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Foreword

Over the years I have pointed out that China's rise as a global power is likely to be the most significant event in international affairs in the 21st century. One dimension of China's growing impact is its rapid emergence as a major force in world energy markets and global energy geopolitics. Beijing's booming energy consumption and intensifying search for energy security have raised a new range of contentious issues between China and the United States that are adding a new layer of issues to an already complex and dynamic relationship. The clearest example of growing problems was the Congressional furor surrounding the China National Offshore Oil Company's (CNOOC) bid for U.S. oil company Unocal last summer, but there are also added U.S. concerns revolving around China's growing energy ties with energy-rich problem states, such as Iran and the Sudan, and apparent efforts to "lock up" equity oil supplies around the globe. Alternatively, from China's perspective, the Congressional furor over the CNOOC-Unocal bid and U.S. opposition to its involvement in problem states confirm the view of many in Beijing that the United States is intent on blocking China's efforts to secure future energy supplies. In sum, energy now is adding a new layer of mistrust and suspicion to U.S.-China relations that threatens to further undermine efforts to forge a cooperative and constructive long-term relationship.

This issue of the *NBR Analysis* examines China's global search for energy security, draws implications for U.S. global energy and security interests, and recommends policies that the authors contend will allow the United States to respond more effectively to China's expanding global energy impact.

Kenneth Lieberthal and Mikkal Herberg bring an exceptional blend of experience from government, business, and academe to the special study. Kenneth Lieberthal is currently Arthur F. Thurnau Professor of Political Science at the University of Michigan and formerly Senior Director for Asia on the National Security Council. Mikkal Herberg is Director of the Asian Energy Security Program at NBR and previously spent twenty years in international strategic planning roles for a major U.S. oil company.

NBR wishes to thank The Henry M. Jackson Foundation and The William Davidson Institute of the University of Michigan for their generous support for and co-sponsorship of the research for this study, and to express appreciation to the U.S. Department of

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Richard J. Ellings President The National Bureau of Asian Research

China's Search for Energy Security: Implications for U.S. Policy*

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and

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Executive Summary

This report examines China's global search for energy security, draws implications for U.S. global energy and security interests, and recommends policies that will allow the United States to respond more effectively to China's expanding global energy impact.

Main Argument:

China is rapidly emerging as a major force in both world energy markets and global energy geopolitics, and key aspects of China's new global energy activities are creating new challenges for U.S.-China relations. As the world's two largest energy consumers, however, the United States and China share key common interests in the energy sector. Both nations can benefit if improved cooperation replaces the current drift toward a competitive energy relationship. The issue of trust will inevitably weigh heavily in determining future levels of cooperation. This paper proposes a sober U.S. policy that will enhance trust and strengthen multilateral, regional, and bilateral cooperation on energy issues.

Policy Implications:

There are a number of ways to promote constructive relations between the United States and China:

- The United States should seek creative ways to integrate China into the International Energy Agency (IEA) and the Group of Eight (G-8). By helping to give Beijing a "seat at the table," the United States can increase the chances that China will become a "stakeholder" in the major efforts of these institutions to deal with energy supply issues.
- The United States should begin taking measures to promote the development of a Northeast Asia Security Community consisting of the United States, Japan, the Republic of Korea (ROK), China, and Russia. This group over time can take up regional energy issues.
- Washington needs to promote an invigorated bilateral energy dialogue with Beijing. The United States would benefit from a set of policies that focuses on achieving the following goals: raising the importance of energy in bilateral dialogue at a policymaking level, avoiding measures and rhetoric that needlessly aggravate China's sense of energy vulnerability, discouraging mercantilist competition for oil supplies in China and elsewhere in Asia, and encouraging energy efficiency, diffusion of new energy-saving technologies, and energy market reform in China.

China is rapidly emerging as a major force in both world energy markets and global energy geopolitics. This emergence reflects the scale of China's rising oil demand and Beijing's increasingly active strategic diplomacy designed to secure future energy supplies. Now the second largest oil consumer in the world and the third largest oil importer, China has experienced oil demand growth that has accounted for nearly onethird of the world's total oil demand growth during the past decade, and is adding the equivalent of a medium-size country to world oil demand each year. In the course of less than a decade, China's three national oil companies (NOC) have become significant new players on the global oil industry scene, with increasing investment stakes in the Persian Gulf, Central Asia, Africa, and the western hemisphere. China is now an important factor that impacts world oil demand and prices, production prospects in key energyexporting countries, and the competitive rules of the game for the world's international oil companies. Moreover, energy investments abroad are expanding China's diplomatic role in key energy-producing regions, most importantly the Persian Gulf, Central Asia, Africa, and Russia. Additionally, China's efforts to secure energy supplies and transport routes in Asia are increasingly affecting the shape and tenor of China's diplomatic ties, as well as rivalries, in Northeast and Southeast Asia.

The United States, on the other hand, is the reigning "superpower" of global energy and, therefore, China's energy "rise" potentially holds major implications for U.S. power and influence. The United States imports nearly thirteen million barrels per day (MMBD) (almost twice the total oil consumption of China, the world's second largest oil consumer) and accounts for one-quarter of the world's daily oil consumption. The United States is the third largest oil producer in the world after Saudi Arabia and Russia. As the dominant geopolitical power in the Middle East and Persian Gulf, the United States has thrice in the past two decades put its military might behind securing access to Persian Gulf oil supplies. In the wake of September 11, that power and influence are also being extended into Central Asia. The U.S. Navy controls the sea lines of communication (SLOC) in all the key energy transit bottlenecks, including the Straits of Hormuz, the Malacca Straits, and the Southeast Asian sea lanes. The United States is also a dominant power in global energy institutions such as the International Energy Agency (IEA), and is home to many of the largest and most technologically sophisticated energy companies in the world. As John Mitchell, a well-known specialist on the geopolitics of energy, has

¹ These include military interventions in Iraq both in 2003 and in 1990–91 and the Persian Gulf "tanker war" in the mid-1980s.

noted, "For every issue on the energy geopolitical agenda, there is at least one telephone line to Washington."²

Consequently, China's rapidly rising global energy impact and diplomatic reach pose many of the same challenges for U.S.-China relations as does China's broader economic and geopolitical "rise." Yet there still is no systematic analysis of either the energy and strategic implications for the United States of China's emergence as a global energy player or how the United States should respond. Does China's booming oil demand and seemingly more statist approach to securing future oil supplies really constitute a threat to U.S. economic and energy security interests? If so, then how? Is China's oil demand a threat to the stability of global oil markets? Will China's growing influence in key energy regions and countries significantly challenge U.S. diplomacy, or can Beijing be persuaded to choose an overall energy policy more consistent with U.S. interests? To use U.S. Deputy Secretary of State Robert Zoellick's term, can China become a "stakeholder" in the global energy system's norms and rules?³

Both the United States and China will benefit if they can develop a collaborative relationship on energy issues—as opposed to the current trajectory characterized by growing mistrust, suspicion, and competition. In reality, the fundamental global energy interests of China and the United States largely converge. China's new energy security challenges mirror the United States' own long-standing energy security challenges. Both countries share an interest in avoiding global supply disruptions, maintaining stability in the Persian Gulf, accelerating the development of new oil and gas resources, expanding the development and use of clean coal technologies, increasing global energy supply diversification, creating greater transit and fuel flexibility, expanding and improving emergency oil-sharing arrangements, and managing the environmental fallout from unrestrained fossil fuel consumption. What can the United States do to make constructive cooperation more likely? Is attaining such cooperation a feasible objective for U.S. policy?

Thus far the U.S. response to China's energy rise has been relatively ad hoc, reactive, and counterproductive. Compounded by China's own lack of transparency, U.S. reactions have suffered from a poor understanding of China on many levels, including China's energy dilemmas, the complex interests driving Beijing's global energy approach, the goals and relationships that characterize Chinese energy institutions and

² John V. Mitchell with Peter Beck and Michael Grubb, *The New Geopolitics of Energy* (London: Royal Institute of International Affairs, 1996), 186.

³ See Robert B. Zoellick, "Whither China: From Membership to Responsibility?" (speech, National Committee on U.S.-China Relations, New York City, September 21, 2005); and Richard Baum, Kurt M. Campbell, James A. Kelly, and Robert S. Ross, "Whither U.S.-China Relations?" *NBR Analysis* 16, no. 4 (December 2005).

state energy companies, and the linkages between energy and other issues in the People's Republic of China (PRC). U.S. Congressional reaction to China National Offshore Oil Corporation's (CNOOC) 2005 bid for Unocal both revealed how little some U.S. policymakers understand about China's global energy push and showed how divisive these issues have become for an already strained U.S.-China relationship. The failed bid also demonstrated that, in today's atmosphere of high energy prices and fears over long-term energy scarcity, both the United States and China are focused intently on their national energy security and tend to assume the worst of the other's intentions. Moreover, the energy policymaking institutions of both China and the United States make effective energy cooperation very difficult.

Therefore, the central question hinges on whether the United States and China will be able to reduce their existing mistrust, which is exacerbated by broader strategic tensions, and devise prudent and serious ways to begin working together to achieve mutual interests in energy. In fact, energy cooperation could actually contribute to building the trust required for potentially broader international cooperation between China and the United States.

The United States and China seem to hold fundamentally different views of global energy markets. This reality makes effective dialogue on energy issues both more difficult and more necessary. China's energy strategy currently appears rooted in a

statist, mercantilist mentality among political leaders in Beijing. The United States, on the other hand, has a stated policy of relying largely on global markets to deliver energy supply security. The United States does not always fully appreciate how its own colossal weight in global energy and geopolitics affects China's concerns regarding U.S. ability to threaten China's energy interests. Ed Morse, an expert on energy and politics, sums up the problem by asserting that, "The U.S. is mostly

"The United States does not always fully appreciate how its own colossal weight in global energy and geopolitics affects China's concerns regarding U.S. ability to threaten China's energy interests."

'brawn' and limited 'brain." Suspicions remain high both in Beijing and Washington regarding the other's intentions on key energy security and supply questions.

⁴ In reality, this policy has been augmented over the past 50 years by major interventions of U.S. power, influence, and diplomacy designed to keep oil flowing to world markets.

