



STRATEGIC CURRENTS: CHINA'S ENERGY SECURITY IN THE US
DOMINATED GLOBAL ECONOMY

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Abstract

As China's economic rise continues, its dependence on imported energy has become a focal point of both strategic vulnerability and global competition. Navigating an energy landscape long dominated by the US influence, China has sought to diversify its energy sources, develop strategic partnerships, and invest in infrastructure projects to protect national interests. This paper explores the evolving dynamics of China's energy security strategy within the context of the US led global energy governance. It examines how geopolitical tensions, economic interdependence, and global market structures influence China's energy posture. Drawing on policy documents, recent academic literature, and economic data, the paper highlights China's efforts to create alternative routes and alliances to ensure uninterrupted energy supply. The findings underscore that while China is building resilience, the US remains a formidable force in shaping global energy flows, policies, and institutions.

Keywords: Energy Security, Global Economy, Geopolitics, Trade Infrastructure, Geopolitical Tensions, China, US

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1. INTRODUCTION

Energy security has become a cornerstone of national strategy for both emerging and established global powers. For China, the world's largest energy consumer and second-largest economy, securing stable and affordable energy supplies is imperative for continued growth and geopolitical influence. As of 2023, China imports more than 70% of its oil and 45% of its natural gas needs (International Energy Agency (IEA), 2023). Much of this energy flows through chokepoints vulnerable to conflict or embargo, particularly the Strait of Malacca, which transports over 80% of China's oil imports.

This dependence creates significant exposure in a world order where the United States, as a global energy superpower and custodian of the post World War II liberal economic order, exerts disproportionate influence. The US not only dominates global energy institutions but also maintains military presence in key maritime zones, controls strategic reserves, and leads alliances that shape energy markets. The convergence of energy dependence and strategic competition has positioned energy security at the heart of US-China relations (Ibekwe et al., 2024).

This paper investigates the strategic currents shaping China's energy security in a global economy largely influenced by the United States. It analyzes China's evolving strategy in response to geopolitical pressures, economic risks, and the shifting dynamics of global energy governance. Through a comprehensive review of policy responses, partnerships, and infrastructure projects, the paper identifies both vulnerabilities and opportunities in China's quest for energy resilience.

1.1. Background

1.1.1. The US Dominance in the Global Energy System

Historically, the United States has occupied a central position in global energy production and governance. The shale revolution of the 2010s transformed the US into a net energy exporter, significantly enhancing its geopolitical leverage. According to Energy Information Administration (2022), the US now exports crude oil, liquefied natural gas (LNG), and refined petroleum products across Asia and Europe, influencing prices and supply chains.

Additionally, the US leadership in international institutions allows it to set norms and practices that often align with its strategic interests. The IEA, for instance, was founded in response to the 1973 oil crisis to coordinate energy policies among developed countries under strong US leadership. Even the dollarization of oil trade gives the US unparalleled financial control over global energy transactions (Wang, Ren, & Li, 2024).

1.1.2. China's Rising Energy Needs

China's energy trajectory has evolved dramatically since its economic liberalization in the 1980s. The growth of heavy industries, urbanization, and rising consumer demand have led to massive increases in energy consumption. While domestic coal remains a major energy source, it has environmental and political costs. Therefore, China increasingly relies on imports of oil and natural gas, particularly from the Middle East, Africa, and Central Asia (Smailis, 2025).

Such increasing reliance has generated strategic discomfort. Malacca Strait, South China Sea, and Hormuz Strait are protected by the US and its allied powers, which were threatening Beijing with disruptions in energy supply during crisis situations. This resulted in a national policy of energy supply channel diversification, securing reserves domestically, and constructing substitute overland routes such as the China-Myanmar pipeline and the China-Central Asia pipeline (Gong, 2022).

2. LITERATURE REVIEW

China's energy security has become a growing concern in recent years as China's foreign energy dependence overlaps with China's rising global ambitions. Scholars and policy-makers have argued over China's domestic vulnerabilities and international strategic challenges, most notably those having to do with United States' dominance of the global institutions of energy and sea lanes of maritime trade.

2.1. China's Energy Vulnerabilities and Strategic Response

Smailis (2025) contends that China's biggest energy weakness is its excessive dependence on foreign oil and diluted leadership in the international energy market. Chinese energy security is limited by such chokepoints as the Malacca Strait, and therefore, depends on oceanic routes vulnerable to interruption through war, piracy, or US naval action. This has led Beijing to pursue what has been described as the "Two Silk Roads of Energy": land transit across Central Asia and maritime routes via South and Southeast Asian ports.

