New Development of China's Energy Strategy

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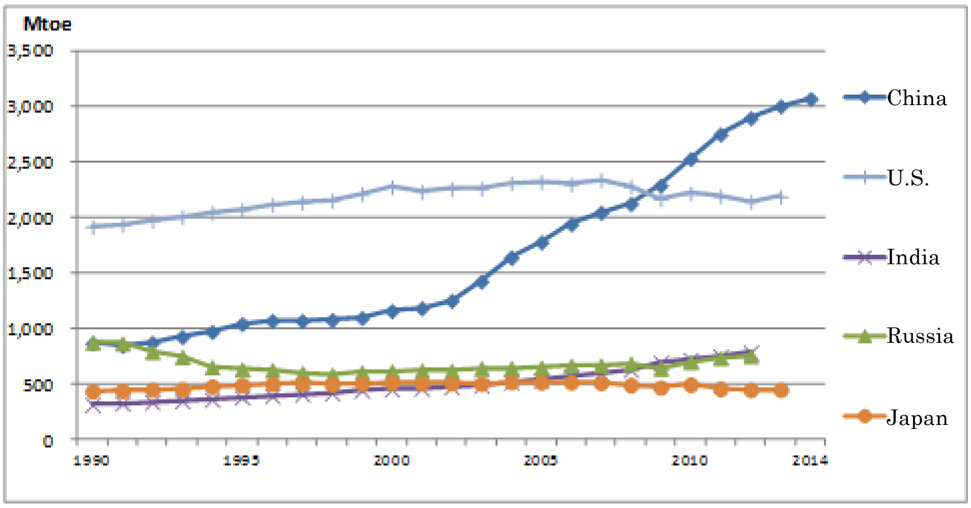
Growing dependence on energy imports

The Chinese economy moved onto a high growth path upon its accession to the World Trade Organization in 2001. In terms of nominal gross domestic product, China passed the United Kingdom in 2005, Germany in 2006 and Japan in 2010, becoming the world's second largest economy. Its primary energy consumption expanded rapidly in line with high economic growth, allowing China to replace the United States as the world's largest energy consumer in 2009 (Figure 1).

Figure 1 Primary energy consumption trends in major countries



Sources: IEA, "Energy Balances of OECD Countries 2014 Edition," "Energy Balances of Non-OECD Countries 2014 Edition"
Data for China in 2013 and 2014 are estimated based on gazettes of the National Bureau of Statistics of China.

China's domestic energy resources are concentrated in coal. Domestic oil and natural gas output growth has failed to catch up with consumption growth, forcing China's dependence on oil and gas imports to increase. Its oil consumption stood at a little more than 50%[1] of U.S. consumption in 2014 but is expected to expand to 126% of U.S. consumption[2] in 2040. Its dependence on oil imports will thus increase. China also depends on the Middle East for more than 50% of oil imports (Figure 2). Therefore, the fluid Middle East situation, piracy, terrorism, China's territorial disputes with other countries in the South and East China Seas, and other

