China's Energy Strategy

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Abstract: China is a vast and overpopulated country in the eastern Asia whose energy security and supply is the most important factor of economic growth and consequently, economic, social and political security. By the past decades, its leaders have understood the key role of economic growth and development in the economic and political security of china. Thus, they have put all their concentration on this issue. As a result, the economic growth rate of china has amounted to 10 percent, becoming the foremost element of political and social stability of china. On the other hand, maintaining this high growth rate depends on the energy security and any disturbance in energy field not only stops the economic growth but also makes the ground for the economic, political and social crisis. As a result, maintaining the energy security is of the importance in strategic goals and foreign policy priorities of the state. Thus, the statesmen tries to prioritize certain polices in domestic and foreign realm in order to increase the energy security namely; diversification of fuel sources, focusing on the domestic products, concentrating on efficiency, establishing strategic reservoirs and investing in oil-owned countries. The aim of this article is evaluating the realization of these policies.

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1. Introduction

China is the world's second largest consumer of primary commercial energy, accounting for 12% of the global total. Its demand in 2003 was equivalent to that of Japan, South Korea, India and Indonesia combined, or some 80% of the EU-15 states, and it increased by 14% in that year. In 2002 China overtook Japan to become the second largest consumer of oil. China's demand for oil rose by a further 11% in 2003, when it accounted for 7.5% of global oil consumption. The same year oil imports rose nearly 30% to 128 million barrels, some 5.5% of globally traded oil. Net oil imports were 108 million barrels, or 40% of China's total oil consumption.

In the twenty-five years of economic reforms since 1978 China's annual economic growth has averaged 8-10% and its consumption of both primary commercial energy and of oil has risen three-fold. Yet it was only in 2003 that the impact of this growth on international commodity markets started to significant across a wide range of materials, from steel to coal and from soy beans to crude oil.

Though China's rising demand has been only one of many factors driving up oil prices, it is likely to remain a major influence on global oil markets for the foreseeable future. China's impact on oil prices will depend not only on actual levels of demand but also on the perception by the markets of the government's policy for its oil sector. (1)

This paper provides a brief review of trends in China's oil sector over recent years, before reviewing the countries strategy for oil imports and identifying some key issues to watch over the coming years.

2. Recent trends in China's oil supply and demand

During the 1980s China was a net exporter of about 20 million tones of oil per year. In the mid-1990s this situation changed. Demand for oil exceeded the domestic capacity to produce and China became a net importer of oil. The gap between domestic demand and supply grew to almost 110 million tones in 2003. Despite expensive exploration campaigns onshore and offshore, the domestic output of oil has been increasing at only 1-2% per year. As old, large fields go into decline, new discoveries are barely compensating. It is most unlikely that a sustained growth of supply will be achieved and total national oil production may reach a peak during the coming ten years.

The demand for oil has risen in all major sectors. But the share used by industry has shown a sustained decline as that used for transport has grown to 40% of total oil consumption. Oil use in other sectors and for non-energy applications has also grown. The number of registered vehicles grew eighteen-fold between 1980 and 2002. Over the same period freight traffic rose by four times and total passenger traffic by six times. Since 1990 the contribution of oil to energy use in transportation has risen from 65% to more than 90% as the role of coal has diminished. (2)

Table 1: China Oil consumption

Year	Million barrel	
2004	6.7	
2005	6.9	
2006	7.4	
2007	7.8	
2008	7.9	
2009	8.2	
2010	9.0	

SOURCE: BP. Statistical Review of World Energy, 2011

During the 1990s China nearly doubled its total oil refining capacity to more than 5.5 million tones per day. The rate of increase then declined sharply, for two main reasons. First, the government was forcing the closure of a number of small, dirty and inefficient refineries and second major investment was being directed at upgrading existing refineries to take the sour crude from the Middle East. As demand for oil and as the countries imports of crude oil continued to grow, capacity utilization in China's refineries rose from about 70% in the mid 1990s to 90% or more in 2003.

