
Energy Challenges in Asia

Valérie Niquet

Octobre 2007



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ISBN : 978-2-86592-207-9

ISSN : 1954-3514

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Contents

INTRODUCTION	2
INCREASING NEEDS: THE SITUATION IN CHINA AND JAPAN.....	3
The Situation in China.....	3
The situation in Japan.....	4
DEFINITION OF ENERGY SECURITY IN CHINA AND IN JAPAN	5
China’s views on energy security	5
Japan’s views on energy security.....	6
THE STRATEGIES TO IMPROVE ENERGY SECURITY BOTH IN JAPAN AND CHINA: COMMON APPROACHES	8
The improvement of energy efficiency.....	8
Energy structure rationalization in China	9
The building of a regional and global multilateral framework	11
The accumulation of stockpiles in Asia	12
CHINA’S NATIONAL SOLUTION FOR ENERGY SECURITY	14
Diversification	14
The illusion of security of supply and the safety of Sea Lanes of Communication (SLOC)	16
JAPAN’S NATIONAL ANSWER TO ENERGY SECURITY CHALLENGES.....	18
Diversification of energy supply	18
An increase of the proportion of oil produced thanks to Japanese upstream investments	19
The improvement of bilateral relations and the commitment of oil producing countries.....	20
DIFFERENT CONCEPTIONS OF SECURITY: CONSEQUENCES FOR THE FUTURE EQUILIBRIUM IN ASIA	23
The role of the military in China.....	24
Oil reserves for national use	25
CONCLUSION.....	26

Introduction

Energy challenges represent one of the most important security paradigms in the Asia Pacific region where you have a mixture of growing energy dependency, fuelled by high economic growth, the emergence of new major players like China and India, and a quasi-complete absence of regional regulatory mechanisms to tackle the challenges in a multilateral way. These challenges mostly concern Japan and China, where crucial energy issues are aggravated by power rivalry, historical and ideological issues, and a lack of both economic and political harmony between them.

Neither countries are self sufficient in terms of energy needs. This can lead to a shared analysis and common approaches regarding Japan and China concerning this issue. Their cases are, however very different and the solutions applied are related to different world views that are not easily reconcilable.

Both countries share common objectives: both want security and stable supply. But there are also big divergences and these divergences could be new sources of conflict and misunderstanding between Tokyo and Beijing.

One of the main differences is history related. Both China and Japan are uneasy regarding outside energy dependency. In Japan, memories of the pre-war oil embargo have not disappeared. The oil shocks of the 70s renewed this uneasiness. However, Japan's outside dependency is not new. Tokyo has learned to live with it, finding a system to alleviate this vulnerability in cooperation with its partners, multilateral institutions like the International Energy Agency (IEA). China's outside dependency is new. The country's dependency on oil, which began in 1993, is particularly challenging since the principles of independence, non interference and military autonomy, principles at the core of Maoist foreign strategy, did not completely disappear in spite of China's new policy of reform and opening up. China's leadership, even the fourth generation, did not forget its isolation during the 60s and 70s, when Beijing felt threatened by both US imperialism and Soviet hegemonism.

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Increasing needs: the situation in China and Japan

The Situation in China

The growth in energy demand is of course most impressive in China (and India) as it is linked to rapid economic growth with almost double digit figures since the beginning of the 90s. Once again this year, in spite of the proclaimed willingness of authorities to check growth in China, the figure for the first quarter of 2007 was 11,8 %. Linked to this growth of course, there has been an evolution of the way of life and patterns of consumption in the most affluent coastal provinces and big cities like Shanghai, Beijing-Tianjin, and the Guangzhou conurbation. For instance, the number of private cars, around 20 million today, could reach 100 million in the near future if growth forecasts do not change. Electrical appliances, such as air conditioning, are also on the increase. ¹From 2000 to 2005, total energy consumption in China increased by 60%, most of this energy demand being met by coal.² However, China's energy consumption per capita is still very low: four times less than Japan, more than ten times less than the United States therefore the potential for growth remains huge.

