The Belt and Road Initiative
A Lens into China’s Energy Security and Maritime Strategy
MINTU BARUA

Abstract

This article contends that China, through its Belt and Road Initiative, is continuing a long-standing pursuit of its energy security strategy begun in 1993 and a separate maritime strategy. The economic corridors that have resulted will diversify the sources and routes of energy imports, and the initiative’s energy cooperation projects are a continuation of China’s long-term goals. China’s maritime strategy, pursued through the Maritime Silk Road, is designed to achieve the goals of developing naval bases and the blue-water navy and increasing military capabilities and naval activities to protect China’s vital interests.

Introduction

In fall 2013, Chinese president Xi Jinping launched the Belt and Road Initiative (BRI), which comprises the land-based Silk Road Economic Belt (SREB) and the sea-based Maritime Silk Road (MSR). The Chinese government’s “Vision and Actions” document states that the SREB will bring China, Central Asia, Russia, and Europe (especially the Baltic) closer to one another; will connect China with Southeast Asia, South Asia, and the Indian Ocean; and will link China with the Persian Gulf and the Mediterranean Sea through Central Asia and West Asia. The SREB emphasizes transcontinental connectivity via land routes, a Eurasian railway network, oil and gas pipelines, and six economic corridors: New Eurasian Land Bridge; China–Mongolia–Russia Economic Corridor; China–Central and West Asia Economic Corridor; China–Indo–China Peninsula Economic Corridor; China–Pakistan Economic Corridor; and Bangladesh–China–India–Myanmar Economic Corridor. The goal for the MSR is just as clear: the “Maritime Silk Road is designed to go from China’s coast to Europe through the South China Sea and the Indian Ocean in one route, and from China’s coast through the South China Sea to the South Pacific in the other.” In the history of human civilization, the BRI is the most ambitious economic development, global connectivity, infrastructure, and investment project ever launched by any country. It involves at least 68 countries across different continents, 65 percent of the global population, and 40 percent of global GDP. Naturally, the project has attracted...
attention from elected leaders, diplomats, scholars, and policymakers worldwide, and in real time scholars are attempting to unfold the underlying motivations. Put simply, China’s twin motivations are economic and strategic.

Some scholars who emphasize the economic factors contend that the BRI is a master plan to develop western regions in China to channel industrial overcapacity and excess foreign exchange reserve into making the overall economy healthier. The border regions of the western provinces are underdeveloped, so in order to develop them the Chinese government focuses on cross-border economic activities between underdeveloped regions and neighboring states. Overcapacity in various industrial sectors, including coal, steel, cement, and energy, had been slowing the overall growth of the Chinese economy. In addition, the possession of massive foreign exchange reserves and the tremendous stimulus package provided by the government during the 2008 global financial crisis worsened economic conditions. China was searching desperately for new overseas markets to offset this industrial overcapacity and excess financial resources. Therefore, some observers argue that purely economic considerations led to the launching of the BRI; strategic concerns were secondary. Such strategic aspirations had been shapeless, they contend, before China had launched the BRI.

Conversely, there are opinions that strategic interests are paramount. Some analysts contend that the BRI is designed to counter America’s strategy of encirclement in the Indo-Pacific. Some have also observed that the BRI was planned to revise the existing regional (and therefore global) order and thereby create a new, China-centric order. The BRI is seen as a Chinese version of the post–World War II Marshall Plan in this respect. There are also theories proposed that the BRI is China’s counter-response to America’s Pivot to Asia strategy and its proposed economic dimension, the Trans-Pacific Partnership. Others contend that the BRI is a Chinese geostrategy to expand the sphere of China’s regional dominance. Contrary to some conventional opinions, some scholars contend that the BRI is neither an infrastructure project nor a route connectivity project. Instead, it is a global strategy based on smart power, which China has devised to occupy the paramount position in the global economy and improve China’s image. Some scholars have also demonstrated how energy security shapes the BRI.

