticulous research by Professor Minxin Pei revealed that the senior managers of all central SOE enterprises are almost all senior members of the CCP. The three most senior positions (party secretary, chairman, and CEO) of the 50 centrally-managed SOEs are appointed directly by the CCP's Central Organization Department (COD), after review and approval by the Standing Committee of the Politburo. The current head of the COD is Li Yuancho, who is a member of the Politburo as well. Almost all appointees are CCP members, and in many cases the CEO and party secretary is the same person. Many of the appointees at these levels were formerly top level provincial officials. The appointments of all remaining senior executives are carried out by the SASAC, which consults with the COD. Once again, the process of appointing officials at these senior levels is replicated in provincial and local SOEs.

Tracing the leadership of China's national oil champions confirms the above findings. The president and party secretary of CNPC is Jiang Jiemin, a former deputy governor of Qinghai Province. The president and party secretary of CNOOC is Fu Chengyu, a member of the CCP's Central Discipline Committee. Fu's predecessor at CNOOC was Wei Liucheng, who was subsequently appointed as the committee secretary of Hainan, the province's highest political post. The president of Sinopec, Su Shulin, was previously the vice minister of Liaoning Province.

By ensuring that only state-owned entities become the dominant and influential Chinese players in upstream and downstream domestic and international markets, the ability of powerful elements within the CCP to shape and execute energy policy is immeasurably enhanced. Since private-sector entities are prevented from playing major roles in the energy sectors, commercial decisions tend to be disproportionately influenced by political interests and considerations—whether these be shaped by individual, Party, or national interests.

Ensuring cheap and reliable energy for the Chinese economy remains a paramount economic and political objective, but strategies to achieve this must take into account the evolving and complex state-dominated framework. The domestic and international operation of open commodity markets presumes that firms are primarily driven by commercial incentives and compete alongside rational commercial and cost restraints, leading to better outcomes, namely market-based pricing and more efficient supply and distribution.

China's state-dominated domestic and international approach to energy security hedges against strictly market outcomes by prioritizing a CCP-first

mindset in the domestic market and a China-first mindset in international oil markets. In other words, efficient pricing and distribution is secondary in Chinese energy policy to priorities of the party and the state. The lack of clear chains of authority in the labyrinthine Chinese system means that a predictable and coherent energy security remains elusive. But it is evident that the rationality of markets is only one comparatively minor factor shaping Chinese energy policy.

China's "Going Global" Hedging Strategy

Although the term "energy security" has been used in Chinese strategic documents since at least the early 1990s, it was not formally prioritized as a national security issue of the highest importance until early this century.¹⁹ From

2003 onwards, the government of President Hu Jintao and Premier Wen Jiabao cobbled together a "going global" strategy to address China's oil shortage. With CNPC and Sinopec controlling exploration, production, and distribution at home, CNOOC was asked to take the lead in acquiring overseas assets and companies in order to lock in supplies of oil (recently CNOOC has been joined by CNPC and Sinopec in offshore

China prioritizes the party and the state over pricing and distribution.

activity). CNPC's international subsidiaries—CNPC International (CNPCI) and the China National Oil and Gas Exploration Development Corporation (CNODC)—now account for around two-thirds of CNPC's profits.²⁰

Although Chinese SOEs are active players in the international commodity markets, the domestic mindset of not allowing the free market to dictate commercial activity in "strategic sectors" is predictably replicated in Beijing's attitude toward the offshore component of energy security policy. The latter is, in the view of one German analyst, simply "too important to be left to market forces alone." That the state-based approach could actually increase energy insecurity through inefficient refining and distribution practices, which lead to artificially higher prices, is seemingly of little concern to Beijing, reaffirming the reality that Chinese economic objectives (which would be better met by a greater number of domestic and international private-sector players operating under market principles) remain largely subordinate to political considerations.

On the back of the de facto guarantee of cheap and plentiful credit from China's compliant "Big Four" state-owned banks, China's oil companies have spread their financial interests far and wide. After much internal discussion in the mid-1990s, Chinese National Oil Companies (NOCs) such as Sinopec, CNPC and CNOOC began investing in countries such as Sudan, Venezuela,

Iraq, Kazakhstan, Ecuador, Indonesia, Iran, and Myanmar. When President Hu assumed power in 2003, Beijing expanded into African countries such as Algeria and Gabon, into the Middle East (Egypt and Iran), and into countries such as Argentina, Brazil, and Canada. NOCs now operate in over 30 countries and have equity production (i.e., the SOEs own or have controlling stakes in actual offshore oilfields) in at least 20 countries.