Table 2: China Oil Production

Year	Million barrel		
2004	3.4		
2005	3.6		
2006	3.7		
2007	3.7		
2008	3.8		
2009	3.8		
2010	4.0		

SOURCE: BP. Statistical Review of World Energy, 2011

In the early 1990s China imported equal quantities of crude oil and oil products and exported significant volumes of crude oil. Once the country became a net importer of oil a number of new features appeared in its pattern of oil trade. Crude imports rose more rapidly than those for oil products, as China sought to maximize the amount of oil refined by the domestic industry. The exports of crude oil were gradually reduced, for the same reasons whilst those of oil products increased in order to sell excess gasoline produced by the domestic refineries. (3)

3. The key elements of Chinas Energy strategy

In 2003 Chinas oil supply-demand gap was about 110 million tones; this is set to grow to 250 to 350 million tones by 2015. China s current oil strategy builds on the nation s longstanding preference for self-

reliance but has been adapted over the last few years to reflect the challenges the country faces in securing its oil supplies from both domestic and international markets. The approach is _strategic_ in nature in that the importance of government is emphasized and markets are relegated to a supporting role. Government directs the implementation of oil policy directly through control of investment and Domestic oil prices as well as indirectly through state-owned oil companies and state banks. The key elements of the domestic aspects of Chinas oil strategy are as follows:

Maximizing the production of oil from domestic oilfields:

This is a major challenge as the old large oil fields in north and east China which have supported the sector for the last thirty years are entering their decline. Discoveries continue to be made offshore and in the north-west of the country, but they are barely compensating for production. Production growth in the first few months of 2004 was only 1%. With few exceptions, most investment in oil exploration and development is through the three main state oil companies (Petro China, Sinopec and CNOOC). (4)

Maximizing the throughput of the domestic refining industry:

For the last ten years the government has sought to maximize the import of crude oil and to constrain the import of products in order to maximize the opportunity for the oil to be refined in China and by Chinese companies. This strategy has been constrained by the need to upgrade the exiting refineries to accept sour crude oil from the Middle East and by the product mix of the Chinese refineries which requires China to import significant quantities of LPG and heavy fuel oil. Foreign investment in China's refining industry (rather than petrochemicals) has moved very slowly. (5)

Domestic pipelines, ports and shipping:

China's ability to import and distribute oil is constrained by a shortage of capacity on many fronts. Considerable steps have been taken to expand the domestic pipeline network for crude oil and for oil products, to construct additional port capacity to handle oil imports and to embark on a concerted drive to build a substantial Chinese oil tanker fleet. In the recent past Chinese tankers have carried less than 10% of the nation s oil imports. By 2005 this is intended to reach 50%.

Emergency storage:

After several years of debate and inaction, the government has at last announced a firm plan to construct emergency oil storage capability which is intended to exceed 20 million tonnes by 2010 and to reach 50-70 million tones by 2015. Construction of the tanks has is due to start in 2004.

Alternative fuels:

China has spent considerable effort investigating alternative transport fuels. The favored option at present is coal-to-liquids drawing on Chinas abundant reserves of coal. Since the late 1990s the Shenhua Group has been charged with developing and bringing to market this technology, and initially concentrated its efforts on direct liquefaction. In the absence of quick success it was decided to license indirect liquefaction technology from Shell. The first plant will be in Inner Mongolia and should be in operation with an annual capacity of one million tones by 2007.

Massive Investment in Middle East:

In contrast to another equally active player in the region, Russia, China's interest in the Middle East is more energy related, and less of a political agenda. China needs oil to fuel its impressive economic growth. The country became a net importer of oil in 1993. Its net oil import has grown since then from 0.16 to 3.76mn b/d) in 2006. (7)

The country relied on the Middle East for 44% of its oil import in 2006 (some source put this figure as high as 58%), making the region China's top supplier, ahead of Africa (32%) and Eurasia (20%). According to IEA estimates in 2007, China's net oil import will reach 7.1mn b/d in 2015 and 13.1mn b/d in 2030 under the reference scenario, as much as the entire EU. The mere size of the country's demand for imported oil would not be met without the strong support from the Middle East region.

