

ASIA'S ENERGY SECURITY

and China's Belt and Road Initiative

By Erica Downs, Mikkal E. Herberg, Michael Kugelman,
Christopher Len, and Kaho Yu



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*Erica Downs, Mikkal E. Herberg, Michael Kugelman,
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Under Xi Jinping, Beijing has launched its ambitious Belt and Road Initiative (BRI), which envisions an enormous expansion of China's investment, trade, and diplomatic engagement across the Eurasian continent, as well as through the Indo-Pacific sea lanes from China all the way to the Middle East and Europe. The "belt" consists of the Silk Road Economic Belt that will expand trade and investment overland to Central Asia and Europe. The "road" refers to the 21st Century Maritime Silk Road that will allow China to project economic, energy, and geopolitical influence throughout the East and South China Seas, the Indian Ocean, and the Middle East.

Nevertheless, despite many official pronouncements, much rhetoric, and a host of slogans, BRI remains something of an enigma. Chinese leaders present the initiative as a "win-win" economic strategy of promoting the collaborative expansion of regional infrastructure, trade, and investment in order to boost collective economic growth and raise the standard of living. Xi talks about creating an inclusive "community of common destiny" throughout Eurasia whereby economic integration supports political stability and peace. In many ways, BRI looks very much like an effort to replicate on a region-wide scale China's development model of the past 30 years that led to such spectacular economic results.

Yet others see the initiative as less benign. Those who are suspicious of China's growing power in Asia and globally are concerned that BRI is more about strategic ambition than commercial logic. They see it as a deeply mercantilist project to expand China's economic power and geopolitical reach. Moreover, even if the initiative is not motivated by strategic ambition, this does not preclude it from having powerful strategic implications and outcomes. From this perspective, the expanding scale of Beijing's efforts suggests that BRI is nothing less than an attempt to reshape the economic, geopolitical, and energy landscape of the Eurasian continent and Asian maritime environment with China at its center.

From an energy security and environmental perspective, BRI promises to substantially affect future trade and investment across Eurasia, with significant implications for regional geopolitical dynamics. China has vital energy security interests vested in accessing energy supplies, particularly from the Middle East; protecting the overseas investments and activities of its national oil companies (NOCs); securing overland oil and natural gas pipeline supplies from across Eurasia; and safeguarding the Indo-Pacific sea lanes through which roughly 80% of the country's oil imports transit. China's huge and rapidly expanding investment in ports throughout the Indo-Pacific maritime space as part of BRI raises important security issues for maritime Asia. Energy security is an important driver of China's rapid expansion of its blue water navy, development of port access in the Indian Ocean, and creation of a new military base in Djibouti on the east coast of Africa.

Less noted but very important are the large-scale investments and financing by Chinese companies and policy banks for coal-fired power generation across the BRI region. For example, 60% of the over \$50 billion in promised Chinese investment in the China-Pakistan Economic Corridor (CPEC) is for coal-fired power generation. This project will be enormously beneficial for Pakistan, which is disastrously short of electricity supplies. But it also highlights the important environmental implications of BRI for the region and host countries' ability to meet their goals

for reducing carbon emissions under the Paris Climate Agreement. So, ironically, while tackling its own air pollution problems at home, there is a risk China may be simultaneously exporting its carbon emissions to the rest of Asia through investment in coal-fired power generation.

Hence, BRI promises enormous energy benefits across the region as China finances and invests in new energy production and infrastructure that will help power economic growth and raise standards of living. On the other hand, the initiative also comes with deeply mercantilist implications insofar as it expands the scale, scope, and impact of China's energy footprint and empowers Beijing to increasingly shape the future energy security environment across continental Eurasia and through the vital sea lanes of the Indo-Pacific.

In view of these complex and crosscutting implications of BRI for the region's energy security and environmental challenges, the National Bureau of Asian Research (NBR) convened its 2017 Energy Security Program under the theme "Asia's Energy Security and China's Belt and Road Initiative." Each year, this ongoing program assesses a major development in Asian energy markets and geopolitics to help policymakers better understand and respond to the implications for energy and environmental security. The 2017 program focused on a range of issues raised by BRI, including the expansion and reform of China's NOCs, the energy geopolitics of CPEC, the investment in energy infrastructure across the Eurasian continental space, and finally the implications of China's activities in the Indo-Pacific maritime space.

NBR commissioned essays by four scholars with expertise on these specific issues. The preliminary findings were discussed in detail at a workshop in Washington, D.C., on June 7, 2017, that included senior representatives from the U.S. and foreign policymaking communities and leading industry and geopolitical specialists. The panel discussions were preceded by a keynote presentation by Nadège Rolland, a senior fellow at NBR who recently published a powerful new study titled *China's Eurasian Century? Political and Strategic Implications of the Belt and Road Initiative*. The authors then incorporated the feedback they received at the workshop to further strengthen their essays, which are published collectively here for the first time.

In her keynote presentation, Rolland laid out the basic dimensions of BRI and some challenges that Beijing faces. She suggested that despite the mantra about "win-win" economic prosperity, the initiative is not a development aid program or "globalization 2.0" but reflects China's ambition to reshape Eurasia according to its own interests. BRI is a China-centric initiative to serve the country's long-term economic interests, although not necessarily to disrupt the existing Western world order. Nevertheless, BRI remains a work in progress and faces huge challenges due to the diversity of the countries involved; the complexity of its projects; the mixed reactions among countries receiving aid and investment; the misgivings of larger powers like the United States, India, Japan, and Russia; and the highly uncertain security environment in which China is investing hundreds of billions of dollars. Rolland argued that the other major powers need to engage with China to try to shape BRI in support of common global development goals that promote future prosperity and peace across Eurasia.

In the opening essay, Erica Downs from CNA examines the interplay between BRI and the return of China's NOCs to expanding their international investments and acquisitions. She suggests that the initiative is unlikely to markedly change the pattern of the NOCs' overseas investment because their strategies are increasingly the result of disciplined decision-making driven by global oil industry competition rather than policy goals such as addressing resource scarcity. Nevertheless, Chinese NOCs are likely to look for opportunities to capitalize on BRI by rhetorically

linking their investment plans to its goals to demonstrate that they are supportive of Xi's signature foreign policy initiative. Ironically, other large international oil companies, including those from the United States, may be able to benefit from partnering with Chinese NOCs as well as from advancing business opportunities in China by linking their activities to the goals of BRI. Downs's analysis shows that Chinese NOCs will tend to invest to the tune of the global oil industry rather than through opportunities presented within BRI alone, although their global growth will nonetheless reinforce China's expanding Eurasian energy footprint.

In the second essay, Michael Kugelman from the Woodrow Wilson International Center for Scholars examines the scale and energy dimensions of CPEC, assessing the key obstacles and implications for South Asian energy geopolitics. CPEC was chosen for a special case study because it is one of the core BRI land routes and involves some of the initiative's first and most fully elaborated energy projects to be operationalized. Therefore, it could help identify some of the real-world challenges and impacts of the energy dimensions of BRI. Kugelman suggests that BRI and CPEC have great potential to ease Pakistan's chronic energy shortages and also increase China's broader access to Eurasian energy markets. However, he argues that this project will not address the causes of these energy shortages, which are rooted in policy problems that extend well beyond supply issues. He also suggests that the success of the project for China is deeply dependent on the precarious and uncertain security situation in Pakistan. CPEC will deepen China's already formidable presence in the country and clearly aggravate India-Pakistan tensions. In addition, real questions persist about Pakistan's ability to finance its share of new energy investments.

In the third essay, Kaho Yu from the Harvard Kennedy School looks directly at the impact of BRI on the geopolitics of global energy cooperation. He argues that the initiative will lead China to adopt a more multilateral energy engagement strategy, one that has the potential to reshape the current international energy order. Yu suggests that the United States should look for areas where its businesses could benefit from Beijing's poor coordination by joining the Asian Infrastructure Investment Bank or taking on a more active role with the Asian Development Bank and the World Bank in supporting energy infrastructure projects. Washington should not assume that all BRI projects are political and should remain open to those that are more commercially driven. Also, because BRI will strengthen the role of the People's Liberation Army (PLA) Navy across the Indo-Pacific maritime space and China's control over port facilities, the United States should consider ways to draw the PLA Navy into international maritime operations and partnerships. Given that China may eventually determine the rules for energy trade and investment in Eurasia, the United States will benefit from remaining engaged in the existing international energy order and seeking to maintain its flexibility in accommodating new powers.

In the report's final essay, Christopher Len from the National University of Singapore focuses on the relationship between BRI's maritime dimension—the 21st Century Maritime Silk Road—and China's efforts to secure its maritime energy supply chain. He argues that China's traditional emphasis on self-reliance has driven its three-decades-long energy diversification strategy, which depends heavily on Indo-Pacific maritime supplies and, in turn, reinforces the development of naval capabilities. The PLA Navy needs long-term access to friendly ports, and China is looking for overland transit routes to connect to Indian Ocean oil and gas shipments. It can only do so if it succeeds in co-opting the small and medium-sized littoral states through the economic statecraft of the Maritime Silk Road agenda. Consequently, a key component of

this initiative is Beijing's \$20 billion in investments for control over port facilities throughout the Indian Ocean, into the Red Sea, and onto Europe. Future energy geopolitics in the Indian Ocean region will hinge on the accommodation by other countries of China as a rising maritime power or, alternatively, the development of a strategic partnership among India, Japan, and the United States to block China's plans, with a potentially destabilizing impact on Asia's future.

Overall, the essays, presentations, and discussions in this year's program show the enormous range of China's activities under BRI and analyze the implications for the Eurasian continental and maritime energy environment. Much of the long-term outcome will depend on how diligently Beijing continues to pursue this initiative, as well as on the reactions of the other major powers in the region—including the United States—to China's increasingly large footprint across the regional energy landscape. It will be vital for the United States and regional powers such as Japan, India, Australia, and Indonesia, among others, to more actively engage Beijing on BRI and steer it toward supporting or augmenting existing multilateral institutions across the region to foster cooperation on energy security. If the United States and other countries join together to undermine BRI and frustrate Chinese aspirations, the result will likely be a less stable region, both geopolitically and in energy security terms.

The continuing success of NBR's Energy Security Program is built on the efforts of a wide range of participants, partners, and collaborators, as we have sought to bring together many of the region's leading experts from the research, business, and policymaking communities. We are grateful to the Asian Development Bank, Chevron, ConocoPhillips, ExxonMobil, and the Center for Energy Governance and Security at Hanyang University for their support of this program, which has enabled NBR to bring timely analysis of key energy security issues in the Asia-Pacific directly to policymakers and industry leaders in both the United States and Asia. We are also grateful to Michael Kugelman and the Woodrow Wilson International Center for Scholars for co-hosting this year's Energy Security Workshop. NBR's own Andy Nguyen again played a critical role in synthesizing this year's final recommendations. His efforts were quite literally tireless and profoundly strengthened our program agenda and the report's final essays.

Next, we would like to extend our deep appreciation to Admiral Jonathan Greenert—the John M. Shalikashvili Chair in National Security Studies at NBR and the U.S. Navy's 30th chief of naval operations—and Dr. Charles Boustany Jr.—chair of NBR's Center for Innovation, Trade, and Strategy and former congressman from Louisiana—for participating in our 2017 program. Their in-depth remarks offered valuable insights during the discussions, and we are grateful for their willingness to lend their leadership and expertise.

Finally, we are deeply indebted to all the program authors and panelists. Many of them traveled across the country or even across the world to join in these discussions. We appreciate the time, effort, and critical eye that they lent to testing and debating the core findings and recommendations in the report. This year's program ultimately engaged more than 150 senior stakeholders representing a wide range of perspectives, countries, and professional backgrounds. We hope that you find the result as immensely rewarding as we do.

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China's National Oil Companies Return to the World Stage: Navigating Anticorruption, Low Oil Prices, and the Belt and Road Initiative

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EXECUTIVE SUMMARY

This essay examines the interplay between the return of China's national oil companies (NOCs) to international mergers and acquisitions and China's Belt and Road Initiative (BRI).

MAIN ARGUMENT

China's NOCs emerged as big buyers of international oil and natural gas assets in the mid-2000s and early 2010s before abruptly curtailing their overseas purchases in 2014–16. This sudden pause in their global acquisitions was largely the result of the collapse in crude oil prices and the targeting of the oil industry by President Xi Jinping's anticorruption campaign. Now that crude prices have stabilized and Xi's crackdown on corruption has moved beyond the oil industry, the NOCs are slowly returning to international mergers and acquisitions. However, this new phase of buying is likely to be characterized by fewer concerns about resource scarcity, more disciplined decision-making, and more partnerships with foreign firms. China's NOCs will look for opportunities to capitalize on BRI to demonstrate that they are supportive of Xi's signature foreign policy initiative. However, most, if not all, of their acquisitions are probably ones they would have made in the absence of this initiative.

POLICY IMPLICATIONS

- China's NOCs are likely to increasingly look to partner with international oil companies in large, high-profile projects. This trend will create opportunities for U.S. and other foreign oil companies to benefit from the NOCs' capital, low-cost supply chains, and ability to attract Chinese banks and construction firms to build related infrastructure, as well as in some cases China's good relations with host-country governments.
- U.S. and other foreign companies can increase their business opportunities in China and third countries by explaining how their activities can advance BRI.
- The fact that Washington is not nearly as enthusiastic about BRI as other foreign governments is unlikely to constrain China's NOCs from doing business with U.S. firms, including through growing imports of U.S. crudes.

China's national oil companies (NOCs) are slowly returning to international mergers and acquisitions (M&A) after spending nearly three years largely sitting on the sidelines. The companies emerged as dominant players in global M&A in the late 2000s and early 2010s, spending \$100 billion in 2009–13, before keeping their wallets closed for most of 2014–16, when the value of their purchases totaled less than \$10 billion. However, the companies began to cautiously resume international acquisitions in late 2016, with China National Petroleum Corporation (CNPC) signing agreements to return to Iran and the United Arab Emirates (UAE) and China National Offshore Oil Corporation (CNOOC) venturing to Mexico and expanding its presence in Africa.¹

At first glance, the fact that China's NOCs are resuming international acquisitions at a time when actors throughout the Chinese system are busy rolling out projects under the Belt and Road Initiative (BRI)—President Xi Jinping's signature foreign policy initiative that aims to forge greater connectivity between Asia, the Middle East, parts of Africa, and Europe—may appear to be a recipe for another wave of upstream asset purchases by China's oil majors. After all, the NOCs rank among the pioneers of China's cross-border M&A, first venturing abroad in the early 1990s and accounting for a large portion of overseas investments from the mid-2000s through 2013. They also have a track record of undertaking projects that establish the very type of economic linkages that BRI seeks to create, such as the construction of oil and natural gas pipelines from Kazakhstan, Myanmar, Russia, and Turkmenistan to China.

However, the NOCs are unlikely to repeat their buying binge of the late 2000s and early 2010s. They will probably be more prudent shoppers, acquiring assets at a much slower pace due to the easing of concerns about scarcity that underpinned much of their earlier buying and a determination to avoid past blunders laid bare by the collapse in oil prices and the Xi administration's anticorruption campaign. While the NOCs will almost certainly link any new overseas acquisitions to BRI to demonstrate support for an initiative in which Xi is personally invested and position themselves to tap into the war chests that Chinese financial institutions are setting aside for BRI, most of their new investments will probably be ones they would have made in the absence of the initiative. Moreover, Beijing has other priorities for overseas investments besides facilitating the import of commodities, which makes it likely that state financing for oil and natural gas projects will be reserved for ones of strategic importance.

The first section of this essay explains why China's NOCs largely stopped acquiring upstream assets from 2014 to 2016, why they have resumed buying, and what this new phase of acquisitions will look like. The second section analyzes the interplay between the return to international M&A and BRI. The third section discusses some implications for foreign firms.

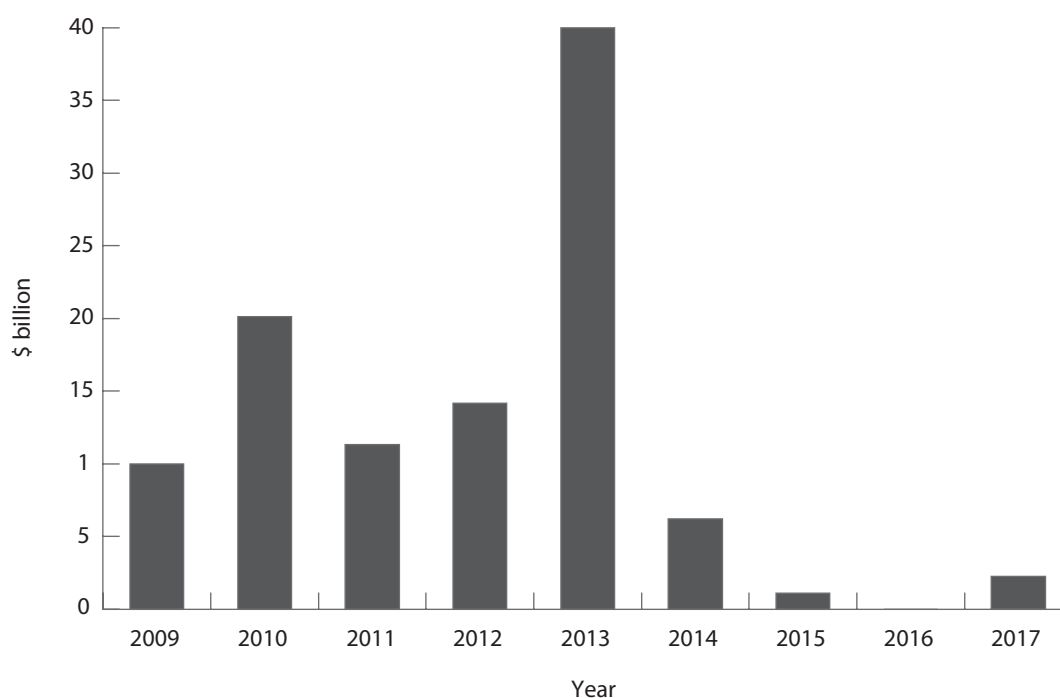
The NOCs Resume International Acquisitions²

China's NOCs were largely absent from the global M&A landscape from 2014 to 2016. After they spent an average of \$20 billion per year on overseas assets from 2009 to 2013, their buying slowed to a trickle throughout the following three years. The value of the NOCs' acquisitions during these three years averaged less than \$2.5 billion per year (see **Figure 1**). Moreover, many of

¹ "China Deal Watch," Bloomberg, <https://www.bloomberg.com/graphics/2016-china-deals>.

² This section draws on Erica Downs, "China/Oil: National Oil Companies Will Revive International Acquisitions This Year," Eurasia Group, Note, March 17, 2016.

FIGURE 1 Value of upstream acquisitions completed by China's NOCs



SOURCE: Author's database.

the deals completed were ones that the NOCs had initiated in previous years, such as Petrobras's sale of its assets in Peru to PetroChina, the internationally listed subsidiary of CNPC. The two companies announced the transaction in November 2013 and completed it in November 2014.³

The pause in the NOCs' overseas purchases was primarily due to Xi's anticorruption campaign and the collapse in crude oil prices. Before oil prices began their slide in the second half of 2014, NOC executives were already hesitant to make big decisions while their activities were under the microscope of anti-graft authorities. The plunge in oil prices, which made it harder to value assets by creating a gap between the prices that sellers wanted to receive and the prices buyers were prepared to pay, reinforced this reluctance.⁴

Xi's Anticorruption Campaign

China's NOCs were an early focus of Xi's crackdown on corruption. The top anti-graft body arrested four senior executives at CNPC and PetroChina in August 2013, as well as a former general manager of CNPC (Jiang Jiemin) in September 2013.⁵ Over the next two years, dozens of

³ "PetroChina Closes \$2.6 Billion Peru Deal," *Oil Daily*, November 12, 2014.

⁴ For more on the difficulties in asset valuation created by the plunge in oil prices, see Keith Goldberg, "Oil Price Drop Loomed Large over Energy M&A in 2014," *Law360*, December 16, 2014, <https://www.law360.com/articles/603599/oil-price-drop-loomed-large-over-m-a-in-2014>.

