

# China's Energy Corridors in Southeast Asia

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Southeast Asia is represented by the Association of Southeast Asian Nations (ASEAN), a bloc of 10 countries in the region, which covers the most strategically important area for China's energy security. The region encompasses all of China's energy-shipping routes from the Middle East, Africa and Latin America. Moreover, it is an important source for clean and alternative energy, since the region is the world's fourth largest liquid natural gas (LNG) producer. In this strategically significant region, China's energy security suffers from gaping vulnerabilities due to its excessive dependence on one particular bottlenecked sea-lane of the Malacca Strait. Acknowledging that too much reliance on this single channel presents high risks for its energy security, China is currently pushing a diversification strategy through the initiation and construction of various channels and projects in order to increase Beijing's optional routes and mitigate the increasing risks of depending on one energy conduit. As the predominant stakeholder for security in the Malacca Strait, China's energy transportation can be significantly affected by the negative impact of piracy threats. This strategy will also help reduce political and economic pressure by any other major power's attempt to contain China's energy lifelines.

Connecting Northeast Asia, South Asia and the West Pacific, Southeast Asia contains all the shipping routes for China's energy imports and transportation from the Middle East, Africa and Latin America. China is dependent on at least four sea-lane routes in Southeast Asia: first, from the Middle East/Africa through the Malacca Strait, then the South China Sea to China for tankers under 100,000 tons; second, from the Middle East/Africa through the Sunda Strait, then the Gaspar Strait and the South China Sea to China for very large crude carriers (VLCC) over 100,000 tons; third, from Latin America/South Pacific through the Philippine sea, then the South China Sea to China; fourth, the alternative route, the Middle East/Africa through the Lombok Strait to the Makassar Strait or Maluku Strait, then the Philippine sea to the West Pacific then China.

Among these shipping routes, the most vital sea-lane is the Malacca Strait, which currently carries 80 percent of China's annual oil imports. According to Chinese government estimates, approximately 60 percent of the vessels that pass through the strait per year are heading to China (Xinhua, September 8, 2005). Moreover, in the next few years, China will inevitably increase its dependence on this strait; by 2010 its annual oil import is expected to grow by 10 percent and the total volume of imports will amount to 150 million tons (China Economic Times, May 9, 2005).

Thus, an excessive reliance on the Malacca Strait makes China's energy transportation vulnerable. These risks come at least from two perceived threats: one, the threats of increasing piracy and maritime terrorism within this region; two, the residual effects of competition between powerful competitor nations—including the United States, Japan and India—increasingly seeking to control this sea-lane.

The threats of piracy and terrorism in the strait have been increasing in recent years (Xinhua, May 18, 2007). From 2000 to 2006, there were on average 30 documented piracy attacks per year that occurred in the Malacca Strait; furthermore, the piracy cases in the entire region of Southeast Asia make up 56 percent of the world total [1]. To control the piracy threats, the littoral countries—Indonesia, Malaysia and Singapore—have taken concrete steps toward enhancing safe passage of energy supply in recent years. The first step is the establishment of the Coordinated Patrol on the Sea in the Malacca Strait in 2004 and the set up of the joint patrol for trilateral air forces in 2005 known as the plan of "Eye in Sky" (EIS), but piracy threats still exist and can flare up at any moment (Lianhe Zaobao [Singapore], August 15, 2007).

As for threats from competitors, China harbors suspicions about the U.S. proposed Regional Maritime Security Initiative (RMSI) and U.S. Proliferation Security Initiative (PSI). The former called for the ASEAN countries to permit U.S. Marines to patrol the waters against piracy and terrorism [2]. The latter would allow U.S. personnel to board a suspect foreign vessel to guard against transportation of weapons of mass destruction (WMD) on the high seas. Due to the memory of the Yinhe Incident of 1993, Beijing still has a lingering fear that these initiatives may give the United States dominant control over these channels and would provide it with essentially a strategic chokehold on East Asia and China.