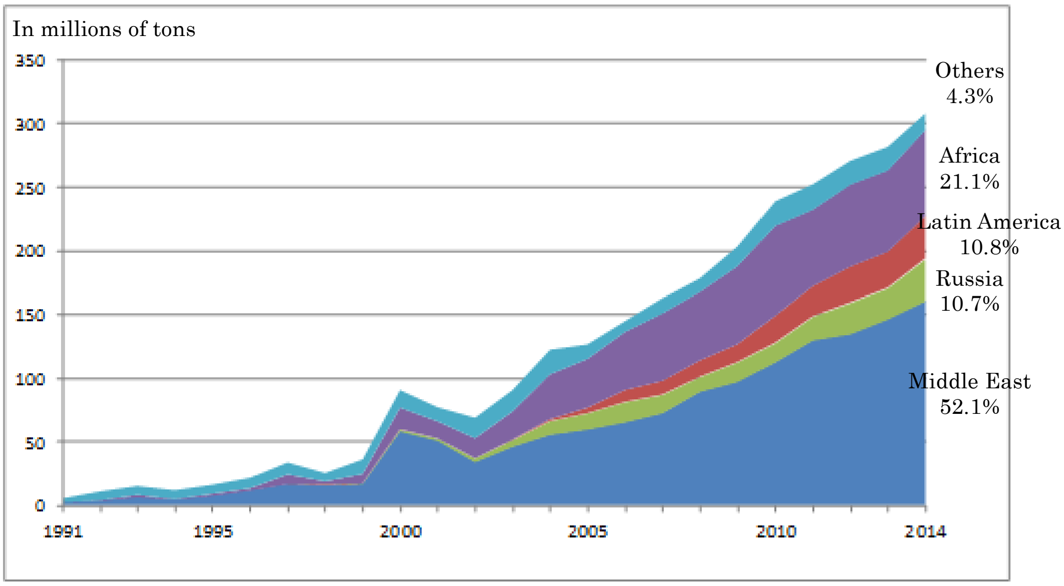
[1] IEA, "OIL Medium-Term Market Report 2015"
[2] IEEJ, "Asia/World Energy Outlook 2014 (Reference Scenario)"

destabilizing factors can be risks for stable oil supply.

China's annual average natural gas consumption growth between 2000 and 2013 stood at 16% far exceeding the average real GDP growth of 10%. China's self-sufficiency rate for natural gas dropped to 70.4% in 2014. Depending on the government's environment-friendly policy, consumption of natural gas as a substitute for coal will increase rapidly, boosting China's dependence on natural gas imports further.

Energy security or how to secure fast-growing oil and natural gas imports is an urgent challenge for China.

Figure 2 Crude oil import trends by region



Source: China OGP

Strategy to secure resources in world

Under five-year energy development plans, China has persistently emphasized a policy of basing its energy security strategy on domestic resources, continuing to enhance resources exploration in domestic locations and neighboring waters including deep-sea areas. Actually, however, domestic oil and natural gas output growth has failed to catch up with consumption growth due to resource shortages. Therefore, the Chinese government has come up with a policy of using two resources and two markets, or domestic and overseas resources and markets. Since the 1990s, it has encouraged the three major state-run oil companies -- China National Petroleum Corporation (CNPC), China Petrochemical Corporation (Sinopec) and China National Offshore Oil Corporation (CNOOC) -- to promote overseas expansion through joint overseas resources development, participation in overseas projects, overseas resources acquisitions and other deals, taking strategic actions to obtain interests in energy resources in various locations of the world.

These Chinese oil companies lagged far behind European and American firms in overseas expansion and tended to expand into riskier locations to avoid competition with international oil majors. They frequently ignored profitability, giving priority to acquiring overseas oil interests. Nevertheless, their overseas expansion efforts might have been considerably useful for developing their human resources, learning relevant technologies and know-how, and accumulating experiences.

Among regions in the world, Africa has great potential for China, produces crude oil of favorable nature and is easier for China to enter. The region is also useful for China to diversify energy resource supply sources. Therefore, Africa has been one of the priority targets for China's overseas resources exploration. From the viewpoint of security, China has viewed Central Asia and Russia contiguous with China as a top priority target. But resource-rich Russia had earlier looked to Europe rather than China, falling short of making the progress China expected in cooperation with it[3].

Western countries and Russia had already developed oilfields featuring less cost and more resources in the Middle East, making it difficult for Chinese companies to expand into the region. Nevertheless, China has developed friendly relations with major Middle East oil producing countries like Saudi Arabia and the United Arab Emirates with its attitude of refraining from intervening in religious disputes and power struggles under its persistent foreign policy of nonintervention in internal affairs, securing its stable crude oil trade with them. China has proactively participated in Iraq's postwar restoration and enhanced relations with Iran that has traditionally been friendly with China. In this way, China has gradually expanded its interests in the Middle East.