Wang, Ren, & Li (2024) offer a geopolitical account of Chinese policy, contending that BRI infrastructure investments are designed to bypass the US dominated routes and gain as much economic and political influence as possible for China in the South. Building energy corridors like the China-Pakistan Economic Corridor (CPEC) and oil refineries in such locations as Gwadar and Sri Lanka is thus for this purpose.

Xuanli Liao (2021) focus on pipeline diplomacy, showing how China's bilateral agreements with countries such as Kazakhstan, Turkmenistan, and Myanmar are not just commercial deals but instruments of foreign policy designed to minimize exposure to the US monitored regions. These pipelines offer alternative routes for gas and oil imports, often crossing politically less volatile regions.

2.2. The Role of the United States in Global Energy Governance

While China builds alternatives, the United States continues to dominate the architecture of global energy governance. Shambaugh (2018) observes that the US wields structural power through its influence in the International Energy Agency, World Bank, and International Monetary Fund all of which play crucial roles in energy pricing, regulation, and funding. Furthermore, the US dollar remains the primary currency for oil trading, enabling the US to exert financial control over energy transactions globally.

Nagy (2022) argues that the US energy diplomacy, particularly in the Indo-Pacific region, is a key pillar of its strategic competition with China. Through the US-India Strategic Energy Partnership and growing LNG exports to Japan and South Korea, Washington is not only securing markets for its energy exports but also forging alliances that challenge China's regional ambitions.

3. METHODOLOGY

To explore the intersection of China's energy security and the US dominated global economy, this research uses a qualitative content analysis approach. The methodology includes a review of primary policy documents, academic literature, and macroeconomic data, combined with geopolitical trend analysis.

Primary Documents include Chinese energy white papers (2016–2022), US Indo-Pacific strategy reports, Belt and Road project updates, and speeches from energy ministers in both countries. Secondary Literature emphasized in this research include peer reviewed journal articles from 2020–2025 on international energy policy, trade, infrastructure, and security. Economic Data utilized in this article includes International Energy Agency reports, World Bank energy investment data, and the International Monetary Fund's assessments of global energy markets.

3.1. Analytical Framework

This paper applies a strategic security lens to examine the following dimensions:

1. **Supply Chain Vulnerability:** China's exposure to maritime chokepoints and its efforts to diversify energy sources and routes.
2. **Institutional Power:** The role of the US led institutions in shaping global energy rules, financing, and trade flows.
3. **Bilateral Agreements and Alliances:** Evaluation of China's energy partnerships vs the US strategic alliances in energy-exporting and importing regions.

4. STRATEGIC ANALYSIS

4.1. China's Diversification Strategy: Beyond Maritime Dependency

At the core of China's energy security policy is the goal of supply chain diversification. Currently, China imports over 10 million barrels of crude oil per day, with a majority passing through the South China Sea and the Strait of Malacca areas under substantial US naval surveillance. This has led Chinese policymakers to push for infrastructure that bypasses these chokepoints (Liu & Sun, 2021).

Projects like China-Central Asia Gas Pipeline (from Turkmenistan through Uzbekistan and Kazakhstan into Xinjiang) and the China-Myanmar Oil and Gas Pipeline, which allows seaborne oil to bypass the South China Sea, are instrumental in this diversification (Smailis, 2025). These initiatives reduce reliance on any single route and serve as hedges against geopolitical disruptions.

Additionally, the Belt and Road Initiative (BRI) has allowed China to invest in energy terminals, refineries, and ports in countries across South Asia, the Middle East, and East Africa many of which are outside the traditional sphere of US influence. This strategy not only secures energy imports but also expands China's soft power and influence in resource-rich regions (Wang, Ren, & Li, 2024).

4.2. The US as a Strategic Counterforce

Although the US has not directly obstructed China's energy routes, it plays a significant indirect role in shaping global energy security environments. Its military bases in the Indo-Pacific, freedom of navigation operations in the South China Sea, and growing energy exports to Asia serve both strategic and economic functions (Zhang & Bai, 2020).

Arslanian (2025) highlights that the US has positioned itself as a stabilizer of global energy markets, often using sanctions, price manipulation, or diplomatic pressure to influence oil-exporting countries. For example, the US sanctions on Iran and Venezuela, both suppliers of oil to China, are seen as indirect methods to pressure Beijing.

