# CHINA'S ENERGY STRATEGY

The Impact on Beijing's Maritime Policies



EDITED BY
GABRIEL B. COLLINS, ANDREW S. ERICKSON,
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#### Gabriel B. Collins, Andrew S. Erickson, Lyle J. Goldstein, and William S. Murray

#### Introduction

WITH ALMOST THREE DECADES of double-digit growth, China's continuing rapid development is both breathtaking and unprecedented in world history. Just as remarkable, this process has been peaceful and has avoided—at least thus far—triggering the instability in the international system that many had predicted. Today the prospects for peace remain good. China is increasingly intertwined within a web of interdependent commercial and institutional interactions; the Chinese president has no military experience and appears to be almost entirely focused on issues of domestic stability and development; advocates of Taiwan independence seem for the moment to be in retreat; and Beijing's newly agile diplomacy has delivered major breakthroughs in a variety of important relationships that have previously been problematic, including those with India, Russia, and Vietnam.

Yet, there are still certain disconcerting tendencies. It was once hoped that Hu Jintao might emerge as a liberal reformer, but this has not been the case and there has been little or no progress on the issue of political reform. Moreover, reports of violent rioting by a disgruntled underclass emerge with increasing frequency, which suggests a considerable level of public dissatisfaction with various policies. Chinese nationalism remains a potent and potentially destabilizing factor, as demonstrated in April 2005 when the Japanese

consulate in Shanghai was seriously damaged by angry mobs. Chinese military modernization continues apace—even though the People's Republic of China (PRC) seems to face its most benign strategic environment since its founding in 1949. The buildup of the last decade has yielded the world's most advanced conventional ballistic missile force, which has garnered perhaps the most attention from foreign military analysts. But this is a very broad front effort, and Chinese progress in the key military realms of aerospace and maritime development has been on display recently during Beijing's 11 January 2007 antisatellite weapon test, and before that on 26 October 2006 when a Chinese diesel submarine reportedly penetrated the protective screen of the U.S. Navy's *Kitty Hawk* carrier battle group in the vicinity of Okinawa.

The China Maritime Studies Institute (CMSI) was formally established at the Naval War College in October 2006 to study China's evident turn toward the seas. Our aim is to create a center for excellence in the study of Chinese maritime development, especially as it pertains to commercial and military affairs. CMSI draws on the extensive Asia-Pacific expertise that has been assembled on the faculty in Newport over the last decade and uses a variety of unique methodologies, including a strong focus on Chinese-language sources. CMSI has succeeded in producing high-quality research for the U.S. Navy and for the scholarly and policy communities more generally. One final point regarding the new institute is vital: maritime cooperation is a theme that figures prominently in almost all current and planned future CMSI activities, including this volume. Indeed, Chinese–American maritime security cooperation was the theme for CMSI's 2007 annual conference. The CMSI team is wholly committed to a balanced and objective approach to studying China's maritime development.

Most prominent among the institute's activities is the annual conference. The first CMSI conference focused on Chinese undersea warfare, and a resulting book, *China's Future Nuclear Submarine Force*, was published by Naval Institute Press in 2007. The present volume has emerged, following considerable research, from CMSI's second annual conference, "Maritime Implications of China's Energy Strategy." In examining the possible relationship between China's evolving energy strategy, on the one hand, and its naval strategy, on the other, this conference attempted to explore a possible interconnection between China's economic and military strategies. In a broader sense, the conference sought to examine the prospects for a Chinese national security strategy that reaches beyond "offshore defense" and even beyond Taiwan. In a sense this initiative strives to open a debate concerning whether

Beijing aspires to be a powerful regional player or a genuine global power with the attendant robust aerospace forces and blue water fleet.

Participants at the 6–7 December 2006 conference included industry analysts, China specialists, and U.S. military officers. Noteworthy among the participants were several retired ambassadors and flag officers, including former Commander-in-Chief, U.S. Pacific Command and ambassador to China Admiral Joseph W. Prueher, USN (Ret.). Among the U.S. Navy representatives were senior officials from the Office of the Chief of Naval Operations, as well as from Commander, U.S. Third Fleet.