⁵ Song Shengxia, "Under Investigation," *Global Times*, September 10, 2013, <http://www.globaltimes.cn/content/810153.shtml>; and Charlie Zhu, David Lague, and Benjamin Kang Lim, "Inside the Purge of China's Oil Mandarins," Reuters, Special Report, July 24, 2014.

top managers at the “big three” NOCs—CNPC, CNOOC, and Sinopec—would also fall victim to the campaign (see **Table 1**). The anti-graft authorities hit CNPC especially hard because the company had served as a power base for Xi’s political adversary, former Politburo Standing

TABLE 1 Selected Chinese oil executives investigated for corruption

Name	Title	Company	Date announced
Wang Yongchun*	Deputy general manager	CNPC	August 2013
Li Hualin	Deputy general manager	CNPC	August 2013
Ran Xinquan	Vice president	PetroChina	August 2013
Wang Daofu	Chief geologist	PetroChina	August 2013
Wen Qingshan	Chief accountant	CNPC	December 2013
Shen Dingcheng	Vice president	PetroChina International	February 2014
Bo Qiliang	Vice president	PetroChina	May 2014
Wang Lixin	Chief of discipline and inspection group	CNPC	October 2014
Liao Yongyuan*	General manager	CNPC	March 2015
Wu Zhenfang	Deputy general manager	CNOOC	April 2015
Wang Tianpu*	General manager	Sinopec	April 2015
Cai Xiyu*	General manager	Sinochem	February 2016

SOURCE: Central Commission for Discipline Inspection, “Zhongshiyou fuzong Wang Yongchun shexian yanzhong weiji zheng jieshou zuzhi diaocha” [CNPC Deputy General Manager Wang Yongchun Is Suspected of Serious Discipline Violations and Is Currently Under Investigation], August 26, 2013; Central Commission for Discipline Inspection, “Zhongshiyou san ming gaoguan shexian yanzhong weiji zheng jieshou zuzhi diaocha” [Three High-Ranking CNPC Officials Are Suspected of Serious Discipline Violations and Are Currently Under Investigation], August 27, 2013; “China Questions Two More PetroChina Parent Officials in Graft Probe: Sources,” Reuters, December 16, 2013; Adrian Wan, “Fourth Top Aide of Ex-security Tsar Zhou Yongkang Probed after Being ‘Snatched by Authorities,’” *South China Morning Post*, February 23, 2014; Charlie Zhu and Michael Martina, “Update 1—PetroChina Overseas Operations Chief Bo Qiliang Under Investigation—Company Source,” Reuters, May 16, 2014; Du Juan, “Anti-corruption Campaign Moves Forward at CNPC,” *China Daily*, October 10, 2014; Central Commission for Discipline Inspection, “Zhongguo shiyou tianranqi gongsi zongjingli Liao Yongyuan shexian yanzhong weiji weifa jieshou zuzhi diaocha” [CNPC General Manager Liao Yongyuan Is Suspected of Serious Discipline and Legal Violations and Is Under Investigation], March 16, 2015; Central Commission for Discipline Inspection, “Zhongguo haiyang shiyou gongsi yuan dangzu chengyuan, fu zongjingli Wu Zhenfang jieshou zuzhi diaocha” [Former CNOOC Party Group Member and Deputy General Manager Is Under Investigation], April 2, 2015; Central Commission for Discipline Inspection, “Zhongguo shiyou huagong jituan gongsi zongjingli Wang Tianpu shexian yanzhong weiji weifa jieshou zuzhi diaocha” [Sinopec General Manager Wang Tianpu Is Suspected of Serious Discipline and Legal Violations and Is Under Investigation], April 27, 2015; and Central Commission for Discipline Inspection, “Zhongguo zhonghua jituan gongsi dangzu chengyuan, dongshi, zongjingli Cai Xiyu shexian yanzhong weiji jieshou zuzhi diaocha” [Sinochem Party Committee Member, Director and General Manager Cai Xiyu Is Suspected of Serious Discipline Violations and Is Under Investigation], February 6, 2016.

NOTE: Asterisk indicates vice-ministerial rank.

Committee member Zhou Yongkang.⁶ Zhou, who was the ninth most powerful official in China from 2007 to 2012, had spent most of his career in the oil patch, including serving as the general manager of CNPC from 1996 to 1998.

The crackdown on corruption paralyzed decision-making at the companies and had a chilling effect on their ability and willingness to negotiate international deals.⁷ First, the anticorruption campaign created vacancies in senior management. CNPC, for example, was without a president from March 2015, when Liao Yongyuan was arrested for corruption, until July 2016, when the Chinese Communist Party appointed Zhang Jianhua to replace him.⁸ Second, senior managers refrained from making major investment decisions that might have attracted unwanted attention from anti-graft authorities. Overseas acquisitions were the very type of major investment decision likely to catch their eyes because of the losses and signs of wrongdoing uncovered in previous transactions. The National Audit Office's review of the \$10 billion that Sinopec invested in Angola from 2008 through mid-2015 is perhaps the most prominent example. The office found evidence that Sinopec earned a return of zero on its investments and had exaggerated reserves, discoveries that may have contributed to the arrest of the company's former president (and rising political star) Su Shulin for corruption in 2015.⁹

The Collapse of Oil Prices

The nearly 60% plunge in the price of oil from 2013 to 2016 (see **Figure 2**) also contributed to the NOCs' reluctance to venture abroad. Uncertainty over how low crude prices would go made it difficult to value overseas assets and appears to have convinced oil executives to hold off on acquisitions until prices stabilized. Indeed, a CNOOC executive stated in August 2016 that "it is still hard for asset buyers and sellers to agree to a deal price."¹⁰ This difficulty in asset valuation may have contributed to CNPC's failure to accept Rosneft's invitation, initially extended in September 2014, to purchase a 10% stake in the Russian company's giant Vankor oil field in East Siberia. Rosneft apparently became frustrated with CNPC's foot dragging and subsequently sold a 49.9% stake in the field to Indian oil companies.¹¹

By early 2016, there were indications that the anticorruption campaign and low oil prices would become less of a constraint on the NOCs' international upstream activities. First, the campaign had passed its peak in the oil industry. Anti-graft authorities completed their routine inspections of the NOCs and other central state-owned enterprises from 2014 to 2015, and Zhou Yongkang and other members of his network who had held top positions at CNPC and PetroChina were in prison.¹² Authorities have since moved on to target other parts of the Chinese system, including

⁶ Joseph Fewsmith, "China's Political Ecology and the Fight against Corruption," Hoover Institution, China Leadership Monitor, no. 46, Winter 2015, <http://www.hoover.org/sites/default/files/research/docs/clm46jf.pdf>; and Zhu, Lague, and Lim, "Inside the Purge of China's Oil Mandarins."

⁷ Jamil Anderlini, "China's War on Graft Leads to Drop in Outbound Investment," *Financial Times*, September 22, 2014, <https://www.ft.com/content/58d0cb22-421b-11e4-a9f4-00144feabdc0>.

⁸ "Zhang Is Appointed as President of CNPC," *Upstream*, July 14, 2016, www.upstreamonline.com/hardcopy/news/1012865/zhang-is-appointed-as-president-of-cnpc.

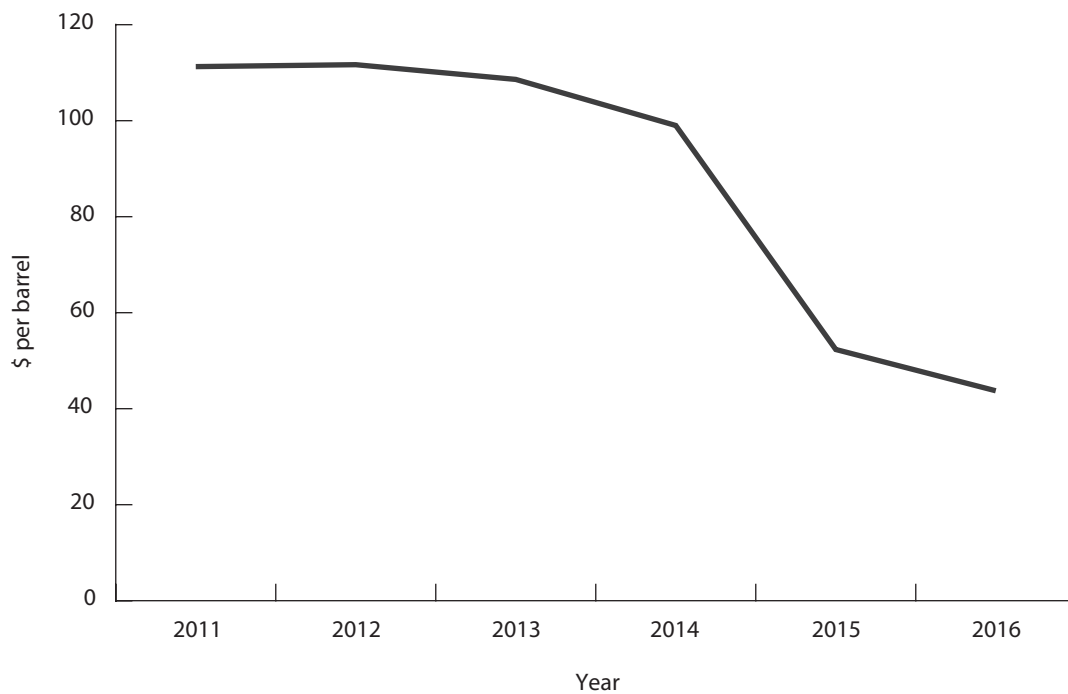
⁹ Brian Spegele, "China Probes Oil Deals in Angola—Former Sinopec Chief Faces Investigation into Africa Operations and Potential Bribery," *Wall Street Journal*, October 21, 2015; and Huang Kaixi, Wang Xiaobing, and Yu Ning, "Auditors Probe Sinopec, Savvy Broker in Angola," *Caixin*, August 4, 2015.

¹⁰ "China's CNOOC Open to Acquisitions, but Treads Cautiously after Nexen," *Platts*, August 25, 2016, <https://www.platts.com/latest-news/natural-gas/hongkong/chinas-cnooc-open-to-acquisitions-but-treads-26530535>.

¹¹ "India Outflanks China with Russian Resource Grab," *International Oil Daily*, March 14, 2016.

¹² Zhang Yi, "19 Top SOE Managers Held in Probe," *China Daily*, May 5, 2015, http://www.chinadaily.com.cn/china/2015-05/05/content_20621017.htm; and Judy Hua and Paul Carsten, "China Corruption Watchdog Launches Inspections, Eyes Sinopec," *Reuters*, November 24, 2014.

FIGURE 2 Brent Crude spot price (2011–16)



SOURCE: U.S. Energy Information, “Spot Prices,” August 2, 2017, https://www.eia.gov/dnav/pet/pet_pri_spt_s1_a.htm.

provincial governments and financial institutions.¹³ Second, the stabilization of oil prices in the range of \$40–\$50 per barrel, along with declining domestic production, is facilitating the NOCs’ return to international M&A. Higher prices have helped persuade NOCs to increase their capital expenditures on exploration and production at home and abroad.¹⁴ CNPC, Sinopec, and CNOOC plan to spend a combined total of 254 billion yuan (\$38 billion) on exploration and production in 2017, 20% higher than in 2016.¹⁵ Moreover, the price stabilization should make it easier for buyers and sellers to agree on asset prices.¹⁶

The NOCs began to resume international acquisitions in late 2016. In November, CNPC and France’s Total announced their intent to return to Iran’s South Pars natural gas field, the world’s second-largest, when they inked a heads of agreement with the National Iranian Oil Company (NIOC) for the development of phase 11 of the field. They finalized the deal in July 2017, making them the first foreign firms to develop a project under Iran’s new oil contract. Total has

¹³ See, for example, “CCDI Inspections Reveal Weakening of Party Leadership, Promotion of Corrupt Officials,” Xinhua, February 14, 2017, http://news.xinhuanet.com/english/2017-02/14/c_136054075.htm; and “China to Target Financial Sector in New Anti-graft Inspection,” Xinhua, October 23, 2015, http://news.xinhuanet.com/english/2015-10/23/c_134744675.htm.

¹⁴ Chen Aizhu, “As Crude Prices Rise China’s Oil Majors Set to Lift Capex for First Time in Years,” Reuters, January 26, 2017, <http://www.reuters.com/article/us-china-oil-spending-idUSKBN15A11M>.

¹⁵ “Fitch: Chinese NOCs’ Higher 2017 Capex to Reverse Output Fall Only in 2018,” Reuters, April 17, 2017.

¹⁶ Paul Welitzkin, “Chinese Oil Companies May Shop for Assets,” *China Daily*, March 9, 2017, http://usa.chinadaily.com.cn/epaper/2017-03/09/content_28492222.htm.

a 50.1% stake, while CNPC holds 30.0% and Petropars (a wholly-owned subsidiary of NIOC) has 19.9%.¹⁷ Total estimates that the first stage of the project will cost \$2 billion.¹⁸ Three months later, in February 2017, CNPC purchased an 8% stake for \$1.8 billion in the Abu Dhabi Company for Onshore Petroleum Operations (ADCO), the largest oil-field operator in OPEC's fourth-largest member country.¹⁹

Meanwhile, in December 2016, CNOOC won two blocks in Mexico's first deepwater oil tender.²⁰ The company also reached a \$450 million agreement with Tullow Oil in March 2017 to increase its stake in four blocks in Uganda's Lake Albert from 33% to 44%.²¹ That same month, CNOOC acquired a 65% stake in a block offshore Senegal and Guinea-Bissau from the United Kingdom's Impact Oil and Gas.²² Less than a week later, in early April, CNOOC signed an agreement with Australia's FAR to jointly evaluate, bid for, negotiate, and manage opportunities offshore Gambia and Senegal in the next two years.²³

In sum, China's NOCs are slowly resuming international acquisitions after a three-year pause. The stabilization of crude prices and the focus of Xi's anticorruption campaign on other parts of the Chinese system have made Chinese oil executives more willing to make major investment decisions. However, the collapse of crude oil prices and the arrest of so many oil executives for corruption will continue to influence the NOCs' cross-border dealmaking.

A New Phase of International Acquisitions

The new phase of overseas oil and natural gas acquisitions by China's NOCs is unlikely to resemble that of the late 2000s and early 2010s, when China's booming oil demand and anxieties about supply scarcity spurred the companies to snap up assets around the globe with more of an emphasis on quantity than quality. Instead, the NOCs will probably be more prudent shoppers. Their dealmaking is likely to be characterized by fewer concerns about scarcity, more discipline, and more partnerships with foreign firms.

Less supply anxiety. The international buying of China's NOCs is unlikely to be driven by the concerns about scarcity that motivated many of their acquisitions in the previous decade, especially in the mid-2000s. At that time, China's oil demand was growing faster than many industry analysts both inside and outside China expected, and there were concerns within Beijing that the country might have difficulty obtaining the oil needed to support its continued economic growth. Moreover, before the U.S. shale revolution and the discovery of Brazil's pre-salt deposits, there was a sense within Chinese oil circles that the NOCs had arrived on the global stage too late to acquire any of the world's best assets. As Fu Chengyu lamented in 2004 when he was the CEO of CNOOC, "it is actually not easy for us to find projects. The oil market already has more than

¹⁷ "Iran: Total and NIOC Sign Contract for the Development of Phase 11 of the Giant South Pars Gas Field," Total, July 3, 2017, <http://www.total.com/en/media/news/press-releases/iran-total-and-nioc-sign-contract-development-phase-11-giant-south-pars-gas-field>.

¹⁸ "Iran: Total Signs Heads of Agreement to Develop Phase 11 of the Giant South Pars Field," Total, November 8, 2016, <http://www.total.com/en/media/news/press-releases/iran-total-signs-heads-agreement-develop-phase-11-giant-south-pars-gas-field>.

¹⁹ Anthony Dipaola and Mahmoud Habboush, "China Wins Big with Stakes in \$22 Billion Abu Dhabi Oil Deal," Bloomberg, February 20, 2017, <https://www.bloomberg.com/news/articles/2017-02-19/abu-dhabi-awards-china-s-cnpc-stake-in-main-onshore-oil-deposits>.

²⁰ Jude Webber, "China Boosts Mexico Ties by Grabbing Blocks in Auction," *Financial Times*, December 5, 2016, <https://www.ft.com/content/9982457e-bb31-11e6-8b45-b8b81dd5d080>.

²¹ Robert Perkins, "China Enters Fray for More Control of Uganda Project," *Oilgram News*, March 20, 2017.

²² "CNOOC Dives into Senegal, Guinea-Bissau Deepwater," *International Oil Daily*, March 30, 2017.

²³ "CNOOC Extends Africa Reach in Tie-Up with FAR," *International Oil Daily*, April 3, 2017.

100 years of history and all of the good projects are already taken. As a newcomer, it is obviously not easy to do well.”²⁴

Fast-forward ten years. By the mid-2010s, the growth of China’s oil demand had slowed and the global oil market was oversupplied. The Chinese government and NOCs were now concerned that there was too much oil in the world rather than too little. For example, in January 2016, when crude traded below \$40 per barrel, the government announced that it would stop adjusting domestic diesel and gasoline prices in line with fluctuations in global crude prices in order to limit the amount of money the NOCs would lose from their upstream operations.²⁵ (From March 2013 to December 2016, Beijing had adjusted diesel and gasoline prices every ten working days to reflect changes in the global oil market.)²⁶

More discipline. China’s NOCs are likely to be more disciplined investors as they seek to avoid the mistakes they made in earlier forays abroad. The oil price collapse and the anticorruption campaign laid bare the folly of some of their earlier overseas investments. Sinopec has become the poster child for acquisitions gone awry. Not only did the National Audit Office’s review of its foreign assets reveal that the company has little to show in terms of production and profits for the \$10 billion it invested in Angola, but sustained low oil prices have also battered Sinopec’s overseas investment arm, Sinopec International Petroleum Exploration and Production Corporation (SIPC), which lost \$3.1 billion in 2015. Moreover, internal SIPC documents reviewed by a leading Chinese financial publication indicate that most of the fields owned by SIPC are old, with little oil left to extract. According to the State-Owned Assets Supervision and Administration Commission, SIPC’s woes are partly due to blind expansion over the past decade.²⁷

Meanwhile, CNOOC and PetroChina appear to have buyer’s remorse, especially with respect to their North American assets. CNOOC registered \$1.2 billion in losses in the first half of 2016, due in part to write-downs on investments in Canadian oil sands.²⁸ In 2015, PetroChina sought to swap its Canadian assets with international oil companies to help minimize its losses from the collapse in oil prices.²⁹

By early 2014, Chinese oil executives had revealed that they were shifting their approaches to international acquisitions. Zhou Jinping, the previous chairman of PetroChina, indicated in December 2014 that the buying binge of the previous decade was over, stating that the focus of PetroChina’s overseas purchases would shift from scale and speed to quality and efficiency.³⁰ In March 2015, Fu Chengyu, then the chairman of Sinopec, was blunter. He stated that a low price

²⁴ “Fu Chengyu: ‘Shenxin zouchuqu’ de zhengzhi jingjixue” [Fu Chengyu: The Political Economy of “Cautiously Going Abroad”], 21 *Shiji Jingji Daobao*, December 29, 2004, http://www.sinolub.com/news/2006/bigShot_0620/70055.html.

²⁵ “Crude Stopped Falling at \$40 a Barrel for Chinese Consumers,” Bloomberg, January 18, 2016 <https://www.bloomberg.com/news/articles/2016-01-18/oil-prices-stopped-falling-at-40-a-barrel-for-chinese-consumers>.

²⁶ Oceana Zhou, “China Suspends Oil Product Price Adjustment for First Time on Crude Volatility,” Platts, December 16, 2015, <https://www.platts.com/latest-news/oil/singapore/china-suspends-oil-product-price-adjustment-for-27056964>; and “China Adjusts Oil Price Mechanism,” China.org.cn, March 26, 2013, <http://www.china.org.cn/business/2013-03/26/content-28365275.htm>.

²⁷ This discussion of SIPC’s woes is based on Huang Kaixi and Chen Na, “Falling Profits, Rising Debts Plague Sinopec’s Overseas Expansion,” Caixin, November 14, 2016, <http://www.caixinglobal.com/2016-11-14/101053087.html>.

²⁸ CNOOC Limited, “Profit Warning,” July 28, 2016, http://portalvhds1fxb0jchzgph.blob.core.windows.net/press-releases-attachments/951558/HKEX-EPS_20160728_002572915-0.PDF.

²⁹ Julie Zhu and Lucy Hornby, “PetroChina Looks to ‘Swap’ Canadian Assets,” *Financial Times*, March 26, 2015, <https://www.ft.com/content/418d2b7c-d3cf-11e4-a9d3-00144feab7de>.

³⁰ “Zhou Jiping fu haiwai kantan kaifa gongsi tiaoyan” [Zhou Jiping Surveys Overseas Exploration and Development Company during Visit], Zhongguo Shiyou Xinwen Zhongxin, December 15, 2014, <http://news.cnpc.com.cn/system/2014/12/15/001520356.shtm>.

alone was not enough to justify the purchase of an overseas asset; the key criterion is whether the acquirer can add value.³¹

More partners. China's NOCs will probably partner with more domestic and foreign firms in overseas acquisitions to help manage risks. As mentioned above, CNPC has signed an agreement with France's Total for the development of phase 11 of Iran's South Pars natural gas field. This partnership is consistent with its past practice of teaming up with international oil companies in large, high-profile projects, such as Iraq's Rumaila field (where it is partnered with BP) and Iraq's West Qurna 1 field (where ExxonMobil is the operator). Meanwhile, CNPC's tie-up with the private firm CEFC China Energy to invest in Abu Dhabi's ADCO is likely the start of a trend of China's NOCs joining forces with private Chinese firms to negotiate deals abroad. The reason for such partnerships is not only to mitigate financial risks in host countries but also to protect NOCs from allegations of corruption at home. According to one industry publication, CNPC teamed up with CEFC because CNPC was concerned that if it paid \$2.7 billion for a 12% share in ADCO by itself, the deal might have raised suspicions about corruption. Instead, CNPC purchased an 8% stake for \$1.8 billion, and CEFC bought the remaining 4% for \$900 million.³²

In sum, China's NOCs are likely to acquire international assets at a slower pace than they did in 2009–13. They are unlikely to be motivated by the concerns about resource scarcity that drove many of their previous purchases and are instead likely to be more deliberate decision-makers and seek more foreign partners in order to maintain or increase the value of their investments. The NOCs will be doing this at a time when the entire Chinese system is mobilizing to implement BRI.