Figures for 2010 reveal that 23 percent of China's offshore equity oil production was in Kazakhstan, 15 percent in both Sudan and Venezuela, 14 percent in Angola, five percent in Syria, four percent in Russia, and three percent in Tunisia. Nigeria, Indonesia, Peru, Ecuador, Oman, Columbia, Canada, Yemen, Cameroon, Gabon, Iraq, Azerbaijan, and Uzbekistan make up the remaining 20 percent. Chinese offshore equity production amounts to around 28 percent of total current Chinese importing requirements, which were 4.8 million barrels per day in 2010. NOC owned/controlled offshore sites are currently producing around 1.37 million barrels per day, and known new purchases of offshore sites suggest that Chinese NOCs' overseas equity production will reach around two million barrels per day by 2020, which is significantly less than the official 2020 target of four million.

For Beijing, diversifying its guaranteed sources of oil is an essential hedge against disruption in normal offshore supply caused by commodity markets. The geoeconomic approach of heavy reliance on purchasing oil in international commodity markets leaves the Chinese economy exposed to spikes in oil prices. Such price spikes could be the result of political unrest in a major oil exporting country such as Saudi Arabia, geopolitical events that might lead to Western sanctions against a major supplier such as Iran, or a rise in global demand, which occurred just prior to 2008. Locking up guaranteed offshore sources of oil is not necessarily, however, an effective hedge in the event of a major war with the United States, since Chinese offshore equity oil still needs to be transported to China, which the United States could interdict during a war.

Hedging against the whims and vagaries of commodity markets means that Chinese NOCs participate in global commodity markets when conditions are benign. Although Chinese companies are not transparent about transactions in oil markets, there is strong anecdotal evidence from 2008-2010 that Chinese NOCs sold a significant portion of their offshore equity oil on local and international markets under benign conditions instead of shipping the resource back into China. This makes sense given the cost of transporting oil from many equity fields. Also, China does not have the domestic refining capabilities necessary to handle such additional volume, meaning it would have to rely on costly third-party refineries. This would be much more expensive than sourcing oil on international markets. But locking up resources through offshore equity oil

gives China the option of hedging, or of bypassing, commodity markets should they deteriorate.

Implications of a "China First" Hedge

Even though other countries such as India use NOCs to acquire resources and technology in international energy markets, many western governments are uniquely wary and even distrustful of Chinese intentions for several reasons. The intimate and opaque role of the CCP in shaping the commercial activities of SOEs in domestic and international markets creates suspicion. China's 2001 ascension into the World Trade Organization (WTO) heightened international expectations for China to accelerate market-based reforms, which would include extensively separating the regime and state from commercial activity. But the opposite has occurred, giving rise to legitimate fears that Chinese NOCs exist to further Chinese strategic interests abroad, in addition to engaging in normal commercial activity. For many, Beijing's apparent attempt to strong-arm Tokyo by halting exports of rare earth metals to Japan, following a 2010 confrontation in disputed waters in the East China Sea, illustrates the blurred line between resource policy and strategic policy in China.

Upstream acquisitions by Chinese SOEs tend to cause the most alarm because Chinese NOC ownership of below-ground assets plays into fears that China will lock up oil supplies and distort international oil markets to the detriment of other economies. These fears are exacerbated because Beijing's standard modus operandi is to pursue a political route for its NOCs to gain favored access with host governments, fueling suspicion that energy security is but one sub-component of broader Chinese geostrategy.

All these concerns should be considered in the context of the ongoing debate as to whether authoritarian China can emerge as a "responsible stakeholder" in a pre-existing liberal economic order. That the broad strategic competition between the United States, the leader of this liberal order, and China appears to be deepening, even as China's importance and integration into the global economy intensifies, isn't helping the situation.