Today, in spite of its current low level of development, China has become the second consumer of oil in the world, behind the United States. Another impressive figure: China has 1,8 % of the known oil reserves yet represents 20,4 % of the world population. For Asia, these figures amount to 9,7 % of the reserves and more than 50 % of the population.³ If today China imports around 50 % of the oil it needs, these figures could reach 80 % in 2020. However, one must keep in mind that these needs are largely met by coal and will remain so.⁴ Thanks to its huge coal reserves, China remains today the third energy producer in the world, behind the United States and Russia.

¹ D. H. Rosen, T. Houser, « China Energy a guide for the perplexed », Center for Strategic and International Studies and the Peterson Institute for International Economics, May 2007.

² E. Downs, « China », *The Brookings Foreign policy Studies*, "Energy Security Series", December 2006.

³ L. Simonnet, « Oléoducs et gazoducs chinois à l'aube du XXe siècle, les vecteurs d'une diplomatie de l'énergie », *Monde chinois*, n°9, Winter 2006-207, pp. 25-39.

⁴ L. Simonnet, « Oléoducs et gazoducs chinois à l'aube du XXe siècle, les vecteurs d'une diplomatie de l'énergie », *op. cit.*

The situation in Japan

Japan's dependency on the outside world is much stronger. Japan, the second economy in the world, imports 100% of its oil, which represents 50 % of the energy mix consumed in Japan. The first difference between Japan and China lies in the growth rate of both the economy and of energy consumption. The other big difference of course is related to the huge gap in energy efficiency between China and Japan. Energy efficiency in China is ten times lower than in Japan.

In spite of these differences both countries are increasingly dependant on the outside world or perceive themselves to be so. This feeling has of course an influence on China's and Japan's views on energy security.

Definition of energy security in China and in Japan

China's views on energy security

For Chinese decision makers and analysts there is a direct link between dependency, risk of interference, and control by outside powers. There is a debate in China – as in Japan – between those who believe in the market economy, mostly big companies who want to make money, experts invited to international symposia and conferences, and those who dream of controlling China's energy supply. The latter are more prominent in think tanks either close to the military or dealing with international relations issues, but tend, apparently, to have more influence at the top, where strategic decision-making takes place.

According to these analyses, energy dependency on the outside world is risky. Energy supply control is also part of a power game, an expression of China's capacity to impose its own rules on the supply chain. China's feeling of uneasiness regarding market forces, of isolation and vulnerability, has been also fuelled by its thwarted ambition due to the rejection of its endeavours to acquire American and Russian assets, Unocal and Slavneft.

This feeling of vulnerability has also been sustained by China's ideological isolation, by the threats of an embargo on the Olympic games, openly expressed during the French electoral campaign, and by the US intervention in Iraq and strategy of outside war on terror since the 9/11 attacks. For China's analysts, the global strategic situation is not positive for China's interests and the country commonly expresses a fear of encirclement from the US and its allies, or quasi-allies in Asia, from Japan in particular, and India.

China's views on energy security are related to war issues. The potential risk of a war with the United States over Taiwan explains China's focus on controlling access and supply regardless of the degree of economic opening up of the country. China could accept a market economy in times of peace, but in the case of war, particularly in the case of USA's involvement. China would have to be able to directly secure energy supply, particularly oil, in order to reduce the risk of pressure from any threats of embargo or disruptions of sea lanes, etc. War and use of force in Chinese strategic culture is perceived as legitimate, checked only by a careful

balance of cost and gain; access to oil is part of China's strategy... The anti-secession law adopted in the spring of 2005 reaffirmed China's principle that the right to use force against Taiwan could be legitimate.

China's viewpoint is that energy security is not only linked to economic growth and price stability but also to the ability to wage a war if and when decided. Moreover, according to Li Junru, Vice president of the Central Party School, energy is a factor that could affect China's peaceful rise and international pre-eminence. He feels that there is an international competition for energy supplies and that China has to be particularly active as a late comer in this competition.

Japan's views on energy security

Japan's views on energy security was, until recently, very different in spite of past experiences of pre-war embargo and oil shocks. Japan tended to rely much more on the market economy to secure a stable supply of energy. Price stability was one of the main incentives. This school of thought is of course still influential in Japan. Certain analysts consider that Japan's "business first" principle should be preserved and that cooperation with China, concerning Russian oil for instance, would be a better strategy than playing Moscow's triangular game.⁵ However, since the year 2000, particularly after Prime Minister Koizumi Junichiro came to power, a new strategy has emerged, more similar to China's concept of energy security.