Where the Belt and Road Initiative Fits In

China's NOCs will look for opportunities to capitalize on BRI to advance their corporate agendas. The initiative, which Xi Jinping unveiled in the fall of 2013, aims to forge greater connectivity between Asia, the Middle East, parts of Africa, and Europe—not only through the construction of infrastructure but also through policy coordination, unimpeded trade, financial integration, and people-to-people bonds.³³ Rhetorically, the companies will link as many corporate activities as they can to BRI to show their commitment to the initiative and position themselves to tap into the large amount of capital that Chinese state-owned banks have pledged in support of it. However, most, if not all, of the overseas acquisitions by China's NOCs probably would have been made in the absence of BRI, and state funding is likely to be reserved for select national strategic projects.

Actors throughout the Chinese system are working to demonstrate their commitment to BRI, and China's NOCs are no exception. BRI is highly personal to Xi, who refers to it as “his initiative.”³⁴ Consequently, Chinese entities—including companies, banks, and various levels of government—want to ensure that they are seen as doing their part to help make BRI a success.

³¹ “San tong you yuan dongshichang tan haiwai bingou; Fu Chengyu: Bu yin ta pianyi cai mai” [A Former Chairman of the Three Barrels of Oil Discusses Overseas Mergers; Fu Chengyu: Don't Buy Just Because It's Cheap], *Zhongguo Jingji Shibao*, May 11, 2015, http://news.xinhuanet.com/finance/2015-05/11/c_127789164.htm.

³² “China's Big Three Make Cautious Return to M&A,” *Energy Intelligence Finance*, March 22, 2017.

³³ National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China, “Full Text: Action Plan on the Belt and Road Initiative,” March 30, 2015, http://english.gov.cn/archive/publications/2015/03/30/content_281475080249035.htm.

³⁴ Xi Jinping, “Kaipi hezuo xin qidian mouqiu fazhan xin dongle—Zai ‘Yidai Yilu’ guoji hezuo gaofeng luntan yuanzhuo fenghui shang de kaimu ci” [Open Up a New Starting Point for Cooperation and Seek to Develop New Momentum—Opening Remarks at the Roundtable of the “Belt and Road” International Cooperation Summit Forum], *Xinhua*, May 15, 2017, http://news.xinhuanet.com/2017-05/15/c_1120976082.htm.

This desire to be seen as champions of an initiative of particular importance to Xi is probably especially strong on the part of the NOCs, given their fall from grace during the early phase of the anticorruption campaign. Moreover, the fact that BRI is very flexible in terms of geography (being open to any country that wants to participate) and content (apparently including no restrictions on what constitutes a BRI project) means that virtually any project can be designated as part of the initiative by its proponents.

The NOCs have been quick to link their overseas activities to BRI. Since the rollout of BRI coincided with the pause in their overseas buying, this has largely consisted of repackaging investments that predate the initiative. CNPC, for example, has noted that it has participated in 50 oil and gas projects in 19 countries that are part of BRI, with investments totaling \$51 billion by the end of 2016.³⁵ Sinopec has similarly highlighted its involvement in projects in more than 40 BRI countries and regions.³⁶ Given the pause in the NOCs' outbound M&A from 2014 to 2016, most of these projects probably antedate BRI.

Placing projects under the BRI umbrella is also a way for China's NOCs to increase their chances of tapping into the considerable funds that Chinese state-owned financial institutions have earmarked for the initiative. These entities have collectively pledged to spend hundreds of billions of dollars on BRI projects (see **Table 2**). Although analysts have questioned whether there are enough bankable infrastructure projects to absorb all of this capital, the political incentive for Chinese state-owned financial institutions to show that they are doing their part to advance Xi's

TABLE 2 Initial commitments of select state-owned financial institutions to BRI

Institution	Commitment (\$ billion)
Industrial and Commercial Bank of China	159
CITIC	113
Bank of China	100
Silk Road Fund	40
China Development Bank	36
Export-Import Bank of China	19

SOURCE: Industrial and Commercial Bank of China, "Gonghang qingli zhichi ZhongBa jingji zoulang dianli xiangmu jianshe" [ICBC's Effort to Support Power Plant Construction in the China-Pakistan Economic Corridor], April 21, 2015; "China's CITIC to Invest \$113 Billion for 'Silk Road' Investments," Reuters, June 24, 2015; "Jinnian Zhonghang Yidai Yilu daikuan mubiao 400 yi Meiyuan haiwailingshou tupuo" [Bank of China's Target for Belt and Road Loans This Year of \$40 Billion Will Be a Breakthrough in Overseas Retail], *Zhengquan Shibao*, March 24, 2017; Silk Road Fund, "About Us: Overview"; and "Full Text of Xi's Speech at Opening of Belt and Road Forum," Xinhua, May 14, 2017.

³⁵ "China to Expand Oil, Gas Cooperation with B&R Countries," Xinhua, May 15, 2017, http://news.xinhuanet.com/english/2017-05/16/c_136289336.htm.

³⁶ Ran Yongping, "Zhongshihua canyu Yidai Yilu yanxian 40 duo ge guojia he diqu xiangmujianshe" [Sinopec Is Participating in Projects in More Than 40 Countries and Regions along the Belt and Road], *Renmin Ribao*, May 10, 2017, <http://energy.people.com.cn/n1/2017/0510/c71661-29265122.html>.

signature initiative almost certainly means that there will be an increase in the amount of funding available for infrastructure and other projects wrapped in the cloak of BRI.³⁷

That said, it is highly unlikely that the NOCs will make new investments primarily for the purpose of advancing BRI. CNPC's return to Iran and the UAE illustrates this point. The company's involvement in both countries predates BRI. In the case of Iran, CNPC had signed a buy-back contract for the development of South Pars phase 11 in 2009 (replacing Total, after Iran grew frustrated with the French firm's delays due to sanctions pressure) before being forced out by Tehran in 2012 for insufficient progress.³⁸ CNPC's efforts to establish a foothold in the UAE began in 2008, when it signed an engineering, procurement, and construction contract valued at \$3.3 billion to construct a pipeline running east from the Habshan oil field in Abu Dhabi to the port of Fujairah on the Gulf of Oman.³⁹ Even in the absence of BRI, CNPC would likely have returned to South Pars and invested in ADCO, given the size of the fields involved.

Moreover, bankrolling the international expansion of China's NOCs is unlikely to be the main focus of Chinese financiers. First, these financial institutions tend to follow Chinese companies abroad, and the NOCs are likely to buy overseas assets at a slower pace than they did in the late 2000s and early 2010s, as discussed above. Second, before Xi announced BRI, China Development Bank had already helped finance the construction of several pipelines transporting oil and natural gas from Kazakhstan, Turkmenistan, Russia, and Myanmar—projects that forged the very regional connectivity that the initiative aims to create. Third, the government's priorities for the overseas activities of Chinese firms, which influence the lending priorities of banks, have broadened beyond facilitating the import of commodities to facilitating the export of Chinese standards, technologies, and equipment, such as in the rail and power industries.⁴⁰

As a result, financing for the international activities of NOCs is likely to be limited to projects of strategic importance to the Chinese government. Yamal LNG, which is located deep in the Russian Arctic, is a case in point. In January 2014, CNPC purchased a 20% stake in the project, which is operated by Novatek, a private firm with close ties to the Kremlin.⁴¹ (Novatek holds a 50.1% interest in the project, while Total owns 20% and the Silk Road Fund owns 9.9%.)⁴² Four months later, CNPC signed a binding contract to import 3 million tons of liquefied natural gas (LNG) per year for twenty years.⁴³ Novatek expects to launch the first 5.5 million tons in late 2017, with another two trains of the same capacity to come online in 2018 and 2019.⁴⁴

Capital provided by Chinese entities has allowed the \$27 billion project to move forward despite Western sanctions specifically targeting Novatek. The first sign that Beijing wanted to see the project developed in a timely fashion came in September 2015 when the Silk Road Fund signed

³⁷ See, for example, Arthur Kroeber, "Financing China's Global Dreams," *China Economic Quarterly*, November 2015, 27–36.

³⁸ Siddik Bakir, "Following Total, CNPC Pulls Out of Iran's South Pars Gas Project," IHS Global Insight, Daily Analysis, July 30, 2012.

³⁹ Qi Yu, "Zhongshiyou he Huaxin huo Alianqiu zuida youtian 12% gufen: You zhengfu de zhichi" [CNPC and CEFC Win a 12% Stake in the UAE's Largest Oil Field: Government Support], *21 Shiji Jingji Daobao*, February 24, 2017, <http://finance.sina.com.cn/chanjing/cyxw/2017-02-24/doc-ifyavwcv8679279.shtml>.

⁴⁰ See, for example, "Guowuyuan xiangjie Zhongguo zhuangbei 'zouchuqu' liu da bankuai" [The State Council Explains in Detail the Six Components of China's Equipment Industry "Going Out"], *Diyi Caijing Ribao*, January 29, 2015, http://www.gov.cn/zhengce/2015-01/29/content_2811567.htm.

⁴¹ "Novatek, CNPC Close Deal," Platts, International Gas Report, January 27, 2014.

⁴² "Yamal LNG: The Gas That Came In from the Cold," Total, <http://www.total.com/en/energy-expertise/projects/oil-gas/lng/yamal-lng-cold-environment-gas>.

⁴³ "Binding Contract on LNG Supply Concluded with CNPC," Novatek, May 20, 2014, http://www.novatek.ru/common/upload/doc/YLNG_CNPC_Contract_ENG.pdf.

⁴⁴ Nastassia Astrasheuskaya, "Russian Yamal LNG to Sell First 2017 LNG Cargoes on Spot Market," Platts, March 30, 2017, <https://www.platts.com/latest-news/shipping/sabetta-yamalpeninsula/russian-yamal-lng-to-sell-first-2017-lng-cargoes-26699065>.

an agreement to acquire its 9.9% equity stake in Yamal LNG for \$1.2 billion, which it completed in March 2016.⁴⁵ The fund, whose board of directors includes representatives of several government agencies, typically provides equity financing with the intent of attracting other financiers. China Development Bank and Export-Import Bank of China quickly followed suit with \$12 billion in debt financing in April.⁴⁶

Yamal LNG is probably important to the Chinese government for several reasons beyond the LNG it will supply. First, Chinese firms are providing as much as 80% of the equipment and have signed contracts worth \$6 billion.⁴⁷ Second, the project will allow China's oil industry to showcase its LNG technology. For example, China Offshore Oil Engineering Co. is building core modules for the project, the first to be independently designed and constructed by a Chinese firm.⁴⁸ This breakthrough is in line with Beijing's plan for China to move up the value chain in manufacturing marine equipment, which is part of a broader effort to transform the country into a global leader in advanced manufacturing.⁴⁹ Third, as Alexander Gabuev of the Carnegie Endowment for International Peace has argued, financing Yamal LNG is a way for the Xi administration to engender goodwill toward China in the Kremlin because Novatek's major shareholder, Gennady Timchenko, is a member of President Vladimir Putin's inner circle and his point person on China.⁵⁰ The same logic applies to the Silk Road Fund's acquisition of a 10% equity stake in Sibur, a gas-processing and petrochemicals group in which both Timchenko and Sinopec are shareholders.⁵¹ Fourth, Yamal LNG helps China expand its activities in the Arctic, a region where it wants to be accepted as a legitimate stakeholder.⁵²

Implications for U.S. Companies and the U.S. Government

Although China's NOCs are resuming international M&A while actors throughout the Chinese system are mobilizing to implement BRI, they are unlikely to make decisions about where to invest—or trade or engage in other overseas activities—solely for the purpose of building the belt and road. To be sure, the NOCs will certainly link whatever international acquisitions they can to BRI to demonstrate that they are doing their part to advance Xi's signature foreign policy initiative and position themselves to gain from the state financial institutions that are bankrolling BRI. However, the NOCs are likely to be more prudent shoppers than they were in the 2000s due to the

⁴⁵ "Novatek Closes Sale of Yamal LNG Stake to China," *Nefte Compass*, March 17, 2016; and "China's Silk Road Fund to Obtain 9.9% Stake in Yamal LNG," *LNG Intelligence*, September 4, 2015.

⁴⁶ James Marson, "Russia's Yamal LNG Signs Long-Awaited Loan Agreement with Chinese Banks," Dow Jones Newswires Chinese (English), April 29, 2016.

⁴⁷ "ZhongE nengyuan 'Silu' xingwen zhiyuan?" [China-Russia Energy "Silk Road" Proceeds Stably and Aims Far?] *Zhongguo Jingji Shibao*, February 28, 2017, <http://www.cet.com.cn/nypd/jsxw/1898160.shtml>; and "Chinese Companies to Produce 80 Pct of Yamal LNG Equipment," Russia Beyond the Headlines, May 6, 2016, https://www.rbth.com/news/2016/05/06/chinese-companies-to-produce-80-pct-of-yamal-lng-equipment_590929.

⁴⁸ Zheng Xin and Zhang Min, "Top-End Oil-Gas Equipment Next," *China Daily*, April 17, 2017, http://m.chinadaily.com.cn/en/2017-04/17/content_28953838.htm.

⁴⁹ China-Britain Business Council, "Made in China 2025 Sectors," 37–38, <http://www.cbcc.org/mic2025>.

⁵⁰ Alexander Gabuev, "Friends with Benefits? Russian-Chinese Relations after the Ukraine Crisis," Carnegie Endowment for International Peace, 2016, 20.

⁵¹ Alexander Gabuev, "China's Pivot to Putin's Friends," *Foreign Policy*, June 25, 2016, <http://foreignpolicy.com/2016/06/25/chinas-pivot-to-putin-friends-xi-russia-gazprom-timchenko-sinopec>.

⁵² Ekaterina Klimenko and Camilla T.N. Sørensen, "The Status of Chinese-Russian Energy Cooperation in the Arctic," Stockholm International Peace Research Institute, Commentary, May 11, 2017, <https://www.sipri.org/commentary/topical-backgrounder/2017/chinese-russian-energy-cooperation-arctic>.

easing of concerns about resource scarcity, low oil prices, and the long shadow of Xi's anticorruption campaign. Their greater focus on generating positive returns from overseas investments at a time when the highest levels of the government are focusing on transforming Xi's vision for greater global economic activity centered on China has implications for U.S. companies and the U.S. government.

First, China's NOCs will probably look to partner with foreign firms, including U.S. oil companies, in large, high-profile projects in third countries to help ensure that their investments are successful. As noted above, CNPC is not "going it alone" in its most recent overseas investments. In Iran the company is working with Total in the development of South Pars, and in the UAE other investors in ADCO include BP, Total, Japan's Inpex, and South Korea's GS Energy. Foreign firms partnering with Chinese companies are likely to benefit from the capital, low-cost supply chains, ability to attract Chinese banks and construction firms to finance and build related infrastructure, and in some cases the commitment of host governments to strengthening ties with Beijing.

Second, foreign companies can increase their chances of winning new contracts by explaining how their business can advance BRI. Linking corporate activities to the priorities of the Chinese leadership has always been a smart strategy for engaging with Chinese firms and the government, and this is likely to be especially true in the case of BRI given its importance to Xi. Moreover, the flexibility of BRI in terms of geography and content means that virtually any project or other business endeavor can be placed under the BRI umbrella. GE, for example, has done an excellent job in capitalizing on this initiative to help generate new sales of equipment. The company saw the value of its contracts with Chinese construction and engineering companies for equipment, such as boilers and turbines, surge from \$400 million in 2014 to \$2.3 billion in 2016.⁵³ While some of this growth probably would have happened anyway as GE followed its Chinese partners abroad in search of new business opportunities, the company's very public commitment to supporting BRI certainly did not hurt.

Third, sales of U.S. crude oil to China's NOCs (and other Chinese firms) are unlikely to be adversely affected by the fact that Washington is not a strong supporter of BRI. Indeed, just as the initiative is unlikely to be a major factor in the NOCs' overseas M&A activity, it is also unlikely to loom large in their decisions about crude oil imports. The surge in Chinese purchases of U.S. crudes in 2017 illustrates this point. Washington's lack of enthusiasm for BRI has not dampened China's appetite for U.S. oil. To the contrary, China's NOCs and independent refining companies are taking advantage of Washington's decision in December 2015 to lift the 40-year ban on oil exports to buy U.S. crudes, motivated by attractive prices and the opportunity to diversify suppliers.⁵⁴ China emerged as the second-largest buyer of U.S. crude in January–June 2017, accounting for 21% of U.S. crude exports in this period.⁵⁵ Both Sinopec and CNPC plan to import more oil from the United States.⁵⁶ Wang Yilin, the chairman of CNPC, made his intentions clear on the sidelines of the Belt and Road Forum in Beijing in May 2015 when he stated that CNPC expects its reliance on U.S. energy imports to increase.⁵⁷

⁵³ Keith Bradsher, "U.S. Firms Want In on China's Global 'One Belt, One Road' Spending," *New York Times*, May 14, 2017, <https://www.nytimes.com/2017/05/14/business/china-one-belt-one-road-us-companies.html>.

⁵⁴ Florence Tan, "China Steps Up Americas Oil Imports, Unipet Backs 'New Frontier,'" Reuters, March 31, 2017; and Catherine Traywick and Sheela Tobben, "China Surpasses Canada as Top Buyer of U.S. Crude," Bloomberg, April 5, 2017.

⁵⁵ U.S. Energy Information Administration, Petroleum & Other Liquids, Exports by Destination, September 13, 2017, https://www.eia.gov/dnav/pet/pet_move_expc_a_EPCO_EEX_mbbldpd_m.htm.

⁵⁶ For a discussion of Sinopec's plans to import more U.S. crude, see Oceana Zhou and Sambit Mohanty, "Analysis: China's Record U.S. Crude Imports to Give OPEC More Sleepless Nights," *Platts*, July 25, 2017, <https://www.platts.com/latest-news/oil/singapore/analysis-chinas-record-us-crude-imports-to-give-27860829>.

⁵⁷ Zheng Xin, "China Escalates Imports of Crude from United States," *China Daily*, July 20, 2017, http://www.chinadaily.com.cn/business/2017-07/20/content_30179723.htm.

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The China-Pakistan Economic Corridor: What It Is, How It Is Perceived, and Implications for Energy Geopolitics

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EXECUTIVE SUMMARY

This essay assesses the scale and energy dimensions of the China-Pakistan Economic Corridor (CPEC), identifies key obstacles, and discusses the implications for energy geopolitics.

MAIN ARGUMENT

CPEC has great potential to ease Pakistan's energy supply shortages. It could conceivably zero out the country's energy shortfall, which ranges from 5,000 to 7,000 megawatts (MW), and produce a more diversified and cheaper energy mix for a nation that currently depends on expensive local furnace oils and oil and gas imports. Initial CPEC power projects, comprising coal, gas, hydro, solar, and wind, are envisioned to generate over 27,000 MW. CPEC could also help China pursue its broader strategy of accessing far-flung energy and other markets. CPEC is one of the core land routes associated with China's Belt and Road Initiative and involves some of the initiative's first projects to be operationalized. However, it is also fraught with risks. These include Pakistan's questionable ability to repay loans, as well as security threats posed by separatist insurgency, terrorism, and organized crime. For these reasons, CPEC's future prospects remain uncertain.

POLICY IMPLICATIONS

- CPEC may enable Pakistan to generate more power, but it will not solve the country's broader energy crisis, which is rooted in factors that go well beyond supply shortages.
- Stability in Pakistan's security situation and economic performance is an increasingly critical interest for Beijing because it is a precondition for CPEC's success.
- Given New Delhi's strenuous opposition, CPEC will exacerbate India-Pakistan tensions.
- CPEC cements the already deep presence of Washington's top strategic competitor in a region where the U.S. has a much lighter footprint.

On April 20, 2015, Chinese president Xi Jinping arrived in Islamabad for a milestone visit. He was in town to announce a bonanza of infrastructure projects for Pakistan, including a port, an airport, a gas pipeline, and a nearly two-thousand-kilometer railway. The price tag was \$46 billion, which at the time was equivalent to 20% of Pakistan's GDP.¹ Xi was launching the China-Pakistan Economic Corridor (CPEC)—a transport corridor project envisioned to stretch from the port of Gwadar off the southern coast of Pakistan to Xinjiang in western China, and to feature projects throughout Pakistan. CPEC represents one of the prime land-based components of China's broader Belt and Road Initiative (BRI).

CPEC offers many potential benefits for Pakistan, ranging from improved infrastructure to increased employment and, more broadly, greater access to the global economy. However, its impact could be problematic in other ways, particularly for India, Pakistan's bitter rival. CPEC illustrates the deep inroads made by Beijing—New Delhi's biggest strategic competitor—in India's backyard. The project also generates additional obstacles for Indian efforts to access markets and natural gas reserves in Central Asia—a region that India cannot reach directly by land because Pakistan denies it transit rights on Pakistani soil.

Overall, energy is a big part of the CPEC story. Some of the highest-priority projects, including sixteen close to completion, relate to energy. The energy components of CPEC are also notable for domestic political reasons in Pakistan: The current government in Islamabad was swept into power in 2013 with a mandate to fix a far-reaching energy crisis. In his speech to mark the occasion of CPEC's launch in April 2015, Prime Minister Nawaz Sharif declared that the project “will benefit all provinces and areas in Pakistan, and transform our country into a regional hub and pivot for commerce and investment.” He added that the corridor “will also enable China to create a shorter and cheaper route for trade and investment in the Middle East and Africa.”² Islamabad has a strong political interest in getting as many energy-related projects online as possible before the next national election, scheduled for 2018. This is particularly true given the government's recent political struggles. The Pakistani Supreme Court disqualified Sharif from office in July 2017 in a decision related to an ongoing investigation of his family's offshore wealth. His successor, Shahid Khaqan Abbasi, previously served as minister of petroleum and natural resources in Sharif's cabinet.