Limited Implications for Energy Markets

Although Chinese NOCs have sold a significant proportion of their offshore equity oil on local and international commodity markets, that has done little to assuage fears that China could lock up equity oil supplies and potentially disrupt supplies to other markets in the future. After all, "going global" is an explicit component of the country's energy security strategy. NOCs must be treated to some degree as tools of the state, considering that Beijing periodically instructs state-owned banks to rush cheap loans to them. In the event of a significant

disruption to oil markets, the political imperative of economic growth probably means that as much offshore equity oil as is needed would be redirected to the Chinese domestic market, in order to mitigate the effects of an interruption in economic activity. However, even if one is suspicious that China would respond in this manner, it would be misguided to be too alarmist about the impact of such action on energy markets themselves.

The numbers tell the story. In 2010, Beijing's offshore equity oil production was around 1.37 million barrels per day, which meets only around 28 percent of its daily importing needs. Production by the next ten largest oil producers (not including China) is around 62.37 million barrels per day.²⁹ The global oil export trade is around 64 million barrels per day in total.³⁰ By these estimates, offshore equity oil controlled by Chinese NOCs makes up just over 2 percent of all oil exports each year.

Even by 2020, the most optimistic estimates place Chinese offshore oil equity production at 2 million barrels per day. Estimates put the global supply of oil at a plateau of around 70 million barrels per day at that time, with such production levels stable until 2035. Although such forward estimates cannot fully account for all factors (such as when peak oil is reached at certain oil fields, unrest in oil-producing countries, etc.), the point remains that Beijing's capacity to disrupt global supply and increase the energy insecurity of other states by locking in offshore oil is far less significant than some alarmist views imply.

What about oil reserves? Of the world's estimated 1.3 trillion barrels of proven oil reserves in the ground, more than half are in the Middle East, with Latin America and North America next in line. (Africa has possibly 15 percent of current proven reserves.) Major oil exporters in the Middle East—such as Saudi Arabia, Iraq, and Kuwait—in addition to other major exporters, such as Brazil, utilize their own SOEs to protect their country's interests as major producers. For Beijing's locking-in policies to significantly disrupt international markets, Chinese NOCs would have to dominate the largest Middle Eastern players by controlling oil assets in countries such as Saudi Arabia. But none of these major oil-exporting countries would want the geopolitical eruptions and economic turmoil that could follow from allowing one importer, including China, to lock in significant quantities of supply. Of all Middle Eastern oil-producing countries, only Iraq and Oman have allowed Chinese NOCs to take an equity stake in oil assets, and only in insignificant quantities.³²

Chinese loan-for-oil agreements in places such as Iran and Russia could cause alarm for some, raising fears that China would be able to lock up oil supplies even if Chinese NOCs do not actually own a significant proportion of these oil assets. Since 2009, Beijing has concluded at least 12 of these loan-for-oil deals with interests in Russia and Venezuela, in which promises are made to sell an agreed amount of oil from selected fields to China (rather than in international

commodity markets or other countries). Beijing has facilitated similar loan-for-oil deals between Chinese NOCs and oil interests in Angola, Bolivia, Brazil, Ecuador, Ghana, Kazakhstan, Russia, Turkmenistan, and Venezuela. By the end of 2010, such 'locking supply' deals were worth at least \$90 billion.³³

A closer inspection of the available information on loan-for-oil deals confirms that these arrangements are not sufficient to threaten supply to other major oil importers. The largest known Chinese long-term loan-for-oil deals signed since 2009 include a \$10 billion agreement with Brazil in February 2009, a \$4 billion agreement with Venezuela in February 2009, and a \$15 billion agreement with Kazakhstan in April 2009. Terms include Chinese NOCs buying 200,000–250,000; 200,000; and 300,000 barrels per day, respectively, at market prices. Other deals include around \$10 billion in a long-term financing plan to help state firms in Venezuela develop the Junin 4 block field, which could produce 2.9 billion barrels of oil over the next 25 years (or about 317,000 barrels per day.) Once again, China's capacity to significantly disrupt supply to other major oil importers is extremely limited at these volumes.