⁵ Edward L. Morse, "The Oil Market in 2006: Observations on Fundamentals and Geopolitics" (presentation, Washington Institute for Near East Policy, November 29, 2005).

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Without a more sophisticated policy response in both Washington and Beijing, the risk is that energy issues are becoming not a source of constructive cooperation but rather a deepening source of competition, misperceptions, and excuses for obstructing one another's interests. If Beijing believes that the United States is attempting to use energy politics as an instrument to weaken and contain China, then Beijing will be more likely to use its growing energy influence to frustrate U.S. foreign and security policies. The array of negative results from such a scenario might include increasing Chinese "hoarding" of oil and natural gas fields and supplies, tying Chinese energy investments abroad ever more closely to dubious regimes, promoting security cooperation with adversarial governments, and politicizing global energy markets. Such fallout would also increase the leverage of government hard-liners in Beijing who want to develop blue-water naval capabilities to challenge U.S. control of the SLOCs through which large shares of China's future oil and natural gas supplies will flow.6 A wide range of other negative outcomes could be imagined. It is therefore in the best interests of both countries to try to understand each other's energy insecurities and find new ways to work toward cooperative outcomes.

The purpose of this study is to recommend U.S. policies that will improve the chances that the United States and China will be able to build upon their objective mutual interests in energy security. The study is divided into four sections. The first section outlines the domestic energy roots and key international dimensions of China's so-called go-out strategy and explains why energy security has taken on such strategic importance to Beijing's leadership. Section two examines the apparently "mercantilist" character of the go-out strategy and suggests that it is much less state-directed, coherent, and strategic than generally assumed by U.S. policymakers. The third section assesses the validity and salience of the main concerns that have emerged among U.S. policymakers regarding the impact on vital U.S. interests of China's global energy search, and parses the issues into those impacting energy markets and those impacting geopolitics. Part four outlines the major challenges to a more constructive dialogue between the United States and China on energy security issues and proposes specific U.S. policy initiatives to enhance trust in the energy sector and to strengthen multilateral, regional, and bilateral cooperation on energy issues.

⁶ China currently relies upon the United States for protection of the SLOCs.

China's Go-Out Strategy

The Roots of China's Energy Insecurity

China's growing dependence on imported energy, in particular oil, and recent moves abroad by Chinese NOCs to secure physical access to future supplies have been documented in a number of recent studies. In order to appreciate why access to energy supplies abroad has become such a critical economic and political concern for Beijing's leadership, however, several key points warrant particular attention. First, at a visceral level, China's leaders fear that domestic energy shortages and rising energy costs could undermine the country's economic growth and thus seriously jeopardize job creation. For a regime that increasingly stakes its political right to rule on economic performance and rising standards of living, the threat of economic stagnation raises real risks of social instability, which could in turn threaten the continued political monopoly of the Chinese Communist Party (CCP). Hence, energy security is a strategic domestic political concern for the leadership. Against this backdrop, Beijing has been further alarmed by a huge rise in global energy prices over the past three years and the increasing specter of long-term global energy "scarcity."

China's strong economic growth is spurring a concomitant growth in energy demand that together are outstripping domestic energy supply and infrastructure capabilities. This supply-demand gap will become more acute over time, particularly in light of the fact that, ever since 2000, China has become far less efficient in energy use per incremental dollar of gross domestic product (GDP). Oil is a particularly sensitive problem. Over the next fifteen years, demand is expected to roughly double. By 2020 China will likely import 70% of its total oil needs, compared to 40% today (see **Table 1**).8 In the long term, oil demand growth will also be driven by an enormous increase in the

⁷ See Philip Andrews-Speed, Xuanli Liao, and Ronald Dannreuther, "The Strategic Implications of China's Energy Needs," Institute for International Strategic Studies, Adelphi Papers no. 346, 2002; Erica Strecker Downs, *China's Quest for Energy Security* (Santa Monica: RAND, 2000); Erica Strecker Downs, "China's Energy Security" (unpublished dissertation, Princeton University, 2004); Joe Barnes, "Slaying the Dragon: The New China Threat School," in *China and Long-Range Asia Energy Security: An Analysis of the Political, Economic and Technological Factors Shaping Asian Energy Markets*, Baker Institute for Public Policy, April 1999; International Energy Agency (IEA), "China's Worldwide Quest for Energy Security," Paris, 2000; U.S.-China Economic and Security Review Commission, "China's Energy Needs and Strategies," Washington, D.C., October 30, 2003; and Ross H. Munro, "Chinese Energy Strategy," in *Energy Strategies and Military Strategies in Asia*, report for the Office of Net Assessment, Department of Defense, 1999.

⁸ See IEA, "World Energy Outlook 2004," October 2004, http://www.iea.org/Textbase/publications/free_new_Desc.asp?PUBS_ID=1266; and U.S. Department of Energy, Energy Information Administration (EIA), "2005 International Energy Outlook," July 2005, http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2005).pdf.

Table 1: China	Oil Demand and 1	Imports (MMBD)

	2000	2004	2010	2020	2020* Imports	Import Share
Actual (BP 2005)	5.0	6.7				
IEA (WEO 2004)			7.9	11.6	7.1	67%
DOE (IEO 2005)			9.2	12.3	8.8	72%
East-West Center (3/05)			8.6	12.3	8.8	72%
IEE Japan (3/04)			7.3	12.0	8.5	71%
Merrill Lynch (11/04)		10.0				

^{*} Assuming a 3.5 MMBD domestic production.

number of vehicles in China, from today's level of approximately 22 million to estimates ranging from 120 to 150 million vehicles by 2020.9

Consequently, China will become heavily dependent upon the Persian Gulf to supply a large share of its future oil needs, and an increasing share of China's oil imports will have to transit vulnerable maritime choke points. The IEA predicts that, as of 2015, 70% of China's oil imports will come from the Middle East, with other significant shares coming by tanker from Africa, by pipeline and rail from Russia, and by pipeline from Central Asia. More than 50% of China's oil will have to transit the Malacca Straits.

The same long-term trends are likely to hold for China's natural gas needs, although import dependence will probably accelerate only after 2010. The U.S. Department of Energy forecasts that imports from Southeast Asia, the Persian Gulf, Africa, and Russia will account for 40% of China's gas needs by 2025.¹¹

In the face of mushrooming energy demand, other segments of China's domestic energy system are also experiencing intensifying supply bottlenecks, including severe (if temporary) shortages of electricity and bottlenecks in coal production and transportation. These shortages are adding to the atmosphere of crisis in the energy sector and aggravating the leadership's sense of vulnerability to supply disruptions.

⁹ The IEA forecasts that total vehicle ownership will reach 90 vehicles per 1,000 people by 2030 when total vehicle stock in China is expected to reach 130 million, IEA, "World Energy Outlook 2004." The EIA estimates that if the present patterns persist, China's car ownership will exceed that of the United States by 2030. See EIA, "2005 International Energy Outlook." ExxonMobil estimates that China's total light vehicle fleet could reach over 100 million by 2020, and over 200 million by 2030,"2005 Energy Outlook: China in Perspective" presentation, "China's Search for Energy Security and Implications for the U.S." NBR conference, September 27, 2005, Washington, D.C.

¹⁰ IEA, "World Energy Outlook 2004."

¹¹ EIA, "2005 International Energy Outlook."

China's energy policies and institutions accentuate demand growth and aggravate energy supply and infrastructure shortages. Subsidized energy prices promote excessive demand growth, which in turn increases pressure on supplies and infrastructure to move energy around the country. At the same time, investment in improving energy efficiency is badly underfunded.¹² Although Beijing has begun to recognize the need for demand-side energy reforms, the government has moved cautiously out of fear of the impact of higher energy prices on employment, inflation, and social stability. There appears to be a growing recognition of these problems among China's top leadership. Such concerns are evident in recent efforts to reorganize energy policymaking, most notably the 2005 establishment of a new State Energy Office, which reports to a new Energy Leading Group headed by Premier Wen Jiabao.¹³ Nevertheless, the pace of reform remains slow.

In short, China's domestic energy supply-demand gap poses challenges to ongoing rapid economic growth. As this problem becomes more acute over time, energy imports will play an increasing role in China's economy. Put simply, energy security has become an issue of the "high politics" of national security, not just the "low politics" of domestic economic policy.

The Roots of China's Go-Out Strategy

Beijing is acting according to the principle that energy security is too important to be left to the markets. China has thus decided to adopt the go-out strategy. Briefly, the main elements of the go-out strategy include a more active, energy-centric form of commercial diplomacy by Beijing's leaders within the key energy exporting regions, combined with a widening campaign by China's three major NOCs—CNPC, Sinopec, and CNOOC—to secure equity investments in oil and gas fields abroad (i.e., physical control over oil supplies) and a diversified slate of long-term crude and liquefied natural gas (LNG) supply contracts from a broad range of exporters to meet future needs. These measures are further augmented by state diplomacy and company efforts to promote development of new oil and natural gas pipelines that will diversify future transport routes for energy imports.

China's national energy plan assumes China will quadruple GDP by 2020, while only doubling energy consumption—a repeat of what occurred during the two decades from 1980 to 2000. In recent years, the level of government investment in improving energy efficiency has actually fallen, however, and is probably only one-third of the annual amount needed to achieve the 2020 target, see *Evaluation of China's Energy Strategy Options*, China Energy Group, Lawrence Berkeley National Laboratory, May 2005.

¹³ "China Creates Office to Safeguard Energy," *China Daily*, April 28, 2005, http://www.chinadaily.com.cn/english/doc/2005-04/28/content_438342.htm.

China's NOCs have acquired growing equity oil stakes and long-term crude oil contracts in the Persian Gulf, anchored by deep involvement in Iran and more recently by growing energy and diplomatic ties with energy giant Saudi Arabia. China's heavy focus on Central Asia has centered on the acquisition of sizeable equity oil stakes in

"The mercantilist cast of the go-out strategy reflects China's sense of weakness and vulnerability regarding reliable access to energy supplies." Kazakhstan that will be shipped via a long-distance pipeline currently being built to western China. Russia has become an important crude oil supplier through its rail shipments to northeastern China, and has intermittently planned to build a

large crude oil pipeline from East Siberia to China. Japan, however, continues to try and persuade the Russians to build the pipeline to the Pacific coast instead. Despite many attempts, China has not yet been successful at establishing an equity oil or gas position in Russia.