The vital role of the Middle East in China's energy strategy is due to their cordial economic and political relationship, the advantages of the region as an oil supplier, and the complexity and difficulty for China to substitute Middle East oil by other sources.

Some forecasts envisage China's reliance on Middle East oil reaching as high as 70% of net import by 2015. (8)

Due to their geographical locations, China and the Middle East do not have a history of significant disputes and conflicts. As a result, there are no major obstacles for their energy inter-dependency. Trade between the two regions is developing well: China exports manufactured goods, infrastructure and labor which the Middle East needs, whilst the Middle East provides water technology, oil and gas supply and petrochemical investment to China. Trade among the two regions is growing at a fast pace, and remains balanced. (9)

The importance of the Middle East region being an indispensable supplier for China also lies in its rich petroleum reserves, production capacity, well established infrastructure, and convenient geographical location. According to official statistics, the Middle East countries held 742.7bn barrels of proven oil reserves at the end of 2006, 61% of the world's total reserves. The area produced 25.6mn b/d of oil in 2006, 31.2% of world's total production. Its reserve/production ratio (R/P ratio) was 79.5 years at the end of 2006, much higher than Africa and Europe/Eurasia (table 1). (10)

The Middle East region also has other comparative advantages compared to the two other major oil producing regions, Africa and Eurasia, in terms of reliability. Most countries in the region have a strong political will to ensure stability of oil supply due to the high dependency of their economies on oil revenue. Middle Eastern oil also has a comparative price advantage, as the average cost of lifting a barrel of oil in the regions is much lower than other regions.

Table 3: Middle East oil reserve

Country	Identified resources (Billion barrel)	Percentage (in the world)
Saudi Arabia	264	19.8
Iran	137	10.3
Iraq	115	8.6
UAE	97	7.3
Kuwait	101.5	7.6
Qatar	26.8	2
Oman	5.6	0.4
Yemen	2.7	0.2
Syria	2.5	0.2
Other countries	0.1	-
Sum	754.2	56.6

SOURCE: BP. Statistical Review of World Energy, 2011

The importance of China's Middle East energy strategy is further exacerbated by the difficulty and complexity for China to increase its oil supply from other sources. China pursues a policy of supply diversification, under which Africa and Eurasia also remain strategic suppliers. However, practical barriers prevent significant increases in oil imports from these two regions. China's efforts in promoting energy ties with Russia and some other Central Asian countries are often overshadowed by the distrust originating from their past relations, by the highly politicized nature of energy issues in these countries, and by surging resource nationalism. China also courts Africa with warm gestures and generous aid packages, making good progress in countries such as Angola, Nigeria and Sudan. However, China is frustrated by the lack of political and social stability, as well as poor infrastructure in these countries. Further, sensitive issues related to human rights, community relationships and environmental issues also frustrate China, as it is eager to send a positive message to the outside world about its increasing global influence.

3. China's Energy Activities in Middle East

To fulfill the energy strategy of the government and the commercial objectives of the NOCs, China is employing a wide range of diplomatic, economic and commercial measures. The government is focused on macro-measures in order to ensure a smooth and friendly environment for energy deals, for example, in promoting stability in the region using its international influence (11), in conducting active energy diplomacy, in promoting economic and energy interdependency by promoting package deals including loans, trade and infrastructure, in encouraging direct upstream investment by Chinese NOCs, and also allowing investment by Middle East countries in China's downstream sector. Chinese NOCs are focused on commercial measures such as actively pursuing projects covering petroleum exploration and production, engineering services, and refineries and petrochemicals. In contrast to IOCs that are restricted by short-term returns, Chinese NOCs can afford to take a long-term view and a more flexible approach in pursuing energy deals in the Middle East.

Although Chinese NOCs are also participating actively in oil and gas projects in other countries such as Kuwait, Oman, Qatar, Syria, UAE and Yemen, their focus is mainly on the three major oil producing countries, Saudi Arabia, Iran and Iraq, with the rationale and nature of their interdependency differing from country to country.