This essay begins with an examination of CPEC's scale and scope, before describing its various energy dimensions. The next section then highlights the very different perceptions of CPEC, with emphasis on those of Pakistan, China, India, and the United States. From there, the essay proceeds to examine CPEC's key obstacles and the implications of the project for energy geopolitics. It concludes by discussing policy implications and offering broader context about how CPEC fits in with BRI. The essay's prime assertion is that CPEC has great potential to ease Pakistan's energy supply shortages and to help China pursue its broader strategy of accessing far-flung energy and other markets. At the same time, however, the project is fraught with risk—relating in particular to financing and security—and so its future prospects remain uncertain.

¹ Andrew Stevens, “Pakistan Lands \$46 Billion Investment from China,” CNN Money, April 20, 2015, <http://money.cnn.com/2015/04/20/news/economy/pakistan-china-aid-infrastructure/index.html>.

² Mateen Haider and Irfan Haider, “Economic Corridor in Focus as Pakistan, China, Sign 51 MoUs,” *Dawn*, April 20, 2015, <https://www.dawn.com/news/1177109/chinese-presidents-visit-to-usher-in-new-era-of-development-pm>.

Overview of CPEC

Scope and Scale

The magnitude of CPEC is extraordinary. Its price tag now exceeds \$50 billion, which is more than six times the total amount of development assistance (\$7.5 billion) that the United States provided to Pakistan between 2009 and 2014.³ That five-year assistance package marked a tripling of U.S. civilian aid to Pakistan.

Many details about CPEC, from specific projects and timelines to loan repayment plans, are shrouded in secrecy. However, in May 2017 the Pakistani newspaper *Dawn* published a document that it described as the “master plan”—a blueprint drafted by Beijing and Islamabad in 2013 and finalized in 2015 that laid out many of the project’s intentions. The document reveals a magnificently ambitious vision that goes well beyond infrastructure. It calls for thousands of acres of agricultural land to be leased to Chinese companies, monitoring and surveillance systems in major cities to strengthen law and order, and a fiber-optic network for both internet traffic and broadcast television transmission, among other projects. CPEC’s scope, according to the *Dawn* report, “has no precedent in Pakistan’s history in terms of how far it opens up the domestic economy to participation by foreign enterprises.”⁴

Energy Dimensions

Energy generation and transmission are major components of CPEC, and power infrastructure figures in some of the most high-priority projects. According to the Pakistan-China Institute, CPEC designates sixteen energy projects as “prioritized/early harvests,” totaling 10,400 megawatts (MW). These include three coal-fired power plants and several hydropower facilities that are around 60% complete, as well as five renewable energy plants (all solar and wind), one of which is 90% complete.⁵ An additional eight projects, focused on coal, gas, and renewables and totaling 17,000 MW, are listed as “actively promoted projects” and have made less progress than the other group.⁶

Strictly based on projected generation amounts and types of fuel, these projects portend well for Pakistan’s energy sector. This sector struggles badly as a result of serious shortages that have led to many hours of daily power outages in cities (particularly in the summer when there is more demand on the grid) and even more in rural areas. In some parts of the country, ten hours of daily outages are not unusual. Electricity shortages between May and August 2017, for example, ranged from 5,000 to 7,000 MW.⁷ In recent years, energy shortages have cost up to 4% of GDP.⁸

Pakistan’s energy mix has long emphasized local furnace oils and imports of oil and gas. This is a precarious mix because these fuels are expensive and the country is expected to run out of

³ This development assistance was authorized by a 2009 bill called the Enhanced Partnership with Pakistan Act, more familiarly known as the Kerry-Lugar-Berman bill. For the text of the legislation, see <https://www.govtrack.us/congress/bills/111/s962>.

⁴ Khurram Husain, “CPEC Master Plan Revealed,” *Dawn*, May 15, 2017, <https://www.dawn.com/news/1333101/exclusive-cpec-master-plan-revealed>. The Pakistani government has said that some of what is laid out in the master plan is inaccurate and outdated, and that the document reflects aspirational more than actual elements of the project, though the government has offered few specifics or clarifications. See “CPEC’s Long Term Plan Is Not Project Document, Clarifies Minister,” *Dawn*, May 16, 2017, <https://www.dawn.com/news/1333380>.

⁵ See Pakistan-China Institute, “Energy Projects: China-Pakistan Economic Corridor,” CPEC Portal, <http://www.cpecinfo.com/energy-generation>.

⁶ *Ibid.*

⁷ Khaleeq Kiani, “Power Cuts Return as Shortfall Touches 7,000MW,” *Dawn*, May 8, 2017, <https://www.dawn.com/news/1331738>; and Khaleeq Kiani, “Abbasi Cracks the Whip as Loadshedding Returns,” *Dawn*, August 9, 2017, <https://www.dawn.com/news/1350409>.

⁸ Michael Kugelman, “Pakistan’s Energy Crisis: From Conundrum to Catastrophe,” National Bureau of Asian Research, Commentary, March 13, 2013, http://www.nbr.org/downloads/pdfs/eta/Kugelman_commentary_03132013.pdf.

indigenous oil reserves by 2025.⁹ CPEC's focus on coal, which currently makes up a negligible percentage of Pakistan's overall energy mix, reflects the country's growing desire to exploit its nearly 185 billion tons of untouched coal reserves. Most of these reserves are located in the southern desert region of Thar. Islamabad hopes that the Thar reserves will one day generate a staggering 100,000 MW of electricity, though even the biggest advocates of coal exploitation admit that this goal will not be achieved anytime soon.¹⁰ Islamabad has not given any formal estimates as to what the share of coal will be in the country's energy mix if these reserves are successfully tapped, but independent Pakistani energy experts have projected that coal could conceivably constitute 15% of the energy mix by 2025.¹¹

Additionally, CPEC's focus on renewables reflects Pakistan's growing desire to tap into solar and wind resources, which thanks to its climate are readily available.¹² This focus also showcases China's desire to invest generously in renewables more broadly. China has announced plans to spend nearly \$400 billion on renewables through 2020 and aims for renewables to constitute 20% of its energy mix by 2030.¹³ This pledge to spend heavily on renewables is not entirely new; even back in 2015, the country spent \$103 billion on renewables—more than a third of the world total that year, and more than the totals of the United States, the United Kingdom, and Japan combined.¹⁴

In short, energy takes center stage in CPEC. On several levels, the project offers tantalizing opportunities to ease Pakistan's rampant energy insecurity. It has the potential to zero out the country's energy shortfall, as well as to produce a more diversified and cheaper energy mix. Such results would deliver relief to the general population, not to mention a much-needed political victory to a beleaguered government. At the same time, a reality check is in order: for all the talk of adding more generation capacity to the grid and mitigating Pakistan's energy shortage, CPEC will not do much to address the fundamental drivers of that crisis—debt, corruption, a lack of a clear and coordinated energy policy process, and other factors that have little to do with supply-side considerations.

Perceptions of CPEC

When it comes to a complex megaproject like CPEC, nothing is as simple as it may seem. Not surprisingly for such a large, expensive, and geopolitically significant project, views of CPEC vary

⁹ See Michael Kugelman, "Easing an Energy Crisis That Won't End," in *Pakistan's Interminable Energy Crisis: Is There Any Way Out?* ed. Michael Kugelman (Washington, D.C.: Woodrow Wilson International Center for Scholars, 2015), 1–22, https://www.wilsoncenter.org/sites/default/files/ASIA_150521_Pakistan%27s%20Interminable%20Energy%20Crisis%20rpt_0629.pdf. Credible figures on the share of indigenous oil reserves in Pakistan's energy mix are difficult to obtain. In fiscal year 2014 (the most recent year for which data is available), Pakistan processed around 12 million tons of crude oil, of which less than 4 million tons were local and around 8 million tons were imported. Total national demand for oil was approximately 21 million tons. Overall, furnace oil constitutes around 35% of the country's total fuel mix. See Bilal Ahmad Sherpao (presentation on country report of Pakistan, Japan International Cooperation Agency training on energy policy, Tokyo, August 2016), <https://eneken.iej.or.jp/data/6883.pdf>.

¹⁰ "Surveys Show 185 Billion Tons of Coal Reserves in Country," *Business Recorder*, September 19, 2016, <http://fp.brecorder.com/2016/09/2016091986065>; and Khalid Mansoor, "How Coal Can Help Address Pakistan's Energy Crisis," in Kugelman, *Pakistan's Interminable Energy Crisis*, 40–52.

¹¹ See "Pakistan Economic Forum Energy Panel," Pakistan Business Council and Pakistan Economic Forum, http://www.pbc.org.pk/assets/pdf/energy_presentation.pdf.

¹² See *Pakistan's Interminable Energy Crisis*. Renewables in this context should be understood mainly as wind and solar power but also hydropower.

¹³ Michael Forsythe, "China Aims to Spend at Least \$360 Billion on Renewable Energy by 2020," *New York Times*, January 5, 2017, <https://www.nytimes.com/2017/01/05/world/asia/china-renewable-energy-investment.html>; and Beth Gardiner, "Three Reasons to Believe in China's Renewable Energy Boom," *National Geographic*, May 12, 2017, <http://news.nationalgeographic.com/2017/05/china-renewables-energy-climate-change-pollution-environment>.

¹⁴ "Global Trends in Renewable Energy Investment 2016," Frankfurt School–UNEP Collaborating Centre and Bloomberg New Energy Finance, 2016, http://fs-uneep-centre.org/sites/default/files/publications/globaltrendsrenewableenergyinvestment2016lowres_0.pdf.

widely among countries. This section will survey perceptions of the project in Pakistan, China, India, and the United States.

Pakistan

There is a noticeable split between public narratives and private sentiments. Government officials speak glowingly and positively about CPEC and rarely if ever express doubts or even minute criticism. So powerful are the public narratives that when Pakistani journalists or analysts dare to criticize the project, they are shouted down and castigated by other observers. These narratives are likely so strong and triumphant because so much is at stake—CPEC is envisioned to ease energy insecurity, develop much-needed infrastructure, and above all better integrate Pakistan into the global economy. The project is also a core component of its relationship with China, arguably Pakistan's closest and most trusted ally.

However, in private conversations, Pakistani officials and analysts offer a more sobering appraisal. They acknowledge the risks of placing all of Pakistan's economic eggs in the CPEC basket and of creating the impression—one already harbored by international investors back in 2015—that top-heavy investment from China no longer provides a level playing field in Pakistan for other interested foreign investors.¹⁵ Privately, Pakistanis also express concern about the country's ability to pay back loans in the coming years, as well as about the security threats—ranging from terrorism and separatist insurgency to organized crime—that threaten CPEC construction.¹⁶

China

Beijing's messaging is very similar to Islamabad's—it uses only the most positive of rhetoric and with a triumphant and confident tone. Like Pakistan, China has much at stake. CPEC is in some ways a test case of BRI because it includes some of the initiative's first projects to become fully operational.

Privately, however, China worries about the security risks to CPEC, even as terrorist violence has subsided in Pakistan since 2014, when the Pakistani military launched a major counterterrorism offensive. Many of the attacks that have taken place since then have occurred along or on envisioned CPEC routes in Baluchistan. Separatist rebels have targeted energy infrastructure in the province for a number of years and remain an active threat. Furthermore, criminal gangs pose threats to CPEC projects in Punjab Province. One such outfit, known as the Chotu Gang, abducted 12 Chinese engineers working on a highway project in Punjab back in 2005.¹⁷ More than 50 people have been killed while working on CPEC-related projects since 2014, including 10 in a single incident in Baluchistan in May 2017. In earlier years, before CPEC, Chinese laborers in Pakistan were attacked as well.¹⁸

¹⁵ Shannon Grewer, "How to Incentivize Energy Innovation and Efficiency, and Encourage the Rapid Deployment of Affordable Solutions," in Kugelman, *Pakistan's Interminable Energy Crisis*, 102–19.

¹⁶ These observations are based on private conversations with Pakistani analysts and members of the political elite in both Islamabad and Washington, D.C., between April and August 2017.

¹⁷ Sachchai Ahmad, "The Pakistan Army's Curious Punjab Operation," *Diplomat*, May 2, 2016, <http://thediplomat.com/2016/05/the-pakistan-armys-curious-punjab-operation>.

¹⁸ Syed Raza Hassan, "Attacks Have Killed 44 Pakistanis Working on China Corridor Since 2014," Reuters, September 8, 2016, <http://www.reuters.com/article/us-pakistan-china-idUSKCN11E1EP>; and Gul Yusufzai, "Ten Gunned Down Near China 'Belt and Road' Projects in Pakistan," Reuters, May 13, 2017, <http://www.reuters.com/article/US-pakistan-militants-idUSKBN189086>.

In addition, Chinese observers express concern about Pakistan's ability to pay back the massive loans that it has received for CPEC.¹⁹ There is also good reason to believe that China worries about political instability, particularly as protests and legal investigations have weakened the government, culminating in Sharif's ouster in July 2017. Beijing prefers to work on CPEC with the more powerful and efficient Pakistani military, given its core role in managing Chinese security concerns.²⁰

India

Not surprisingly, New Delhi has expressed serious reservations about CPEC. Gopal Baglay, the spokesperson for India's Ministry of External Affairs, released a statement on May 13, 2017, that was extraordinary for its harsh language: "Regarding the so-called 'China-Pakistan Economic Corridor,' which is being projected as the flagship project of the BRI/OBOR, the international community is well aware of India's position. No country can accept a project that ignores its core concerns on sovereignty and territorial integrity."²¹ Indeed, as Baglay's comments suggest, India's biggest objection to CPEC is that it entails building projects in Gilgit-Baltistan, a part of the disputed Kashmir region that is administered by Pakistan but claimed by India. New Delhi does not formally oppose BRI as a whole; rather, its stated concerns are restricted to CPEC, which it has described as a violation of Indian sovereignty.²²

Additionally, many within the Indian policymaking and strategic elite view CPEC as China's latest effort to "encircle" India in the South Asia region through infrastructure development, energy deals, and in some cases naval and other military-related projects. That CPEC is taking place on India's doorstep and all across Pakistan is even more unsettling for New Delhi.²³

The Indian government rarely comments publicly and explicitly about China's policies and influence in South Asia. Even when a border standoff plunged Sino-Indian relations into crisis over the summer of 2017, official statements focused more on the need for resolution than on China's actions. However, given that China is India's chief strategic competitor, New Delhi is likely to view CPEC largely through a strategic lens, with a focus on how the project increases China's influence and position in South Asia, rather than through a strictly economic lens that would emphasize China's desire to hasten access to markets. Such a focus only deepens India's mistrust about CPEC.

The United States

From the time CPEC was publicly launched in 2015 up to the time of writing, Washington has been strikingly quiet about the project. The U.S. government has neither endorsed CPEC nor formally opposed it. Significantly, in comments to the Senate Armed Services Committee in early October, Defense Secretary James Mattis stated that BRI "goes through disputed territory,"

¹⁹ These observations are based on private conversations with Chinese researchers in Washington, D.C., over the course of the summer of 2017.

²⁰ See Andrew Small's comments in Zofeen T. Ebrahim, "CPEC and Major Unanswered Questions," Third Pole, October 13, 2016, <https://www.thethirdpole.net/2016/10/13/cpec-and-major-unanswered-questions>.

²¹ Baglay's comments were meant to address why India had declined to attend a BRI summit in Beijing. See "Official Spokesperson's Response to a Query on Participation of India in OBOR/BRI Forum," Ministry of External Affairs (India), May 13, 2017, http://www.mea.gov.in/media-briefings.htm?dtl/28463/Official_Spokespersons_response_to_a_query_on_participation_of_India_in_OBORBRI_Forum.

²² The fact that India has not formally objected to BRI does not at all mean that it tacitly accepts and supports the initiative. As discussed elsewhere in this essay, India has good reason to be concerned.

²³ See, for example, Arun Prakash, "A Strategic Encirclement," *Indian Express*, April 25, 2017, <http://indianexpress.com/article/opinion/columns/indias-political-and-security-establishment-needs-a-strategy-in-light-of-chinas-naval-expansion-4626796>; and Dheeraj P.C., "China's Strategy of Encirclement," *Indian Defense Review*, May 23, 2017, <http://www.indiandefencereview.com/news/chinas-strategy-of-encirclement>.

words that appeared to echo India's position on CPEC.²⁴ However, this one observation should not be mistaken for a formal position on CPEC. Nevertheless, monitoring the progress of CPEC is a major focus of U.S. officials, particularly those posted in Islamabad. Viewed through a strategic lens, CPEC is problematic because it represents major inroads made by a key strategic competitor in a region where the United States has been much less present than China. Through an economic lens, however, the project can be seen positively because its intended outcomes—more infrastructure, better energy security, increased employment, greater economic growth, and above all stability—align neatly with Washington's own interests in Pakistan.

Some U.S. analysts have even spoken about possibilities for cooperation on CPEC, including by tapping into up-and-coming connectivity projects in Pakistan and the broader region that the United States formally supports. These include the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline and the Central Asia-South Asia power project (known as CASA-1000). TAPI entails conveying natural gas from the Caspian Sea to Turkmenistan, onward to Afghanistan and Pakistan, and then to India. CASA-1000 envisions sending surplus hydroelectricity from Tajikistan and Kyrgyzstan to Pakistan and Afghanistan. The former is projected to be completed in 2019, and the latter in 2018.

Additionally, internet portals that monitor CPEC investments have reported that the U.S. company General Electric is partnering with China's Harbin Electric Company to construct a CPEC-branded 1,180 MW power plant in Punjab, near the provincial capital of Lahore, and is also providing turbines, boilers, and generators to assist in the construction of a 1,320 MW power plant in Baluchistan Province.²⁵

Obstacles for CPEC

CPEC has genuine potential to transform Pakistan's energy landscape and develop its economy. More broadly, the project will help Beijing achieve the goal of facilitating access to far-flung markets. Its potential, however, should not be overstated. CPEC's intention to generate more electricity and to help diversify Pakistan's energy mix is a boon for supply-side considerations, but such outcomes will do little to address the root causes of the country's energy crisis. These range from sectorial debt and corruption to transmission and distribution losses that sometimes approach 20%.²⁶

Additionally, CPEC's potential may be constrained by another natural resource consideration: water. Pakistan is dangerously water insecure—its annual per capita availability barely hovers above the scarcity threshold of one thousand cubic meters—and yet CPEC will require ample water use.²⁷ Of particular concern is the parched province of Baluchistan, home to the Gwadar port and other early-harvest CPEC projects. Gwadar's two chief water sources are both severely compromised: one is a desalinization plant in the Arabian Sea that produces less water than intended because of financing constraints, and the other is a poorly maintained dam with rapidly

²⁴ "On OBOR, U.S. Backs India, Says It Crosses 'Disputed' Territory: Jim Mattis," *Economic Times*, October 4, 2017, <http://economictimes.indiatimes.com/news/politics-and-nation/on-obor-us-backs-india-says-it-crosses-disputed-territory-jim-mattis/articleshow/60932827.cms>.

²⁵ "Energy Sector Projects under CPEC," Pak-China, May 26, 2016, <http://pakchina.pk/energy-sector-projects-cpec>; and "GE Equips New 1,320 MW CPHGC to Help Pakistan Meet Growing Energy Needs," CPEC Portal, March 17, 2017, <http://www.cpecinfo.com/cpec-news-detail?id=MTcxNA==>. In a private conversation in August 2017, a Pakistani researcher confirmed GE's involvement in CPEC.

²⁶ For more details on Pakistan's energy crisis, see Kugelman, "Pakistan's Energy Crisis."

²⁷ See Michael Kugelman, "Nightmare Scenarios," *Dawn*, June 29, 2015, <https://www.dawn.com/news/1191022>.

shrinking storage space. The former, intended to produce 2 million gallons of drinking water every day, was generating only 0.3 million gallons as of 2016. And the latter's reservoir depth, which was 50 feet when the dam opened in 2005, was down to 21 feet in 2016 due to silt accumulation.²⁸

Pakistan has moved quickly to address concerns about security and offered up a security force of nearly twenty thousand soldiers to protect CPEC workers, as well as a separate maritime force to protect Gwadar port.²⁹ However, the risks will remain high, particularly in Baluchistan.³⁰ Here, a decades-long separatist insurgency driven by grievances about the state's inequitable exploitation of natural resources remains strong. CPEC could pour more fuel on the fire as it undertakes large-scale infrastructure development and natural resource extraction, thereby playing right into the hardened historical narratives of Baluch insurgents.

Finally, financing is a potentially big constraint. The contracts and other formal documents associated with CPEC are shrouded in secrecy, and there is little information publicly available on loan repayment terms. Pakistani economists have raised concerns about a troubling combination: increasing inflows of funds from China that must be paid back, coupled with declining exports, remittances, and FDI, which are core components of Pakistan's external economic sector. As Khurram Husain, an economics columnist who has reported closely on CPEC finances, asks: "Are we now getting locked into a cycle of borrowing and imports under the garb of CPEC even as the more important pillars of the external sector—exports, remittances and FDI—shrivel up?"³¹

Impacts on Regional Energy Geopolitics

How CPEC affects energy geopolitics will ultimately depend on how far the project can go. Its progress depends on a variety of factors. These include the security situation in Pakistan, the speed with which the necessary technology and labor can be obtained and deployed, the quality of baseline infrastructure needed for project development and construction, and the financial sustainability of CPEC projects. Still, at this early stage several general points can be made about the implications of CPEC, and particularly what it means for South Asia as well as the Middle East.