To complicate things a little more, Japan's new view on energy security, focusing on the control of the supply side rather than on market forces, has been for a large part fuelled by China's real or perceived energy strategy since the end of the 90s. Tensions between China and Japan, culminating in the anti-Japanese demonstrations in China in 2005, have of course strengthened Tokyo's viewpoint. Although market liberalization was perceived as a good answer to a price crisis, Tokyo has been alarmed by the emergence of China as an aggressive competitor. Written in May 2006, a report sent to the Prime Minister states that these energy issues put the integrity of Japan's nation at risk, and focused on the role of China.⁶

Another publication also stressed the role of China in Japan's security equation because of growing Chinese nationalism; competition between both countries for access to resources has led to increased rivalry.⁷ This feeling has been reinforced by the fact that

⁵ T. Masuda, « Energie Power Games in Asia », *Conférence de l'Ifri*, [HdisponibleH](#) sur www.ifri.org

⁶ N. Masahiro, *the Establishment of an International Energy Security System, Report to the Prime Minister*, Japan Forum on International relations, Institute for Energy Economics, May 2006.

⁷ "East Asia Energy Crisis Scenario Investigation Committee Report", Japan Science and technology Report,

Japan, as a buyer, is not the major Asian player it used to be. In the 70s, Japan was responsible for 60 % of oil demand in Asia. In the 80s, Japan was buying oil in China as part of its diversification strategy. Today, Japan is responsible for only 25 % of Asia's oil demand and this figure could drop to 14 % in 2020.

Moreover, Japan has been reasserting itself on the world stage and assertiveness in energy issues is part of this re-emergence of Japan as a "normal" power. Energy security has become part of Japan's domestic political debate. In Japan, energy is increasingly perceived as strategic, and national interests take precedence over economic considerations. In May 2006, Meti published a "New National Energy Strategy" which, alongside a view on the market economy, insists on the necessity for Japan to become more autonomous energy-wise, focusing less on price and more on access.⁸ For Omi Koji, chairman of the energy strategy committee of the LDP, Japan should no longer rely on the market alone to secure energy".⁹

Both China and Japan share the same preoccupations regarding costs, scarcity of resources and risks of terror attacks on major sea lanes. Even though China's energy security equation remains different from Japan's, in both countries there is a consensus on the urgency to solve energy security issues.

⁸ *New National Energy Strategy*, < [Hwww.enecho.meti.go.jp](http://www.enecho.meti.go.jp) >, May 2006.

⁹ P. C. Evans, « Japan », *The Brooking Foreign Policy Studies, Energy Security Series*, December 2006.

The strategies to improve energy security both in Japan and China: common approaches

The improvement of energy efficiency

There is a certain level of consensus between China and Japan concerning the implementation of a more efficient energy strategy in both countries. In his work report at the People's National Congress in March 2007, Prime Minister Wen Jiabao mentioned the necessity to reduce excessive consumption and pollution in order to reach the targets of the 11th Energy Plan. According to Zhang Guobao, Vice President of NDRC (National Development and Reform Committee), China's energy policy for the 21st century must emphasize energy conservation, through the increase of energy efficiency, in order to improve energy security and protect the environment. One of the means to achieve these objectives would be to optimize China's rather inefficient and redundant energy infrastructure. Along the same lines, at the G8 meeting in Saint Petersburg in July 2006, Hu Jintao proclaimed a "new" energy security policy for China consisting of strengthening energy cooperation and research as well as implementing development programs with other countries.

Japan has followed the same strategy. Tokyo has referred to promoting technology transfers in the field of clean coal and civil nuclear energy, and to improving energy efficiency, not only in Japan, but also in Asia, particularly in China.¹⁰

In terms of energy efficiency, Japan's objectives are very ambitious; Tokyo intends to increase the efficiency ratio by 30 % and reduce oil consumption in transportation to 80 %, through the development of new technologies like hybrid cars, etc. However, progress will be difficult as energy efficiency in Japan is already very high and the margin for improvement very narrow. Japan's official philosophy of energy is based on the "3E"s of Economic growth, Energy security and Environmental protection.¹¹

¹⁰ *New National Energy Strategy*, op. cit.