Moreover, Washington's partnerships with India, Japan, and South Korea under the Indo-Pacific Strategy further constrain China's regional energy aspirations. The US supports these countries with energy exports and technology transfers while strengthening their maritime capabilities to monitor key sea lanes (Jayaram, 2021).

4.3. Strategic Reserves and Domestic Development

To complement its external strategy, China has increased investment in strategic petroleum reserves (SPR) and renewable energy development. By 2022, China's SPR had exceeded 500 million barrels, with underground storage facilities constructed inland to guard against sabotage or natural disasters (Smailis, 2025).

Simultaneously, China leads the world in investments in solar, wind, and nuclear energy, aiming to reduce fossil fuel dependency over the long term. These efforts are not just about climate leadership; they are part of a comprehensive energy resilience policy designed to reduce import risk (Li, Jin, & Shi, 2018).

4.4. Economic Implications

4.4.1. For China: Economic Leverage and Risk

China's energy security strategy brings both economic advantages and new financial risks. On the positive side:

- Diversified supply chains stabilize prices.
- Overseas investments open new markets for Chinese firms.
- Infrastructure projects promote export of construction, energy, and financial services.

According to the World Bank (2022), Chinese firms involved in energy infrastructure under BRI have collectively secured contracts worth over \$250 billion since 2015. This has bolstered industrial output and foreign currency reserves.

However, long-term risks include:

- Exposure to debt defaults by BRI partner countries.
- Rising costs of protecting overseas assets in unstable regions.
- Backlash from global powers concerned about China's expanding influence.

The 2023 crisis in Sri Lanka, where a Chinese financed port was leased for 99 years due to debt defaults, serves as a cautionary tale.

4.4.2. For the US: Export Gains and Strategic Control

The US benefits economically from its energy leadership. LNG exports to Asia have surged, with India, Japan, and South Korea emerging as top buyers. According to the Energy Information Administration (2022), energy exports added over \$130 billion to the US economy in 2021 alone.

More importantly, control over energy finance and policy institutions (e.g., IMF lending terms, IEA coordination) gives the US a long-term strategic edge. Countries reliant on the US energy or financial institutions are more likely to align with its policies or abstain from supporting China's initiatives.

However, challenges persist:

- The rise of alternative energy alliances (e.g., China-Russia-Iran) threatens US dominance.
- Pushback from allies over unilateral sanctions (e.g., Nord Stream tensions).
- Economic nationalism that undermines free trade in energy markets.

5. CASE STUDIES

5.1. Case Study 1: China-Myanmar Oil and Gas Pipeline

China-Myanmar pipeline opened in 2017 links China's Yunnan province Kunming to Bay of Bengal port Kyaukphyu. Beijing is importing Middle East oil and natural gas without crossing the Malacca Strait. It is the most important driver of Beijing's policy of diversification. The pipeline alone is over 770 kilometers long and has the capacity to transport 12 billion cubic meters of gas and 22 million tons of oil annually. It is the best example of where infrastructure diplomacy and Chinese energy foreign policy intersect (Sagena et al., 2024).

But it is politicized with political risk due to intra-conflict in Myanmar as well as sanctions against the country by foreign countries. It is an example of the political risk from land linkages to politically unstable countries, and also China's high-tech risk assessment that it has to carry out.

5.2. Case Study 2: US LNG Exports to Asia

Having edged around the 2015 export ban on crude oil, America overnight emerged as the global leader in LNG exports. Additional sales to sympathetic nations like India, Japan, and

South Korea have enabled Washington to create new energy dependences and cement economic alliances.

Most evident among them is the 2018 United States-India Strategic Energy Partnership. Besides offering energy commerce, it also fosters collaboration in renewable energy, nuclear security, and oil reserve development (US Department of Energy, 2021). The partnership supplements India's energy security and positions it between American interests, surrounding Chinese space (Howarth, 2024).

This image illustrates how the US converts its energy riches into geopolitics to provide commercial and strategic partnerships.

6. CONCLUSION

As there is a reversal of trend in the world's consumption of energy and increased tensions between great powers, national strategy is increasingly founded on energy security. The rise of China as a commercial-industrial behemoth has been accompanied by an expanded imperative to secure diversified, resilient, and foreign coercion-proof energy supply chains.