Pakistan Benefits from CPEC

The generation of more electricity and the harvesting of new indigenous energy resources (mainly coal and renewables) could in time allow Pakistan to reduce its high dependence on imported oil and gas from the Middle East, and particularly the Persian Gulf—always a plus given the instability in that part of the world. Overall, imported petroleum products account for a whopping 90% of Pakistan's fuel consumption. Imported crude oil and finished petroleum

²⁸ Shah Meer, "The Overlooked Threat to CPEC in Gwadar," *Diplomat*, June 23, 2016, <http://thediplomat.com/2016/06/the-overlooked-threat-to-cpec-in-gwadar>.

²⁹ Ayaz Gul, "Pakistan Forms Special Maritime Force to Secure Chinese-Built Port, Projects," *Voice of America*, December 13, 2016, <https://www.voanews.com/a/pakistan-forms-special-maritime-force-to-secure-chinese-built-port-projects/3634285.html>.

³⁰ Exact figures on the total number of CPEC workers in Pakistan, along with the breakdown of Chinese vs. Pakistani laborers, are difficult to obtain. Generally speaking, the Chinese laborers are skilled, whereas the Pakistani workers are unskilled. In September 2016 the Pakistani National Assembly provided data claiming that at that point more than fourteen thousand Pakistani security workers had been deployed to protect more than seven thousand Chinese laborers spread around Pakistan's four provinces. See Rajeev Deshpande, "15K Pakistanis Guarding 7K Chinese Working on China-Pakistan Economic Corridor," *Times of India*, September 11, 2016, <http://timesofindia.indiatimes.com/world/pakistan/15K-Pakistanis-guarding-7K-Chinese-working-on-China-Pakistan-Economic-Corridor/articleshow/54283602.cms>.

³¹ Khurram Husain, "Birth of Another Dependency?" *Dawn*, January 5, 2017, <https://www.dawn.com/news/1306493>.

products satisfy 80% of domestic oil demand.³² If the CPEC energy projects truly do take off, then Pakistan will be a big winner because it will be able to tap into newfound repositories of domestic fuels to serve many energy needs, particularly for electricity—notwithstanding the aforementioned concerns about demand-side challenges to the energy sector.

Iran Is a Winner

Iran would be a winner for two reasons. One is that Tehran and Islamabad have long wanted to complete a natural gas pipeline, but financing constraints have prevented Pakistan from developing its portion of the pipeline. China has indicated a willingness to finance this project under the CPEC rubric, increasing the likelihood that it will finally be built. The second reason that Iran wins from CPEC is the potential for Pakistan to reduce its imports of oil and gas from Saudi Arabia, Iran's regional rival. This heavy reliance cannot be overstated; oil and gas products constitute 90% of Pakistan's total import bill from Saudi Arabia, which is Pakistan's second-largest overall source of imports, trailing only China.³³ For Iran, the establishment of a pipeline with Pakistan, coupled with the reduction in oil and gas imports from Saudi Arabia, would be a net win.³⁴

India Is Disadvantaged

A fully developed and operational Gwadar port under CPEC will give China (India's main strategic competitor) strong power-projection capacities into the Arabian Sea and onward into the Indian Ocean. Speculation—based on Pakistani media reports quoting officials in Islamabad—that China may deploy naval ships to guard Gwadar will only worry New Delhi more.³⁵ For India, the stakes are high from an energy perspective, given that 75% of its energy supplies, including 75% of its oil, cross the Indian Ocean.³⁶

Additionally, CPEC cements the barriers to Indian access to the natural-gas riches of Central Asia. Pakistan has long denied transit rights to India, meaning that India cannot reach Afghanistan and by extension Central Asia directly by land. Central Asian energy markets are attractive because the region is relatively stable compared to the Middle East—the region that provided India with half of its oil and gas imports in 2016.³⁷ This lack of direct access to Central Asia is particularly problematic given India's plans to more than double its natural gas use from 7% to 15% by 2022. New Delhi aims to use gas as an alternative to oil-based products in a variety of spaces, including transportation and power generation. It also intends to lay fifteen thousand kilometers of new gas pipelines. Indian officials have even spoken of transforming India, which

³² See Shahid Iqbal, "Pakistan Saved \$4.5bn on Oil Imports in FY16," *Dawn*, July 24, 2016; and "Pakistan's Oil Production Reaches Two-Year High," *Express Tribune*, February 2, 2017, <https://tribune.com.pk/story/1314213/december-pakistans-oil-production-reaches-two-year-high>.

³³ Amir Husain, "Pak-Saudi Trade Ties: Potential and Prospects," *Arab News*, August 14, 2017, <http://www.arabnews.com/node/1144331/saudi-arabia>.

³⁴ For more background on the energy dimensions of the Saudi-Iranian rivalry, see Aniseh Bassiri Tabrizi, "The 'Oil War' between Iran and Saudi Arabia," Royal United Services Institute (RUSI), Commentary, June 15, 2016, <https://rusi.org/commentary/%E2%80%99oil-war%E2%80%99-between-iran-and-saudi-arabia>.

³⁵ M.K. Bhadrakumar, "Chinese Naval Ships at Gwadar Port Call for a Rethink of India's Regional Policy," *Dawn*, November 28, 2016, <https://www.dawn.com/news/1298977>.

³⁶ Rani D. Mullen and Cody Poplin, "The New Great Game: A Battle for Influence and Access in the Indo-Pacific," *Foreign Affairs*, September 29, 2015, <https://www.foreignaffairs.com/articles/china/2015-09-29/new-great-game>.

³⁷ Kadira Pethiyagoda, "India-GCC Relations: Delhi's Strategic Opportunity," Brookings Doha Center, Analysis Paper, no. 18, February 2017, https://www.brookings.edu/wp-content/uploads/2017/02/india_gcc_relations.pdf.

currently is heavily dependent on coal and oil, into a gas-based economy.³⁸ Limited access to Central Asian gas will severely challenge these goals.

India has sought several workarounds to enable it to better access Central Asia. It is strengthening its diplomacy with Central Asian states and in June 2017 formally joined the Shanghai Cooperation Organisation, a regional organization with Central Asian members. Most significantly, in 2016, India signed an accord with Iran and Afghanistan that entails developing the Chabahar port in southern Iran and building a railroad from the port to the border with Afghanistan.³⁹ This corridor may offer India the best alternative to a direct route to Central Asia. Critically, if completed, it would enable the country to convey energy supplies and other imports back home via rail and onward via sea. However, this project remains years away from fruition. Additionally, the Trump administration's hostile position toward Iran suggests that it could tighten the sanctions regime, which may complicate New Delhi's ability to allocate financing to the project.

Other envisioned Indian workarounds include the TAPI pipeline as well as the International North-South Transport Corridor. The latter aims to connect India with Russia via Chabahar and Central Asia. It is meant to feature shipping, road, and rail routes, and its membership—originally India, Iran, and Russia when first established in 2000—includes more than a dozen countries from Asia (mainly Central Asia) and the Middle East. However, despite some forward movement, much work remains to be done on these projects, and their full implementation remains quite far off.⁴⁰

India's Act East policy, which entails deepening engagement with the country's Asian neighbors to its east, has led it to explore energy opportunities in the broader Indo-Pacific region. In 2014, such efforts yielded an agreement with Vietnam that grants India oil exploration rights in the South China Sea. However, China's increasingly provocative actions in this region could imperil India's energy interests in Vietnam and other countries where it is exploring deals, such as Indonesia.

All this said, New Delhi is overseeing a robust regional energy security strategy that should be able to help blunt the effect of losing out on Central Asian energy resources. Over the last few years, India—despite cutthroat competition from China—has concluded energy deals with Bangladesh, Myanmar, Nepal, and Sri Lanka.⁴¹ Here, India has already made some concrete, albeit modest, progress. For example, it has worked out arrangements to use transit facilities in Bangladesh—as well as the electricity grid—to provide energy supplies to India's impoverished northeast region. New Delhi and Dhaka have also made deals that bring broader development benefits to India, including one that entails India providing electricity to Bangladesh in return for Bangladesh providing Internet bandwidth in India's northeast. Additional benefits could follow, though they will take more time. For instance, India has considered constructing a liquefied natural gas (LNG) terminal in Myanmar that would eventually provide LNG to its northeast. Finally, discussions are underway on a memorandum of understanding between Bangladesh, Bhutan, India, and Nepal to govern an electricity-sharing arrangement.

³⁸ "Where India's and China's Energy Consumption Is Heading," *Economist*, November 26, 2016, <http://www.economist.com/news/special-report/21710633-consumption-patterns-asia-will-not-replicate-those-west-where-indias-and-chinas>.

³⁹ For background on the Chabahar project, see Michael Kugelman, "Modi's Play in Iran and Afghanistan," *Foreign Affairs*, June 5, 2016, <https://www.foreignaffairs.com/articles/india/2016-06-05/modis-play-iran-and-afghanistan>.

⁴⁰ For more detail on the progress of the International North-South Transport Corridor, see Dipanjan Roy Chaudhury, "International North-South Transport Corridor for Better Indo-Russian Connectivity Inches toward Reality," *Economic Times*, April 10, 2017, <http://economictimes.indiatimes.com/news/defence/international-north-south-transportation-corridor-for-better-indo-russian-connectivity-inches-towards-reality/articleshow/58099129.cms>.

⁴¹ The latter case involves helping develop Sri Lanka's coal and petroleum sectors.

Farther afield, India is exploring a deal with Russia to build a 4,500–6,000 kilometer pipeline. A deal is also in the works for India to construct floating storage and regasification units in Indonesia while in return receiving LNG supply kits for Indian cars.⁴² These latter two initiatives are merely aspirational at this point and have made considerably less progress than have India's energy-related initiatives with its South Asian neighbors.

Entanglement in the Saudi Arabia–Iran Conflict

CPEC and the wider web of China-Pakistan-India energy geopolitics may get caught up in the intensifying rivalry between Saudi Arabia and Iran—with major implications for energy supplies as well as regional security more generally. Anti-Iran militants based in Baluchistan have carried out cross-border strikes into Iran, with one incident in April 2017 killing ten Iranian border guards. Tehran has accused Pakistan and also Saudi Arabia of providing support to these militants on Pakistani soil. In May 2017, Iran demanded that Pakistan shut down their bases in Baluchistan or risk having Iran take them out itself. Several days later, Pakistani media reports claimed that Iranian cross-border fire killed a Pakistani civilian.

Meanwhile, anti-Iran militants also have a presence in the Iranian province of Sistan and Baluchistan (across the border from Pakistan's Baluchistan Province), which is where Chabahar port is located. Saudi Arabian analysts have expressed fears that Chabahar will allow Iran to project power into the Persian Gulf and Indian Ocean, as well as intensify oil trade between Iran and India, at a time when Saudi-Indian energy relations have grown significantly. (Saudi Arabia is now the main source of Indian oil imports.) Riyadh, alarmed by Chabahar, could well provide assistance to anti-Iran insurgents operating in Sistan and Baluchistan in order to sabotage construction. Saudis have already expressed public support for such insurgents. In 2016, Prince Turki al-Faisal, a former intelligence chief and ambassador to Washington, attended a rally in Paris held by a group advocating for the overthrow of the Iranian regime and endorsed its “legitimate struggle.”⁴³

These developments portend the prospect of two major linchpins for energy-related connectivity projects—Gwadar in Pakistan and Chabahar in Iran—experiencing increasing levels of unrest. This would exacerbate China's existing fears about security for CPEC projects and present yet another challenge for India's aspirations to better access energy supplies in Central Asia.

Conclusion: Much Potential, Many Risks

The significance of CPEC is hard to overstate. It involves immense amounts of money and features a large range of multisector projects spread across Pakistan. And above all, it is meant to usher in transformative economic change for Pakistan by generating new infrastructure and connectivity and for China by hastening access to markets and serving as a key land-based component of BRI. Energy is a core dimension of CPEC. A large percentage of the overall projects will be power plants and other forms of energy infrastructure, and energy projects are some of the first initiatives to be operationalized.

At the same time, CPEC is marked by controversy and constraints. While it has been welcomed with enthusiasm in Pakistan and China, some officials and analysts privately worry about financial

⁴² Indrani Bagchil, “Away from OBOR, India Pushing for ‘Energy Diplomacy’ in Neighborhood,” *Times of India*, May 15, 2017.

⁴³ James B. Dorsey, “Pakistan Caught in the Middle as China's OBOR Becomes Saudi-Iranian-Indian Battleground,” *Huffington Post*, May 5, 2017, http://www.huffingtonpost.com/entry/pakistan-caught-in-the-middle-as-chinas-obor-becomes_us_590bfa74e4b046ea176ae9bd.

sustainability and security, among other concerns. New Delhi fears that CPEC will expand the influence and presence of India's main strategic competitor in its own backyard, while Washington has reason to be concerned about its own chief strategic rival deepening its footprint in a region where the United States is much less present. Additionally, while CPEC boasts great potential and could well ease Pakistan's gaping energy shortages, the project will be hard-pressed to address the fundamental drivers of the country's energy crisis, which include corruption, sectoral debt, and other demand-side considerations. Overall, it will face challenges that revolve around security, financing, and natural resource availability.

CPEC thus holds a number of positive and negative implications for energy geopolitics in both Pakistan and the broader region. If the project is successful, Pakistan would be able to reduce its strong dependence on imported oil and gas from Saudi Arabia and other parts of the volatile Middle East. Reduced dependence on Saudi energy supplies would be a boon for Iran, Riyadh's bitter rival. By contrast, CPEC would cement India's lack of direct access to Central Asia, which New Delhi has long eyed because of its natural gas riches. New Delhi has sought several workarounds, though many of these options remain far from completion. In the interim, India has sought to compensate for its lack of access to Central Asia by pursuing energy deals with Vietnam, Bangladesh, Sri Lanka, and Myanmar, among other countries. Finally, the energy geopolitics of China, Pakistan, and India could get dragged into the Saudi Arabia–Iran rivalry if it spills into the Baluchistan regions of both Iran and Pakistan, as is likely.

Additionally, several broader policy implications emerge from CPEC. First, the project may enable Pakistan to generate more power, but it cannot solve the country's energy crisis—one that is multifaceted and not limited to supply constraints. Second, stability in Pakistan, in terms of both the security situation and economic performance, is an increasingly critical interest for Beijing, because it is a precondition for CPEC's success. Third, given Indian opposition, CPEC will deepen tensions in an India-Pakistan relationship fraught with hostility and mistrust. Fourth, CPEC cements the already deep presence of China in a region where the United States has a much lighter footprint.

Ultimately, however, the project's future prospects are uncertain at this point. This means that some of the paramount policy questions associated with CPEC will go unanswered until there is more clarity as to how far the project will go. To what extent will CPEC benefit Pakistan's economy? How much of a contribution will it make to BRI, particularly as one of the first elements to be operationalized? How will CPEC complement, or conflict with, other emerging transportation corridors used to convey energy supplies between the Middle East and Asia?

In the grand scheme of things, CPEC is but a modest part of the larger BRI. Its scope and scale are immense, yet they pale in comparison to what Beijing hopes to do with the initiative. BRI boasts the potential to involve 64 countries, nearly 4.5 billion people, and around 40% of the global economy. One economist estimates that it will be twelve times as large in absolute dollar terms as the Marshall Plan.⁴⁴

Still, regardless of how much of CPEC's potential is fulfilled, the overall significance of the project cannot be denied. It involves the world's likely next superpower pouring billions of dollars in infrastructure investments into a volatile, nuclear-armed country and will be an early bellwether for how successful China can be in its ambitious pursuit of what may be the largest and most expensive trade link the world has ever seen.

⁴⁴ Enda Curran, "China's Marshall Plan," Bloomberg, August 7, 2016.

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The Geopolitics of Energy Cooperation in China's Belt and Road Initiative

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EXECUTIVE SUMMARY

This essay examines the factors, mechanisms, and implications of energy cooperation under China's Belt and Road Initiative (BRI) and analyzes how the initiative could reshape the current international energy order.

MAIN ARGUMENT

Unprecedented in size and scope, BRI promises approximately a trillion dollars in investments to resource-rich regions in Asia, Europe, and Africa. With its theme of interconnectivity, the implementation of the initiative is expected to prioritize infrastructure projects. Transnational energy cooperation, especially the massive development of energy infrastructure and improved market access, will be an important way for China to achieve its ambitious goals. Although BRI will facilitate energy cooperation, it would be wrong to assume that energy security is China's primary aim; instead, energy cooperation is an important way of achieving the initiative's higher-level objectives. BRI foresees a more multilateral engagement strategy from China, one that enables both domestic development and external influence and that eventually may have the potential to modify the current international energy order.

POLICY IMPLICATIONS

- The U.S. should establish mechanisms to monitor and assess the progress of energy infrastructure projects. The U.S. should not assume that all energy projects in BRI are purely commercial or political but instead should analyze them on a case-by-case basis.
- The U.S. should address areas where its businesses could benefit from BRI. Poor coordination in BRI has resulted in false expectations in the recipient countries, leaving room for the U.S. to carve out a role for itself in the initiative. The U.S. could offer "soft" support in infrastructure construction and should consider joining the Asian Infrastructure Investment Bank and exercising leadership in existing institutions, such as the Asian Development Bank and the World Bank, to coordinate on projects.
- China has attempted to strengthen its maritime defense and logistics capacity by investing in ports along the BRI corridors. The U.S. should trace China's new sea routes and port investments and find ways to cooperate with China's navy in international partnerships and joint maritime operations.
- With BRI, China may eventually determine the rules for energy trade and investment in Eurasia. The U.S. should maintain flexibility in adapting the existing international order to accommodate new energy powers.

China's Belt and Road Initiative (BRI) is an ambitious development project with strong geopolitical and economic dimensions that intends to revive and modernize the traditional Silk Road. Through BRI, China expects to strengthen its interconnection and cooperation with the countries along the envisioned route in five main areas: infrastructure, policy, finance, trade, and culture.¹ Unprecedented in size and scope, the initiative promises investments of around \$1 trillion in Asia, Europe, and Africa.² BRI is essentially a Chinese vision for the future regional integration of the Eurasian continent that crucially aims to achieve China's economic, foreign, and security policy interests through a series of small initiatives and development projects.³

Although energy was not officially identified as one of the main areas in BRI, it is closely linked to BRI and is frequently mentioned in the "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," a "vision document" issued in March 2015 by China's Ministry of Foreign Affairs, Ministry of Commerce, and National Development and Reform Commission.⁴ The importance of energy to BRI is further reflected in the "Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," which was issued by China's National Development and Reform Commission and National Energy Administration.⁵ Transnational energy cooperation, especially the massive development of energy infrastructure and improved market access, will be an important way for China to achieve its ambitious goals. After the country hosted a summit on BRI in May 2017, the Chinese government even proposed the formation of a "belt and road energy club," a regional grouping made up of governmental departments, companies, and research institutions, with the goal of building a consensus on energy cooperation for countries and regions involved in BRI.

If U.S. policymakers are to properly respond to China's strategy, they must understand the main factors and future approaches behind energy cooperation in BRI. This essay has four parts. The first section analyzes the various factors driving energy cooperation under the initiative. The next section then builds on this understanding of the rationale for BRI to provide a detailed account of the mechanisms for energy investment. The third and fourth sections assess the implications of the initiative and offer recommendations for U.S. policymakers. This essay concludes that, if successful, BRI will advance a more regional and multilateral engagement strategy for China, one that has the potential to modify and even upend the current regional order.

Factors behind Energy Cooperation under BRI

Infrastructure is the cornerstone of BRI, and hence energy cooperation—which typically involves huge levels of infrastructure spending—has become an important aspect of the initiative. That being said, energy cooperation under BRI is not simply about infrastructure investment.

¹ National Development and Reform Commission (NDRC), Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China (PRC), "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," March 28, 2015, http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html.

² Jane Perlez and Yufan Huang, "Behind China's \$1 Trillion Plan to Shake Up the Economic Order," *New York Times*, May 13, 2017, <https://www.nytimes.com/2017/05/13/business/china-railway-one-belt-one-road-1-trillion-plan.html>.

³ See Pepe Escobar, "The Eurasian Big Bang: How China and Russia Are Carving Out Their Own World Order," *Energy Post*, August 25, 2015.

⁴ NDRC, Ministry of Foreign Affairs, and Ministry of Commerce (PRC), "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road."

⁵ NDRC and National Energy Administration (PRC), "Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," May 12, 2015, http://www.nea.gov.cn/2017-05/12/c_136277478.htm.