China's NOCs have also built a large portfolio of oil stakes and supply contracts in Africa, centered on the NOCs' largest equity production position in Sudan's oil industry, along with growing investments and supply contracts with major west African oil exporters Nigeria and Angola. In the western hemisphere, China owns growing equity oil stakes in Canada's western heavy-oil belt and is building ties with Venezuela. China has recently acquired equity investments through a major acquisition in Ecuador, and a strategic energy alliance with Brazil's Petrobras. In Southeast Asia, China's energy acquisitions and supply contracts are growing rapidly in Indonesian oil and LNG, Australian LNG, and natural gas supplies and potential oil pipeline deals with Myanmar.

All told, China's NOCs now have equity oil production overseas of 400–500 thousand barrels per day (MBD), equal to approximately 15% of China's oil imports. Beijing has signed "strategic" energy alliances of one sort or another with at least nine countries, including Iran, Sudan, Russia, Kazakhstan, Saudi Arabia, Brazil, and Venezuela. Thus, while seeking to expand its equity oil and state-to-state (or NOC-to-NOC) position, China still must rely on the market for the vast majority of oil imports (see **Table 2**).

The mercantilist cast of the go-out strategy reflects China's sense of weakness and vulnerability regarding reliable access to energy supplies. This sense of weakness provides the rationale for direct state intervention and support. From a U.S. policy perspective, three aspects of this viewpoint stand out. First, this mercantilist attitude is strongly influenced by a general mistrust of global energy markets. China's leaders believe they

Table 2: Chinese Petroleum Companies

Domina	Ċ	CNPC	Sin	Sinopec	CN	CNOOC	Other*	Total	tal	7 A
regions	# of deals	% of deals	# of deals	% of deals	# of deals	% of deals	# of deals	# of deals	% of deals	ney Countries
Eurasia	16	22	3	6	0	0	2	21	15	Russia, Kazakhstan, Uzbekistan
Middle East	8	10	11	34	0	0	9	25	18	Saudi Arabia, Oman, Iran
Africa	19	26	11	34	4	25	3	37	27	Sudan, Angola, Algeria, Nigeria
Northeast Asia	1	1	0	0	1	9	1	3	2	Mongolia
Southeast Asia	15	20	3	6	11	69	2	31	22	Indonesia, Australia, Myanmar, Papua New Guinea
Latin America	11	15	3	6	0	0	2	16	11	Venezuela, Brazil, Ecuador, Peru
North America	4	5	1	3	1	9	0	9	4	Canada
Company Total	74	100	32	100	17	100	16	139	100	

Note: Information on China's global energy investments are taken from The National Bureau of Asian Research's Asian Global Energy Investments Database. The graph above is adapted from Yang Bonny Lin's unpublished paper "Weak Vertically and Competing Horizontally: An Analysis of Relations between and within the Chinese Central Government and National Oil Companies," University of Michigan, 2005. Numbers above do not include memorandums of understanding or proposed investments.

^{*} Major subsidiaries of CNPC, Sinopec, and CNOOC include: Sinochem, Zhuhai Zhenrong, China Aviation Oil Company, China National Oil and Gas Exploration and Development Corporation, China National Electronic Equipment Corporation, and China Oilfield Services Limited.

are facing an unstable and unforgiving global energy market that is dominated by sophisticated global oil companies, Western industrial countries, and unreliable and unstable-oil exporting countries. The market alone cannot be counted on to supply oil on demand and at an acceptable price. Because supplies are subject to disruption from numerous geopolitical risks, the only way to ensure reliable supplies is through the physical control of oil supplies directly from major producers, state-to-state cooperative agreements, and transport systems in which China has a stake.

Second, distrust of energy markets is aggravated by the perception that these markets are dominated by the United States, a perception that overlaps with concerns that the United States is out to exploit China's energy weakness. Based upon strategic dominance in the Persian Gulf, the U.S. Navy's control over critical energy transport sea lanes, and enormous power in the global oil industry and institutions, many believe that the United States exerts a powerful influence on global oil prices and flows. ¹⁴ The projection of U.S. power into the Persian Gulf and Central Asia in the wake of September 11 has further aggravated these fears. Strident rhetoric in the United States during the 2005 CNOOC-Unocal episode has strongly reinforced these perceptions. ¹⁵

Third, in terms of energy sector capabilities, Beijing feels that China is working from a position of weakness and must play "catch-up." Excluded from the major institutions governing global oil cooperation (such as the IEA) and forced to rely upon NOCs that are relatively new and weak competitors in the dynamic global oil industry, China feels dominated by the large, powerful, and technologically sophisticated oil companies that Beijing feels help to defend the interests of Western industrial countries.

All these factors combine to give a mercantilist character to China's energy security drive and to Beijing's rhetoric about its energy security concerns. And this perception of China's strategy strongly conditions the U.S. reaction, which characterizes China's strategy as a state-led challenge to U.S. energy and security interests. Such perceptions suggest the need for a much closer look at how China's global energy strategy is actually developed.

¹⁴ For an interesting insight regarding Beijing's orientation on these issues, see Xiaojun Ma, "East Asia Energy Strategy: Conflict or Cooperation" (speech, International Strategy Research Institute, AEI/CCPS Conference, Washington, D.C., May 9, 2005).

¹⁵ See, for example, Hon. C. Richard D'Amato, "National Security Dimensions of the Possible Acquisition of UNOCAL by CNOOC and the Role of CFIUS," statement presented before the House Committee on Armed Services, July 13, 2005.

A Mercantilist PRC Energy Policy?

As China's energy footprint grows, what matters most from a U.S. perspective is the extent to which China's efforts to increase energy security are creating potential future problems that will affect a widening set of U.S. energy and security interests. Whether the United States and China will be able to work together to manage these issues more effectively remains to be seen.

A key question regarding the ability of the United States and China to cooperate on global energy issues is whether China's outward energy thrust represents an organized, strategic challenge to U.S. energy and security interests, as many in Washington believe, or, alternatively, is a more malleable, loosely connected set of policies that are not directly aimed at the United States but have collateral impacts on a number of key U.S. interests.

In reality, the latter view is far closer to the truth. A close examination of China's energy security policymaking suggests that, rather than a coherent strategy, Beijing's

energy security policies are more a collection of ad hoc initiatives—some coordinated, some not, and some state driven, others market and commercially driven. Although China has adopted what Phillip Andrews-Speed terms a "strategic" approach to energy,¹⁶ there is no central policy institution that effectively oversees this strategy. Rather, Chinese leadership and

"...rather than a coherent strategy, Beijing's energy security policies are more a collection of ad hoc initiatives—some coordinated, some not, and some state driven, others market and commercially driven."

supporting institutions seem to adhere to a more broad "mentality" in which the government, NOCs, and China's diplomatic corps all work to some extent in the same direction.¹⁷

As U.S. policymakers take account of the overseas investments by China's NOCs, they must also recognize that these NOCs are not driven solely by state exhortation and diplomatic and financial support. As these NOCs gain experience in the global

¹⁶ Andrews-Speed et al., China's Energy Needs.

¹⁷ Erica Downs, who has written extensively on this process, uses a traditional Chinese saying to describe it as, "Each soldier fighting his own war." See Erica S. Downs, "The Chinese Energy Security Debate," *China Quarterly*, no. 177 (2004).

energy industry competitive environment, they are increasingly operating within a sort of commercial "nether land," torn both between their traditional fealty to state interests and their expanding commercial instincts. They are moving abroad in response to the same commercial competitive pressures and resource constraints that drive the major international oil companies (IOC) and other private and state-owned international energy companies to expand globally. As is true for all the major oil companies, equity oil reserves are a key component of commercial profitability, competitiveness, and the attainment of an operating scale sufficient for China's NOCs to compete successfully in the global energy industry. Similar to the situation faced by other large oil companies based in other countries, oil exploration and development costs in China are high, available resources are limited, and large, low-cost reserve opportunities are concentrated abroad. Moreover, each company now holds minority public share ownership and cannot entirely ignore traditional shareholder interests in corporate growth and profitability.

Also, among the Chinese NOCs there is a wide range of commercial drive and sophistication that belies a simplistic view of global expansion as a simple extension of state policy. CNOOC clearly is the most commercially oriented, efficient, and "Western" in its operations, and in many ways behaves much the same as a typical IOC. CNPC, the largest state company and the one closest to the central government, by contrast operates more like a ministry than an oil company. Sinopec is somewhere in between. There are other key differences that reinforce the need for a more nuanced U.S. policy toward the expansion of China's NOCs. The government has purposely put the most controversial investments—in the Sudan, Iran, and other rogue states—in the hands of CNPC, the most centrally directed of the NOCs, and these investments are held by the government parent company, rather than the market-listed global arm of CNPC (called PetroChina). This calculated move is designed to increase flexibility and reduce potential shareholder pressure. In fact, a powerful indicator of the damage done by the CNOOC-Unocal episode is that the management of the market-listed arm of CNOOC soon afterward sought to obtain shareholder approval for its 100% government-owned parent CNOOC to make investments abroad. The purpose of this request was to confer upon CNOOC more independence from capital markets and foreign political pressure so that the NOC could invest in more controversial, opaque countries and deals. Notably, CNOOC's private shareholders successfully prevented that change in the company's charter.

China's NOCs, despite their visibly commercial motives, do not want to put themselves clearly at odds with Beijing. Their fundamental attitudes and behaviors are, however, often far more market driven and corporate centered than a superficial understanding of the go-out strategy might suggest. The government may seek more disciplined control of the NOCs, but it does not always have a free hand. Thus, because China's energy "strategy" reflects both mercantilist instincts and an evolving natural industry drive to invest abroad, an effective U.S. policy response must distinguish between NOC investments and behaviors that are driven by state diplomacy and those that are driven more by sound competitive and commercial logic. Therefore, while China's global energy push outward does raise significant new issues for U.S.-China relations, U.S. policymakers err if and when they assume that the overseas investments of China's national oil companies abroad are always a reflection of a coherent state strategy and direction. Given this context, what then are the most significant energy issues in U.S.-China relations?

