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CHINA'S OIL INDUSTRY ENTERS A NEW ERA WITH THE TREND OF ENERGY TRANSITIONS

By Chen Weidong



The continued decline of oil prices in the last two years has challenged China's consistently adhered to oil security strategy. The defects of China's oil industry—such as low efficiency, high cost, and excessive production capacity—are more immense than ever. Over the past two hundred years, energy has transitioned from high carbon to low carbon and from low density to high density. Compared to previous eras with declining prices, this round of low oil prices is a structural decline and marks the beginning of a new era of energy.

Overcapacity is the first major challenge for the future of China's oil industry. Although the Chinese today are largely concerned with overcapacity in the coal, iron, and steel sectors, overcapacity in the oil industry is rarely mentioned by the public despite it being a pressing issue. It is worth noting that in China oil overcapacity is not a problem caused by a rich resource endowment. Domestic oil production supplies only around 43% of the Chinese market, which is an insufficient supply due to the lack of oil under Chinese soil.¹ In addition to scarce indigenous reserves, China's oil industry suffers from low efficiency. To maintain high production capacity, Chinese companies need to drill hundreds more wells than the top foreign competitors.

Second, China possesses numerous highly paid overseas assets that are currently suffering from serious asset devaluation. China's oil industry began a new era of growth as early as 2008, and from 2009 to 2013 Chinese oil companies were particularly keen on investing in foreign oil assets. The total investment of Sinopec, PetroChina, and China National Offshore Oil Corporation (CNOOC) reached a little more than \$100 billion during this time period.² During the same period, the global oil giants were also active in mergers and acquisitions. The difference, however, is that while foreign companies mostly sold oil assets, they mainly purchased natural gas assets as an adjustment strategy to cope with the anticipated decline in oil prices and even the global oil industry. Chinese oil companies, in contrast, are now the owners of these oil assets and must deal with the financial burdens.

¹ Data is available from the International Energy Agency's interactive Sankey diagram, available at <http://www.iea.org/Sankey/#?c=People's Republic of China&s=Balance>.

² Gaurav Agnihotri, "Why Has Chinese Spending on Oil Dried Up?" OilPrice.com, June 1, 2015, <http://oilprice.com/Energy/Crude-Oil/Why-Has-Chinese-Spending-On-Oil-Dried-Up.html>.

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The third problem involves the difficulty in transitioning oil-dependent localities toward non-oil based economic sectors. Cities were built on oil fields where Chinese oil companies were comprehensively integrated to function as de facto small societies, with several generations of individuals and several other industries dependent on the oil sector. Since the depletion of oil resources, the local industrial transformation has been very hard. China's market-oriented reforms of its oil industry have proceeded very slowly, and the industry maintains the organizational structure of these cities. How to break up these small societies in order to facilitate local economic transition will be a key challenge.

Historically, China's oil industry went through three phases. Early on, it relied on the power of the entire country's resources and the industrial style of the Soviet system. After that, it achieved oil self-sufficiency in 1965, became a pure oil exporter in 1968, and turned oil into its most profitable export commodity. Following the turn of the century, China became the fastest-growing oil consumer and eventually the largest investor in the world oil market after 2008. In these three stages the oil industry shared the simple goal of increasing domestic production in order to ensure domestic supply. Today, the fourth phase is coming with the new goal of speeding up the transformation of domestic energy infrastructure and improving the operational efficiency of the entire industry.

Focus China's oil and gas reform on the downstream. Focusing on upstream makes little sense. China is not an oil-rich country—despite its huge oil industry—and it is impossible to change this resource endowment with endless human and material input. Although increased investment could still boost production, it is not a reasonable option in today's market economy. The market requires profit to sustain growth, and opening the upstream market will not bring fundamental changes to the Chinese oil industry.

In contrast to upstream, the Chinese government has gradually opened the downstream market, allowing foreign and private capital to participate in

order to promote competition and growth. It also has urged state-owned oil companies to expand upstream in order to improve efficiency.

Reform the monopoly in the energy system. China is now the largest importer of oil and a top target for competition among peripheral resource exporters. In the age of coal and oil, the United Kingdom and the United States, respectively, were the largest energy consumers in the world as well as global leaders. Today, China is the largest energy consumer and now has the opportunity to contribute to shaping global norms. At the same time, China should seize this opportunity to reform the monopoly structure in its energy system.

At the market level, the core of China's energy reform is the pricing system. U.S. power plants usually have two kinds of facilities, coal-powered and gas-powered, and consumers tend toward the cheaper resource. This mechanism decouples the United States' natural gas price from the price of oil and allows gas to compete with coal. In contrast, for many years, the Chinese government regulated the price of each kind of energy product. There were no market prices that allowed for the substitution of an energy product when others were not available. As a consequence, Chinese natural gas was priced four times as high as coal. Today, we are seeing that all kinds of energy products are in a market and can be properly substituted with one another. Hence, in the next stage of reform, China must integrate the market pricing system into the core of the energy system in order to improve quality, structure, and operational efficiency.

Realize the importance of global and local. Due to the shift in global consumption, the Middle East has become reoriented toward the Asia-Pacific. China imports 52% of its oil supply from the Middle East, Japan and South Korea both import 84% of their supply, and India imports 62%.³ Although China historically has had little political influence in the Middle East—nor an interaction platform like the United States and Europe—it should prioritize regional coordination, forming consistent values and

³ Data is available from the U.S. Energy Information Administration, <http://www.eia.gov/beta/international/analysis.cfm>.

speaking with a unifying voice, in order to safeguard Asian interests in the region.

The One Belt, One Road initiative encompasses not only relations between China and the Gulf states but the triangular relationship between the United States, the Middle East, and China. The initiative will facilitate the integration of related energy markets and safeguard China's oil and gas supply. Cooperation

should also be strengthened in the field of new and renewable energy—with a view toward not only increasing China's own solar and wind energy but also helping related countries fund these initiatives and develop the technological know-how to employ them. This can improve the energy structure of both China and other countries in the region. ∞

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Sustainable Futures Energy and Environmental Security in Times of Transition

This publication is part of a series of briefs commissioned on the sidelines of the Pacific Energy Summit.

The seventh annual invitation-only Pacific Energy Summit will be held in Singapore on June 22–24, 2016, and will convene 200 leaders from government, industry, and research from across the Asia-Pacific. Delegates will address how countries in the Asia-Pacific can foster more robust, collaborative approaches to sustaining economic growth and advancing much-needed access to energy while achieving the ambitious environmental goals outlined in the Paris Agreement.

The 2016 Pacific Energy Summit will be co-chaired by Admiral Dennis C. Blair (former Director of National Intelligence; Chairman of the Board and CEO, Sasakawa Peace Foundation USA; and Member, NBR Board of Directors) and Professor Tan Eng Chye (Provost and Deputy President of the National University of Singapore). To request an invitation, please email pacificenergy@nbr.org.

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