According to the “Vision and Actions on Energy Cooperation” document, BRI will pursue the following goals:

- promote energy cooperation for an open, inclusive, and beneficial community of shared interests, responsibility, and destiny
- improve regional energy safety and optimize the distribution of energy resources
- integrate regional energy markets
- push forward green and low-carbon development

Therefore, energy cooperation in this context could be understood as the collaboration and cooperation between governments, companies, and individuals within the BRI region to achieve the above four objectives. Although BRI could facilitate energy cooperation, it would be wrong to assume that energy security is China’s ultimate goal. Instead, energy cooperation is an important way of achieving the initiative’s higher-level objectives. It would also be inaccurate to assume that all energy projects in BRI either are purely commercial projects or have underlying political agendas. Each energy investment should be analyzed on a case-by-case basis. Before discussing the mechanisms of energy cooperation, I will first examine the numerous factors that drive it.⁶

New Energy Security in BRI

Most of the regions neighboring China are rich in energy resources—including oil, gas, renewables, and rare earth minerals—and overlap with the four external energy corridors of China—namely the northwest, northeast, southeast, and southwest corridors.⁷ As stated above, unlike in the country’s past approach to energy security, acquiring energy resources abroad is not the primary objective of energy cooperation under BRI. Instead, China’s strategic focus has shifted from quantitative objectives (e.g., increasing the amount of oil imported) to qualitative objectives (e.g., upgrading infrastructure and industries).

In addition to meeting growing demand for energy, BRI aims to advance economic development in the region. According to the “Vision and Actions on Energy Cooperation” document, energy cooperation in BRI focuses not merely on imports of resources but also on industry development, policy coordination, energy finance, sustainable development, and governance structure.⁸ Fan Bi, deputy director general of the State Council Research Office, pointed out that the current energy security challenges that China is facing do not primarily lie in supply and demand but in the diversification of sources and transportation routes, as well as in the structural contradictions caused by the need for balance between economic growth and sustainable development.⁹ In general, China is comfortable with its energy security from a traditional perspective of securing supply. It is now easier for China to import oil and gas because the market is shifting to the demand side. Instead, Chinese authorities are paying more attention to domestic issues such as the reform of oil and gas markets, as well as the development of cleaner energy supplies. Externally, they

⁶ For a detailed discussion of these factors, see Nadège Rolland, *China’s Eurasian Century? Political and Strategic Implications of the Belt and Road Initiative* (Seattle: National Bureau of Asian Research, 2017).

⁷ These four corridors are part of China’s energy security strategy to diversify its routes and sources. Traditionally, China has relied on Middle Eastern oil imported via sea routes (southeast corridor). Considering the instability in the Middle East, China diversified its supply sources and developed oil and gas cooperation with Central Asian countries (northwest corridor) and Russia (northeast corridor). In order to reduce the overdependence on the southeast corridor, China further diversified these routes by building the Myanmar-China oil and gas pipelines (southwest corridor).

⁸ NDRC and National Energy Administration (PRC), “Vision and Actions on Energy Cooperation.”

⁹ Fan Bi (opening speech at the third Chinese Energy Economy Forum, Beijing, July 28, 2014).

are working harder to diversify sources and transportation routes for long-term stability.¹⁰ The government has also become more concerned about seeking new overseas markets for Chinese industries that have suffered from China's economic slowdown.¹¹

Economic Interests

BRI is meant to spur regional cooperation by using China's huge potential for investment and trade. While energy cooperation under the initiative appears to have a strong focus on overseas investment, its origin is attached to China's domestic economic development. BRI is a new round of opening up in response to emerging economic challenges: worsening economic growth, excess capacity and production in Chinese industries, backward development in the western part of China, and political instability in China's immediate neighborhood.¹² Overcapacity is not a new problem in China, especially in sectors such as steel, cement, solar energy, and coal.¹³ In order to resolve this problem, Chinese authorities have set targets to cut outdated capacity and restructure industries to tackle inefficiency. As a result, Chinese companies have expanded their investment in overseas markets. Energy, in particular, is one of the preferred sectors for Chinese companies to transfer overcapacity because energy projects—such as pipelines, grids, solar panels, power plants, and refineries—require huge investment in and the construction of necessary infrastructure. In other words, BRI prioritizes energy projects that will generate ample construction opportunities for Chinese companies.

Regional Security

Not only does BRI improve China's energy security and economic outlook, but cooperation under the initiative is important for addressing regional security concerns such as terrorism, separatism, and extremism. The Chinese government considers the regions in its immediate neighborhood as a "top strategic priority" for energy infrastructure projects.¹⁴ Chinese authorities traditionally considered interconnection, particularly via transportation and energy infrastructure, as the key way to boost regional development and economic growth, given that poverty is one of the main causes of political instability.¹⁵ An economic slowdown in the neighborhood would result in regional instability and eventually harm China's own political and social stability, especially in regions like Xinjiang in western China. Security issues such as terrorism, separatism, and extremism in neighboring regions are considered to be risks to domestic stability in Chinese provinces on the border. Therefore, Chinese authorities are using investments in energy infrastructure projects under BRI as safeguards for social and political stability within China and its neighboring regions.

¹⁰ Fan (opening speech at the third Chinese Energy Economy Forum).

¹¹ Frank Umbach and Kaho Yu, "China's Expanding Overseas Coal Power Industry: New Strategic Opportunities, Commercial Risks and Geopolitical Implications," European Centre for Energy and Resource Security, Strategy Paper, no. 11, 2016.

¹² Lucy Hornby, "China Seeks Foreign Investors for One Belt, One Road Push," *Financial Times*, May 25, 2016.

¹³ Chinese production of steel is now more than double that of Japan, the United States, India, and Russia and has become disconnected from actual market demand. With resources being wasted, Chinese companies with overcapacity are suffering from low profits and are forced to reduce their costs. Given less investment available for innovation, these companies will find it difficult to move up the value chain. Overcapacity in China also makes global trade more difficult. The export of China's excess capacity, especially in the steel industry, at extremely low prices has affected the level of trade friction among global players. See European Union Chamber of Commerce in China, "Overcapacity in China: An Impediment to the Party's Reform Agenda," 2016.

¹⁴ See Chen Dongxiao, "China Aims to Set the Regional Cooperation Agenda," East Asia Forum, July 27, 2015.

¹⁵ Author's interview with a research director from the Chongyang Institute for Financial Studies at Renmin University, Beijing, May 11, 2015.

Strategic Interests

Beyond economics, BRI serves China's broader foreign policy goals. As seen in the scope of Chinese investment, many energy projects—such as the construction of the Central Asia–China gas pipeline and the development of Gwadar port in Pakistan for oil and gas imports—can serve dual economic and strategic purposes. First, reviving the ancient Silk Road is part of President Xi Jinping's articulation of the “China dream.” Xi has departed from Deng Xiaoping's low-profile approach and has adopted an outward-looking foreign policy, representing China as a dominant power in Asia.¹⁶ Second, China finds it necessary to reshape the global environment for its rise to be unrestrained.¹⁷ Building energy infrastructure on the mega-scale of BRI could project and expand the country's regional influence. Greater energy investment under BRI will advance regional economic integration and increase the region's economic reliance on China.¹⁸ In the long run, the Chinese leadership can demonstrate a strong narrative of economic progress and tackle sustainable development as part of its response to climate change.¹⁹ This could also help China export its standards for future investment and trade. Third, Chinese authorities are concerned that the country's trade routes, which are surrounded by U.S. allies, could possibly be cut off in extreme circumstances. Both Chinese investment in Gwadar port and the China-Myanmar pipeline are considered as possible options to “diversify energy supply away from the chokepoint of the Strait of Malacca and vulnerable shipping lanes through the disputed South China Sea.”²⁰

To summarize the preceding discussion, through BRI China is attempting to rely on direct overseas investments to project influence into countries and regions along its trade routes. Chinese authorities' objective is to bolster and solidify the country's geopolitical standing in East Asia, South Asia, Central Asia, the Middle East, Africa, and Europe.²¹

Mechanisms for Energy Investment under BRI

Prioritizing Infrastructure

Energy cooperation under BRI is not merely about accumulating energy resources or acquiring overseas assets. More importantly, it prioritizes the development of infrastructure. Energy projects, many of which require massive construction of new infrastructure, are a promising way for BRI to boost China's economic growth and relieve overcapacity in construction-oriented industrial sectors. Because of this interest, China will continue to expand the scale of its investment in energy projects such as the construction of oil and gas pipelines, refineries, power-transmission corridors, power plants, and solar panels. In addition to energy facilities, energy projects usually include other logistics and transportation infrastructure, such as highways, railways, port hubs, and storage facilities. For example, one iconic BRI project was the investment by China's Silk Road Fund and China National Petroleum Corporation (CNPC) of a combined stake of 29.9% (9.9%

¹⁶ Christopher K. Johnson, “President Xi Jinping's ‘Belt and Road’ Initiative,” Center for Strategic and International Studies, Report, March 2016.

¹⁷ Kadir Pethiyagoda, “What's Driving China's New Silk Road, and How Should the West Respond?” Brookings Institution, May 17, 2017.

¹⁸ Bonnie S. Glaser, “China's Grand Strategy in Asia,” statement before the U.S.-China Economic and Security Review Commission, March 13, 2014.

¹⁹ Amar Bhattacharya et al., “Delivering on Sustainable Infrastructure for Better Development and Better Climate,” Brookings Institution, December 2016.

²⁰ Lucy Hornby, “China and Myanmar Open Long-Delayed Oil Pipeline,” *Financial Times*, April 11, 2017. See also Ankit Panda, “Chinese State Firm Takes Control of Strategically Vital Gwadar Port,” *Diplomat*, November 13, 2015, <http://thediplomat.com/2015/11/chinese-state-firm-takes-control-of-strategically-vital-gwadar-port>.

²¹ See also George Magnus, “China Must Prove Silk Road Plan Is Serious,” *Financial Times*, May 4, 2015.

and 20.0%, respectively) in the Yamal liquefied natural gas (LNG) project, which involves resource development, infrastructure construction, and transportation of resources in the Eurasian Arctic.²² As the largest investment in the region, Yamal LNG does not merely drive local development and resource exploration. Infrastructure investment will also provide new logistics routes, changing the economics and geopolitics of energy cooperation in Eurasia.

China is expected to extend and diversify the value chain in BRI energy cooperation from traditional upstream exploitation and exploration of fossil energy to downstream activities such as pipeline construction and petrochemical operations associated with renewable energy development.²³ It could also drive the development of energy-related industries, such as fertilizer, agriculture, irrigation, and domestic gas sales. This is a way to expand and integrate energy facilities and markets in the upstream, midstream, and downstream areas. Other than promoting the domestic economic development of recipient countries, such an approach can help establish hubs in important regions, such as Xinjiang, and further enhance regional security.²⁴

Due to the transnational scale of these projects, the Chinese government in the long run may consider establishing regional energy markets, such as gas and power markets, which are restricted geographically by infrastructure (e.g., pipelines and transmission grids). It might also work to improve trade levels with other governments involved in BRI. In order to deepen energy cooperation, Chinese enterprises are encouraged to adopt various practices, including direct investment, mergers and acquisitions, public-private partnerships, and engineering, procurement, and construction contracts. There will be more diverse contract options, including the utilization of joint ventures and production-sharing agreements.²⁵ In addition to state-backed energy companies, entities from other sectors, especially the construction and machinery industry, will also be involved in the energy infrastructure projects. Energy cooperation will be a tool for linking Chinese companies' investments "to a broader Chinese national strategy aimed at forging tighter economic links between China and the rest of Eurasia."²⁶

Project-Based Approach

Due to the large scale of investment and geographic coverage, as well as high-profile events like the BRI summit, many believe that BRI will be a government-led development plan rather than one left to the private sector. These observers see the initiative as a top-down coordinated strategy for China to direct its investments throughout Eurasia. However, although the Chinese government could facilitate energy investments and cooperation through a number of BRI-specific committees, boards, and special offices that have been created to support the initiative, actual operational progress and development will rely heavily on the availability of commercially viable projects. In other words, energy cooperation under BRI will also take

²² Heidar Gudjonsson and Egill Thor Nielsson, "China's Belt and Road Enters the Arctic," *Diplomat*, March 31, 2017, <http://thediplomat.com/2017/03/chinas-belt-and-road-enters-the-arctic>. Russia's Novatek and France's Total own the remaining shares in the project (50.1% and 20.0%, respectively).

²³ NDRC and National Energy Administration (PRC), "Vision and Actions on Energy Cooperation."

²⁴ Traditional Chinese wisdom believes that the interconnection of cities and regions could boost economic development, which will lead to prosperity. Such prosperity could stabilize regions as long as local communities are satisfied with the economic benefits. Xinjiang is surrounded by regions with security issues, such as terrorism, separatism, and extremism. The interconnection of Xinjiang with neighboring regions could bring mutual economic benefits and stability.

²⁵ Chinese energy investments, especially in the oil and gas sectors, mostly take the form of product-sharing agreements. More diverse contract options could fit better for different countries, industries, and companies, which might have unique preferences or requirements for cooperation.

²⁶ Erica Downs, "Mission Mostly Accomplished: China's Energy Trade and Investment along the Silk Road Economic Belt," Jamestown Foundation, China Brief, March 19, 2015.

a bottom-up and project-based approach instead of solely relying on instructions from above. Chinese energy companies must first secure a project before applying for loans or asking for political blessing. Without viable energy projects, it is difficult for the central authority to arrange or approve funding.

Chinese state-backed enterprises are targeting countries where Western companies find it difficult to invest.²⁷ China, for example, is planning the China-Pakistan Economic Corridor, a flagship project of BRI. Pakistan's minister of planning, Ahsan Iqbal, argued that "China took a bet on Pakistan" when "others were just looking at the political risk." In the case of Gwadar port, Pakistan began building the port with the help of Singapore. However, Singapore pulled out due to security issues and the global financial downturn, and China stepped in.²⁸ A report from the Brookings Institution points out that "Chinese investment is equally distributed between good and poor governance environments, whereas Western investment is concentrated in the former."²⁹

Chinese investors enjoy having the flexibility to make deals where the return involves not only profits but also strategic interest. For example, in addition to addressing growing negativity and instability in China's neighborhood, the BRI investments could increase the country's influence over the host state. Chinese infrastructure projects are so heavily funded that they are difficult to dislodge, and in return for investment, companies in the host states may sell energy assets or equity to the investors, increasing China's presence in the country over time.

Such a bottom-up approach reveals the difficulties in identifying the nature of Chinese investors operating under BRI. Certain developing countries that need financial aid for domestic development might regard a BRI-sponsored project as part of a national development plan under the Chinese government. However, they could be disappointed to learn that a number of Chinese investors are simply chasing business opportunities. Moreover, in some cases, multiple Chinese companies could be desperately competing for the same project and government funding, causing additional confusion for the recipient country, which might be expecting more centralized guidance. It is worth noting that this approach does not deny the intention of Chinese authorities to oversee top-down coordination of BRI. Instead, the current bottom-up process explains the poor coordination of BRI as well as the desperation of Chinese companies in pinning down overseas investment projects. Over time, this could create false expectations among many of the BRI recipient countries.

Geopolitical Implications: Moving toward Multilateralism

Due to the transnational scale of the energy projects, energy governance on both regional and global levels will become important for the successful implementation of BRI. In recent years, while there has been a substantial increase in China's overseas investment, related trade disputes

²⁷ In the case of Chinese investment in Sudan in the late 1990s, it was difficult for a Western company to invest in a regime that "engaged in slavery, genocide, and terrorism" and was under U.S. sanction. In contrast, due to the need for foreign oil reserves, China ignored the governance environment in Sudan and invested in its oil industry. The vice president of China Petroleum Engineering and Construction Corporation claimed that a Western company could not have done what China did in Sudan (investments in the oil industry) even though the Chinese company knew the investment did not make any profit. See Human Rights Watch, "China's Involvement in Sudan: Arms and Oil," Report, 2013; Ian Johnson, "China Takes Long View in Overseas Oil Projects," *Wall Street Journal*, December 16, 1999; and John Berlau, "Is China Stock a Security Risk?" *Investor's Business Daily*, October 5, 1999.

²⁸ Faseeh Mangi, "China's New Silk Road Hinges on a Small Pakistan Port," Bloomberg, September 29, 2016, <https://www.bloomberg.com/news/articles/2016-09-29/china-s-new-silk-road-hinges-on-a-small-pakistan-port>.

²⁹ Wenjie Chen, David Dollar, and Heiwai Tang, "Why Is China Investing in Africa? Evidence from the Firm Level," Brookings Institution, Report, August 12, 2015.

and cross-border transportation problems have also become prominent.³⁰ Currently, China has an increasing number of transnational energy projects—for example, the Central Asia–China pipelines and Yamal LNG project—along the BRI corridors, and hence the country demands further protection of its overseas energy interests. However, China still lacks an appropriate international legal framework for safeguarding its overseas energy investments.³¹ Due to this void, Chinese enterprises on the front line of BRI, such as CNPC, that are responsible for investment and management have already begun studying the precaution mechanisms of potential risks associated with transnational energy projects.³² For example, in a dispute over oil and gas transit, China could find itself unable to settle the dispute through current mechanisms, which are focused more on operational maintenance and are not legally binding.³³

While China avoids relying on current multilateral institutions led by the West, it still learns from their example and has aimed to establish a Chinese- or Asian-led multilateral institution for promoting and protecting energy cooperation under BRI. According to the “Vision and Actions on Energy Cooperation” document, China “will work with other countries and regions to create the Belt and Road Energy Club, and provide a platform for deeper understanding and wider consensus on energy cooperation for more countries and regions involved in BRI.”³⁴ The Belt and Road Energy Club serves as a common platform to reduce the above obstacles by promoting consensus building, exchange, and information sharing. The organization follows the key principles of BRI and aims to gather governments, energy enterprises, financial institutions, industrial associations, and think tanks to achieve the following goals:

- provide advance multilateral and bilateral exchanges for better energy and policy cooperation among participating countries
- offer multilateral and bilateral cooperation mechanisms to optimize resource distribution and minimize risks among participating countries
- conduct joint research based on the needs of participating countries
- provide an information-sharing, evaluation, and consultancy service for the energy enterprises of participating countries
- promote collaboration and research in the areas of consensus building, technological innovation, standardization, and high-caliber personnel exchange

The function of the Belt and Road Energy Club is similar to that of the International Energy Agency and the Energy Charter. China is taking the approach of learning useful elements from existing international energy organizations and adapting them to its own system. Chinese energy cooperation under BRI is also attached to other organizations in which China already takes part, including the Asian Infrastructure Investment Bank (AIIB), the Silk Road Fund, the Shanghai Cooperation Organisation, and the South-South Cooperation Fund on Climate Change. These organizations represent different areas of interest for China—including infrastructure, finance,

³⁰ In 2016 the newly signed contract value of Chinese contracted overseas projects reached \$244.01 billion, 51.6% of which went to projects in BRI. See Ministry of Commerce (PRC), “MOFCOM Department Official of Outward Investment and Economic Cooperation Comments on China’s Outward Investment and Cooperation in 2016,” January 18, 2017, <http://english.mofcom.gov.cn/article/newsrelease/policyreleasing/201701/20170102503092.shtml>.

³¹ One existing international mechanism from which China could learn is the Energy Charter Treaty.

³² This is based on a private interview conducted with a senior researcher from CNPC, Beijing, May 21, 2016.

³³ Current mechanisms include bilateral investment agreements, memoranda of understanding, and intergovernmental agreements.

³⁴ NDRC and National Energy Administration (PRC), “Vision and Actions on Energy Cooperation.”

security, and climate—and will inevitably interact with the existing multilateral institutions in the region. Although the nature of this relationship remains to be seen, it will have a definite impact on the role of existing institutions and rebalance energy governance in the region over time.

Policy Recommendations

A more robust multilateral framework is needed and expected for successful energy infrastructure development and cooperation under BRI. China has avoided relying on current multilateral institutions led by the West and is aiming to establish a Chinese- or Asian-led multilateral institution for promoting and protecting its stake in energy projects. BRI is not a unique case. Its progression is similar to the path taken in past instances of regional integration, which often began with a broader economic promotion and development plan for the region, later evolving into the maintenance of regional security and eventually into regional institutional integration. It is just a matter of time before BRI reaches this level. The establishment of a new regional institution eventually could compete with existing institutions and modify the current geopolitical order in Eurasia, enabling the rise of China to be unrestrained. What follows are broad recommendations for U.S. policymakers to manage this scenario.

Establish mechanisms to understand the development of BRI energy projects. BRI is vast, complex, and difficult to comprehend. Considering infrastructure as the cornerstone, the United States should establish mechanisms to monitor and assess the progress of energy infrastructure projects on an ongoing basis. The United States should address the multiregional and multidisciplinary nature of these projects and should not generally assume that they all are purely commercial or political. Chinese energy investments under BRI have to be analyzed on a case-by-case basis.

Carve a role for the United States in BRI energy cooperation, especially in finance and sustainable development. The United States should address areas where its businesses could potentially benefit from BRI. Poor coordination has created false expectations in recipient countries, leaving room for the United States to carve out a role for itself in the initiative. It could offer “soft” support in infrastructure building through providing green technology, legal services, research, financing, and cyber protection. The United States should also consider joining new multilateral financial institutions associated with BRI such as AIIB. The bank is now co-financing projects with the Asian Development Bank (ADB), the World Bank, and the European Bank for Reconstruction and Development and is learning from their experiences. The United States could also exercise leadership in existing multilateral development banks, such as ADB and the World Bank, to coordinate with AIIB on projects and address a series of issues, including energy poverty and climate change.

Promote maritime understanding and cooperation between the United States and China. One driver of BRI is the desire to diversify resource transportation routes away from chokepoints and vulnerable shipping lanes in the South China Sea. Waters along BRI require strong maritime cooperation and security. Meanwhile, China has attempted to strengthen its maritime defense and logistics capacity by investing in ports along the BRI corridors. The United States should trace China’s new sea routes and port investments and find ways to incorporate the People’s Liberation Army Navy into international partnerships and operations (e.g., joint sea patrols, antipiracy, and antiterrorism operations).