Energy and U.S.-China Relations

China's global energy expansion has provoked a wide range of concerns among U.S. policymakers, concerns that were brought into sharp relief during the CNOOC-Unocal episode. As suggested earlier, these issues require a more nuanced treatment if U.S. policymakers are to respond more effectively to China's growing energy presence and impact. These issues can be divided into two groups of potential problems: markets and geopolitics.

Markets

China's impact on oil markets and prices. The first major set of U.S. policy concerns revolves around China's growing impact on global oil markets and prices. Much recent rhetoric in the United States suggests that China's oil demand is the prime culprit behind rapidly rising world oil prices. China has indeed accounted for a significant share of world oil demand growth recently (approximately 30–40% annually over the past several years), making China one important factor among many in today's tight oil markets. High oil prices are, in fact, a product of a long list of supply and demand developments, including very strong global oil demand, slow growth in production capacity, and low investment in new capacity in recent years, particularly in the Organization of Petroleum Exporting Countries (OPEC). 18 Global refining is also running at virtually full capacity and is especially tight in the United States. Due to this tight capacity, global

¹⁸ OPEC's oil production capacity, for instance, is essentially the same today (roughly 31 million barrels per day, MMBD) as it was twenty years ago, a period during which world oil demand rose by 22 MMBD. See BP PLC, "BP Statistical Review of World Energy 2005," June 2005, http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/publications/energy_reviews_2005/STAGING/local_assets/downloads/pdf/statistical_review_of_world_energy_full_report_2005.pdf.

price formula linkages strongly influence benchmark U.S. crude prices and, therefore, world prices.¹⁹

The notion that China has a special role in rising oil prices is particularly misplaced. The United States has actually been the major factor in producing destabilizing oil demand growth. From 1995 to 2004 U.S. oil imports grew by 3.9 MMBD while China's grew by 2.8 MMBD. The incremental U.S. draw on global oil market supplies absorbed the equivalent of more than three-quarters of the entire increase in OPEC oil exports during that ten-year period,²⁰ making the United States much more of a rogue element than China in the world oil market over the past decade.

Taking oil "off the market"? A second U.S. concern over oil markets and prices has been China's preoccupation with acquiring equity oil supplies that are controlled by the Chinese NOCs. Because these Chinese companies can ship this oil directly to China, many in the United States believe that China is effectively taking oil "off the market." This effort has fueled U.S. concerns that China's "hoarding" behavior will undermine open and flexible global oil markets, lead to higher oil prices, and worsen supply shortages elsewhere. Congressional and media reactions to China's oil investments in Canada and Venezuela have been particularly hostile, voicing strong concerns that China is challenging traditional U.S. access to "secure" oil supplies.

These concerns reflect apparent confusion among some U.S. policymakers about how today's global oil markets function. China's leadership does seem to believe that equity control provides greater oil supply security. But even though, as suggested earlier, equity oil reserves are important to the competitive strength and profitability of China's NOCs, equity barrels are in reality no more effective at ensuring China's national energy security than long-term crude supply contract barrels. The major geopolitical risks to stable oil flows—such as political instability in key exporting countries, wars, ethnic conflict, a potential U.S. blockade of China's oil in a Taiwan crisis, or transit bottlenecks—would disrupt equity and contract oil flows equally. There is no correlation between equity oil and energy security.

¹⁹ Total world oil consumption in 2004 was 80.8 million barrels per day, world oil refining capacity was 83.9 million barrels per day, and production was roughly 96% of capacity. BP Statistical Review of World Energy 2005; see also Klaus Rehaag, Intenational Energy Agency, "A Market on Steroids" (presentation at the conference "Middle East Petroleum and Gas Week 2004," Bahrain, May 12, 2004).

²⁰ See "BP Statistical Review of World Energy 2005."

²¹ Christopher R. Hill, Assistant Secretary of State for Asia and the Pacific, testimony before the Senate Foreign Relations Committee, Subcommittee on East Asian and Pacific Affairs, Washington, D.C., June 7, 2005.

The view that owning barrels provides energy security is based upon a pre-1970 understanding of global oil markets—an era before the creation of today's dynamic, flexible global commercial oil markets. Over the past five years, no major economy has suffered a physical shortage of oil—despite severe oil price increases and a rapid succession of geopolitical and weather-related supply disruptions.²²

Unfortunately, the same outdated view underlies the thinking of many in Washington, D.C. who see China's equity oil obsession as a threat to U.S. oil security. The oft-stated charge that China would take Unocal's Gulf of Mexico oil production to China and "deprive" the United States of its own oil supplies ignores a basic fact: modest redistribution of Atlantic Basin oil supplies could replace the barrels going to China, with no real effect on price or supply security.²³

The consequence of an outmoded view is that policymakers from both Washington and Beijing are continuing to react in ways that reinforce each side's suspicions of being denied future oil supplies. A similar dynamic is contributing to China's increasingly acrimonious battle with Japan over oil pipelines and natural gas fields. Similarly, China and India, despite tentative steps toward limited cooperation, are basically investing with the understanding that they are "competing" head-to-head for oil supplies in Africa and the Middle East.²⁴ These delusions are motivating real actions. China and other Asian countries, therefore, need to be discouraged from this "hoarding" mentality. Although vital to the competitive commercial success of China's NOCs, equity oil becomes a form of national "hoarding" when cast in political and national security terms. As will be suggested later, U.S. policymakers need to avoid reacting to an outmoded view of oil markets in a way that unnecessarily reinforces China's paranoia over oil security.

The global governance of oil. The third oil market issue deals with the important area of global emergency oil stock management. Due to China's growing scale of oil imports and its market impact, China's exclusion from the emergency oil sharing arrangements of the IEA risks added price volatility in times of global supply disruptions. For example, prior to the 2003 Iraq War, China undertook a huge oil buying spree in anticipation of supply disruptions, thereby aggravating the oil price spike that occurred prior to the

²² In fact, due to administrative and pricing distortions caused by government oil price controls—and not the lack of availability of imported oil supplies—one of the very few actual oil supply shortages in recent years occurred in 2005 in southern China.

²³ In this example, the shift in movement of 50 thousand barrels per day (MBD) of Unocal's Gulf of Mexico crude oil production to China instead of the United States would also effectively result in the Chinese purchasing 50 MBD less in the North Sea, Angola, or Nigeria. As events actually transpired, CNOOC was prepared to sell the Gulf of Mexico crude into the U.S. market.

²⁴ "India Yet To Match China's Cash, Political Clout," Petroleum Intelligence Weekly, October 24, 2005.

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U.S. invasion. The effectiveness of the IEA's emergency oil sharing programs is already weakening, as a growing share of the global demand base is outside the IEA sharing system. China is also developing its own strategic petroleum reserves (SPR), which so far do not have regional or global sharing mechanisms available in the case of a crisis. Since all importers benefit from reduced prices in a crisis, there is likely to be growing resentment that China—which refuses to share its own reserves with the broader international community—would be "free-riding" on emergency oil releases supplied by IEA countries during a crisis. Moreover, the lack of direct availability of emergency oil supplies potentially opens up China, India, and other competing, non-member states to political pressure from supplier states that try to use energy as a diplomatic lever. The example of serious foreign policy splits in the western alliance during the 1973–74 oil crisis is instructive. The later section on policy recommendations addresses this problem more fully.

Geopolitical Issues and Implications

Beyond energy markets, China's search for secure oil supplies also raises a number of new, geopolitical issues that are complicating U.S.-China relations.

Energy ties to "problem" states. A major concern for the United States is the growing involvement of China's energy sector in a number of problem states, including Iran, the Sudan, Myanmar, Uzbekistan, Venezuela, Cuba, and, lately, Syria. Iran and the Sudan are clearly of the most significant concern and raise a host of problems because of the challenges Iran poses to the international arena in terms of potential nuclear weapons development and the Sudan's severe human rights problems. In a number of cases, these relationships with problem states are accompanied by broader military ties and weapons sales elements that increase the problems posed for U.S. policymakers.

As long as the Chinese government believes that equity oil supplies are vital to energy security, China's NOCs will have strong incentives to expand their investments in these "problem" states. From a commercial standpoint, these "problem" states also represent important and unique opportunities to purchase equity reserves.

China's NOCs are latecomers to the world oil exploration and production (E&P) scene, and are competing with the major global oil companies from the United States and Europe that over decades have developed the long-term relationships, exploration and production expertise, and strong investment positions in all the most accessible and promising countries offering petroleum investment opportunities. CNPC, Sinopec, and CNOOC are indeed playing catch-up. Even the most competitive companies are finding fewer new opportunities to access sizable reserves. Seventy-five percent of the

world's known oil reserves are in countries where outside investment in oil development is excluded or sharply limited.²⁵ As a result, competitive pressures force the Chinese NOCs to reach further into high-risk, uncertain countries for new E&P opportunities, just as the other major international oil companies are doing. A unilateral U.S. embargo on these energy-rich countries merely reduces the competition for the Chinese NOCs and makes the temptation to seek access to these reserves nearly irresistible. Hence, finding ways to manage the tensions over all these issues is imperative in any U.S. policy response to China's expanding energy diplomacy.

Energy and Northeast Asian geopolitics. China's efforts to secure energy supplies and oil and gas transport routes have aggravated geopolitical tensions in Northeast Asia. These tensions are also being fueled by the equally competitive policies of other major

regional importers (particularly Japan) as well as by Russia's erratic policies on the promise of future energy supplies to Northeast Asia. The Kremlin is seeking to use energy as a strategic instrument to reassert its influence in the region and is thereby contributing to the competitive environment in the region, particularly between China and Japan. "Energy nationalism" has become a potential threat to regional stability as energy disputes increasingly spill over into broader

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Energy security and China's military development. Another important issue for some departments of the U.S. government, particularly the Department of Defense, is the potential for perceived energy security threats to drive China's military modernization. China's increasing dependency on oil flows through the Malacca Straits and the other sea lanes of Southeast Asia is potentially accelerating China's development of the naval capabilities necessary to protect those lanes. China has greatly increased cooperation, port access agreements, and maritime ties with Pakistan, Bangladesh, and Myanmar

²⁵ IEA, "2004 World Energy Outlook," 99.

in an apparent effort to be better positioned to protect its maritime energy transport routes during a future crisis. This cooperation, in turn, risks exacerbating the broader tensions between the United States and China over the increasing pace and scale of China's military and naval modernization.