Chinese oil companies have grown into some of the world's largest firms[4]. In line with changes in domestic and foreign situations, they have changed their overseas expansion policies. After accumulating financial capabilities and experiences, they have shifted their overseas expansion strategy from the obtainment of subcontracts for small oilfield development projects to the acquisition of interests in favorable resources development projects through the direct purchase of large Western energy companies.

Particularly, the 2008 global financial crisis triggered Chinese oil companies' acquisition of energy firms in the United States, Canada, the United Kingdom, Spain and other industrial countries. CNOOC's attempt to acquire U.S. oil firm Unocal Corp. in 2005 failed in the face of strong opposition from the U.S. Congress for national security reasons. After later persistent negotiations, however, CNOOC successfully acquired Canadian energy company Nexen for $15.1 billion in 2012. According to the "2014 China Oil and Gas Industry Development Analysis and Forecast Report Blue Book," Chinese oil companies implemented more than 100 cooperation projects in 33 countries by the end of 2013, obtaining 120 million tons in overseas crude oil production capacity and 22 billion cubic meters in natural gas capacity.

[3] Takehara, Mika "Reasons for Chinese State-run Oil Companies' Eagerness to Expand into Africa" http://oilgas-info.jogmec.go.jp/pdf/0/692/200611_001a.pdf

[4] Sinopec and CNPC placed fourth and fifth in a world company ranking in 2013.

Channels for crude oil import transportation to China, as well as Japan, had mostly been limited to sea lanes via the Straits of Hormuz and Malacca and the South and East China Seas, leaving oil supply security vulnerable. Since 2010, however, China has completed crude oil and natural gas pipelines from Central Asia, a crude oil pipeline from Russia, and crude oil and natural gas pipelines from Myanmar, establishing import routes from the four directions of north, south, east and west, substantially improving its energy security (Figure 3).

Figure 3 Crude oil and natural gas pipelines to China

Source: Prepared from people.com http://energy.people.com.cn/GB/71899/389073/

"One Belt, One Road" initiative and energy strategy

When Chinese President Xi Jinping visited Central Asia and Southeast Asia in autumn of 2013, he proposed a Silk Road Economic Belt and a 21st century Maritime Silk Road, making the so-called "One Belt, One Road" initiative controversial. At a summit of the Asia Pacific Economic Cooperation forum in November 2014, President Xi demonstrated his strong will to promote the initiative.

Of the "One Belt, One Road" initiative, the Eurasian Corridor or Land Bridge portion covers the enhancement of infrastructure including expressways, railways, pipelines and optical fiber cables. The Silk Road Economic Belt plan is a grand strategic initiative seeking to develop a new trade and transportation route linking China to Central Asia and Europe. There are various candidates for the route. Three basic candidates are given in Figure 4.

Figure 4 Eurasian Corridor (Eurasian Land Bridge) candidate routes

Source: Prepared form changjiangtimes.com http://www.changjiangtimes.com/2012/10/417312.html

The Chinese government believes that the "One Belt, One Road" initiative is of great significance to the energy security strategy. Energy security is vital to industrialization and economic development. The international situation indicates that the U.S. "return to Asia" strategy has increased the risk of the Malacca Strait and the South China Sea, both key points of the energy transportation route for China, being blockaded. In preparation for such blockade, China has been apparently attempting to promote the so-called "March West" strategy for developing ground transportation routes in response to the U.S. Asian strategy.

The government consistently maintains a strategic recognition that security must have two components. The "One Belt, One Road" strategy has domestic and overseas components. The overseas component covers the diversification of import sources, import routes and energy sources. East European countries that depend on Russia for 100% of natural gas supply are fatally vulnerable to political supply disruptions. China may be moving strategically to avoid such vulnerability.