The importance of Saudi Arabia in China's Middle East energy strategy lies in the scale of its reserve and production capacity, as well as the

country's regional and international influence in the petroleum sector. Saudi Arabia has remained the top oil supplier to China, only briefly surpassed by Angola in 2006. The main rationale of the Sino-Saudi relationship is the issue of security of oil supply, due to Saudi Arabia's conservative attitude in allowing foreigners to book its reserves. The two sides are investing in each others' downstream sector in an effort to secure their supply and demand. The most notable deals include a petrochemical Joint Venture set up by Saudi Aramco, ExxonMobil and Sinopec in China's Fujian Province, which covers a \$3.5bn refinery with a capacity of 240,000 b/d (12). A separate contract was signed by the partners covering 750 petrol stations and a network of terminals in Fujian. Saudi Arabia is also helping China in building up its strategic storage facility (13). On the other hand Chinese NOCs' activities in Saudi Arabia are very much limited to engineering services, such as pipeline, well repair, and seismic data collection, and natural gas projects, which involve higher risks and capital input.

China imports a large quantity of oil and intends to import significant amounts of LNG from Iran. (14) The main rationale for cooperating with Iran is not only to secure the supply of oil and gas, but also to seek commercial opportunities for Chinese NOCs, as Iran is one of the few countries in the Middle East that assigns China the right to conduct business in its upstream sector. China is the largest petroleum trade partner of Iran in 2007, and is one of the few countries to break US sanctions against Iran, which "penalizes foreign companies for investing more than \$20mn". (15) Therefore, China is also critically important for Iran in terms of commercial and political support in the international arena. Chinese activities in Iran include refinery upgrades, as well as pipeline and engineering services such as drilling. The two major projects of North Pars gas field exploration and Yadavaran oil field development are among the most important projects between the two countries. A deal involving the development of the North Pars gas field between CNOOC and National Iran Oil Company (NIOC) is said to be finalized soon. The project involves an investment of \$16bn from the Chinese side. Another project worth \$2bn, the Yadavaran project between Sinopec and NIOC, was finalized in 2007. Sinopec will develop it and buy 10mn tons of LNG over 25 years. (16)

China is also keen to extract the vast reserve base in Iraq, which was made possible after the country was reopened for investors. China's participation in the country's oil industry can be traced back to Saddam Husain's rule, when development and production deals were signed

between CNPC and Baghdad involving the Al-Ahdab and Halfaya Fields. However, these deals were frozen as a result of UN sanctions. Since 2006 Iraq invited the Chinese NOCs to participate in its recent licensing round for oil and gas contracts. The Chinese side responded with enthusiasm to the invitation, and was willing to cancel Iraq's debt and provide further reconstruction aid to Iraq in order to secure cooperation between the two countries.

China has seized the global recession as an opportunity to secure long-term deals that will make inroads into previously closed markets and enhance its energy security. The costly and often unsuccessful strategy of capturing equity barrels through direct investment is being complemented by a new model: loan-for-oil deals with governments in search of financial assistance. China has begun to lock in future supplies while establishing a large foothold in key producing states like Brazil, Kazakhstan and Russia – deepening its trade partnerships and opening new opportunities for its National Oil Companies (NOCs) and domestic service companies.

4. Middle Eastern Positive Perspectives to china

China s energy-driven initiatives in the Middle East have been generally

Well received in the region. Both Iran and Saudi Arabia and other Middle East rich oil countries have responded positively to Chinese overtures. For Iran, the political and strategic advantages of cultivating closer ties to China seem obvious. As Tehran comes under increased international pressure over its nuclear activities, the support of a permanent member both of the UN Security Council and the International Atomic Energy Agency (IAEA) Board of Governors provides much needed international political cover. Given China s history of supplying arms and sensitive military technology to Iran, Tehran almost certainly calculates that Beijing might play such a role again. In addition the new government in Iran has positive view about china and other east Countries. (17)

From this viewpoint, Just as Chinese oil companies sometimes pay market premium for access to hydrocarbon resources, Iranian officials seem willing to pay their own premiums for better relations with China. Although China is a large market, deals with Chinese oil companies currently do little to help Iran obtain the advanced exploration and production technologies needed for its own up-stream sector. In this Context the oil and gas deals that Iran has concluded with China have a distinctly strategic quality to them; they seem intended to ensure access to an important export market and bolster a developing political relationship rather than to bring about the transfer of civilian technologies or infusions of capital.