China as a new player in global energy geopolitics. Finally, growing energy ties in key exporting regions inevitably will make Beijing an important diplomatic player in these areas and will bring China into direct contact with vital U.S. interests in these regions. Beijing will become an important competitor for influence in the Persian Gulf, as China build ties with Iran, Saudi Arabia, and possibly Kuwait and Iraq. At the same time, U.S. allies in the region (such as Saudi Arabia) are looking to diversify their diplomatic relationships away from heavy dependence on the United States. Energy is also a major factor in China's growing involvement in Central Asia via the Shanghai Cooperation Organization (SCO). Beijing is building an extensive energy relationship with Kazakhstan, expanding energy investments in Uzbekistan, and increasing its involvement in the Caspian Sea region. Energy will also influence China's engagement and influence in Southeast Asia, particularly with two key U.S. allies, Indonesia and Australia. China has become active in the western hemisphere through significant investments in heavy-oil development in Canada and Venezuela. The United States has traditionally been the dominant outside force in the energy geopolitics of these countries. The reality of growing Chinese influence should encourage both China and the United States to begin to develop mechanisms for managing potential disagreements.

A More Effective U.S. Response to China's Energy Rise

As shown above, China's global energy expansion will directly impact a number of important U.S. economic and strategic interests. This raises the question of whether the United States is capable of developing coherent and effective policies to manage these impacts and promote cooperation and markets. The above overview suggests that while China's attitudes and practices in the field of energy leave much to be desired, they are not the result of a tightly organized, centrally directed, and disciplined global energy strategy. Washington's perceptions of the real state of China's energy efforts and implications for U.S. policy are often significantly wide of the mark. As the world's largest energy consumers and importers, the United States and China have enormous stakes in ensuring maximum supply and price stability. Developing a strategy to move toward this outcome requires a hard-nosed look at energy policy decisionmaking from both the United States and China.

To date, the U.S. response to China's growing energy role has been largely ad hoc and reactive. Recommended U.S. policy responses to China's energy initiatives must take into account not only U.S. energy and diplomatic policy capabilities but also consideration of the specific context of Chinese developments.

U.S. Energy Policymaking

America's capacity to develop and implement a national energy policy depends upon several factors: the policy preferences of the administration in office, the inherent dynamics of the U.S. political system, and the respective roles of the public and private sectors in shaping U.S. energy outcomes.

The Bush administration has credibility as a government that is determined to increase government investment in energy production, back U.S. energy companies around the world,²⁶ and increase energy supplies for U.S. consumption.²⁷ The administration has not, however, prioritized efforts to improve energy-related environmental outcomes, increase efficiency in the energy sector, and improve energy conservation measures—and recent measures to increase production have been met with modest success.²⁸

In addition, the key energy players on the U.S. side are the U.S. energy majors—private sector firms with deep pockets, sophisticated technologies, global reach, keen understanding of present and future markets, and substantial clout in the U.S. political system. None of these firms are under the direct control of the U.S. government, yet their priorities in many ways define the characteristics of "American" energy policy.

²⁶ For example, the Bush administration has, along with the U.S. oil industry, reshaped Iraq's post-invasion oil development in order to utilize production sharing agreements that benefit and favor U.S. oil companies. See Greg Muttitt, "Crude Design: The Rip-Off of Iraq's Oil Wealth," Global Policy Forum, November 2005, http://www.globalpolicy.org/security/oil/2005/crudedesigns.htm.

^{27 &}quot;Bush Urges More Refineries, Nuclear Plants," CNN.com, April 28, 2005, http://www.cnn.com/ 2005/POLITICS/04/27/bush.energy/; and Michael Klare, Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency (New York: Metropolitan Books, 2004).

²⁸ Investment in non-traditional sources of energy (e.g., renewable energy and nuclear power) is still relatively low. Though various measures—such as leasing more public land for oil and gas drilling—have been attempted, the administration has met with little success in increasing domestic production of oil and gas. Even after the enactment of the 2005 Energy Policy Act, experts still project a future doubling of U.S. petroleum import dependency. See Environmental Working Group, "Big Access, Little Energy," 2004, http://www.ewg.org/oil_and_gas/printerfriendly.php; and ICF Consulting, "2005 Energy Act: Impacts on the Development of Petroleum Resources," 2005, http://www.icfconsulting.com/Markets/ Energy/Energy-Act/petroleum-resources.pdf.

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No upcoming electoral changes will alter the fundamental reality that the U.S. government is ill-suited to producing and implementing a comprehensive energy policy. The disjointed nature of the U.S. political system—with its separation of powers and ample provision for representation of competing interests in the policy process—must be kept in mind as any recommendations for U.S. government action toward China's energy future are developed. Washington is always vulnerable to the charge of "preaching what it does not practice" in terms of a national energy policy. The United States is and will remain a relative energy glutton, a country in which energy efficiency and conservation measures are the result of private sector reactions to the market rather than of comprehensive public policy initiatives.

In some regards both China and the United States, despite very different political and economic systems, have similar types of dysfunctions in their energy policy decisionmaking and implementation processes. Both countries have domestic systems more sensitive to the demands of energy suppliers than to those of consumers and environmentalists. Both have energy policy frameworks that are weak, spread across a range of bureaucracies, and dominated by industry interests. Both prioritize economic growth over energy stewardship. Recommendations calling for cooperation between the policymakers in these two governments must be cognizant that the limitations in each system are likely to compound rather than reduce the difficulties of effective cooperation.

Energy policy initiatives toward China are further complicated by serious ongoing disagreements within the U.S. government about long-term developments in China. The internal debate is one between those who see China as an inevitable enemy and those who see only a potential enemy. The former wish to constrain China's growing strength in any way possible.²⁹ Given that one of China's major underlying vulnerabilities lies within its energy sector, some hard-liners advocate policies that will reduce China's access to energy resources and increase the vulnerabilities of China's energy supplies.

Those who see China as only a potential enemy seek both to build bridges of cooperation to China in order to skew China's development onto constructive paths and

²⁹ Gary Schmitt and Dan Blumenthal, "Wishful Thinking in Our Times: The Pentagon Looks at China and Blinks," *Weekly Standard*, August 8, 2005, http://www.aei.org/include/pub_print.asp?pubID=22922; and U.S. Department of Defense, "Quadrennial Defense Review Report," February 6, 2006.

to prepare necessary hedges to cope with potential adverse contingencies.³⁰ The energy sector provides an arena in which U.S.-China cooperation can be particularly beneficial, both in signaling a relatively benign U.S. posture toward China's development and in providing for outcomes that are in the long-term interests of the United States.

Further complicating this issue is that China is similarly split between those who see the United States as an inevitable enemy and those who see it as a potential enemy.³¹ Hard-liners in both capitals seek to reduce U.S.-China interdependence, seeing such interdependence as an intolerable vulnerability.³² Each indication of distrust over the future, such as many of the comments made by U.S. members of Congress during the summer 2005 debate over CNOOC's bid for Unocal, simply strengthens the position of the hard-liners on the other side. Such commentary also undercuts those among China's NOCs who advocate increasing reliance on commercial success and global oil markets to advance China's energy security.

Policy development regarding China's energy initiatives must be based on an accurate understanding of the uncertainties about future relations and the propensity of each side to look for indicators that its fears are warranted. Energy is an extremely important and sensitive issue on both sides, and is not an arena that is under the tight, coordinated control of the top officials in either country. Within this context, signals and symbols become an important part of the policy mix. The pertinent signals emanate not only from actions in the energy sphere but also from broader areas, such as defense, economic and trade policy, and diplomacy.

³⁰ David Shambaugh and Wu Xinbo, "Sino-American Bridges Need to Be Repaired," Financial Times, September 1, 2005, http://www.brookings.edu/printme.wbs?page=/pagedefs/bda885643ffeff3f4a49b15e0a1415cb.xml; and David Lampton, "What Growing Chinese Power Means for America," testimony at the hearing on "'The Emergence of China Throughout Asia: Security and Economic Consequences for the U.S.," June 7, 2005, http://nixoncenter.org/Lampton6-7SenTestimony.pdf.

³¹ Jisi Wang, "Zhongmei guanxi guanjian shike hubu hui" [Hu and Bush Meeting As Critical Period in Sino-U.S. Relations], *Liaowang dongfang zhoukan*, September 9, 2005, http://www.hnol.net/content/2005-09/09/content_3360304.htm; and Jisi Wang, "Zhongmei guanxi de qianjing shi huanhe ji wending" [Future Prospects of Sino-U.S. Relations Are Benign and Calm], *Caijing*, November 15, 2005, http://finance.sina.com. cn/roll/20051115/15332120732.shtml.

James Dorn, "U.S.-China Relations in the Wake of CNOOC," Cato Institute Policy Analysis, no. 533, November 2, 2005, http://www.cato.org/pubs/pas/pa553.pdf; and "Zhonghaiyou shougou jieshi zhongmei guanxi ehua" [CNOOC Purchase Reveals Worsening of Sino-U.S. Relations], Xianggang Mingbao, June 30, 2005, http://www.peacehall.com/news/gb/intl/2005/07/200507010026.shtml.

A Sophisticated U.S. Strategy

A sophisticated U.S. strategy should utilize the full array of tools available in a reasonably coordinated fashion to influence China's energy outcomes. The goals of such a strategy should be:

- to build the mutual trust necessary for effective cooperation
- to increase Beijing's willingness to work with U.S. counterparts to develop and deploy capabilities to address China's key energy problems
- to enhance incentives and opportunities for China to follow the desired energy strategy
- to help China develop specific technical and policy capabilities that will better enable it to achieve desirable energy outcomes

The United States has vital national interests entailed in China's energy future. China's choices in the energy sector will affect the availability and price of energy on the international market, the level of diplomatic and security tension over energy access, and the quality of the global environment.