Finally, as peak crude oil production is reached in many existing oil fields, new fields will have to be found to meet rising oil demand. The IEA predicts that current crude oil production in existing fields, which produced 69 million barrels per day in 2010, will only produce 22 million in 2035. This means that additional capacity from new fields will need to increase by around 17 million barrels per day by 2020, and 47 million barrels per day by 2035.³⁷

From 2010–2035, Iraq, Saudi Arabia, Kuwait, Brazil, and Kazakhstan will be able to significantly increase production from new fields. Countries such as China, Russia, and Venezuela are projected to suffer significant declines in oil production during this period. Africa, which will supply approximately 12 percent of global oil resources leading up to 2035 (based on currently known recoverable oil resources),³⁸ will not be a dominant player in the future. Moving forward, the significance of the majority of Beijing's supposed portfolio of compliant states willing to sell significant oil assets to Chinese NOCs will decline in their role in global oil supply.

The Real Impact of China's Oil Diplomacy

Skepticism about the wisdom of China's geostrategic approach to energy security, particularly with respect to oil, is intensifying. Some analysts now argue that China's energy security objectives are better achieved through fuller participation in global commodity markets, while others suggest that Beijing's oil diplomacy is driving it closer toward pariah states, to China's ultimate detriment.³⁹

Chinese NOCs often pay a premium for equity oil assets, yet end up selling much of the oil to local and regional commodity markets because shipping costs Domestically, China's markets are designed to ensure that state-owned interests dominate. and inadequate domestic refining capabilities make the costs of shipping these assets home exorbitant. Loan-for-oil agreements carry considerable political and economic risk, as argued earlier. Despite the size of the firms, China's three big NOCs still lack the technology and expertise of their international rivals—meaning that exploration, extraction, refining, and distribution of these oil assets is still done inefficiently and expensively by

international standards. There is little evidence that the United States is willing and able to distort international energy markets to China's detriment, and it is access to the relatively efficient and transparent commodities markets around the world that has allowed China to fulfill its energy needs from foreign sources.

Nevertheless, Beijing's determination to hedge against a market approach to energy (i.e., sourcing oil from freely traded commodity markets) will persist. The current, somewhat counterproductive mindset is ingrained from a political economy that does not leave it to markets when it comes to every important sector of the economy. Using the hand of the state to orchestrate the rise of national champions in key markets is imperative for the CCP to retain its economic relevance in a rapidly modernizing economy. Creating enormous NOCs under instructions to "go global" is an important component of energy and economic security, and therefore regime security.

In many respects, China is exploiting opportunities left behind in countries ignored by Western firms due to those countries being pariahs and subject to sanctions, or else because they present commercial opportunities subject to unacceptably high political and economic risks. The mindset and approach of mixing politics and business, so characteristic of the operation of the Chinese political economy, generally works best in these shunned countries which are looking for valuable capital free of governance or reform conditions.

There is no evidence that China's oil diplomacy was preconceived in order to deliberately complicate U.S. and other Western interests in various parts of the world. But in the opportunistic search to lock in oil assets, Beijing has paved the way for its NOCs by deepening comprehensive relations with countries such as Iran, Sudan, and Venezuela, while Western governments have been attempting to isolate regimes in these countries.

Because China seeks privileged access or purchasing rights to oil assets for its NOCs, sweetening the deal for governments and regimes in these countries (who invariably control the vast majority of the oil assets) involves a comprehensive set of political, diplomatic, and economic incentives—not just

economic aid and financing but also diplomatic cover in institutions such as the UN Security Council. Unlike liberal democracies where strategic coordination of politics, regulatory procedure and approval, state financing and commercial interest, and popular opinion is much more difficult, the structure of China's authoritarian political economy and its practices mean that Beijing is far more willing to negotiate a deal with governments and regimes in poorer-governed countries, and is far more efficient at concluding these agreements.

n strategic sectors such as energy, winners and losers are determined by political considerations.

Beijing is well aware that it has a comparative advantage over Western governments when it comes to dealing with regimes in weak, failing, or failed states, and it is therefore unlikely to relinquish the perceived advantage. Chinese NOCs can step into Iran where Western firms have been barred by sanctions. For nations such as Angola that are unwilling or unable to meet the transparency and accountability requirements of the World Bank or other international lenders, a Chinese deal can provide an economic and political lifeline. Put simply, whenever and wherever there are significant energy assets for sale, there are few political, diplomatic, commercial, or ethical issues preventing Chinese NOCs from bidding.