In addition to a crude oil pipeline built between China and Kazakhstan, China completed three pipelines -- A, B and C -- from Turkmenistan in Central Asia to China's West-East natural gas pipeline via Uzbekistan and Kazakhstan in December 2009, October 2010 and May 2014, respectively. Their design annual supply capacity is 55 million cubic meters. China started the construction of the fourth or D natural gas pipeline in September 2014. When it is completed in 2020, the four pipelines' combined annual capacity will reach 85 billion cubic meters. China also plans to construct a pipeline linking China to Iran via Pakistan and Afghanistan. If this pipeline is completed, China's stable energy supply capacity will increase dramatically.

From energy cooperation to regional cooperative development

Chinese oil companies' overseas expansion has made great achievements and frequently received thanks from relevant foreign governments. At the same time, however, they have been criticized for "plundering resources," posing "threats" and launching "new colonialism." The Chinese government has acknowledged that it is an important challenge to associate overseas resources development with contributions to local economic development and livelihood.

Russia, Central Asia and the Middle East have rich resource deposits. They still have massive untapped resources offering great potential. But Central Asia has many inland countries with weakness seen in trade and distribution, becoming a bottleneck for economic development. Pipelines and transportation networks in China will be linked to Central Asian countries to promote trade and exchanges, detonating the Silk Road Economic Belt strategy.

China has a proverb "yao xiang fu xian xiu lu," meaning "Wanna be rich? Build roads first!" It calls for building roads first for economic development. The Silk Road Economic Belt plan seeks to first promote infrastructure development by constructing roads, improving existing railways into high-speed ones and expanding transportation capacity substantially to vitalize trade. The Chinese government has indicated its willingness to provide financial support for such infrastructure development. It has unveiled a plan to contribute $40 billion for a Silk Road Fund to promote the Silk Road Economic Belt. In January 2015, China launched the Energy Development Fund as the first private-sector fund under the Silk Road Fund project to finance the "One Belt, One Road" initiative, soliciting $20 billion in investment from the private sector. China will also contribute 5 billion yuan (about 94.2 billion yen) to create a Maritime Silk Road Bank. It is paving the way for the Asian Infrastructure Investment Bank (with statutory capital of $100 billion) and the New Development Bank (BRICS Development Bank) (with capital being increased from the initial $50 billion to $100 billion) as multilateral banks to be used for the "One Belt, One Road" initiative.

Since the 1990s, the Chinese government has advocated the so-called "Go Out" policy for companies' overseas expansion. The "One Belt, One Road" development strategy offers to support investment by all companies including energy firms in Central Asian countries to secure China's energy supply and promote local industrialization. Resource trade alone cannot secure sustainable economic development while monoculture economies dependent heavily on resource exports have a security vulnerability. Instead of monopolizing energy resources in Central Asia, China has offered to develop distribution traffic networks in Central Asian countries, share the benefits from these networks with these countries and support resource-supplying countries' industrialization according to their requests to create a sustainable economic development cycle. President Xi has called for China's joint development with neighboring countries. "You can take a ride on our express train (for our economic development) or just hitchhike, all are welcome."

Conclusion

Western sanctions on Russia over the Ukraine crisis prompted Russia to fast approach China. This has made it easier for Chinese companies to get help in Central Asia that has traditionally remained under Russian influences, providing China an opportunity to promote the "One Belt, One Road" initiative.

In Central Asian countries that feature prevalent terrorism, various racial, religious and factional disputes and a large number of nomads who have been historically less conscious of national borders, however, resources development could trigger border frictions that could develop into regional conflicts. Great uncertainties thus accompany the promotion of a strategy for developing Central Asia. The Chinese government is exploring a unique strategy learning lessons from the U.S. Middle East policy that has not necessarily been successful.

Attracting attention is whether China as a Eurasian express train could ensure its energy security and drive industrialization and economic development in neighboring countries by promoting the "One Belt, One Road" initiative. The formation of Eurasia to integrate large markets and excellent technologies in Europe, rich energy resources in the Middle East and Central Asia, and labor, production capacity and markets in East Asia is expected to greatly contribute to economic development, and peace and stability in the world.

We wish to see a 13,000-kilometer Eurasian express train being driven safely.

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