To begin serious efforts to improve China's energy outcomes, policymakers in Washington must first fully accept the reality that such improvement is in U.S. interests. If, however, U.S. policymakers believe that it is in the interests of the United States to increase the hurdles to sustainable development that China faces, effective measures to work with China in this vital issue area will prove unattainable. The full case for cooperation has yet to be made persuasively across the U.S. government. For those who believe that such cooperation conforms to vital U.S. interests, the following seven initiatives highlight the preferred future for China's energy strategy:

- Commitment to market-based approaches to acquiring energy resources on the international market. This commitment includes reduced efforts to lock up foreign energy resources through purchases of equity assets in foreign fields.
- Willingness to cooperate with other consumers to increase price stability. This measure recognizes that, as one of the world's two largest oil consumers, China can facilitate the adoption of measures to leverage producers to enhance energy availability and price stability. Coordination with the United States in future releases from respective U.S. SPRs, for example, could play an important role at a time of artificial supply disruptions.
- Openness to applying new technology and sustaining the conditions to encourage its development and use. This initiative includes embracing relatively supportive rules to

attract or develop new technology, and enhancing protections for intellectual property rights for those new technologies.

- Improved systems optimization. The United States has an interest in greater efficiency of China's overall energy system. China, however, remains relatively weak in systems analysis targeted at optimizing allocation of resources across an array of complexly integrated efforts. This is a core strength of both the U.S. government and U.S. energy companies.
- Effective conservation measures. China's political economy is sharply skewed to favor production over conservation. Increasing the effectiveness of conservation efforts will require that China study experiences elsewhere, incorporate new technologies and sophisticated regulatory frameworks, and make difficult changes in the incentive system for local government officials.
- Improvements in overall energy efficiency per unit of GDP. Though high on China's current agenda, efficiency improvements will require major technology imports, better systems optimization, changed local government incentives, and substantial budgetary funding.³³
- Improvements in environmental outcomes in the energy sector. Coal accounts for 68% of China's current energy use, and this figure will drop by less than 10% by 2020. Given China's expected GDP growth rates over this same period, absolute quantities of coal consumed will increase substantially. The country's environmental situation is so severe as to require determined efforts both to adopt environmentally friendly technologies (such as clean coal) and to increase the shift toward other energy sources.

The Issue of Trust

The issue of trust is both fundamental and nettlesome. Most of the above suggestions for the formulation of U.S. energy policy toward China require that Beijing trust the United States enough to allow effective cooperation on more than a project-by-project basis. The issue of trust becomes especially important in reducing Beijing's acute security concerns regarding sourcing and transporting its imported energy. An important aspect of Beijing's sourcing strategy is rooted in distrust of U.S. strategic intentions toward China's energy security needs. State equity oil policy as well as the

³³ As noted above, current plans call for China's GDP to quadruple between 2003 and 2020. During this same time, however, China's energy consumption is expected only to double. Since the adoption of that goal, energy consumption has actually risen at a rate considerably faster than GDP. In terms of energy use per unit of GDP, China currently lags far behind not only the industrialized countries but also in certain developing countries such as India. Superior technologies that can substantially improve the PRC's energy efficiency are already available elsewhere.

tough global competitive environment for China's NOCs are driving Beijing into deals with problem states, but those very deals in turn themselves produce outcomes that further erode the trust between the United States and China.

The U.S. relationship with China is so wide ranging and complex that energy sector policy alone will not determine the degree of trust that both sides bring to the table. The

"The U.S. relationship with China is so wide ranging and complex that energy sector policy alone will not determine the degree of trust that both sides bring to the table." U.S. rhetoric toward China-related energy issues is, however, watched carefully in Beijing. As noted above, Congressional rhetoric during the controversy over CNOOC's bid for Unocal in the summer of 2005 inevitably strengthened the position of those in China who

argue that the United States' long-term approach to China is hostile. Because energy sector policy priorities and related investments tend to be expensive, long term, and of vital importance, this type of perception can become a crippling obstacle to effective cooperation.

Energy sector cooperation is, therefore, inevitably hostage to the broad sweep of U.S.-China relations, including many seemingly unrelated diplomatic, security, economic, and other issues. Within this overall relationship, the specific level of cooperation in the energy sphere can play a significant role in either enhancing or reducing overall mutual trust. Both sides should take greater cognizance of this important reality.

Multilateral Initiatives for Energy Cooperation

China and the United States have already undertaken a substantial number of bilateral cooperative efforts in the energy sphere. Many of these have taken place under the aegis of the Fossil Energy Protocol (extended in April 2005 and in effect until 2010) between the United States and China, and involve exchanges and other activities across the board in energy exploration and use.³⁴

Such ongoing activities are helpful both in providing forums for technical exchanges and for improving mutual understanding of the problems involved. By linking up appropriate experts on each side, these cooperative efforts, therefore, lay the necessary groundwork for effective identification of key problems, and provide the basis for future

³⁴ For more information, see the U.S. Department of Energy's summary of the activities under this protocol, http://fossil.energy.gov/international/International_Partners/China.html.

cooperation on a significant scale. The problem to date is that such exchanges have tended to occur below a policy level in each government—neither side appears to have meaningfully raised the issue of U.S.-China cooperation in the energy sector to a policy-making level nor secured a champion for such cooperation at that level.

A high level of engagement in the issue is, however, critical. No sector is more intimately tied to the overall fate of the economy—and to both social outcomes and national security—than is energy. At lower bureaucratic levels, specialists in energy have little difficulty identifying win-win situations for technology sharing, joint exploration, efficiency and conservation approaches, and so forth. The resulting initiatives remain politically weak, however, until they are integrated into larger policy issues such as those concerned with equity among localities, economic growth strategies, environmental trade-offs, and international security. Policy-level engagement is what is required to cast energy sector initiatives in terms that support, rather than diverge, from the strategies and priorities in these broader issue areas.³⁵

This report recommends three *multilateral* initiatives that the United States can take to increase mutual trust and understanding with China in the energy sphere—these initiatives involve the Group of Eight (G-8), IEA, and a Northeast Asia Security Community. Such efforts must occur as part of a high-level strategy and therefore force leading officials to confront basic issues that integrate U.S.-China energy cooperation prospects into larger political and national objectives. In that context, the knowledge gained from mid-level exchanges can be put to effective use in the service of national policy goals. Otherwise, such knowledge is more likely to stay largely bottled up in the specialist community, with disappointingly few spillover effects.

Given the many problems in U.S.-China bilateral relations, multilateral initiatives also offer a potentially very important basis for building mutual trust in this sphere. The following initiatives warrant attention because each has the potential both to produce positive outcomes in energy cooperation and to reduce Chinese mistrust of long-term U.S. intentions in this sphere.

China and the G-8. In the G-8 (as in the IEA discussed below) there is an increasing disconnect between the goals and the membership of the organization. The G-8 in theory represents the advanced industrial democracies and meets in order to address major economic issues of common concern. Having expanded to include Russia, the

³⁵ Ongoing cooperation at the specialist level may at some point capture the attention of key policymakers, especially if there is a general shift in policy priorities at the top. Waiting for such an eventuality is not, however, a good basis for current policy. Better is to develop an approach that brings the related issues to high-level policy attention now.

G-8 has already pushed the boundaries of the notion that it is a group consisting solely of advanced industrial democratic states.

This year Russia holds the rotating presidency of the G-8, and one of the group's major topics is global energy security. Put simply, it makes little sense for the major powers of the world to sit together and discuss management of global energy issues without having China at the table. Even if invited to join, however, China would be reluctant due to fears that G-8 membership might put China too firmly in the club of advanced countries, thus weakening its status as a representative of the developing world.

The G-8 would benefit from revising its institutional mission to become more of a forum that brings together the most consequential countries in the world to address the world's most pressing economic issues. This new approach would permit the organization to include China fully, with an eye to perhaps inviting India, Brazil, or others as members as their economic stature and impact warrant. This modification would enable the G-8 to keep up with changes in the real world and thereby retain its relevance.

Although still in many ways a developing country, China is also a major power and an important actor in global issues. G-8 membership need not strip China of its legitimate role in speaking up on issues where China's interests as a developing country are still very much at stake.

The underlying issue for Washington is whether the United States wishes to view China as a major country whose participation and cooperation are necessary for effective management of key global issues, including energy. To have an international energy regime where China is outside of the multilateral rules of the game is not a desirable situation, especially if such exclusion encourages China to free ride on the benefits of that regime without bearing any serious responsibility for effective contributions and enforcement.

If the United States were to take the lead in encouraging Chinese participation in the G-8 (and, as suggested below, in the IEA), this initiative could respond quietly but eloquently to those Chinese who believe that the United States ultimately seeks to constrain China's future stature and growth. If the United States did seek to encourage China to become such a major global stakeholder, such an initiative would discomfit Beijing, which may well have concerns about the changes that would be required. But such an effort could also make a major contribution toward building the underlying strategic trust without which the United States and China would over time find it extremely difficult to avoid mutually destructive policies toward each other.

China and the IEA. The IEA was established in response to the 1973–74 oil crisis, and initially focused on formulating multilateral measures that would reduce the vulnerability of its member countries to future oil supply disruptions. By 2006, however, the agency has branched out into many related areas. The current twenty-six members include the Republic of Korea (ROK) and Japan—but not China.

As suggested earlier, Chinese coordination with the IEA and participation in its various activities could prove to be very important in the event of future oil supply uncertainty on the international markets. When confidence in oil availability sags, even limited competition in the spot market can produce large-scale price volatility.³⁶ For reasons suggested earlier, to exclude China from a cooperative framework that encompasses all of the other major oil importers could, therefore, be costly in a time of crisis.

Direct Chinese membership in the IEA would, however, be difficult to achieve and potentially very contentious to pursue. The IEA was formed by the countries of the Organization for Economic Co-operation and Development (OECD), and membership in the OECD is a prerequisite for membership in the IEA. Qualifications for OECD membership include having a per capita GDP of at least \$3,000 and meeting certain standards of human rights.³⁷ In any case, EU members are currently more concerned about bringing Russia into this framework than having China join. Any effort to relax existing conditions in order to accommodate Chinese membership would, therefore, likely prove too divisive among current IEA members to be feasible.