In contrast to Iran, Saudi Arabia is a long-standing U.S. ally, complicating Beijing s efforts to cultivate better relations with Riyadh. The Saudi leadership, however, was disturbed by the anti-Saudi backlash in Congress and in U.S. public opinion following the September 11 attacks. Saudi leaders were also disappointed by what they perceived as President George W. Bush s less-than-vigorous public defense of the U.S.-Saudi relationship. They were also dismayed by what from their perspective were serious deficiencies in the Bush administration s Middle East policies during its first term in office. (18)

Although the atmospherics of U.S.-Saudi relations improved some what with election of Barak Obama, the dismay with U.S. As a result of these concerns, the Saudi leadership is pursuing a hedging strategy toward the United States. The Other Middle East Countries in the same way have similar intention to developing energy cooperation with china. For example Iraq, UAE, Oman, Qatar, Kuwait have same intention in developing energy cooperation with china oil Companies. (19)

5. Impediments to enhancing Middle East-Chinese strategic relations

A significant barrier preventing Middle East Countries from developing strategic relations with China is a structural failing on the part of the Middle East nations to collectively and successfully deal with foreign powers. For example despite the presence of the Arab League, the Arab world has not developed a joint Arab foreign policy. The difficulty of coordinating among 22 Arab countries, entrenched national policies, and the disparities among Arab states in terms of their national interests in China have all prevented the development of a common Arab policy toward China.

Another impediment is that Middle East Countries still view China through a Cold War lens and therefore expect China to form an international bloc against the United States and the West, seeing Sino-Russian rapprochement or the creation of the Shanghai Cooperation Organization as precursors to the formation of such a bloc. Unable to see that the mechanisms and tools of international relations, rivalries and conflicts are now fundamentally different from what they were during the Cold War era, Arab states have been stunted in their ability to further develop strategic relationships with China. Until recently many Arab countries viewed Chinese relations with both the Arab world and Israel as a zero-sum game in which China had to choose side. Despite the recent relative evolution away from this narrow-minded Arab view, it remains in some respects. As part of an evolving understanding of Chinas relationship with Israel, some Arab states now

expect that China will undertake a pivotal role in managing the Arab-Israeli conflict. This expectation ignores the reality of Chinese-Israeli ties, particularly in the military domain, and fails to grasp the nature of the Chinas development as a rising power. Despite international appraisals of Chinas ascent, China still categorizes itself as a regional power out of fear that it will jeopardize its rise by alarming other international powers. (20)

Another key obstacle is related to the limits imposed on the development of Middle East Countries relations with China given the strategic reality in the Middle East. This is particularly true for the countries allied with the United States, whether Gulf countries with their security and defense agreements, or other Arab countries with close military ties to the United States. Maintaining this current alliance is a basic precondition for Arab economic and military relations with the United States and European countries, and therefore essential for the preservation of regional stability in the Middle East. Thus, any major strategic move in these countries interaction with China has to take into consideration both their special relationship with the United States and the nature of American relations with China.

In addition, security concerns and the lack of stability within the Arab world obstruct the creation of a genuine Sino-Arab strategic relationship. The experience of Chinese-Iraqi relations offers an important example in this regard. While former Iraqi president Saddam Hussein succeeded in developing strong economic and military relations with China, the collapse of his regime and Iraq s plunge into chaos badly damaged Chinese interests in the region. (21)

6. New model emerges in other oil rich regions

China was investing heavily in Africa and making forays into Kazakhstan and even Latin America, with Chinese NOCs receiving strong diplomatic and financial backing by the government. Skeptical observers viewed China's investments in energy and mining as a resource grab that would lock up supplies and crowd out investment from western countries.