Adapt existing multilateral energy governance to accommodate new energy powers. With BRI, China may eventually determine the rules for energy trade and investment in Eurasia, which could create a fundamentally competitive dynamic between the United States and China. The United States should maintain flexibility in adapting the existing international order to accommodate new energy powers.

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China's Maritime Silk Road and Energy Geopolitics in the Indian Ocean: Motivations and Implications for the Region

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EXECUTIVE SUMMARY

This essay examines how the 21st Century Maritime Silk Road under China's Belt and Road Initiative (BRI) relates to Beijing's quest for energy security and draws implications for Japan, India, South Korea, and the U.S.

MAIN ARGUMENT

A common theme for the four major Asian economies of China, Japan, India, and South Korea is their heavy reliance on maritime transport for access to natural resources, which is expected to grow in the future. China, with its traditional emphasis on self-reliance, has sought to diversify its energy import sources and transit routes and protect its own rights and interests overseas. From the perspective of energy security, China's development of access to port facilities for the People's Liberation Army (PLA) Navy and alternative overland transit pipelines through its littoral neighbors will be the defining features of the Maritime Silk Road. However, Chinese actions have raised concerns among U.S. and Asian stakeholders about the future balance of power in the region and the development of a Sinocentric order.

POLICY IMPLICATIONS

- China's traditional emphasis on self-reliance provided the imperative for its energy diversification strategy and the development of the PLA Navy's blue water capabilities. These activities are in turn driving new cooperative and competitive dynamics in the Indian Ocean region.
- China's narratives about the benefits of BRI and the protection of rights and interests overseas are increasingly converging into a single broader narrative about China's preparedness to contribute to common security in the areas covered by BRI. A likely result of this converged narrative is the increase in diplomatic activities by the PLA Navy under the auspices of BRI.
- The PLA Navy requires access to friendly ports across the Indian Ocean, and China is also looking for alternative overland transit routes to connect its overseas oil and gas shipments. Achieving these goals will require China to co-opt smaller littoral states into the Maritime Silk Road agenda.
- If the U.S., India, and Japan can forge a substantive strategic partnership, their accommodation of China as a rising maritime power will be less likely. Paradoxically, efforts to counterbalance or impede China's plans will further ingrain the country's sense of energy insecurity and reinforce its determination to enhance its maritime capabilities and develop alternative transit routes for its energy imports.

Asia's major economies are some of the world's largest energy consumers and rely heavily on maritime transport for access to natural resources. For countries such as China, Japan, South Korea, and India, the Indian Ocean is a key conduit for energy imports from Africa and the Middle East. These shipments then pass through the Malacca Strait—the world's busiest shipping lane—where tankers accounted for 29% of overall traffic in 2016.¹

The safe and uninterrupted flow of seaborne energy imports is a national security imperative for these countries, and this heavy reliance on the maritime supply chain is set to grow even more with the rise in demand for liquefied natural gas (LNG) in Asia. China's state-owned enterprises, including its national oil companies, have established an increasingly global presence, with Chinese assets and citizens located all over the world, including in volatile countries and unstable regions. This has created a new imperative for China to protect its rights and interests overseas. In this context, the country's growing aspiration as a maritime power—which includes developing capabilities to secure its maritime energy supply chain—is highly significant. In October 2013, President Xi Jinping, in a speech to the Indonesian parliament, proposed the creation of a 21st Century Maritime Silk Road (MSR) to promote maritime cooperation with China's littoral neighbors. The MSR, together with China's blue water naval ambitions, is driving new cooperative and competitive dynamics, putting the future balance of power in Asia at stake.

This essay examines China's MSR initiative in the context of the country's growing dependence on seaborne energy trade. Focusing on the Indian Ocean, it assesses the implications of the initiative for the other major importing economies in the Asia-Pacific—namely, India, Japan, South Korea, and the United States. The essay begins with an overview of China's quest for energy security amid its growing dependence on energy imports and a discussion of how this quest has contributed to the growth of China's maritime consciousness. The essay then explains China's foreign and strategic policies under the current leadership of Xi, with a particular emphasis on how this new approach manifests itself through his Belt and Road Initiative (BRI). The next section examines how the MSR relates to China's maritime energy and security agenda, followed by an analysis of the role of ports and pipelines in the country's efforts to secure its seaborne energy imports in the Indian Ocean. The subsequent section discusses the regional implications of China's growing presence in the Indian Ocean for India, Japan, and South Korea and assesses what these developments mean for the United States. The final section offers some concluding thoughts on key geopolitical factors that will affect the success of the MSR.

China's Growing Overseas Energy Dependence and Rising Maritime Consciousness

Recognizing the limits of domestic oil production, China significantly stepped up its international investments in oil projects in 1997 through the state-owned oil company China National Petroleum Company (CNPC), while looking to ensure the diversification of overseas sources to reduce risk.² As the volume of maritime trade increased and dependence on imported oil grew, so did Beijing's anxiety over the security of sea lines of communications (SLOCs).

¹ Marcus Hand, "Malacca and S'pore Straits Traffic Hits New High in 2016, VLCCs Fastest Growing Segment," Seatrade Maritime News, February 13, 2017, <http://www.seatrade-maritime.com/news/asia/malacca-and-s-pore-strait-traffic-hits-new-high-in-2016-vlccs-fastest-growing-segment.html>.

² Philip Andrews-Speed, Xuanli Liao, and Roland Dannreuther, *The Strategic Implications of China's Energy Needs*, Adelphi Paper 346 (London: Oxford University Press, 2002); Amy Myers Jaffe and Steven W. Lewis, "Beijing Oil Diplomacy," *Survival* 44, no. 1 (2002): 115–34; and Erica Strecker Downs, *China's Quest for Energy Security* (Santa Monica: RAND Corporation, 2000).

The government identified such reliance, particularly on the maritime transit chokepoints of the Strait of Malacca, the Strait of Hormuz, and Bab-el-Mandeb Strait, as a strategic vulnerability.³ For example, in a speech at the Chinese Communist Party (CCP) Central Economic Work Conference in November 2003, then president Hu Jintao expressed concern over China's heavy reliance on the Malacca Strait. Observing that "over half of China's oil imports come from the Mideast, Africa, and Southeast Asia, and about four-fifths of the imported oil is shipped through the Malacca Strait," Hu noted that "certain powers have all along encroached on and tried to control the navigation route through the strait."⁴ Besides a military blockade, China is also concerned about terrorism and piracy in this area.⁵

This perceived vulnerability, particularly with regard to the Malacca Strait, became a serious concern given China's traditional emphasis on self-reliance. It provided a powerful imperative for the country to diversify its energy import sources and transit routes, as well as to ensure unimpeded access along the SLOCs across the Indian Ocean and South China Sea. From 2008 onward, China participated in the Gulf of Aden antipiracy operations, and in 2011 a People's Liberation Army (PLA) Navy frigate played a supporting role in the evacuation of 35,000 Chinese citizens after the outbreak of civil war in Libya. These two cases reinforced China's belief in the importance of developing long-range naval capabilities and establishing a sustained presence in the Indian Ocean.⁶

This growing maritime consciousness culminated in November 2012 at the 18th National Congress of the CCP, when the strategy to develop China into a "maritime power" was officially announced for the first time. This marked a shift in the Chinese leadership's self-identification from the traditional view of China as a land-based, continental power to the view of China as both a continental and maritime power. This was followed by a heightened emphasis on maritime affairs in official policy under the new leadership of Xi Jinping. In April 2013, China released a defense white paper that highlighted the importance of protecting overseas rights and interests, with a specific mention of energy and natural resources:

Security issues are increasingly prominent, involving overseas energy and resources, strategic sea lines of communication (SLOCs), and Chinese nationals and legal persons overseas. Vessel protection at sea, evacuation of Chinese nationals overseas, and emergency rescue have become important ways and means for the PLA to safeguard national interests and fulfill China's international obligations.⁷

In July 2013, Xi reiterated at a high-level CCP meeting that China will steadily build its maritime power through peaceful and mutually beneficial cooperation.⁸ In 2014, China imported 52% of its crude oil from the Middle East, 22% from Africa, and 11% from the Americas. Around 80% of China's oil imports must pass through the Strait of Malacca.⁹

³ Christopher Len, "China's 21st Century Maritime Silk Road Initiative, Energy Security and SLOC Access," *Maritime Affairs* 11, no. 1 (2015): 4–5.

⁴ Wen Han, "Hu Jintao cu po maliujia kunju" [Hu Jintao Concerned over Malacca Strait Factor in PRC Oil Security], *Wen Wei Po*, January 14, 2004, <http://paper.wenweipo.com/2004/01/14/YO0401140011>.

⁵ You Ji, "Dealing with the Malacca Dilemma: China's Effort to Protect Its Energy Supply," *Strategic Analysis* 31, no. 3 (2007): 467–89; and Marc Lanteigne, "China's Maritime Security and the 'Malacca Dilemma,'" *Asian Security* 4, no. 2 (2008): 143–61.

⁶ Len, "China's 21st Century Maritime Silk Road Initiative," 5–6.

⁷ Information Office of the State Council of the People's Republic of China (PRC), *The Diversified Employment of China's Armed Forces* (Beijing, April 2013).

⁸ "Xi Advocates Efforts to Boost China's Maritime Power," *Xinhua*, July 31, 2013.

⁹ U.S. Energy Information Administration, "Country Analysis Brief: China," May 14, 2015, <https://www.eia.gov/beta/international/analysis.cfm?iso=CHN>.

The Belt and Road Initiative and China's New Foreign and Strategic Policy Approach

The previous section explained China's growing anxiety over its dependence on energy imports and how this sense of vulnerability fostered China's maritime consciousness. This section will explain how such considerations were turned into action through Xi's Belt and Road Initiative, as well as how BRI fits into his new foreign and strategic policy approach, with emphasis on China's maritime agenda.

The Belt and Road Initiative

During a visit to Kazakhstan in September 2013, Xi announced the Silk Road Economic Belt and advocated investment to improve overland connectivity between China, Central Asia, and Europe.¹⁰ Shortly thereafter in early October 2013, in a speech to the Indonesian parliament, Xi proposed the creation of the 21st Century Maritime Silk Road. The latter initiative sought to promote maritime cooperation and greater connectivity between China and the Association of Southeast Asian Nations (ASEAN) in order to "build a more closely-knit China-ASEAN community of common destiny."¹¹ The MSR was extended to apply to South Asian littoral states in September 2014 when Maldives and Sri Lanka signed major transportation infrastructure agreements during Xi's visits to these countries. A subsequent document released in March 2015 by the National Development and Reform Commission (NDRC) titled "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road" clarified that the MSR "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."¹² In July 2017, China added another economic passage in the MSR leading to Europe via the Arctic Ocean.¹³ Together, these two overland and maritime components make up what is now officially referred to as the Belt and Road Initiative.

China's New Foreign and Strategic Policy Approach

BRI is a proactive strategy to develop a constructive narrative for China to expand and deepen linkages with its neighbors, which will in turn elevate the country's international status and enhance its peripheral security. To appreciate China's efforts to shape the external environment through BRI, it is necessary to first examine Xi's foreign and strategic policy approach.

Xi has advocated a more assertive, China-centric approach of "striving for achievement" in foreign policy, in contrast with Deng Xiaoping's maxim of "keeping a low profile."¹⁴ In the past, China was regarded to have "passively adapted itself to changes in the international environment," but under Xi's new approach, it would henceforth "undertake initiatives to shape

¹⁰ "President Xi Jinping Delivers Important Speech and Proposes to Build a Silk Road Economic Belt with Central Asian Countries," Ministry of Foreign Affairs (PRC), September 7, 2013, http://www.fmprc.gov.cn/mfa_eng/topics_665678/xjpfwzysiesjtfshshzzfh_665686/t1076334.shtml.

¹¹ "Speech by Chinese President Xi Jinping to Indonesian Parliament," ASEAN-China Centre, October 3, 2013, http://www.asean-china-center.org/english/2013-10/03/c_133062675.htm.

¹² National Development and Reform Commission (NDRC), Ministry of Foreign Affairs, and Ministry of Commerce (PRC), "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," March 28, 2015, http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html.

¹³ NDRC and State Oceanic Administration (PRC), "Vision for Maritime Cooperation under the Belt and Road Initiative," June 20, 2017, http://english.gov.cn/archive/publications/2017/06/20/content_281475691873460.htm.

¹⁴ Xu Jin, "Zhongguo waijiao jinru 'fenfa youwei' xin changtai" [China's Foreign Policy Approach of "Striving for Achievement"], *China Daily*, December 16, 2014, <http://column.chinadaily.com.cn/article.php?pid=3264>.

its external environment in a favorable direction.”¹⁵ In the diplomatic context, China emphasized the importance of peripheral diplomacy to “turn China’s neighborhood areas into a community of common destiny...and boost win-win cooperation and connectivity with our neighbors.”¹⁶ This policy is to be expressed through BRI. In the military context, a key feature is Beijing’s expanding blue water naval agenda. In January 2015 a Ministry of National Defense spokesperson acknowledged that the PLA Navy has stepped up its activities in the far seas, “providing more public security services to the international society, which is conducive to maintaining global peace and promoting common development.”¹⁷ China’s 2015 defense white paper stated that the PLA Navy “will gradually shift its focus from ‘offshore waters defense’ to the combination of ‘offshore waters defense’ with ‘open seas protection.’”¹⁸

In November 2015, China also announced that it was in talks with Djibouti, situated on the Gulf of Aden close to the Bab-el-Mandeb Strait, to build “logistics facilities” in support of Chinese peacekeeping and antipiracy missions. This is the PLA’s first overseas facility, and it reflects China’s growing ambitions and capabilities in the Indian Ocean. In addition, the antiterrorism law promulgated in December 2015 enabled sending personnel, including troops and armed police forces, on overseas counterterrorism missions.¹⁹ In March 2017, it was reported that China plans to increase its marine corps from 20,000 to 100,000, with some troops expected to be stationed at ports in Djibouti and Gwadar, Pakistan. This major expansion of the marine corps is all the more significant considering the 2015 announcement that 300,000 personnel would be cut from the PLA.²⁰

Convergence of BRI and China’s Common Security Agenda

As BRI moves toward the early stages of project implementation, Chinese officials are beginning to expand the narrative beyond the message of common prosperity to include the common security challenges anticipated from these projects. Although the narratives on BRI and China’s protection of rights and interests overseas are separate, they have run in parallel. However, there is increasing convergence of these two accounts into a single broader narrative of China’s preparedness to contribute to common security in support of BRI objectives. This is especially evident in the maritime domain, where Beijing has notably begun to emphasize the linkages between the MSR, the need to protect its rights and interests overseas, and the advancement of common security through maritime security cooperation.

For example, in early May 2017, Meng Jianzhu—a member of the Politburo of the CCP, secretary of the Central Political and Legal Affairs Commission, and head of the Central Public Security Comprehensive Management Commission—told a security conference on the Silk Road that “increasing international cooperation, jointly dealing with risks and challenges and protecting the

¹⁵ Yan Xuetong, “From Keeping a Low Profile to Striving for Achievement,” *Chinese Journal of International Politics* 7, no. 2 (2014): 166.

¹⁶ “The Central Conference on Work Relating to Foreign Affairs Was Held in Beijing,” Ministry of Foreign Affairs (PRC), November 29, 2014, http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1215680.shtml.

¹⁷ “Defense Ministry’s Regular Press Conference on Jan. 29, 2015,” Ministry of National Defense (PRC), January 29, 2015, http://eng.mod.gov.cn/Press/2015-01/29/content_4567609.htm.

¹⁸ Information Office of the State Council (PRC), *China’s Military Strategy* (Beijing, 2015), http://www.mod.gov.cn/auth/2015-05/26/content_4586723_2.htm.

¹⁹ “Counter-terrorism Law of the People’s Republic of China,” trans. by China Law Translate, December 27, 2015, <http://www.chinalawtranslate.com/%E5%8F%8D%E6%81%90%E6%80%96%E4%B8%BB%E4%B9%89%E6%B3%95-%EF%BC%882015%E5%BC%89/?lang=en>.

²⁰ Minnie Chan, “As Overseas Ambitions Expand, China Plans 400 Per Cent Increase to Marine Corps Numbers, Sources Say,” *South China Morning Post*, March 13, 2017, <http://www.scmp.com/news/china/diplomacy-defence/article/2078245/overseas-ambitions-expand-china-plans-400pc-increase>.

security of One Road, One Belt [are] the joint responsibility of all countries.” At the event, Guo Shengkun, the minister for public security, expressed hope that “all sides would foster the concept of common and cooperative security, and establish a sound security cooperation mechanism for the Belt and Road Initiative.” To this end, Guo called for more pragmatic cooperation in such areas as public security, antiterrorism, and the protection of overseas interests.²¹

Additionally, an official document released in June 2017 by the NDRC and the State Oceanic Administration titled “Vision for Maritime Cooperation under the Belt and Road Initiative” contained a subsection on maritime security that stated that “efforts will be made to promote the concept of common security for mutual benefits.” The document identified five areas for cooperation: maritime public service, navigation security, joint search and rescue missions, prevention and mitigation of marine disasters, and maritime law enforcement.²² The Chinese thinking reflected above, emphasizing common security interests in the development of BRI, indicates the growing role of the PLA Navy under the auspices of the initiative. Beyond the safeguarding of China’s overseas rights and interests, the PLA Navy can be expected to promote confidence building and common security in countries along BRI.²³ The next section will focus on specific actions undertaken by China to promote its maritime energy and security interests.

Promoting Maritime and Energy Security through Ports and Pipelines

From an energy security perspective, the developments described thus far highlight two important points related to China’s efforts to accelerate infrastructure connectivity. First, China is working to secure the SLOCs that it relies on for seaborne energy imports. Its objective is to maximize the PLA Navy’s strategic and operational autonomy, ensuring a high degree of independence in decision-making in the international arena.²⁴ In order to achieve this goal, China requires access to overseas port facilities for the PLA Navy in friendly littorals. This is an important driver in China’s support for the development of port and logistical infrastructure along the MSR, particularly in the Indian Ocean region.

Second, China is attempting to diversify its energy import routes to minimize disruptions at sea, reduce over-reliance on the Strait of Malacca, and shorten delivery time. To this end, it is seeking to develop new land-based transit routes to bypass the Strait of Malacca.

Port Access and the Protection of Rights and Interests Overseas

Besides the PLA’s logistics facilities in Djibouti, Chinese companies have been investing heavily in commercial deep-sea ports. State-owned enterprises are investing billions in ports worldwide, particularly those along the route between Asia and Europe through the Suez Canal.²⁵ The major ones highlighted in the media include ports in Piraeus, Greece; Gwadar, Pakistan; Colombo and

²¹ Ben Blanchard, “China Stresses Security Needed for New Silk Road Initiative,” Reuters, May 4, 2017, <https://in.reuters.com/article/china-silkroad-security/china-stresses-security-needed-for-new-silk-road-initiative-idINKBN18107H>.

²² NDRC and State Oceanic Administration (PRC), “Vision for Maritime Cooperation under the Belt and Road Initiative.”

²³ Liu Lin, “Yidai Yilu yanxian zhanlue zhidian yu junshi wajiao jianshe” [Strategic Fulcrum Countries of the Belt and Road and the Development of Military Diplomacy], *World Affairs*, no. 15 (2017), <http://www.ishizhi.cn/BookWorld/news.aspx?cid=7693&ct=0>.

²⁴ Energy Studies Institute and Chatham House, “The Future of Sea Lane Security between the Middle East and Southeast Asia,” Meeting Summary, 2015, 6.

²⁵ Costas Paris, “Chinese Shipping Giants Seek Control of ‘Maritime Silk Road,’” *Wall Street Journal*, April 7, 2017; and James Kynge, “Chinese Purchases of Overseas Ports Top \$20bn in Past Year,” *Financial Times*, July 16, 2017.

Hambantota, Sri Lanka; and Malacca (Melaka Gateway), Malaysia. Most recently, the Chinese state-owned port operator Ningbo Zhoushan has been in discussions to buy a stake in the New Priok port project—an extension of the Tanjung Priok port in Jakarta, which is the busiest port in Indonesia.

According to research conducted by the *Financial Times*, nearly two-thirds of the world's top 60 container ports had received some degree of Chinese investment by 2015. Such commercial transactions are by themselves ostensibly innocuous, but this trend has brought attention to China's "dual use" of ports for commercial and naval purposes. China watchers have remarked that Chinese investments in civilian ports—such as those in Sri Lanka, Greece, Pakistan, and Bangladesh—tend to be followed by deployments or visits by PLA Navy vessels.²⁶

Port calls by navies generally reflect good relations between governments and help enhance mutual understanding and friendship between navies. They also enable the vessels to replenish their supplies and conduct ship maintenance, while allowing personnel off-time recreation. In the Indian Ocean region, the PLA Navy is known to have made port visits to Pakistan, Sri Lanka, Bangladesh, Myanmar, Maldives, Malaysia, and Seychelles. India is concerned that such port calls will enable the PLA Navy to establish a persistent presence in this maritime domain. China's involvement in port development projects, especially those situated close to India's coast, is thus fueling New Delhi's long-standing fears that such activities will expand Beijing's strategic influence in South Asia, resulting in Chinese encirclement.²⁷ This explains why the docking of Chinese submarines in the Chinese-run Colombo International Container Terminal in Sri Lanka in September and November 2014 alarmed and triggered fierce opposition from India's strategic community.²⁸ Observers also point to the \$185 million that the state-owned China Merchant Group paid in 2012 for a 23.5% stake in the Red Sea port of Djibouti, which eventually incorporated the logistics facilities used by the PLA, as evidence of the intertwining of Beijing's economic and military agendas.