The aim of this article is not to determine whether economic factors or strategic factors are dominant in the BRI. Both are present, and any single interpretation can be misleading. Instead, this article contends that China is pursuing its two longtime and overarching strategies: energy security and maritime dominance. Well before it launched the BRI, China was pursuing a cooperation-based energy security strategy because, militarily, it could not defend its own energy interests.
Thus, to tackle its vulnerability over oil imports, China started upgrading its maritime strategy—in the form of the so-called String of Pearls—to defend commercial and strategic interests (which of course included energy security). To ensure uninterrupted oil imports from overseas, China, instead of relying on foreign tanker fleets, emphasized oil imports from Chinese-flagged tankers.

This article is divided into three sections. The first addresses the origin of China’s energy insecurity and its strategy in response. The second section demonstrates how, before the BRI, China was already implementing its cooperation-based energy security strategy as well as its maritime strategy. The final section explains in greater detail how China has been pursuing its long-term energy security and maritime strategies via the BRI to protect its vital interests.

**China’s Energy Insecurity**

Although China has a vast reserve of coal, its domestic energy resources are inadequate to meet growing energy demand. Coal fulfills around two-thirds of China’s total energy supply, but coal reserves are likely to be depleted within less than 50 years. Under these circumstances, the growing imbalance between demand for and supply of oil and gas will make China more dependent on massive imports from overseas. For instance, about 75 percent of China’s total oil consumption and 45 percent of its total gas usage is met through imports.

In 1993, China turned into a net oil importer from a net oil exporter, which heightened energy insecurity due to excessive dependence on imports of foreign oil, which could pose a severe threat to national security. One may observe that the root of China’s energy insecurity is geostrategic vulnerability. The United States militarily controls the most crucial maritime route that spans from the Persian Gulf to the South China Sea. China imports most of its foreign oil through this route, so it believes that the United States is capable of disrupting China’s oil supply during a political and military crisis such as Taiwan. Chinese analysts believe that the United States has executed this containment strategy to limit China’s access to oil imports. Thus, China considers the United States to be the biggest threat to China’s energy security.

China’s overdependence on maritime choke points, such as Malacca Strait, for oil imports has made it strategically vulnerable. (This is known as the so-called Malacca dilemma.) Notably, 80 percent of China’s oil imports routes through Malacca Strait. Therefore, China has adopted policies such as investment in oil and gas exploration and development projects overseas; construction of energy infrastructures, including oil and gas pipelines; and diversification of the sources and routes of energy imports. To reduce its dependence on Middle Eastern oil and lessen strategic vulnerabilities related to seaborne energy imports, China has been investing massively in oil- and
gas-rich regions in Africa, Central Asia, and Russia. Consequently, African nations such as Sudan, Angola, and Congo; Central Asian nations such as Kazakhstan, Turkmenistan, and Uzbekistan; and the Russian Federation have received substantial investment from China. This policy of seeking resources outside the Middle East may help China to minimize the Malacca dilemma.26

Indeed, China’s decision to invest in oil and gas resources in Central Asia and Russia can secure its energy supply because Central Asian states and Russia have sizable unexplored oil and gas reserves.27 In addition, Central Asia’s significant strategic advantages have made it a top preference for Chinese investment. Unlike West Asia, the presence and strength of the US military is not as strong in Central Asia. China’s energy interest in Central Asia is less vulnerable to the military dominance of the United States.28 To exploit the same strategic advantage, China prefers to invest in oil and gas resources in Russia. Thus, by diversifying its sources of oil imports, China has been trying to minimize geopolitical risks related to its foreign oil supply.29 Investment in overseas oil and gas resources and the construction of oil and gas pipelines are crucial parts of China’s diversification of energy supply plan.

