
China's Rising Seaborne Food and Fuel Imports: Propelling Naval Expansion?

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Strategic Horizon 1C: The U.S.-China relationship will be central to international relations in the twenty-first century, as the two great Asia-Pacific powers compete, coexist, and cooperate across the full spectrum of national capabilities. While they share many important interests and are increasingly interdependent, particularly in the economic realm, Beijing and Washington regrettably retain presently-irreconcilable differences regarding important security issues. While this friction can likely be managed, albeit at the cost of tremendous effort and patience on both sides, occasional crises are likely, and conflict cannot be ruled out completely if wisdom and diligence prove insufficient. The best way to avoid conflict is to understand its potential nature and cost. To that end, this four-part series will examine four major issues:

- *China's Near Seas military focus and capabilities*
- *China's economic environment and implications for military development*
- *Chinese energy and resource imports and their potential to drive naval expansion*
- *China's conflict triggers and mitigating factors, particularly economic interdependence*

While this series will retain China SignPost™ (洞察中国)'s traditional Sino-centric focus, it must be noted that the U.S. and its capabilities, policies, and actions clearly represent a major part of the strategic equation, and Beijing clearly has its own views and concerns about them.

Chinese Energy and Resource Imports and Their Potential to Stimulate Naval Development

The extent to which Chinese energy and resource import trends might drive expansion of China's navy and "blue water" capabilities is one of the most important yet difficult questions for analysts forecasting Beijing's military development.¹

Experts agree that China's imports of energy resources such as crude oil will likely rise significantly in coming years.² In 2011, China imported roughly 40% of its crude oil supply, 182 million tonnes of coal³, roughly 6% of total demand; and 12% of its natural

gas supply by sea. More importantly, these numbers are likely to rise. For instance, even if the Chinese economy slowed substantially, the country could still add more than 300,000 barrels per day of new crude oil demand each year—the equivalent of adding a Philippines to the global oil market annually.

Geologic and economic realities strongly suggest that China's dependence on seaborne energy imports will continue to surge. China's domestic oilfields are hard pressed to maintain current output levels, and barring major breakthroughs, will not provide a net expansion in domestic supplies that could replace oil imports.

As a result, more than half of China's total oil supply is now imported. Roughly 90% of imports come by sea and pipeline construction will not reduce this, as oil output growth in Russia and Kazakhstan—China's overland oil suppliers—has not kept pace with China's rising oil demand. Russian oil production grew by 170 thousand barrels per day (bpd) in 2011, while China's oil consumption grew by 566 thousand bpd during that same period.

Grain imports are also likely to rise significantly, even though China already obtains 67% of its soybean supplies by sea. If each of China's roughly 200 million "middle class" who have enough disposable income to periodically eat out begin to consume one five-ounce chicken sandwich per week, this would create an additional 3.2 million tonnes per year of grain demand (in the form of corn and soybeans). China's push to rebalance its economy in favor of domestic consumption, coupled with a small per capita arable land base and a water supply crisis in the North China wheat bowl, is generating increased seaborne imports of staple grains from places like Australia, the U.S., Brazil, and Argentina.

Securing China's Seaborne Natural Resource Imports

Under a wide range of plausible scenarios, Chinese energy/natural resource imports will continue rising. Less clear is how China might respond to rising dependency on foreign-sourced seaborne oil, mineral, and food. Some analysts believe that Beijing will continue to free ride off U.S.-led sea lane security that protects oil and natural resources being shipped to any different Asian consumers. Others contend that Beijing will be impelled to build a blue water navy to defend its resource lifelines and protect its trade.

People's Liberation Army Navy (PLAN)-affiliated writers often advocate that their service develop further capabilities to protect maritime transit and resources. Together with many of their civilian counterparts, they view such comparatively abundant and under-

exploited resources, newly accessible thanks to emerging technologies, as timely replacements for increasingly depleted continental reserves. However, opinions on the nature and extent of the threat to China's sea lane security and what corresponding policies are feasible and desirable vary widely, and there appears to be an extreme lack of consensus across the board.

These factors make it extremely difficult to predict the extent to which natural resource imports are likely to stimulate PLAN development. While some researchers emphasize the extent of China's proximity to Russian energy sources, domestic energy supplies, and political ability to ration supplies for military use in crisis, few serious experts dispute the overall trend of higher dependence on imported natural resources and the strategic vulnerabilities that might result. There is greater debate concerning how Beijing is likely to respond to the challenge.

Some analysts go so far as to view concerns over protection of seaborne natural resource imports as a potent, rapid driver of Chinese blue water expansion. They tend to cite statements by Chinese experts expressing grave concern about Chinese seaborne energy reliance. Others emphasize the inherent difficulty of blockading China or Chinese analyses citing the advantages of relying on the public good of sea lane security provided by the U.S. Navy and openness to cooperation as reasons why Beijing has not (yet) assumed defense of its critical sea lanes.

In fact, China appears at a strategic crossroads. Today's objects of focus in the Near Seas offer compelling strategic cohesion and consensus. There is far less agreement concerning the ability and advisability for China to develop similarly kinetic capabilities in the Far Seas/Oceans. It thus seems likely that China's long range "blue water" naval capability will primarily be a slowly-growing, lower-level supplement to the naval forces geared for a conflict closer to China's coast, unless or until one or more of the following conditions are met:

- China makes major progress concerning Near Seas objectives
- China achieves economic strength sufficient to pursue intense development in both arenas
- Significant events or strategic changes convince Beijing that further action is needed

Growing Resource Imports Will Likely Influence Naval Procurement

China's tremendous appetite for natural resources will remain a key influence behind economic and maritime security policies in the East Asian region and abroad. Geographically, Chinese policymakers will likely focus the bulk of their efforts on the South China Sea and Indian Ocean regions, as they form the most active seaborne commodity corridor feeding China.