Judging from India's unease, the main challenge for Beijing is, as a researcher at the PLA National Defense University concluded, "to figure out how to effectively protect its security interests in this region while prevent[ing] itself from falling into the trap of strategic rivalry with other major powers."²⁹ Another researcher from the PLA Academy of Military Science noted that while China has legitimate reasons for looking after its overseas interests, the PLA must be mindful of international public opinion when carrying out such activities. The author highlighted India's deep suspicion about China's port activities in Sri Lanka and Pakistan, as well as the United States' and Japan's concerns over the base in Djibouti, noting that if China does not manage its affairs well in this regard, other great powers may oppose its agenda.³⁰

²⁶ James Kynge, Chris Campbell, Amy Kazmin, and Farhan Bokhari, "How China Rules the Waves," *Financial Times*, January 12, 2017.

²⁷ Charu Sudan Kasturi, "Chinese Navy Hits India Wall," *Telegraph* (India), June 3, 2017, https://www.telegraphindia.com/1170604/jsp/frontpage/story_155095.jsp; and Jeff M. Smith, "China's Investment in Sri Lanka," *Foreign Affairs*, May 23, 2016, http://www.afpc.org/publication_listings/viewArticle/3206%20/true.

²⁸ Vijay Sakhuja, "Chinese Submarines in Sri Lanka Unnerve India: Next Stop Pakistan?" Jamestown Foundation, China Brief, May 29, 2015, <https://jamestown.org/program/chinese-submarines-in-sri-lanka-unnerve-india-next-stop-pakistan>; and Shihar Aneez and Ranga Sirilal, "Chinese Submarine Docks in Sri Lanka Despite Indian Concerns," Reuters, November 3, 2014, <https://in.reuters.com/article/sri-lanka-china-submarine/chinese-submarine-docks-in-sri-lanka-despite-indian-concerns-idINKBN0IM0LU20141102>.

²⁹ Xu Qiyu, "National Security Interests and India Ocean: China's Perspective," Research Unit on Military Law and Ethics, Research Paper, no. 16-11, January 12, 2016, 2.

³⁰ Liu, "Yidai Yilu yanxian zhanlue zhidian yu junshi waijiao jianshe."

Pipeline Diversification

On May 12, 2017, China's NDRC and the National Energy Administration released a white paper titled "Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," two days before the commencement of the high-level Belt and Road Forum for International Cooperation. The document detailed China's commitment to "promote international cooperation on energy and integrate itself even deeper [in]to the world energy system." On the issue of supply security, it stated that China "will strengthen communication, increase mutual trust with relevant countries, and reduce risks in the energy supply mechanism." The document stated that China "will continue to improve and expand the scale of oil and gas pipeline connectivity, and jointly maintain its safety."³¹ According to Liu Qiang, secretary general of the Global Forum on Energy Security and director of the Energy Economics Division at the Chinese Academy of Social Sciences, these measures will "help mitigate the risks currently inherent in the transport of fuel and other goods through unstable, insecure or unfriendly channels" and result in "strengthened energy and geopolitical security" and "a more stable regional energy market."³² To this end, China is seeking to develop new land-based transit routes via friendly littoral states such as Myanmar and Pakistan to connect its oil and gas shipments from the Middle East, East Africa, and offshore fields in the Indian Ocean.

Myanmar. China has a crude oil and gas pipeline project in Kyaukpyu Township in Myanmar's Rakhine State in the west. The oil and gas pipelines run parallel to each other and carry supplies to Ruili in China's southwestern Yunnan Province.³³

The \$1.50 billion oil pipeline—which starts from Madaya Island in Kyaukpyu and runs 771 kilometers (km)—began operating in April 2017. It can carry up to 22 million tons of oil annually, which is equivalent to 6% of China's total imports in 2016.³⁴ CNPC holds a 50.9% stake in the pipeline, while Myanmar Oil and Gas Enterprise, Myanmar's national oil company, owns the remainder.³⁵

The \$1.04 billion gas pipeline—which starts on Ramree Island in Kyaukpyu and runs 793 km—draws from Myanmar's offshore fields and possesses an annual capacity of up to 12 billion cubic meters (bcm) of natural gas, of which Myanmar receives 2.5 bcm a year. CNPC holds a 50.9% stake in the joint venture.³⁶ China's gas consumption was 143.8 bcm in 2012, with 27% of its gas coming from imports. The 10 bcm piped into China from Myanmar would thus equal almost 7% of China's 2012 gas consumption.³⁷

³¹ NDRC and National Energy Administration (PRC), "Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," May 12, 2017, http://www.nea.gov.cn/2017-05/12/c_136277478.htm. The 2015 BRI document had already stated that China would like to "work in concert to ensure the security of oil and gas pipelines and other transport routes." See NDRC, Ministry of Foreign Affairs, and Ministry of Commerce (PRC), "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road."

³² Liu Qiang, "China's 'One Belt, One Road' Offers Energy Security for Asia and Beyond," *South China Morning Post*, June 12, 2015, <http://www.scmp.com/comment/insight-opinion/article/1820505/chinas-one-belt-one-road-offers-energy-security-asia-and>.

³³ "Overview of the Myanmar-China Oil and Gas Pipelines," China National Petroleum Corporation, <http://www.cnpc.com.cn/en/myanmarcsr/201407/f115a1cc6cdb4700b55def91a0d11d03/files/dec09c5452ec4d2ba36ee33a8efd4314.pdf>.

³⁴ Wataru Kodaka and Yuichi Nitta, "A New Myanmar Oil Pipeline Helps China Dodge U.S. Influence," *Nikkei Asian Review*, April 20, 2017, <https://asia.nikkei.com/magazine/20170420/Politics-Economy/A-new-Myanmar-oil-pipeline-helps-China-dodge-US-influence>.

³⁵ Zheng Xin, "Oil Starts Flowing through China-Myanmar Pipeline," *China Daily*, April 12, 2017, http://www.chinadaily.com.cn/business/2017-04/12/content_28886175.htm.

³⁶ The remainder is owned by Posco Daewoo (25.0%), ONGC Videsh (8.3%), Myanmar Oil and Gas Enterprise (7.4%), Korea Gas Corporation (4.2%), and GAIL (India) Limited (4.2%) under the joint-venture company called South-East Asia Gas Pipeline Company Limited (SEAGP). See the SEAGP website, <http://www.seagp.biz/who-we-are>.

³⁷ "China-Myanmar Gas Pipeline Targets Energy Security and Cooperation," Xinhua, October 22, 2013, http://www.china.org.cn/china/Off_the_Wire/2013-10/22/content_30372079.htm.

Pakistan. China and Pakistan launched the China-Pakistan Economic Corridor (CPEC) in 2015 to link Pakistan's southern Gwadar port on the Arabian Sea and the Chinese city Kashgar in western Xinjiang, which includes an oil pipeline development plan. The initial investment for CPEC totaled \$46 billion, but has since increased to \$62 billion in 2017.³⁸ Using existing routes via the Malacca Strait, oil tankers from the Persian Gulf need to travel more than 10,000 km for two to three months to reach China, whereas utilizing overland pipelines connected to Gwadar port—which sits just 400 km from the Strait of Hormuz—will reduce the distance to a mere 2,500 km.

The media in Pakistan reported in 2016 that the pipeline is expected to carry 1 million barrels per day (mmbd) of Middle Eastern oil to China, with the five-year project likely to start in 2017 and be completed by 2021.³⁹ China imported 7.6 mmbd in 2016, according to Chinese customs statistics.⁴⁰ According to the 1 mmbd estimate, the pipeline, if built, could transport 13% of China's oil imports based on the volume of imports in 2016.⁴¹

The limits and challenges of transit pipelines. While China is keen to invest in overland pipelines to reduce its reliance on the Strait of Malacca, it remains to be seen if this approach will provide a viable alternative. The U.S. Department of Defense's 2016 annual report to Congress is skeptical:

Given China's growing energy demand, new pipelines will alleviate only slightly China's maritime dependency on either the Strait of Malacca or the Strait of Hormuz. Despite China's efforts, the sheer volume of oil and liquefied natural gas that is imported to China from the Middle East and Africa will make strategic SLOCs increasingly important to China.⁴²

Furthermore, overland routes via pipelines through transit countries have their own challenges. First, they are vulnerable to the obsolescing bargain. China has already experienced this in Myanmar, where the oil pipeline that was completed in 2014 did not start flowing until April 2017 due to a disagreement with Myanmar over additional tariffs.⁴³ Second, the proposed and completed pipelines transit volatile regions—for example, Rakhine State in Myanmar, where ethnic conflict is escalating, and Baluchistan in Pakistan, which is plagued by insurgency. China's standing policy of noninterference will limit its ability to directly address pipeline disruptions in volatile transit states, especially in times of unrest. Generally, overland transit pipelines are more vulnerable than transportation via tankers. Besides the fact that pipelines are hard to protect because of their length and remote routes, a single explosion could significantly reduce, if not completely cut off, pipeline deliveries. In contrast, an attack on a single tanker at sea will not cause any major disruption to the rest of the tanker fleet, at most resulting in a diversification to alternative routes.

³⁸ Salman Siddiqui, "CPEC Investment Pushed from \$55b to \$62b," *Express Tribune* (Pakistan), April 12, 2017, <https://tribune.com.pk/story/1381733/cpec-investment-pushed-55b-62b>.

³⁹ Fawad Yousafzai, "China to Build Mega Oil Pipeline from Gwadar to Kashgar," *Nation* (Pakistan), June 13, 2016, <http://nation.com.pk/national/13-Jun-2016/china-to-build-mega-oil-pipeline-from-gwadar-to-kashgar>.

⁴⁰ "China—Oil and Gas," International Trade Administration, U.S. Department of Commerce, July 25, 2017, <https://www.export.gov/article?id=China-Oil-and-Gas>.

⁴¹ For additional details on Gwadar port and CPEC, see Michael Kugelman's essay in this report.

⁴² U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2016* (Washington, D.C., 2016), 47.

⁴³ Yimou Lee, Chen Aizhu, and Shwe Yee Saw Myint, "Beset by Delays, Myanmar-China Oil Pipeline Nears Start-Up," Reuters, March 21, 2017, <https://www.reuters.com/article/us-myanmar-china-oil/beset-by-delays-myanmar-china-oil-pipeline-nears-start-up-idUSKBN16S0XF>.

Regional Implications

India, Japan, and South Korea

China has an important role to play in maintaining regional order by providing public goods and services through its navy and infrastructure development plans. While there are potential synergies for the other great powers to work with China, mistrust has impeded constructive cooperation. Furthermore, Beijing is prioritizing its efforts in the smaller littoral states as part of its Indian Ocean strategy rather than focusing on engagement with India and extraregional stakeholders. These two key factors are hampering the development of an inclusive regional security architecture, and limiting these stakeholders' ability to jointly tackle both traditional and nontraditional threats.

Beijing's expanded engagement in the Indian Ocean has led to growing concern among other Asian economies that also depend on the Indian Ocean and the South China Sea for their seaborne energy trade.⁴⁴ India, Japan, and South Korea, which rely heavily on the same SLOCs as China, are worried that if the PLA Navy's capability is enhanced by the network of Chinese commercial port facilities in China-friendly littorals that would consent to dual use, Beijing will develop an even more assertive maritime policy, which would ultimately affect their own interests along the SLOCs and in the region as a whole. Furthermore, some in the strategic community are concerned that once China succeeds in co-opting the smaller littoral states in support of a Sinocentric regional vision, and having secured its energy supply chain, it will be less deterred from choosing the military option in times of confrontation.⁴⁵

India's engagement with China is limited by its perception of itself as the preeminent and resurgent power in the Indian Ocean, of China as a strategic rival, and of Pakistan and Sri Lanka as pawns in a Chinese plan to encircle and undermine India's interests. Japan, for its part, is concerned that China's growing engagement in the Indian Ocean could undermine its own maritime interests in the region. Nobuo Tanaka, who headed the International Energy Agency and held high-ranking positions at Japan's Ministry of Economy, Trade and Industry, has asserted that China is projecting its power in the Indian Ocean through BRI, while expressing concern that "China is a kind of threat to us in the South China Sea. Will this Indian Ocean be the same, or different?"⁴⁶ South Korea, on the other hand, does not regard China as a strategic competitor in the Indian Ocean but is concerned that any great-power conflict in the area may disrupt its own shipping interests. Japan and South Korea both regard China as the strategic competitor of their formal ally, the United States. Thus, the alliance places limits on potential cooperation with China in the maritime security sphere for fear of undermining the role and capability of the U.S. Navy and upsetting relations with Washington.⁴⁷

⁴⁴ James Bennett, "Chinese Development in Indian Ocean Raising Concern of Possible Militarisation among Major Players," ABC News, February 9, 2017, <http://www.abc.net.au/news/2017-02-09/could-the-indian-ocean-become-south-china-sea/8257204>; and Masenori Nishi, "The Role of Japan in Indian Ocean Security: A Japanese Perspective," in *Indo-Pacific Maritime Security: Challenges and Cooperation*, ed. David Brewster (Acton: Australian National University, 2016), 56–57.

⁴⁵ Samir Tata, "Deconstructing China's Energy Security Strategy," *Diplomat*, January 14, 2017, <http://thediplomat.com/2017/01/deconstructing-chinas-energy-security-strategy>.

⁴⁶ Bennett, "Chinese Development in Indian Ocean Raising Concern."

⁴⁷ Nishi, "The Role of Japan in Indian Ocean Security," 57; and Philip Andrews-Speed and Christopher Len, "The Future of the U.S. Security Umbrella for Sea Lines of Communication (SLOCs) between the Middle East and Southeast Asia, and the Future Role of China," Energy Studies Institute, February 2016, 28.

Some observers argue that India, Japan, and South Korea should band together on the basis of their shared democratic values to oppose China's potential hegemonic ambitions.⁴⁸ For example, India and Japan have been cultivating a bilateral strategic relationship. Since 2015, Japan has been a regular participant in Malabar, the U.S.-India joint exercises in the Indian Ocean. India and Japan have also begun lobbying the smaller littoral states to accept their port development plans both in place of and in addition to China's investment plans. In 2015, Bangladesh chose the Japanese-financed Matarbari port project over China's proposed port in Sonadia, located 25 km away, which was a blow to the Bangladesh-China-India-Myanmar corridor envisioned in China's 2015 BRI document.⁴⁹ In Sri Lanka, Japan is working with India to invest in the ports in Colombo and Trincomalee, in competition with Chinese-operated Hambantota port in an effort to counter Sri Lankan reliance on China.⁵⁰ India is also supporting the development of Chabahar port in Iran, which is just 75 km from Gwadar port.

Generally speaking though, strategic cooperation between India and Japan has been slow, especially when compared with China's pace in cultivating diplomatic relations and developing investment ties across the Indian Ocean region.⁵¹ Even if New Delhi and Tokyo work together, they still lack the financial and economic muscle to compete with China's economic statecraft and defense spending.

The United States

The United States has been the traditional security provider in maritime Asia through its naval presence in both the Indian and Pacific Oceans. It has an interest in protecting international energy markets by ensuring maritime freedom of navigation and the security of SLOCs.⁵² However, the United States lacks a coherent strategy given that the Indian Ocean region is divided among three regional commands: Pacific Command, Africa Command, and Central Command. The United States also lacks the alliance structure in the Indian Ocean that it has in the Pacific.

Furthermore, the relative decline of U.S. military capacity and strategic commitment toward Asia, along with the political deadlock and economic challenges that the United States faces at home, has added another element of uncertainty to the regional dynamic.⁵³ The situation has become more worrisome for regional states since Donald Trump became president, owing to his "America first" rhetoric. Over the past decade, the United States has in fact been downplaying its own assertive role in the region in favor of greater collaboration and cooperation with its allies and partners.⁵⁴ In February 2017, Admiral Dennis Blair, former director of national intelligence, stated that India, Japan, and the United States would need to "improve that military balance in our

⁴⁸ Prakash Panneerselvam, "Advancing India's Relationship with Japan and South Korea: Quest for Middle Power Cooperation," Institute of Peace and Conflict Studies, Issue Brief, no. 262, 2016, 12, <http://www.ipcs.org/issue-brief/india-the-world/advancing-india39s-relationship-with-japan-and-south-korea-quest-for-262.html>; and Daniel M. Kliman and Daniel Twining, "Japan's Democracy Diplomacy," German Marshall Fund of the United States, Asia Paper Series, July 2014.

⁴⁹ Sudha Ramachandran, "China's Sinking Port Plans in Bangladesh," Jamestown Foundation, China Brief, June 21, 2016, <https://jamestown.org/program/chinas-sinking-port-plans-in-bangladesh>.

⁵⁰ Munza Mushtaq, "Japan Seeks Balance with China in Seas around Sri Lanka," *Nikkei Asian Review*, February 27, 2017, <https://asia.nikkei.com/Politics-Economy/International-Relations/Japan-seeks-balance-with-China-in-seas-around-Sri-Lanka>.

⁵¹ Daniel Stacey and Alastair Gale, "China Races Ahead in Indian Ocean While India and Japan Take Baby Steps," *Wall Street Journal*, July 23, 2017.

⁵² U.S. Department of Energy, *Valuation of Energy Security for the United States* (Washington, D.C., January 2017), 59, https://energy.gov/sites/prod/files/2017/01/f34/Valuation%20of%20Energy%20Security%20for%20the%20United%20States%20%28Full%20Report%29_1.pdf.

⁵³ Nick Bryant, "The Decline of U.S. Power?" BBC News, July 10, 2015, <http://www.bbc.com/news/world-us-canada-33440287>.

⁵⁴ Timothy J. Keating, "Expanding U.S. Military Partnerships in the Pacific," interview by Greg Bruno, Council on Foreign Relations, December 12, 2008, <https://www.cfr.org/interview/expanding-us-military-partnerships-pacific>.

favour, and therefore make it very high risk for China to undertake military aggression.”⁵⁵ However, it remains to be seen whether these countries will have the capacity to do so. Paradoxically, efforts to counterbalance or impede China’s plans—for instance, by engaging in a military buildup against China, lobbying the smaller littorals to restrict Chinese naval port visits, or forcing them to choose sides when the great powers are at odds—will further cement China’s sense of vulnerability and reinforce its determination to achieve strategic and operational autonomy for the PLA Navy and develop alternative transit routes for energy imports. Such great-power rivalry will have a destabilizing effect on the entire Asian region.

Conclusion

Much attention has been focused on China’s increasingly assertive and expansive foreign and strategic policy, as well as on the sophisticated application of economic statecraft toward its smaller neighbors, including the littoral states. China’s ingrained culture of self-reliance is fostering the country’s maritime power aspirations. In the context of the MSR, this has manifested itself through China’s growing activities and its preoccupation with the protection and diversification of energy import routes. In the broader maritime context, China has notably begun to emphasize the linkages between the MSR agenda, its strategic maritime interests, the need to protect its rights and interests overseas, and the advancement of maritime security cooperation.

In sum, access to ports to facilitate operations for the protection of China’s rights and interests overseas and the development of transit pipelines as a means to diversify oil and gas import routes will be, from an energy security perspective, the defining imperative in China’s 21st Century Maritime Silk Road. Progress toward these two objectives will be contingent on China establishing friendly relations with its neighbors. Based on the rationale of self-reliance, China’s actions continue to be defensive in nature. The question is whether its intentions will in the long term evolve from protecting its own maritime lifelines and the promotion of common security objectives toward denying adversaries the right to freedom of navigation.

China’s growing naval engagement in the Indian Ocean, together with its BRI projects, has raised concern in the United States and with other key Asian stakeholders that have misgivings about a Sinocentric regional order. Ultimately, the future of Asia’s energy security and the success of the MSR will depend on a number of key developments. The first is the strategic accommodation of a rising China—whether China is able to take active steps to avoid great-power rivalry in maritime Asia, and whether India, Japan, and the United States are willing to accommodate China’s interests, given its growing strategic ambition and expanding naval capacity.⁵⁶ The second is the growing strategic rivalry between China and India—namely, whether India can forge a substantive strategic partnership with Japan and the United States. The third is China’s ability to co-opt the smaller littorals into its Sinocentric regional order. The last is the future commitment of the United States to its allies and partners in the region and whether it has both the intent and capability to maintain its role as the primary security provider in maritime Asia.

⁵⁵ Bennett, “Chinese Development in Indian Ocean Raising Concern.”

⁵⁶ Energy Studies Institute and Chatham House, “The Future of Sea Lane Security between the Middle East and Southeast Asia,” 4.



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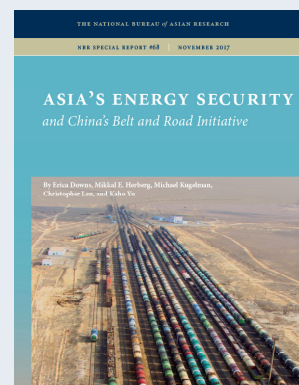
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