The organizers of this conference purposefully chose to welcome a variety of viewpoints to this important dialogue, including perspectives held by analysts who view China as an emerging economic and military threat and those who believe that China is becoming a vital "stakeholding" partner in global commerce and security. A wide range of perspectives on Chinese energy and naval strategies—and the relationship between these strategies—are evident in the chapters of this book. This reflects CMSI's broader commitment to an open, pluralistic, and scholarly approach to studying Chinese maritime development. In this regard, we believe it is significant that most of this book's chapters draw substantially on original Chinese sources—many not previously referenced in English-language scholarship—to better acquaint the reader with the sophisticated and voluminous Chinese strategic literature on both energy security and naval development.

This conference focused on three concrete questions: (1) What is China's energy strategy? (2) What role might energy dependence play in China's emerging naval modernization? (3) What are the implications of China's energy strategy for maritime strategy? Some consensus findings, along with major points of disagreement, are described below.

With respect to China's overall energy strategy, the economist contingent noted that China's gross national product may continue to grow at its present pace for two decades or more. Despite diversification of energy suppliers and investment in alternative energy sources (e.g., nuclear power) and several pipelines to China being built or in discussion, analysts believed, Beijing's growing fossil fuel dependence and its reliance on seaborne supplies would not be reduced significantly. It was noted that Beijing seeks to vastly increase the energy efficiency of its economy, but participants were deeply skeptical that this could be achieved, even though many believed that Beijing is likely to reestablish an energy ministry in the near future. Finally, it was emphasized in the course of several presentations that China's energy diplomacy in

Central Asia, the Middle East, and especially Africa has been highly effective and may rely on unconventional methods.

Many analysts at the conference addressed the issue of an interconnection between Chinese energy and naval strategies. In particular, it was widely agreed that many Chinese (including, especially, PRC naval analysts) are concerned by the possibility of a U.S. energy embargo against China (possibly aided by Japan, India, or both), for example, in a Taiwan crisis. It was suggested that this issue may already be serving as a rationale for China's accelerated naval development, particularly "beyond Taiwan" (the latter an area of increasing confidence for Beijing), because Chinese naval analysts seem to believe that the People's Liberation Army Navy (PLAN) cannot contest critical energy sea lines of communication (SLOC) now or in the near future. One cogent summary of China's national security viewpoint on the so-called Malacca Dilemma (马六甲困局) with naval implications might be a concerted effort to make the U.S. "not willing to block, not daring to block, and not able to block" ("不愿阻断, 不敢阻断, 无法阻断") China's energy lifeline. This Chinese conception seems to hint at a strategy of cultivating interdependence first while simultaneously hedging against conflict with both robust deterrence and also further development of energy transport and military capabilities to ensure security if deterrence fails. Participants at the conference broadly agreed with the notion that energy issues will likely compel the PLAN to be used increasingly in nonconflict situations in a wider variety of regions. One of those regions is likely to be the Indian Ocean, although in the near and medium term China would appear to face a large ambition-capability gap. In this regard, while PLAN development has been moderate in scope (numbers of platforms) and any change in that trajectory would be obvious to outside observers, there have been enormous and strategically significant qualitative achievements in the last decade.

Conference participants also considered the implications of China's energy strategy for the development of U.S. maritime strategy. Participants widely agreed that emerging Chinese access denial and littoral sea control capabilities require the U.S. Navy to carefully consider SLOC security in East Asia: credible capability must be retained without inadvertently generating perceptions of aggressive intent. In addition, the point was made that the United States may ultimately be more vulnerable than China to oil supply disruption because of higher dependence on imported fossil fuels within its overall energy mix. Finally, many of the participants suggested that the PLAN seems to have reached a crucial strategic turning point. In that light, it was surmised that opportunities for external engagement may be substantial,

and that such engagement could help to foster a maritime "stakeholder" mentality within the Chinese Navy.

While there were substantial areas of consensus among conference participants, there were also some interesting areas of disagreement. The assembled specialists differed on the extent to which various Chinese actions were centrally planned and controlled. For instance, the actual degree of state control over Chinese oil companies was a subject of debate. Some participants downplayed the overall importance of the military aspect of China's energy security policy while others maintained that the strategic aspects are salient. A related question concerned whether energy is the true motivation for China in territorial disputes in the East and South China seas. Analysts also had different opinions concerning the likely extent of Chinese capabilities over the next decades, particularly with respect to People's Liberation Army (PLA) power projection beyond China's close-in waters. They differed concerning whether China's increasing clout in Africa (and the developing world more generally) serves U.S. interests. Finally, there was disagreement about whether China might be receptive to a more robust U.S. naval engagement, and the extent to which U.S. naval policy might or might not be able to influence the scope and pace of China's naval modernization. Whether China should be explicitly discussed in the developing U.S. maritime strategy as a unique challenge also formed another sharp point of debate among the participants.