It is telling that China has rejected invitations to join organizations such as the IEA, despite U.S. and IEA officials openly supporting a special non-Organization for Economic Co-operation and Development (OECD) membership for China. One reason for Chinese reticence is the obligation to be more transparent about its energy agreements with other countries (particularly with Sudan and Iran). Beijing often sees multilateral cooperation as a "Trojan Horse" for furthering U.S. and Western interests.⁴⁰

It's Affecting Diplomacy, not Energy

There is much evidence to suggest that China's geostrategic approach does not actually further the country's energy security objectives, especially when it comes to securing oil. The vast majority of China's oil imports come from openly traded local and international commodity markets, and the most dangerous threat to that supply are domestic disruptions in major oil-producing nations such as Saudi Arabia—factors beyond Beijing's control. Moreover, the peacetime interdiction of China-bound oil tankers by the U.S. Navy is inconceivable since it would severely damage U.S. standing as a provider of impartial public security goods,

decimate the appetite in many capitals for hosting U.S. naval assets, and wreak enormous damage to the U.S. and global economy.

In the face of such realities, it is tempting to conclude that Chinese energy insecurities are grounded on a senseless paranoia and misunderstanding, and therefore it should be a relatively easy argument to convince Beijing to abandon its geostrategic mindset in the search for oil. Yet, Beijing's mindset needs to be placed alongside enduring domestic and geopolitical factors that work against a more "enlightened" market-based view of securing its energy needs. Domestically, markets are designed to ensure that state-owned interests dominate. In key strategic sectors such as energy, winners and losers are not determined through the operation of the free market, but by political interests and considerations. Likewise, in securing oil from overseas, Beijing's China-first mindset prevails.

Nevertheless, China's energy policies are not significant enough to cause significant disruptions in global energy markets. The greatest casualty of Chinese energy policies is that they provide diplomatic protection to countries such as Iran, and cause diplomatic problems for the United States, the West, and those seeking to reinforce the liberal international order more broadly. Even if the best we can hope for is Chinese pragmatism, the journey will still be a turbulent one. And energy policy and competition over resources is just one manifestation, albeit an important one, of this troubling reality.

Notes

- 1. Robert A. Manning, "The Asian Energy Predicament," Survival 42, no. 3 (Spring 2000): pp. 73–88.
- 2. See "World coal prices set to rise in the next 5 years: IEA," *People's Daily*, December 15, 2011, http://english.peopledaily.com.cn/90778/7677210.html.
- 3. U.S. Energy Information Administration, "Country Analysis Briefs-China," http://www.eia.gov/cabs/china/Full.html.
- 4. See "BP Statistical Review of World Energy 2011," http://www.bp.com/sectionbody-copy.do?categoryId=7500&contentId=7068481.
- 5. Ibid
- 6. See Marc Lanteigne, "China's maritime security and the 'Malacca Dilemma'," Asian Security 4, no. 2 (2008): 143–161.
- 7. "China's Premier Wen Jiabao Targets Social Stability," BBC, March 5, 2011, http://www.bbc.co.uk/news/world-asia-pacific-12654931
- 8. See John Lee, Will China Fail? (Center for Independent Studies Press, 2009), pp. 53–106; David Li, "Large Domestic Non-Intermediated Investments and Government Liabilities Challenges Facing China's Financial Sector Reform," Tsinghua University's Center for China in the World Economy Paper, April 4, 2006.
- See "BP Statistical Review of World Energy 2011," http://www.bp.com/sectionbodycopy.do?categoryId=7500&contentId=7068481.
- See "China announces 16% cut in energy consumption per unit of GDP by 2016," Xinhua, March 5, 2011, http://news.xinhuanet.com/english2010/china/2011-03/05/c_ 13761876.htm