Those fears, not surprisingly, proved to be unfounded. China faced familiar obstacles in its overseas oil investment, including difficult contract terms, rising service sector costs and operational risks for personnel – all of which contributed to project delays. Its energy investment in Africa is a case in point. Although the three Chinese NOCs acquired acreage in a wide range of African countries, many of those projects remain in the exploration stage and results have often been disappointing. Technological shortcomings largely prevented the Chinese NOCs from competing in the deepwater, and China's late

entry into the game resulted in less promising onshore opportunities. A large share of the NOCs' assets were held in politically risky states like Sudan (still a very large component of CNPC's overseas production) or countries with much smaller resource potential and limited exploration history like Mali and Niger.

The Chinese NOCs' mandate to go abroad has not subsided. International operations are still viewed as a vital means for CNPC, Sinopec and CNOOC to build operational skills and gain access to advanced technology. Overseas operations also provide opportunities for Chinese seismic and drilling companies, in keeping with China's goal of building a world-class service sector.

Although direct investment by Chinese NOCs will continue – with each maintaining a distinct investment strategy – the bilateral deals signed by China in the past few months mark an opportunistic effort to take advantage of current economic conditions. In the short term China has shifted its focus to a loans-for-oil strategy that will capitalize on opportunities to diversify its supplies and increase its energy security.

China New Model: Loans-for-Oil

The Chinese government has finalized bilateral deals with Russia, Brazil, Venezuela and Kazakhstan that will collectively provide \$50 billion in Chinese loans in exchange for future oil supplies. Under the terms of the bilateral deals, China would receive at least 1.2 mmb/d in future supplies within the next ten years. The loan-for-oil deals have three distinct advantages for the Chinese: they allow China to lock up future supplies, extend its presence in countries that have been difficult for the Chinese NOCs to penetrate, and create opportunities for Chinese service sector companies. (22)

The most tangible benefit is that China has secured sizable export commitments. In a February agreement, the Chinese Development Bank (CDB) signed two 20-year loan agreements with Rosneft and Transneft (the Russian state transport monopoly) that will provide \$25 billion in financing in exchange for 300 mb/d of oil shipments via the East Siberia-Pacific Ocean (ESPO) pipeline. In a deal finalized in May, the CDB agreed to a \$10 billion loan to Petrobras in return for Sinopec's access to 200 mb/d of oil beginning in 2010. A \$4 billion deal with Venezuela will finance projects that will increase Venezuelan exports to China from roughly 350 mb/d to 1 mmb/d by 2015. Finally, a bilateral deal with the Kazakh government gives China a 50 percent stake in Mangistaumunaigaz (MMG) – which holds roughly 370 mmb in reserves - while ensuring sufficient financing for the 3,000 km Kazakhstan-China pipeline. Several of these bilateral deals stipulate that China will be repaid in cash rather than in barrels, with its borrowers simply repaying principal and interest. (23)

Aside from the supply commitments, the loanfor-oil agreements will expand China's footprint in a handful of key producing states. In Russia, for example, the Chinese deal represented a significant step forward after several years of contentious renegotiations of a 2005 export deal between the two countries. The newest deal between China and Russia took months to negotiate, as both sides drove a hard bargain. The final agreement met Russia's core objectives - it alleviated Rosneft and Transneft's short-term financing difficulties and freed up cash for Rosneft to consider acquisition opportunities. It also met China's primary goals of ensuring stable crude supplies, guaranteeing enough cash to finance phase one of the ESPO pipeline, and earning loan guarantees from Russia's state-owned bank Vnesheconombank. In the end, the Russia-China deal strengthened a relationship that both sides view as a strategic priority in the coming years. (24)