With the US dominating global economic hegemony, China's energy policy is pragmatically blended with institutional interaction, diplomatic relations, and infrastructure investment. While China-Myanmar pipeline and BRI collaboration reduce zero short-term risk to an absolute minimum, they are political risk, not zero risk but rather environmental pressure and financial vulnerability.

The United States, though, is the global energy leader that utilizes its energy sales, institutional power, and military deployment in a perspective to redrawing the world energy map. Its approach towards India, Japan, and other such similar like-minded friends is a geopolitical balancing and containment approach towards China's rising crafted energy footprint.

Lastly, both nations are playing a game of chess with energy policy where ports, pipelines, alignments, and technology are being utilized as pawns. Though fragmentation is conceivable in the sense of competition, it is also conceivable in the sense of multilateral energy cooperation on climate change, technological developments, and issues of energy efficiency.

China's future energy security will no longer be a matter of supplying the commodities, but a matter of who can deliver secure, sustainable, and inclusive systems. The problem of China today is no longer how to secure the commodities, but how to peacefully rebalance the world because war is not an available solution. America's problem will be how to manage and negotiate with the emerging powers in the new energy world.

REFERENCES

- Gong, X. (2022). Energy security through a financial lens: Rethinking geopolitics, strategic investment, and governance in China's global energy expansion. *Energy Research & Social Science*, 83, 102341.
- Howarth, R. W. (2024). The greenhouse gas footprint of liquefied natural gas (LNG) exported from the United States. *Energy Science & Engineering*, 12(11), 4843-4859.
- Ibekwe, K. I., Etukudoh, E. A., Nwokediegwu, Z. Q. S., Umoh, A. A., Adefemi, A., & Ilojiana, V. I. (2024). Energy security in the global context: A comprehensive review of geopolitical dynamics and policies. *Engineering Science & Technology Journal*, 5(1), 152-168.
- International Energy Agency. (2023). World Energy Outlook 2023. <https://www.iea.org/reports/world-energy-outlook-2023>

- Jayaram, D. (2021). Geopolitics, Science and Climate Diplomacy in the Indo-Pacific: An Assessment. *Science Diplomacy*, 2.
- Li, K. X., Jin, M., & Shi, W. (2018). Diversification as an energy importing strategy for China under the Belt and Road Initiative. *International Journal of Shipping and Transport Logistics*, 10(3), 335-354.
- Liu, J., & Sun, H. (2021). China's oil security: Strategic reserves, diversified imports, and maritime chokepoints. *Energy Reports*, 7, 5201-5212.
- Nagy, S. R. (2022). US-China strategic competition and converging middle power cooperation in the Indo-Pacific. *Strategic Analysis*, 46(3), 260-276.
- Sagena, U. W., Harludi, O. P., Rahman, I., Meganingratna, A., & M Hasyim M, M. H. M. (2024). Security and Environment Concern of Energy Cooperation Between China and Myanmar. In *Advances in Social Science, Education and Humanities Research: Proceedings of the World Conference on Governance and Social Sciences (WCGSS 2023)* (pp. 40-48).
- Shambaugh, D. (2018). US-China rivalry in Southeast Asia: power shift or competitive coexistence. *International Security*, 42(4), 85-127.
- Smailis, G. (2025). *The geopolitics of global maritime energy transportation: chokepoints, markets, risks and security* (Master's thesis, Πανεπιστήμιο Πειραιώς).
- Arslanian, F. (2025). US Sanctions and Cooperation among Targets: The Case of Cooperation between Iran and Venezuela. *Middle East Critique*, 1-22.
- U.S. Department of Energy. (2021). U.S.-India Strategic Energy Partnership Fact Sheet. <https://www.energy.gov/ia/articles/us-india-strategic-energy-partnership>
- Wang, Q., Ren, F., & Li, R. (2024). Geopolitics and energy security: a comprehensive exploration of evolution, collaborations, and future directions. *Humanities and Social Sciences Communications*, 11(1), 1-26.
- World Bank. (2022). Global Infrastructure Outlook: Energy Investment Forecast. <https://www.worldbank.org/en/topic/energy>
- Xuanli Liao, J. (2021). China's energy diplomacy towards Central Asia and the implications on its "belt and road initiative". *The Pacific Review*, 34(3), 490-522.
- Zhang, L., & Bai, W. (2020). Risk assessment of China's natural gas importation: a supply chain perspective. *Sage Open*, 10(3), 2158244020939912.