This volume is divided into four parts. The first part, "China's Energy Future and National Security Strategy," establishes a foundation for this study by surveying Beijing's economic and military development and consequent energy needs and policy challenges. The initial chapter, by James Mulvenon, considers the role of energy in the development of the PLA as well as Beijing's strategic options for defending its growing energy access. Mulvenon demonstrates that the PLA is taking the issue of fuel scarcity seriously from an operational perspective. Chas W. Freeman Jr. then assesses the comparative energy vulnerabilities of China and the United States and the prospects for bilateral cooperation in this regard. The third chapter by Daniel H. Rosen and Trevor Houser evaluates the intersection between China's potential future economic growth and energy demand. David Pietz then offers detailed analysis of China's energy sector. Mikkal Herberg provides an overview of the strategic implications of China's growing efforts to acquire and utilize liquefied natural gas as an alternative to more polluting fuels, especially coal. As Chinese energy requirements increase, the security of the relevant SLOC has become a major topic for discussion in Beijing. In the

final chapter of part I, Gabriel B. Collins and Andrew S. Erickson consider the motives and the strategic implications of developing a nationally flagged Chinese tanker fleet.

Part II, "China's Global Energy Access," offers in-depth studies of China's efforts to acquire energy around the world. James R. Holmes and Toshi Yoshihara contend that the vital importance of energy imports from the Middle East dictates that China's growing strategic focus, while limited at present, will be directed not into the Western Pacific but rather toward the Indian Ocean. Saad Rahim outlines the substantial recent progress in relations between Beijing and Riyadh, which may result in significant Saudi assistance in China's development of both oil refining capacity and a strategic petroleum reserve (SPR). Although China cannot genuinely compete with the United States in Riyadh, Beijing is subtly gaining influence in Saudi Arabia. Ahmed Hashim analyzes the long-standing ties between Iran and China while uncovering factors that over the long term may limit the development of a true strategic partnership. Sino-Iranian relations are subordinate to Sino-American relations in Beijing's calculus because the trade relationship between the United States and China is so robust. Clifford Shelton examines China's increasing success in parlaying economic assistance and an ethic of noninterference into increasing access to African oil reserves. A case in point involves the Central African Republic, whose entire embassy in Beijing is seemingly funded by China in exchange for rights to mineral exploration. Vitaly Kozyrev situates China's quest for energy and military security in the complex terrain of Eurasia, where China's substantial diplomatic achievements have rendered its borders relatively secure. Kozyrev argues that China intends to be simultaneously a continental and a maritime power. In a chapter devoted to Sino-Japanese competition for sovereignty and resources in the South China Sea, Peter Dutton proposes innovative legal solutions to a complex and volatile dispute over gas fields in the East China Sea. Finally, John Garofano considers the strategic significance of the South China Sea, not only for Beijing's national development but also for Washington's geopolitical interests. Garofano describes China's increasingly effective projection of soft power in the South China Sea region and evaluates future prospects.

Part III, "China's Naval Development and Concerns Regarding Energy Access Denial," considers scenarios of great concern to both the United States and China. Gabriel B. Collins, Andrew S. Erickson, and Lyle J. Goldstein begin by surveying the views of Chinese naval analysts on the maritime threats related to energy confronting Beijing and Beijing's potential responses. They demonstrate that that there is not only acute concern in China about these