- 11. See Minxin Pei, China's Trapped Transition (Cambridge, MA: Harvard University Press, 2006).
- 12. See Michael F. Martin, "China's Banking System: Issues for Congress," Congressional Research Service Report, February 20, 2012, www.fas.org/sgp/crs/row/R42380.pdf
- 13. See Yasheng Huang, Capitalism with Chinese Characteristics: Entrepreneurship and the State (New York: Cambridge University Press, 2008), pp. 50–108.
- See Andrew Szamosszegi and Cole Kyle, "An Analysis of State-Owned-Enterprises and State Capitalism in China," U.S.-China Economic and Security Review Commission, October 26, 2011, http://www.uscc.gov/researchpapers/2011/10_26_11_CapitalTrade-SOEStudy.pdf
- 15. See John Lee, "China's Corporate Leninism," *The American Interest* 7, no. 5, May/June 2012: pp. 36–45.
- 16. Ibid.
- 17. "Global 500 for 2011", Fortune Magazine, http://money.cnn.com/magazines/fortune/global500/2011
- 18. See Minxin Pei, China's Trapped Transition (Mass: Harvard University Press, 2006.)
- 19. See Jaewoo Choo, "Energy cooperation problems in Northeast Asia: Unfolding the reality," *East Asia* 23, no. 3 (2006): pp. 91–106.
- Suisheng Zhao, "China's Global Search for Energy Security: Cooperation and Competition in the Asia-Pacific," *Journal of Contemporary China* 17, no. 55 (May 2008): pp. 207–227, at 210.
- 21. See Heinrich Kreft, "China's quest for energy," *Policy Review*, no. 139 (October 1, 2006), http://www.hoover.org/publications/policy-review/article/7941.
- 22. Julie Jiang and Jonathan Sinton, "Overseas Investments by Chinese National Oil Companies," International Energy Agency, February 2011, http://www.iea.org/papers/2011/overseas_china.pdf.
- 23. U.S. Energy Information Administration, "Country Analysis Briefs–China", http://205. 254.135.7/countries/country-data.cfm?fips=CH&trk=c.
- 24. Ibid.
- 25. Ibid
- 26. Jiang and Sinton, "Overseas Investments by Chinese National Oil Companies," p. 17.
- 27. Ibid., pp. 7-8.
- 28. See Keith Bradsher, "Amid Tension, China Blocks Vital Export to Japan," *New York Times*, September 22, 2010, http://www.nytimes.com/2010/09/23/business/global/23rare. html?pagewanted=all.
- 29. Figures calculated from CIA, "The World Factbook," https://www.cia.gov/library/publications/the-world-factbook/fields/2011.html. The top 11 oil producers in descending order are: Saudi Arabia, Russia, the United States, Iran, China, Canada, Mexico, the United Arab Emirates, Brazil, Iraq, and Nigeria.
- 30. Calculated from 2011 IEA and British Petroleum data.
- 31. International Energy Agency, World Energy Outlook 2011 (Paris: OECD Press, 2011), p. 123.
- 32. See Jiang and Sinton, "Overseas Investments by Chinese National Oil Companies," pp. 39–43; and U.S. Energy Information Administration, "Country Analysis Briefs-China."
- 33. Ibid (Jiang and Sinton)., pp. 22–23.
- 34. FACTS Global Energy, "China's overseas oil and gas investment, recent developments," FACTS Global Energy, no. 33 (2009); CNPC Research Institute of Economics & Technology, Report on Domestic and Overseas Oil & Gas Industry

- Development in 2009 (Beijing: CNPC Research Institute of Economics & Technology, 2009).
- 35. Jiang and Sinton, "Overseas Investments by Chinese National Oil Companies," p. 41.
- 36. "China and Venezuela sign agreements on Junin-4 and a long-term financing loan," CNPC, April 19, 2010, http://www.cnpc.com.cn/en/press/newsreleases/ChinaandVenezuela_signagreementsonJunin4andalongtermfinancingloan.htm.
- 37. International Energy Agency, World Energy Outlook 2011.
- 38. German Federal Institute for Geosciences and Natural Resources, Energy Resources 2010 (Hanover: BGR, 2010); U.S. Geological Survey, World Petroleum Assessment (Boulder: USGS, 2010); International Energy Agency, World Energy Outlook 2011.
- 39. Andrew B. Kennedy, "China's New Energy-Security Debate," Survival 52, no. 3 (2010): pp. 137–158.
- 40. See John Lee, "An Exceptional Obsession," *The American Interest* 5, no. 4 (May/June 2010): pp. 35–45.