Similarly, the Chinese deal with Kazakhstan – in which CNPC and the China Export-Import Bank will lend \$5 billion each to Kazmunaigaz (KMG) and the Development Bank of Kazakhstan, respectively marked a turning point in a trade relationship that has proven difficult in recent years. When CNPC acquired Petro Kazakhstan in 2005 – at that point the largest overseas acquisition by a Chinese NOC - the Kazakh government introduced new legislation that granted pre-emptive rights to KMG in future deals. CNPC was criticized for paying too much for the Petro Kazakhstan acquisition, but its 67 percent stake in that company has now been accompanied by a 50 percent stake in MMG -giving CNPC a much larger foothold in the upstream in Kazakhstan. The Chinese government views the effort to secure additional crude supplies from Russia and Kazakhstan through the lens of energy security; additional pipeline imports serve as a hedge against possible supply disruptions elsewhere, for example in shipping lanes in the Straits of Hormuz or Straits of Malacca.

Finally, the loans-for-oil agreements will open new opportunities for Chinese service companies. CNPC's service sector subsidiaries in manufacturing and engineering could win pipeline construction contracts for the ESPO phase one and its spur line to China. China's loan to the Development Bank of Kazakhstan will be partly used to construct a "West Europe-West China" highway that would likely employ Chinese construction laborers. Other potential opportunities for Chinese companies in Kazakhstan as a result of the bilateral loans include the construction of a gas pipeline and potential joint work in uranium mining — all projects that would meet job creation

objectives of both governments in underdeveloped areas. And China's loan agreement with Petrobras stipulates that the Chinese could supply the Brazilian NOC with "equipment and services in the areas of LNG facilities, offshore drilling rigs and service ships."

Brazil is a particularly enticing market for Chinese service companies, given the enormous demand for engineering, construction and drilling contractors as Petrobras tackles its \$174.4 billion five-year investment plan. Although the Brazilian government (and Petrobras) may prefer to turn to domestic companies, the capacity of the Brazilian service sector is limited, and those firms may not be able to match the cost competitiveness of Chinese companies.

Finally perhaps most importantly, many governments are finding it easier to negotiate directly with the Chinese than to make deals with numerous international oil companies; the Chinese government can leverage its finances and the capabilities of its NOCs and service companies in a single deal. As Petrobras CEO Sergio Gabrielli stated last month, "there isn't someone in the US government that we can sit down with and have the kinds of discussions we're having with the Chinese."

Conclusion

China is a vast, overpopulated country with communist political structure which needs to a dynamic economy. Consequently and regarding to the experiences of other communist states, its leaders has followed a different economic policy in 1970s. According to this policy, the economic growth and development must be the bases of economic, political and social stability. In other word, given to the overpopulation and undemocratic political structure. the Chinese policy makers have seen the economic growth as the legitimating base in order to keep stability. So, it can be argued that economic growth and development have been the most important factors of employment, stability and social welfare, economic security and thus, political stability in past decades.

On the other hand, these leaders know well that these conditions depend on the energy supply or in better word, energy security. So it should be said that energy supply is the key factor of the continuous economic growth of china which in turn, is the most significant element of economic, political and social stability of china. Accordingly, china statesmen have tries to prioritize some policies in order to increase the energy security. Focusing on the domestic products, concentrating on efficiency for decreasing the energy consumption in country are of these policies. in Consequence, 90 percent of china energy supplies

from the fossil fuels as well as investment in new and clear energies like nuclear, wind, solar and... is on the priorities. The goals of all these policies are decreasing the fossil energies consumption and abating the dependency on the import oil and gas and thus, achieving the strategic goal of energy security.

However, these measures not only could have decreased the importance of import oil and gas for china but also, due to the high rate of economic growth, the china importation of oil and gas would increase in future decades. As a result, beside the before-noted strategies, china has pursued other strategies to secure oil importation which includes establishing strategic reservoirs, diversification of fuel sources and investing in oil-owned countries.

According to these conditions china has followed simultaneously two grand policies in energy field. The first one is attempting to increase the ratio of new energies and thus, decrease the import of energy especially oil and gas, increase the energy security and decrease the ecological infections. Beside this, regarding the increasing dependency on import oil, china has seek other measures like diversification of fuel sources, establishing strategic reservoirs and investing in oil-owned countries.

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