Implementation of Cooperation-based Energy Security Policies

From 1949–1993, China was self-sufficient in terms of its energy. In this period, China depended only on domestic production, and energy security played a minimal role within Chinese foreign policy during this period. As self-dependence ended in 1993, China began to import oil from overseas. From 1993, China’s energy security strategy became an integral part of Chinese foreign policy and national security. After 1993, national oil corporations (NOCs) started playing a significant role in energy security policy through foreign direct investment in overseas energy resources.30 Notably, in 1982, 1983, and 1988, the Chinese government formed three NOCs: the China National Offshore Oil Corporation, the China National Petrochemical Corporation (Sinopec), and the China National Petroleum Corporation.31 From 1993 onward, NOCs started investing in overseas oil development and exploration projects in the countries such as Kazakhstan, Turkmenistan, Venezuela, Peru, Indonesia, Angola, Nigeria, Sudan, Kuwait, Iraq, and many others.32 In its Eleventh Five-Year Plan (2006), China emphasized energy security. Since 2006, Chinese corporations started investing in select foreign countries, and medium-size and smaller corporations started investing as well. Notably, since 2006, China’s foreign policy played playing a more active role in backing China’s energy security strategy. After the outbreak of the global economic crisis in 2008, China got the opportunity to invest its vast currency reserve
in the global market. Consequently, China started investing in overseas energy resources.\(^{33}\)

Since 2008, China’s nationalized oil corporations started purchasing overseas oil and gas resources, and between 2011 and 2013, it invested around $73 billion in such resources. In 2010, the amount of oil production from China’s overseas resources was 1.36 million bbl/d; in 2013, this increased to 2.1 million bbl/d. In 2013, 26 percent of China’s overseas oil production came from Iraq; other nations, such as Kazakhstan, Sudan, and South Sudan, also contributed to China’s overseas oil production. In 2013, the NOCs concluded several bilateral oil-for-loan agreements, worth $150 billion, with many nations, including Kazakhstan, Russia, Venezuela, Angola, and Ghana. In oil-for-loan agreements, China provides loans to partner countries to construct energy infrastructures and explore energy resources in return for receiving oil from those partner countries at established rates. China has signed many such agreements worth more than $45 billion with Venezuela in return for receiving 600,000 bbl/d in crude oil and related products. China has signed gas-for-loan contracts with Turkmenistan; China and Russia have signed several oil and gas agreements, including two loan-for-oil deals whereby China would receive 600,000 bbl/d of oil from Russia via the Eastern Siberia–Pacific Ocean pipeline. Additionally, China and Russia have signed agreements whereby China would receive up to 800,000 bbl/d of crude oil from Russia by 2018. China now receives oil from Eastern Siberia. Thus, China has strengthened its energy security through energy-rich neighbors to gain better access to their energy resources.\(^{34}\)

The construction of oil and gas pipelines is the central component of China’s plan to diversify routes for energy imports. In 2006, China inaugurated its first transnational oil pipeline through which it started receiving Kazakh and Russian oil. Oil from central and western Kazakhstan is sent to China through this pipeline. Initially, this pipeline delivered 200,000 bbl/d of oil, but after pipeline expansion in 2013, delivery capacity doubled.\(^{35}\) In 2015, to import oil from Myanmar, China launched an oil pipeline that had a delivery capacity of 440,000 bbl/d.\(^{36}\)

From 2007, China turned from a net natural gas exporter into a net natural gas importer. China’s demand for gas imports significantly increased due to construction of pipelines and infrastructure to process natural gas.\(^{37}\) Currently, China imports around 45 percent of its gas.\(^{38}\) In 2019, China imported 4.6 trillion cubic feet (Tcf) of natural gas, 7 percent more than in 2018.\(^{39}\) In 2019, 62 percent of China’s total natural gas imports came from liquefied natural gas imports, and 38 percent via pipeline from three Central Asian countries—Turkmenistan, Uzbekistan, and Kazakhstan—and Myanmar.\(^{40}\)
The Central Asian Gas Pipeline (CAGP) is China’s first international natural gas pipeline, which imports natural gas from Kazakhstan, Turkmenistan, and Uzbekistan. The CAGP has been developed through several phases. Phase one (Line A) and Phase two (Line B) became functional in 2010 with a capacity of 1.1 billion cubic feet per year (Bcf/y). Phase three (Line C), which became partly operational in May 2014, added 880 Bcf/y. In 2014, China imported more than 1,040 Bcf/y of gas from Turkmenistan and Uzbekistan, an amount that is likely to increase with pipeline expansion. Soon after the beginning of gas production from the new Galkynysh field in September 2013, the amount of production increased, and in 2013 China and Turkmenistan signed a gas supply contract to increase capacity from 1.4 trillion cubic feet per year (Tcf/y) to 2.3 Tcf/y by 2020. In September 2013, China signed agreements with Uzbekistan and Tajikistan to construct Phase four (Line D) of the CAGP. Through Line D, natural gas would handle the Galkynysh field’s second stage of development. In September 2014, Line D construction started with an expectation that it would add 880 Bcf/y to the CAGP by 2016. Line D is expected to handle additional capacity of up to 1.1 Tcf in the CAGP system and increase supply capacity from Turkmenistan to 2.3 Tcf/y. Although the Line D has faced several obstacles, it is expected to become functional by 2022.