Providing sea lane security in these areas will involve China's uniformed maritime security services (and civilian counterparts, in the South China Sea). It will also likely become a focal point as the PLAN begins building its first carrier group. China's State Oceanic Administration has ordered 36 additional patrol vessels and also plans to add 16 patrol aircraft to its force in coming years.⁴

These vessels could be used for sea lane security patrols in the South China Sea and thereby help free up PLAN assets for deployment further afield.⁵ The PLAN itself is also presently building the new Type 056 light corvette, which appears geared toward operations in the South China Sea area.⁶ Finally, the December 2011 deployment of the 3,000-ton Haijian 50⁷, China's largest coast guard patrol vessel, to disputed areas of the East China Sea suggests that Beijing intends to use its growing civil maritime forces to help secure key maritime transit zones in coming years.

Natural resource security is of course far from the only reason that deck aviation platforms would be useful to the PLAN, but natural resource-driven sea lane security missions could well comprise a major part of the "protect China's overseas economic interests" mandate that carrier advocates can cite to gain traction in defense budget allocation debates.

Resource security missions could use either carriers, amphibious vessels⁸, or both; and the way Beijing allocates resources for carrier and amphibious vessel construction over the next five years will suggest how extensively the PLAN wants to be able to handle higher-intensity maritime contingencies as opposed to simply being able to show the flag along key sea routes and suppress piracy.

A carrier group would offer immense diplomatic benefits in providing a visible Chinese naval presence in the South China Sea, Southeast Asia, and along key Indian Ocean sea lanes. Ultimately, several carrier groups would be necessary for persistent presence in these areas, however, to allow for periodic training and maintenance.

Greater focus on carrier group development would suggest that Chinese leaders want to bolster their capacity to handle higher-intensity expeditionary missions than would be the case if ship procurement focuses more on smaller deck aviation-capable platforms such as amphibious vessels.

Bottom Line: China's rising dependence on seaborne imports for critical fuel and food supplies will help the PLAN leadership argue for the resources and support it would need to enhance China's long-range naval power projection capabilities. The pace and extent of this modernization remains highly uncertain, however, and will hinge heavily on China's finances and perception of threats to its maritime resource lifelines.

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China SignPost™ 洞察中国 founders Dr. Andrew Erickson and Mr. Gabe Collins have more than a decade of combined government, academic, and private sector experience in Mandarin Chinese language-based research and analysis of China. Dr. Erickson is an Associate Professor at the U.S. Naval War College's China Maritime Studies Institute (CMSI) and an Associate in Research at Harvard's John King Fairbank Center for Chinese Studies. Mr. Collins is a law student at the University of Michigan Law School. His research focuses on commodity, security, and rule of law issues in China, Russia, and Latin America.

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The authors have published widely on maritime, energy, and security issues relevant to China. An archive of their work is available at www.chinasingnpost.com.

¹ For detailed analysis, see Andrew S. Erickson and Lyle J. Goldstein, “Gunboats for China’s New ‘Grand Canals’? Probing the Intersection of Beijing’s Naval and Energy Security Policies,” *Naval War College Review* 62.2 (Spring 2009): 43-76, <http://www.usnwc.edu/getattachment/f655705e-0ef3-4a21-af5a-93df77e527fa/Gunboats-for-China-s-New--Grand-Canals---Probing-t>.

² Hearing: China’s Global Quest for Resources and Implications for the United States, U.S.-China Economic and Security Review Commission 26 January 2012, http://www.uscc.gov/hearings/2012hearings/written_testimonies/hr12_01_26.php.

³ “NDRC: China’s Coal Imports/Exports, Production and Consumption Performance in 2011,” 2 February 2012, <http://www.chinamining.org/News/2012-02-02/1328167659d53916.html>

⁴ Wang Qian, “Maritime Forces to be Beefed up amid Disputes,” *China Daily*, 17 June 2011, http://www.chinadaily.com.cn/cndy/2011-06/17/content_12718806.htm.

⁵ Lyle J. Goldstein, *Five Dragons Stirring Up the Sea: Challenge and Opportunity in China’s Improving Maritime Enforcement Capabilities*, *Naval War College China Maritime Study* 5, April 2010, http://www.usnwc.edu/Research---Gaming/China-Maritime-Studies-Institute/Publications/documents/CMSI_No5_web1.pdf.

⁶ “Could This Be the First Photos of Type 056 Light Corvette Under Construction?” [sic] *China Defense Blog*, 3 January 2012, <http://china-defense.blogspot.com/2012/01/could-this-be-first-photos-of-type-065.html>.

⁷ “Largest Patrol Ship Makes First Trip to East China Sea,” *Global Times*, 14 December 2011, <http://www.globaltimes.cn/NEWS/tabid/99/ID/688384/Largest-patrol-ship-makes-first-trip-to-East-China-Sea.aspx>.

⁸ “Fourth Chinese Navy Type 071 LPD launched at Shanghai Shipyard,” *Naval Forces News – China*, *Navy Recognition*, 28 January 2012, http://www.navyrecognition.com/index.php?option=com_content&task=view&id=301.