issues but also openness to the possibility of maritime cooperation in the energy security domain. Bernard D. Cole then surveys the role energy has played in Chinese maritime strategy since 1949. Cole assesses that China's navy today has the most capable conventionally powered submarine force in the world, a large and improving surface combatant force, and significant forces in other maritime mission areas. China's navy is already able to overpower Taiwan's navy, it offers a serious potential match for the Japanese Maritime Self-Defense Force, and it poses a thought-provoking challenge to possible U.S. naval intervention in a Taiwan scenario. While Cole maintains that energy security will remain a PLAN mission, he concludes that this mission is unlikely to become a major planning consideration for China's naval modernization. James Bussert subsequently reflects on the PLAN's development of surface combatants and their potential use in future defense of China's SLOC. Contrary to much conventional wisdom, this naval analyst suggests that global SLOC missions will be within reach of the PLAN in coming decades. Bruce Elleman reviews naval blockades in East Asia and the factors that influence their success or failure, demonstrating that China has ample experience with blockades, of which it has repeatedly been victim. In their concluding chapter to this section, Gabriel Collins and William S. Murray also challenge prevailing wisdom, both within China and abroad, by concluding that inherent interdiction difficulties as well as growing Chinese access denial and retaliatory capabilities would make it difficult to execute in practice, potentially counterproductive, and likely very risky for any foreign power to attempt an energy blockade of China.

The final part, "China's Energy Security and U.S.-China Relations," considers larger strategic and policy implications, especially as they may pertain to the future of the U.S. Navy. Ronald O'Rourke enumerates recent PLAN development and suggests that it is critical for Washington to retain presence, influence, and operational capacity in the Western Pacific by remaining committed to robust naval development and deployment. Dan Blumenthal probes aspects of China's maritime and energy development that may raise concerns in Washington, and warns in particular of unsavory regimes that benefit from China's quest for energy as well as of the instability that could flow from China's building of a genuine blue water fleet. In the end he concludes that the responsibility lies with Beijing to reorient its energy policies in line with market forces to allay suspicions about its larger strategic goals. Jonathan D. Pollack confronts this conflictual paradigm head-on, arguing that the concept of energy security itself is deeply flawed and conducive to dangerous myth-making on both sides of the Pacific. He focuses

instead on probing the ways in which China and the United States might work together, potentially as partners in a "thousand ship navy," to mitigate a shared problem.

The opinions expressed in this volume are those of the authors and editors alone and in no way reflect the official policies or assessments of the U.S. Navy or any other entity of the U.S. government. The editors wish to thank each of the respective authors for their outstanding research contributions. In addition, we extend profound thanks to many at the Naval War College who played important roles in executing a successful conference and producing this volume, in particular: Danling Cacioppo, Michael Cardin, Peter Dombrowski, Cristina Hartley, Jim Lewis, Debbie Maddix, Susan Moretti, Jo-Ann Parks, Robert Rubel, Michael Sherlock, and Doug Smith. We wish to give special recognition to Gigi Davis, an exemplary professional who has invested many late nights in this effort. CMSI wishes to thank Raytheon Integrated Defense Systems for its continuing support of Asia-Pacific studies at the Naval War College through a generous gift to the Naval War College Foundation. Finally, we appreciate the diligent and exceptional work of the editorial team at Naval Institute Press on this second volume in the series Studies in Chinese Maritime Development.

Before embarking on the intellectual journey embodied by this fine collection of papers, it is worth recalling that historically China has not been aggressive and expansionist. During the apex of its power, the so-called Middle Kingdom did not generally colonize far-flung domains and its borders have remained more or less stable over a long period of time. Still, basic international relations theory tells us that the rapid rise of great powers is often accompanied by grave instability. The bloody conflicts of the last century are at least partly attributed to this phenomenon.

At the time of our 2006 conference, several participants noted that the event fell on the sixty-fifth anniversary of the tragic Pearl Harbor attack of 7 December 1941. This was entirely coincidental, of course, but we should nevertheless use the opportunity to solemnly reflect on the value of peace in the Asia-Pacific region and, at the same time, on how the strength of our navy can help guarantee that peace. It is widely agreed by historians that the major causes of the deadly war in the Pacific more than six decades ago were Japan's requirement for external resources, its perceived vulnerabilities, and the associated ideologies that then took hold in Tokyo. The durable peace that has prevailed in East Asia for decades is testimony to the power of cooperation over confrontation under conditions of foresight and goodwill.

We live in a world increasingly defined by China's rapid and continuing rise. For the benefit of all countries, we must proceed with a clear understanding of the interconnectedness between energy, international conflict, and maritime security at a variety of levels. The entire world would lose if the history of sixty-five years ago were to repeat itself in this dynamic region.

June 2007

#### Note

1. 凌云 [Ling Yun], "龙脉" ["The Dragon's Arteries"], 现代舰船 [Modern Ships] (October 2006): 19.