In May 2014, China and Russia signed a historic gas agreement, whereby China would purchase 1.3 Tcf/y of gas for 30 years at $400 billion from Russia’s East Siberian field. In November 2014, China and Russia signed a memorandum of understanding that China would receive 1.1 Bcf/y of gas from Russia’s Western Siberia.

To sponsor the construction of a gas pipeline for an additional 420 Bcf/y, China signed an agreement with Myanmar in 2008. The pipeline became functional in the middle of 2013, and China had received 116 Bcf of gas by 2014.

**Strategic Initiatives to Strengthen China’s Energy Security: From the String of Pearls to the Nationalization of Tanker Fleets**

The Malacca dilemma led China to introduce the “String of Pearls” strategy, through which China seeks to enhance maritime capability and protect vital interests. The phrase “String of Pearls” was first used in a 2005 report prepared by the defense contractor Booz-Allen-Hamilton to explain China’s maritime strategy. “Pearls” refers to several seaports and naval bases located in Pakistan, Myanmar, Sri Lanka, and Bangladesh. China may exercise its maritime strategy, protect its vital overseas interests, and project its military capability utilizing this strategy. China claims that the String of Pearls is designed to ensure its energy security and deter potential threats.
security by protecting the sea lines of communications (SLOCs) that stretch from the Indian Ocean via Malacca Strait to southern China.\(^{47}\) Indeed, the protection of SLOCs to ensure the supply of energy and raw materials is the core of the strategy.\(^{48}\)

The nationalization of tanker fleets is another way to protect China’s energy interests. China believes that as most of the tanker fleets China uses to import oil are foreign, and thus the energy supply may be interrupted during crises such as sanctions or blockades. Therefore, China wants to import oil by its Chinese-flagged tanker fleets to ensure the uninterrupted energy supply because state--flagged tanker fleets may enjoy sovereign immunity in the crisis. As a result, China aimed to transport 60–70 percent of its oil imports with state--flagged tanker fleets by 2020. However, there is no guarantee that the Chinese--flagged tanker fleets can ensure uninterrupted oil supply during a crisis.\(^{49}\)

Energy cooperation is the foundation of China’s energy security strategy. Notably, scholars contend that China’s energy cooperation strategy was derived from severe energy insecurity due to China’s weakness in protecting its energy shipping routes militarily.\(^{50}\) Consequently, to remove this strategic vulnerability, China introduced the maritime strategy, in the form of String of Pearls, to strengthen energy security and protect other vital interests in a more comprehensive manner. China has nationalized its tanker fleets to strengthen energy security.

**BRI: The String of Pearls and Energy Security Strategy under One Umbrella**

Because energy cooperation is an essential part of China’s long-standing energy security strategy, it is no surprise that energy cooperation is part of the BRI agenda. Scholars observe that investing in the construction of energy infrastructure and facilities under the BRI is an effective way to channel China’s industrial overcapacity and excessive accumulated capital.\(^{51}\) Furthermore, China’s massive investment in the BRI energy projects can help China continue its long-term energy security strategy more comprehensively. Besides investing in energy projects through the BRI, investing in the MSR maritime projects is another effective way to channel Chinese capital and strengthen China’s long-term maritime strategy.

**Energy Security Strategy under the Belt and Road Initiative**

Energy cooperation is an essential aspect of the BRI, which is clear from the BRI documents and statements by the Chinese government.\(^{52}\) In addition, China
proposed to form the “Belt and Road Energy Club” to promote energy cooperation among BRI countries.  