³⁶ Amy Myers Jaffe, "Energy Security: Implications for U.S.-China-Middle East Relations," James A. Baker Institute for Public Policy, 2004, http://www.rice.edu/energy/publications/energysecurity_U.S._China_MiddleEast.html. A spot market is a market in which commodities, such as grain, gold, crude oil, or RAM chips, are bought and sold for cash and delivered immediately.

³⁷ IEA membership requires compliance with the IEA governing treaty of the Agreement on an International Energy Program (IEP). The main ascension commitments, as outlined by the IEP agreement, include: (1) maintaining oil reserves equivalent to at least 90 days of net oil imports, (2) providing domestic oil demand restraint measures, (3) participation in oil allocation among IEA countries in the event of severe supply disruptions, (4) coordinated IEA activation, deactivation, and emergency measures, (5) establishment of an oil market information system, (6) establishment of a permanent framework for consultation with oil companies, and (7) long-term energy cooperation. See IEA, "International Energy Program Agreement 1974." http://www.iea.org/Textbase/about/IEP.PDF. For more on China's membership, see IEA, "International Energy Agency: The First 30 Years," vol. 4 (2004), http://www.iea.org/textbase/nppdf/free/2004/history_v4.pdf.; and the IEA website detailing cooperation efforts with China, http://www.iea.org/Textbase/subjectqueries/nmc/china.asp.

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China already participates in an array of IEA workshops and related activities.³⁸ As with China's cooperation on bilateral efforts with the U.S. government, these activities bring together specialists on such topics as energy modeling and statistics or electric power reform. Only one IEA workshop has focused on energy security and cooperation in Northeast Asia. That meeting, which convened in 2004, brought together speakers from the United States, Japan, Russia, and the ROK. No Chinese official or firm, however, gave a presentation.³⁹

The IEA has worked more effectively with China in the area of developing strategic reserves. The agency has provided a good discussion forum for this vital topic, yet this effort remains well short of active planning and common commitments for how to deal with the issue of potential supply disruptions in the international oil markets.

There are two potential approaches to improving this situation. One would be to make changes roughly along the lines suggested above for the G-8. Under this scenario, the IEA could redefine itself as a grouping of major countries concerned with management of the international energy regime, rather than as democracies that are a part of the OECD. If this redefinition becomes acceptable to the current members, China could then become an actual IEA member, with full participation in all activities and full assumption of responsibilities for management of supply disruptions. Again, U.S. encouragement of the IEA to move in this direction would send a strong signal to Beijing that the United States is serious about treating China as an important player in the international energy regime.

If this proves to be a step too difficult to take given the sensibilities of the current members, then the issue is to find creative ways to make China an effective *partner* of the IEA without its becoming an actual *member* of the organization. Potentially some new category of association can be developed that will provide a basis for joint planning and action, give China input into IEA deliberations, yet offer China the possibility of such participation at a less-than-full-membership status. Toward this end, the United States could take the lead in presenting to other IEA members the specific importance of active Chinese cooperation and in exploring with Beijing the types of cooperation that might prove feasible in a partnership between China and the IEA.

³⁸ For a basic list of such activities with hyperlinks to detailed information, see IEA Information Centre, "Cooperation with Non-OECD Countries: China," http://www.iea.org/dbtw-wpd/Textbase/subjectqueries/nmc/china.asp.

³⁹ See IEA News and Events, "Joint Conference on Northeast Asia Energy Security and Cooperation," http://www.iea.org/textbase/work/workshopdetail.asp?WS_ID=178.

Such an approach would also require the development of concrete plans to engage China in an array of cooperative activities. Such activities would be designed to build sufficient IEA-China mutual trust that would allow Beijing to reach credible agreement with the IEA to act in concert with it at a time of oil supply uncertainty. This would require, among other things, Chinese confidence that Beijing would at least informally have a seat at the table as the IEA deliberates on specific responses as oil crises develop.

The U.S. government should examine creative approaches to achieving this goal. While some experts have advocated the inclusion of China into the IEA, few have outlined specific inclusion mechanisms and measures. Ed Morse has gone part way, suggesting two avenues via which China and other emerging markets could participate to a greater extent in the IEA: (1) through an options, fee-based insurance policy that gives non-members access to the IEA strategic stockpiles in the event of an emergency, and (2) through the IEA countries' joint financing and sponsoring of regional stockpiles.⁴⁰ Neither of these avenues, however, creates the level of active Chinese cooperation that should be sought.

In sum, building cooperative ties with China through the IEA can take three forms, none of which are mutually exclusive:

- continuing and increasing China's participation and cooperation level in current projects, whether based on informal or formal status
- developing new projects and agreements targeting and including China (such as additional special policy agreements that build on the 1996 Memorandum of Policy Understandings in the Field of Energy and the 2001 Framework for Energy Technology Cooperation)
- seeking to create an intermediate level of formal association that gives China defined input into IEA decisionmaking and also allows for the development of concrete plans and agreements regarding such vital issues as how to act cooperatively during a potential period of oil supply disruption

Having Washington take the lead in bringing about an IEA-PRC partnership would both increase the likelihood that such a partnership can be brought into being and enhance Beijing's level of trust in Washington's goodwill in terms of energy supply and price issues. Such an effort would also encourage Beijing to take a less mercantilist approach to meeting China's energy demands.

⁴⁰ Edward L. Morse, statement at the "China Energy Needs and Strategies" hearing of the U.S.-China Economic and Security Review Commission, October 30, 2003, http://www.uscc.gov/hearings/2003hearings/transcripts/ 031030tran.pdf.

Moving toward a Northeast Asia Security Community. Northeast Asia lacks a multilateral intergovernmental forum that brings together the major countries of the region on a regular basis. The Northeast Asia Cooperation Dialogue (under the sponsorship of the University of California Institute on Global Conflict and Cooperation) has since 1993 convened Track II meetings of representatives of all the countries now engaged in the Six-Party Talks. While these have provided a useful format for discussion, they have not led to regularized, formal intergovernmental conclaves.

By contrast, the Shanghai Cooperation Organization (SCO), for instance (formally established in July 2001), has grown and evolved since its early 1990s incarnation as the Shanghai Five. In response to changing concerns about border and increasingly terrorist-related security issues in Central Asia, the SCO has gradually expanded its membership, regularized its activities, and developed an administrative infrastructure. During 2000–05 alone, the SCO convened twenty-five ministerial-level meetings and took concrete measures such as setting up a multinational counterterrorism center.

The notion of a Northeast Asia Security Community has been mooted in China and elsewhere for nearly half a decade, but these scattered discussions have not yet produced concrete progress.⁴¹ Over the course of this period, the need to construct such an intergovernmental community has increased as tensions in the region, especially between China and Japan, have grown.

One idea has been to build upon the North Korean Six-Party Talks to institutionalize an ongoing forum for the discussion of Northeast Asian security issues. ⁴² This proposal carries the advantages of basing the future organization upon a forum that has already both developed its own style and internal *esprit d'corps* and already produced a significant contribution to Northeast Asian security. Furthermore, it would also avoid the problem of possible North Korean pique over being left out of a Northeast Asian security community, a prospect that could make it more difficult in the future for the Six-Party Talks to achieve agreement on dismantling North Korea's nuclear capabilities.

Though these considerations have merit, the magnitude of the problems to be addressed beyond the North Korean nuclear question, as well as the lack of a clear path toward resolving the nuclear issue itself within the near future, suggest that

⁴¹ Vladimir Ivanov, "Creating a Cohesive Multilateral Framework through a New Energy Security Initiative for Northeast Asia," Economic Research Institute for Northeast Asia Report, no. 55, December 2003, 27–35, http://www.erina.or.jp/En/Lib/ER/ER-pdf/Er55.pdf.

⁴² See, for example, Zhongying Pang, "Beijing Seeks Multilateral Northeast Asian Security," *Asia Times Online*, April 9, 2004, http://www.atimes.com/atimes/China/FD09Ad03.html; and Ok-Nim Chung. "Solving the Security Puzzle in Northeast Asia: A Multilateral Security Regime," *CNAPS Working Paper*, September 1, 2000, http://www.brookings.edu/fp/cnaps/papers/2000_chung.htm.

the establishment of a separate forum to move toward a Northeast Asian Security Community would be advisable. In recent years, Sino-Japanese diplomatic and security tensions have been on the rise. These tensions are merging historical, diplomatic, energy, and security concerns into a growing rift that makes cooperation on major issues much more difficult.⁴³ Although the United States enjoys good relations individually with both China and Japan, Washington is viewed in Beijing as standing staunchly on the Japanese side of Sino-Japanese bilateral disagreements and as encouraging Japanese policy positions that will exacerbate, rather than ameliorate, Sino-Japanese divisions.⁴⁴

These developments have potentially costly consequences, among which are the following:

- decreased Chinese trust in U.S. strategic intentions regarding the PRC
- increased difficulty in achieving common positions on the North Korea nuclear issue
- tensions that could produce local flare-ups over the Diaoyutai/Senkaku territorial dispute and over energy exploration and development in disputed waters in the East China Sea
- potentially greater difficulty in maintaining stability across the Taiwan Strait
- growing incentives in both China and Japan to expand military capabilities

For many years China has shied away from trilateral forums with the United States and Japan, presumably because Beijing has feared being the odd man out, given the U.S.-Japan alliance relationship. But Beijing may now be more willing to engage in trilateral or broader multilateral discussions and activities involving the United States and Japan. Beijing has already encouraged discussion of a Northeast Asian free trade agreement involving China, Japan, and the ROK,⁴⁵ and feels that China's relationship with the ROK is qualitatively as good as that between Seoul and Washington.

⁴³ Minxin Pei and Michael Swaine, "Simmering Fire in Asia: Averting Sino-Japanese Strategic Conflict," Carnegie Endowment for International Peace Policy Brief, no. 44, November 2005, http://www.carnegieendowment. org/files/pb44.pei.FINAL.pdf.

^{44 &}quot;U.S.-Japan Statement on Taiwan Opposed," China Daily, February 20, 2005, http://www.chinadaily.com.cn/english/doc/2005-02/20/content_417717.htm; and Zan Jifang, "The Taiwan Card," Beijing Review, no. 9 (2005), http://www.bjreview.com.cn/En-2005/05-09-e/09-world-2.htm.