In response to these measures, China pursued a posture of "standing back," which was clearly

demonstrated by China's rejection to participate in or observe the PSI joint exercise in 2006 near the South China Sea. Further, in 2007, China again refused to participate in a joint exercise for interception of vessels suspected of harboring WMD with the United States and Japan near the offshore area of Japan [4]. Secondly, to minimize the high risk of relying on the Malacca Strait, China is rigorously planning for the long-term and developing transportation routes that utilize diverse channels, routes and countries to import energy for China; in other words, there is a greater focus on both bilateral and multilateral efforts to disperse and minimize these risks [6].

The first and most feasible alternative is the building of a China-Burma pipeline. If negotiations follow through as planned, China will build a pipeline from Sittwe—a city on the southwest coast of Burma near the Indian Ocean—to the Chinese city of Kunming in Yunnan Province. This shortcut is estimated to reduce the Malacca voyage by 750 miles and could help relieve China's overdependence on the Malacca Strait by one-third or more [7]. This plan's potential pitfall is in the terms of negotiations. Specifically, Chinese corporations may have to pay more to their Burmese counterparts just to "buy-in," or the junta could unilaterally suspend the project or even give the bid to India, Japan, Thailand or Singapore, since all these countries are seeking deeper energy cooperation with Burma. In this respect, the Burmese junta has in fact much more leverage than it appears to the United States. With so many options available and no coherent strategy among the competitors, it would be logical for the junta to seize its advantages by hedging the high demand and playing one competitor off against another.

Another possibility is the development of a comprehensive 3,500-mile trans-Asian Railway Network that would link China to many ASEAN nations, creating an efficient means for transporting energy to China. Initial talks over the rail system began in 1995 at the 5th China-ASEAN Summit, and the idea has evolved into an elaborate three-line system that would reduce transportation time and costs significantly. The plan is listed in China's National Plan for Railway Network Construction, 2003-2020. This network will largely be constructed during the next six to 10 years. The trans-Asia railway will also build up the infrastructure necessary to link Southeast Asia and China with Northeast Asia, Central Asia, South Asia, and eventually create a trans-Eurasian railway system that connects Asia and Europe [8]. A number of technical problems, however, have destabilized this project. For instance, Laos lacks basic railway infrastructure and different rail diameters in the various ASEAN countries pose a major technical barrier. With a total project budget of \$11 billion, funding for the project remains uncertain because of the relatively weaker financing capabilities of the ASEAN countries and the scale of their economies.

The third possible alternative is building a canal or pipeline across the Kra Isthmus in southern Thailand, which is a flat terrain with a minimum width of 30 miles and ideal for building a world-class canal. A Chinese "Panama Canal" if completed could significantly shift the regional strategic energy landscape [9]. A canal, coupled with roads, rail and underground pipelines across the Isthmus, which are also underway, would greatly reduce China's current overdependence on the Malacca Strait. The canal could effectively redirect an estimated 90 percent of the vessels from the Malacca Strait and it would cut total fuel usage in half (China Brief, April 12, 2006). Despite Beijing's enthusiasm, progress on the project was slow due to economic and technical hurdles, and then came to a halt in 2006 as a result of the political upheaval in Thailand and the risks posed by rising Muslim insurgencies in the southern part of that country. Yet after the recent Thai election on December 23, 2007, the new government may be more open. The new government—ruled by People's Power Party (PPP)—is publicly regarded as pro-Thaksin and may continue the economic policies of former Prime Minister Thaksin Sinawatra, who was in favor of the Kra pipeline.

The last alternative is the Liquid Natural Gas (LNG) projects between China and ASEAN states. Although the oil resources in Southeast Asia are minimal compared to those in the Middle East, Africa and Latin America, this region is collectively rich in natural gas resources. Actually, it is the fourth-largest LNG producer in the world [10], which offers an important opportunity for China to import and develop its clean and alternative energy, since LNG is widely regarded as a type of clean energy. Since 2004, China has been pushing forward its energy and economic transformation, calling for a shift from an oil-based, heavy pollution economy to one that is cleaner and gas-based. This long-term goal gives more importance to this gas-rich area. In 2002, China and ASEAN established a strategic energy partnership. In addition, the mechanism was upgraded to cooperation on energy security when China and ASEAN—together with Japan, India, South Korea, Australia and New Zealand—released the joint Declaration on January 2007. This agreement stated the following goals toward achieving regional energy security:

- Improve energy efficiency and the environment
- Decrease the dependence on traditional energy by means of introducing clean alternatives
- Make an open and competitive energy market for the region that provides affordable energy
- Cut CO2 emissions
- Encourage the role of the private sector and introduce more investments for energy explorations and extractions [11]

These long-term trends are carried over by a current of joint surveys, exploration and purchases of LNG with Southeast Asia. In 2005, China National Offshore Oil Corporation (CNOOC), a Chinese state-owned energy tycoon, bought a 17 percent stake in the Indonesian Tangguh natural gas field, becoming the largest foreign investor in the industry. In 2006, both Indonesia and Malaysia won bids for Zhujiang Delta and Shanghai Delta (LNG projects), respectively [12]. In March 2005, China, the Philippines and Vietnam signed a working agreement for joint surveys in the South China Sea, which led to cooperation on a previously hotly disputed region. Thailand and Burma are also important sources for China's natural gas imports. Currently, Thailand's gas exports to China account for half (390,000 tons) of Thailand's total LNG exportation, making up about 5 percent of China's imports. China began joint explorations with Burma in 2001, and in 2005, Burma allowed China to explore deep-water areas off its coast in the Indian Ocean. According to Burma's energy companies, their natural gas resources exceed 1.4 trillion m<sup>3</sup> and they currently extract 5 billion m<sup>3</sup> per year. If the China-Burma gas pipeline comes into service by 2010, it would compose a much larger proportion of China's imports than Thailand. In 2007, some local Chinese media in the Southwest provinces unofficially reported that "the pipeline may set to commence within this year"; however, both China and Burma refused to officially confirm this news, or reveal any information about the timetable (People's Daily Online, April 18, 2007). Despite the ambiguity, what is certain is that the pipeline will inevitably materialize and the only question is how soon.

Southeast Asia is the most important conduit for China's energy security. The region covers all the energy-shipping routes for China's energy needs but also offers an important source of clean and alternative energy for China. China is actively pursuing a diversification strategy that will allow it to protect its energy interest in Southeast Asia by hedging against the vulnerabilities posed by the highly congested and bottlenecked Malacca Strait.

#### Notes

1. Annual Reports 2000-2006, Piracy Reporting Centre, International Maritime Bureau.
2. Testimony of Adm. Thomas B. Fargo, U.S. Navy Commander of Pacific Command before the House Armed Services Committee and House of Representatives regarding U.S. Pacific Command Posture, March 31, 2004
3. Indian Navy Takes Big Strides Toward Blue Water Capability, By Editorial Assistant Raeefa Shams, The Jewish Institute for National Security Affairs (JINSA), U.S., July 24, 2007.
4. Actually China and South Korea both refused to participate in the joint exercise, because China still has doubts on PSI's intention, while South Korea does not want to provoke North Korea. See, "Japan to hold a interception exercise without China and South Korea Observation"(Chinese Version), Global Times, September 29,2007.
5. Speeches of Mr. Ju Chengzhi, the Head of China Administration on the Jakarta Conference on Malacca Strait and Singaporean Strait Security, September 2005
6. China will speed up multiple energy supply strategy, National Development and Reform Commission, <http://www.hztz.com.cn/RedNews.asp?NewsID=663>
7. Ying Zhenmao: China-Burma Pipeline on the Way, China Petroleum, No.4,2007,28-29.
8. Negotiation amongst 41 states on Trans-Asian Railway Network with Problems still existing(Chinese Version),China.com, November 9,2006.To view the illustration, see [http://www.china.com.cn/international /txt/2006-11/09/content\\_7336240.htm](http://www.china.com.cn/international /txt/2006-11/09/content_7336240.htm).
9. Lin Xixing: Rivalries in Kra? Building Southwestern Passageway, World Knowledge (Chinese Version),No.13,2004.
10. World Energy Report 2005, British Petroleum Corporation, U.K.
11. The Cebu Declaration for East Asian Energy Security, released by ASEAN secretariat, January 15, 2007.
12. ASEAN Summit: Energy Battle behind Gas, Nanyang Sangpao (Chinese version), Malaysia, November 2006.