The BRI and China’s long-standing energy security strategy are interconnected. Economic corridors are essential to China’s energy security strategy. Most are designed to diversify energy imports’ sources and routes. They include the China–Mongolia–Russia Economic Corridor; China–Central and West Asia Economic Corridor; China–Indo–China Peninsula Economic Corridor; China–Pakistan Economic Corridor; and Bangladesh–China–India–Myanmar Economic Corridor. They will import oil and gas from Russia, Central Asia, the Middle East, Africa, and Myanmar. For example, the China–Central and West Asia Economic Corridor will tighten China’s energy ties with Central Asia and Russia and help China lessen its dependence on the Persian Gulf region. The China–Pakistan Economic Corridor and Bangladesh–China–India–Myanmar Economic Corridor will help China import energy from Africa and the Gulf region by partially avoiding the Strait of Malacca. These economic corridors can diversify the sources and routes of energy imports and reduce China’s energy anxiety and strategic vulnerability. One may note that the plan of diversification works effectively. For example, in 2014, 11 percent of China’s crude oil imports came from Russia, and in 2019 it rose to 15 percent. Notably, in 2014, 68 percent of China’s crude oil imports came from the Middle East and Africa, which rose to 62 percent in 2019. These statistics indicate that China’s dependence on Malacca Strait for importing oil from the Middle East and Africa will not fade immediately. Instead, even in the distant future, China will still depend on the vulnerable route through Malacca Strait for importing Middle Eastern and African oil. Therefore, under the MSR, and reinforcing its String of Pearls strategy, China has been enhancing its maritime power to construct seaports and overseas military bases.

The Arctic Ocean region is also vital for China, mainly for two reasons. First, the Arctic region has a reserve of 13 percent and 30 percent of the world’s unexplored oil and gas, respectively. Second, the Arctic maritime route may reduce China’s strategic vulnerability related to the SLOCs that stretch from the Horn of Africa to Southeast Asia. Therefore, Chinese experts recommended that the Chinese government sketch out a master plan to exploit the potential economic and strategic advantages of the Arctic. As a result, China included the Arctic region in the MSR to exploit the Arctic region’s economic and strategic advantages.

One may note that various BRI documents issued by the Chinese government have concentrated on maritime security issues and the protection of energy interests, which include the protection of energy supply, energy infrastructure, such as oil and gas pipelines, and energy transport routes. Furthermore, one may con-
tend that, by absorbing the String of Pearls strategy into the BRI, specifically MSR, China can lessen the risks of seaborne energy imports and protect China’s vital economic and strategic interests. This notion confirms that the MSR is devised to advance China’s maritime and overseas interests, facilitate maritime trade and transport, and promote maritime security. This includes the protection of the seaborne energy supply, commercial shipments, vital SLOCs, and overseas energy resources. The construction of seaports and the modernization of the Chinese navy or the People’s Liberation Army Navy (PLAN), which is a fundamental requirement for the development of the blue-water navy, are inevitable to ensure maritime security and protect China’s vital interests.

In the 2015 Defense White Paper, China stated that, instead of concentrating only on the “offshore water defense,” China would focus on both that and “open seas protection.” The addition of open seas protection in China’s maritime strategy demonstrates that China has shifted its maritime strategy to develop a robust blue-water navy. Notably, much earlier than China’s 2015 Defense White Paper’s official release, in 2010, Chinese military personnel unofficially confirmed that China had been shifting its naval strategy. This meant a shift from coastal defense to far sea defense to protect China’s vital shipping routes and SLOCs. Under the MSR, China has been constructing seaports overseas and modernizing its navy, yet another aspect of the String of Pearls strategy.