⁴⁵ Jane Skanderup, "Toward a Stronger Foundation for United States, Japan, and China Relations," *Center for Strategic and International Studies Issues and Insights* 4, no. 6 (August 2004), http://www.csis.org/media/csis/pubs/v04n06%5B1%5D.pdf; and "China, Japan, ROK Sign Joint Declaration," *Xinhua*, October 7, 2003, http://www.china.org.cn/english/MATERIAL/76728.htm.

A Northeast Asian Security Community would be designed to enhance trust, improve mutual understanding, increase active cooperation, and expand certain technical capabilities in a way that would decrease the likelihood of misunderstanding and conflict among the participating members. Such a forum would likely get underway

"A Northeast Asian Security Community would be designed to enhance trust, improve mutual understanding, increase active cooperation, and expand certain technical capabilities in a way that would decrease the likelihood of misunderstanding and conflict among the participating members."

gradually and develop in stages. It could begin with exploratory meetings involving the foreign and defense ministers—and possibly the heads of state—of the participating countries. The goal should be first to move to regularized consultations and create an institutional support mechanism (such as a secretariat and staff), which would enhance the capacity for cooperative activities in priority issue areas. In these early stages, the Northeast

Asia Security Community could, given the already existing forum of the Six-Party Talks, regard the North Korea nuclear issue as outside the forum's purview.

Although energy issues should not drive efforts to form a Northeast Asian Security Community, such issues are extremely important in the region and carry security implications that are readily apparent. For example, Sino-Japanese competition for energy resources from Russia and elsewhere has become serious, with the start of Chinese exploitation of resources in the East China Sea raising tensions still more. ⁴⁶ Both sides could benefit from finding ways to increase mutual confidence and cooperation in securing vital oil and gas resources.

Energy issues should thus find their way onto the Security Community's agenda at an early stage, and the United States can reap benefits from encouraging and supporting efforts to address Northeast Asian energy issues as a part of this Security Community's tasks. As the United States, Japan, and China explore ways to improve mutual understanding and reduce regional frictions, U.S. encouragement and support can help energy sector issues more easily become a major topic for discussion and cooperative action.

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⁴⁶ "China Fuels Energy Cold War," *Asia Times Online*, March 2, 2005, http://www.atimes.com/atimes/China/GC02Ad07.html; and "China Gorging and Japan-China Resource and Energy Conflicts," *Yomiuri Shimbun*, http://www.nautilus.org/aesnet/2005/JUL0605/Japan_China.pdf.

The United States already plays a significant role in the Northeast Asia energy issue. The U.S. Navy protects both Chinese and Japanese oil supply lines to and from the Middle East. U.S. actions in the Middle East and Central Asia affect the stability of a region vital to Northeast Asia's energy import regime. And in any potential Sino-Japanese conflict over energy resources in the East China Sea, U.S. military forces could well become involved. Given the United States' close alliance with Japan and extensive economic engagement with China, U.S. interests are deeply engaged in the management of energy issues in Northeast Asia.

The above discussion mentions the United States, China, and Japan as the three countries most centrally involved. Russia, however, is also a major player in Northeast Asia's energy future. China and Japan have been vying over where a major Russian pipeline to Northeast Asia will terminate,⁴⁷ and Russia's approach to its energy export regime is an issue of major interest to the United States. Given that Russia is a participant in the Six-Party Talks, a major arms supplier to China, and maintains an ongoing territorial dispute with Japan, Moscow's inclusion in a Northeast Asia Security Community is warranted.

The ROK also needs to be included on both energy and security grounds. From a geopolitical perspective, the ROK is at the center of many of the large regional natural gas and oil pipeline proposals to transport Russian oil and gas to Northeast Asia. South Korea's large and rapidly growing natural gas market will be important in determining whether a large regional natural gas pipeline is commercially viable. Therefore, ROK choices between sea-borne Asian LNG supplies or Russian pipeline gas supplies will be quite important to regional energy outcomes and cooperation. A case can also be made for including the ROK in light of the fact that its vital interests are so intricately tied up with security cooperation in the region. Indeed, South Korea is already in the process of expanding its security ties with China, even while maintaining an alliance with the United States and engaging in a minor yet bitter territorial dispute with Japan.

In sum, the countries that should be engaged in moving toward the development of a Northeast Asia Security Community include the United States, Japan, China, the ROK, and Russia. Pressures to increase the size of the group should be resisted, at least until the Six-Party Talks achieve a successful outcome. This group should emerge gradually through a process of increasingly formalized and regularized consultations among the parties. Toward this end, the United States should at an early point take the initiative to bring Northeast Asia energy security onto the agenda of this multilateral

⁴⁷ James Brooke, "Disputes at Every Turn of the Siberia Pipeline," *New York Times*, January 25, 2005, http://www.pacificenvironment.org/article.php?id=109.

group and encourage subsequent policy and institutional development to address this issue. This could provide a vehicle for the United States to encourage China to work cooperatively with others in the energy arena and could simultaneously increase China's trust regarding U.S. intentions in this vital sphere.

Bilateral Aspects of U.S.-China Energy Cooperation

As indicated above, Beijing and Washington should continue to seek additional vehicles for effective consultation and cooperation among experts on both sides. U.S. efforts will be largely directed by the Department of Energy, while Chinese efforts will be managed by the National Development and Reform Commission (NDRC). In each country, additional agencies are also involved to some extent.

In order to complement the efforts of regional and multilateral energy institutions to wean China from its mercantilist energy impulses, the United States must make better use of opportunities that could lead to a bilateral energy dialogue, and avoid reactions that reinforce China's mistrust of U.S. intentions toward its energy security needs. Any such effort will entail a number of measures.

First, the United States must raise the level of bilateral discussions on energy and accord these discussions much greater weight in the overall bilateral dialogue. Building confidence on energy security issues will require many years of consistent high-level attention. The United States and China have recently convened two dialogues that provide early opportunities to increase mutual confidence. The new U.S.-China Strategic Dialogue, inaugurated by Deputy Secretary of State Zoellick, has placed energy on the agenda as a priority item. The U.S.-China Energy Policy Dialogue, inaugurated in June 2005 by Energy Secretary Bodman, also provides a senior-level opportunity to reinforce these discussions at a senior NDRC level. Energy policy concerns and messages being sent by the U.S. government through these two dialogues need to become more coordinated, sophisticated, and consistent.

Second, the U.S. government must avoid wherever possible engaging in rhetoric or policies that needlessly reinforce Beijing's concerns over U.S. intentions toward China's energy needs. Events in 2005 demonstrated how certain policy measures might be adopted that could actually reduce the prospects for future cooperation and sow increasing distrust between the two governments. In the context of the 2005 CNOOC bid for Unocal, for example, there were proposals to give the Congress an increased role in future decisions of the Committee on Foreign Investment in the United States (CFIUS), and related proposals again surfaced in relation to the 2006 Dubai Ports issue. Such a measure could dramatically reduce the possibility of future Chinese investment in

the United States, and could send a strong signal of fundamental U.S. distrust regarding China's economic activities.

Another example of the wrong message being sent to the Chinese at a high level was Vice President Cheney's visit to Canada at the same time as President Hu's visit to the Alberta oil sands region. The calculated timing of the visit simply reinforces Chinese perceptions that the United States views Canadian oil as some sort of strategic prize.

Third, the United States must find ways to engage other Asian powers bilaterally with the intent of discouraging mercantilist and competitive energy initiatives, which may in

turn heighten and reinforce China's fears over future energy supplies and directly undermine prospects for regional energy cooperation and reliance on markets. This would complement the multilateral regional dialogue suggested earlier. A change in China's energy policy trajectory, along with changes in the policies of

"...the U.S. government must avoid wherever possible engaging in rhetoric or policies that needlessly reinforce Beijing's concerns over U.S. intentions toward China's energy needs."

Japan, India, and Russia, is essential to reduce future problems. Most important in this regard is Japan.

Fourth, the United States needs to invigorate its ongoing efforts to engage China on such issues as accelerating domestic energy market reform, improving efficiency, reducing demand growth, and developing and diffusing new energy technology (particularly transportation technology). These efforts have been going on for many years without having had much impact on China's energy policies and development. Due to the growing influence of those advocating market reform and improved efficiency in China's energy bureaucracy, the United States may have greater opportunities in the future to accelerate movement in this direction.

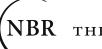
These cooperative efforts are a plus for the bilateral relationship, improving as they do the state of knowledge necessary to produce more effective cooperation and outcomes in the energy policies of both countries. These initiatives cover such a broad array of important issues, and there are so many more problems that warrant serious joint study and consultation, that it is not appropriate to single out additional specific "next steps" that should assume priority. This general effort warrants serious support by both governments.

Conclusion

China and the United States are the two biggest players on the international energy markets and will retain their positions as the world's largest oil importers far into the future. Neither country serves as a model for others, though, given that both on balance privilege increasing supply over constraining demand, and prefer promoting growth over preserving the environment. Both, moreover, fall well short of being able to craft and implement a disciplined energy strategy for themselves either at home or abroad.

These two countries do, however, share enormous interests in maintaining overall supply security and price stability, two goals that are well served by far greater and more effective bilateral and multilateral cooperation. Such cooperation is difficult, though, given both the very real misperceptions held in each capital about the energy situation in the other and the deep underlying strategic distrust of motivations in each direction.

This essay therefore has sought to clarify the actual situation (especially on the Chinese side) and to propose specific areas for fruitful increased cooperation. The authors have also made three broader, more strategic proposals that speak both to key energy concerns and the more fundamental problem of reducing mutual strategic distrust. In the view of either Beijing or Washington, none of these issues can easily or comfortably be resolved, but the problems and potential approaches warrant focused attention at the highest policy levels in order to move the trajectory in the vital energy sector in a more fruitful direction for both countries.



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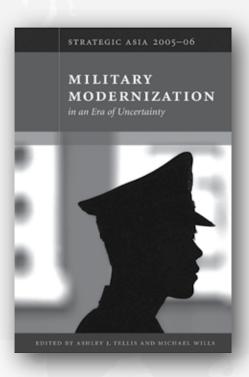
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