**The Continuation of the String of Pearls Strategy under the Maritime Silk Road**

China has been constructing or has proposed construct seaports in BRI countries to advance its commercial and military interests. These include Hambantota and Colombo (Sri Lanka), Kyaukpyu (Myanmar), Casablanca (Morocco), Mombasa (Kenya), Kumport (Turkey), Bagamoyo (Tanzania), Port Djibouti (Djibouti), Piraeus (Greece), Gwadar (Pakistan), Chittagong (Bangladesh), and some others Chinese companies have been heavily investing in these seaports. Chinese corporations—mainly two state-owned companies, China Merchants Group and Cosco Group—have already invested around $11 billion into overseas ports to ensure access. The Chinese companies have invested in 42 ports in 34 countries under the MSR. The construction of ports and investment in harbors are essential for China if is to become a maritime superpower. Scholars are concerned that China-sponsored ports that have been built ostensibly for commercial purposes may eventually be used for military purposes. Similarly, the United States is deeply concerned about these ports because Washington suspects they will be used as naval bases for China’s blue-water navy to advance China’s military ambi-
Experts assume that the construction of ports and logistic hubs equipped with military facilities could motivate China to increase its military footprint in the Indian Ocean in the coming years. Moreover, experts assume that China may establish overseas military bases in some BRI countries, including some debt-ridden countries such as Sri Lanka, which is now compelled to allow China to access or control its seaports in lieu of repaying its Chinese loan. Using Sri Lanka's inability to repay Chinese debt, China in 2017 took away Sri Lanka's Hambantota port on a 99-year lease. Turning apprehensions into reality, China in 2017 inaugurated its first overseas military base in Djibouti. Indeed, Hambantota and Djibouti are just the tips of the iceberg; surely, China will take control of more ports and inaugurate more overseas military bases in the near future to strengthen its strategic presence in the maritime theater, especially the Indian Ocean. One can observe that the construction of seaports and the logistic hubs equipped with military facilities under the MSR are extensions of China's long-term maritime strategy. This is precisely the point of the String of Pearls strategy.

The construction of seaports and the modernization of PLAN are important to ensure maritime security under the MSR. Experts argue that, besides many other important strategic factors, another vital issue is the protection of China's vital SLOCs that stretch from the Persian Gulf to the Indian Ocean, through which most of China's energy imports pass. According to leading Chinese energy experts, China's worry over disruption to its energy supply by the United States during political or military crisis, such as the Taiwan issue, has led China to modernize its navy. Experts argue that the protection of China's energy interests and the SLOCs led to the development of China's blue-water navy.

One can easily understand the relationship between the modernization of PLAN and China's energy security strategy based on former Chinese president Hu Jintao's statements. In November 2003, then-President Hu Jintao expressed his deep concern over China's risk related to oil imports through the unstable route of Malacca Strait. On 27 December 2006, Hu Jintao strongly advocated for a powerful blue-water navy that would be capable of defending China's national interests. He indicated much earlier that China would modernize its navy and change its maritime strategy to protect vital interests, including energy security. Consequently, in November 2012, at the 18th National Congress of the Communist Party of China, China formally revealed its ambition of becoming a maritime power. After a few months, in April 2013, China released its Defense White Paper, which emphasized the protection of maritime interests integral to China's national interests. Indeed, maritime security issues, such as the security of seaborne energy imports, the protection of overseas interests, the protection of
SLOCs, and the protection of Chinese shipments, are significant for China’s national security and interests.  

Conclusion

This article contends that, after China became dependent on energy imports from overseas in 1993, it started thinking about energy security. As a result, it started pursuing an energy cooperation strategy to collaborate with oil- and gas-rich countries. In addition, to address its strategic vulnerability related to oil imports, China has developed its maritime strategy, namely the String of Pearls, to protect vital interests, including energy interests.

After launching BRI in 2013, China has been continuing its long-standing energy security strategy and the maritime strategy to protect its vital interests more vigorously. Under the MSR, China has been increasing maritime capabilities to develop a blue-water navy and construct seaports in various countries. China’s blue-water navy can efficiently operate in the deep seas to protect China’s national interests.

Mintu Barua

Mr. Barua is a scholar who works mainly on Chinese foreign policy and international relations theory. His articles have been published in journals including International Studies and China Report. His most recent article, “Contest for Dominance: US–China Rivalry in Asia,” was published in China Report.

Notes

2. NDRC, “Vision and Actions,” sec. III.
3. NDRC, “Vision and Actions,” sec. III.
5. Bhattacharjee, “Belt and Road Initiative.”


The Belt and Road Initiative

38. Clemente, “China Is The World’s Largest Oil & Gas Importer.”
42. USEIA, “Country Analysis Executive Summary: China,” 10.


78. Storey, “China’s ‘Malacca Dilemma.’”