¹¹ T. Tomihiro, *The Status of Japan's Energy Policy and Task Ahead*, Agency of natural resources and Energy, MITI, available on <[H<www.worldenergy.org](http://www.worldenergy.org)H>

The issue of environmental protection is one of Japan's "politically correct" foreign policy niches. The 2006 report mentions the 1997 Kyoto protocol which promised to reduce global warming gas emissions by 6 % from the 1990 level by 2008-2012. Cooperation with China on this issue is also a major part of Japan's energy security policy. According to IEA, China has taken the first place in front of the United States in terms of gas emissions in 2007.¹² One of the measures adopted by Japan in order to meet the target to improve energy was the implementation in 1997 of the Keidanren, an environmental action program which reviews targets annually.

China also recently published very ambitious figures in terms of energy efficiency. According to these figures, China should reduce its energy intensity by 20 % in 2010.¹³ This objective seems very optimistic. China today lags far behind Japan and even the US in terms of energy efficiency. In order to improve these figures, the government decided in 2006 to publish a green GDP in order to put more stress on environmental protection and energy conservation than on economic growth. Partial figures for 2005 were published in 2006; however, the publication of the 2006 figures, in March 2007, was cancelled at the last moment by the National Statistics Bureau and the State Environment Agency. Apparently, these figures were so dismal that publishing them would have been too embarrassing. Moreover, the fact that the worst province was Ningxia, one of the poorest in central China, only demonstrated that the richer provinces along the coast tend to delocalize their waste and energy inefficient industries to the interior.¹⁴ Officially, there has been a slight global improvement in China in terms of energy consumption per GDP unit in 2006. There was a reduction of 1 to 2 % of energy consumption in 2006 after four years of increase.¹⁵

Energy structure rationalization in China

There is a debate in China today on the necessity to reform the country's institutional energy structure. The main issue revolves around the creation of a ministry of energy to coordinate policies in a more effective way. However, one must keep in mind that in the People's Republic of China's political structure, in spite of recent evolutions, the core of the power does not lie in the ministries, but in the party and is much more related to the position of party officials rather than to their rank in the government. For instance, the China Communist Party (CCP) controls the personnel as well as the investments of China's big energy State Owned Enterprises (SOE),

¹² <[Hwww.news.bbc.co.uk](http://www.news.bbc.co.uk)>, 24-04-2007.

¹³ E. Downs, op. cit.

¹⁴ "Green GDP Mired in Red Tape", *news.bbc.co.uk*, 24-04-2007.

¹⁵ 0,2 % in 2005; 5,5 % in 2004; 4,9 % in 2003 in K. G. Nealer, "Energy Diplomacy with an Attitude", *PACNET* 20, 16-04-2007.

National Oil Companies (NOC), including their subsidiaries listed on the stock market.

The creation of a Ministry of Energy has faced strong opposition in China. The former ministry, created in 1988, was dissolved in 1993 by Zhu Rongji due to its lack of efficiency. There has been strong opposition on the part of former ministries, from China's big SOE in the energy sector, and from the head of the NDRC, Ma Kai, who could also stand to lose part of its power and influence on the energy sector.¹⁶ Today, China's energy policy emanates from different power centers. The Former Ministry of petrol's assets became the China National People's Congress (CNPC), while the ministry of petrol and chemical products' assets became Sinopec. Although the China National Offshore Oil Corporation (CNOOC) was only a corporation, it ranks today as a general bureau. CNPC and Sinopec still have a ministerial status. All these SOE have also established subsidiaries listed on international stock exchanges: Petro China, Sinopec Ltd and CNOOC Ltd.¹⁷

These SOE are instruments of the Chinese government's energy policy and increasingly are beneficial to organizations trying to be as profitable as possible.¹⁸ Apart from the SOE, other actors in the definition and implementation of China's energy policy include the national development and reform commission (NDRC), the ministry of land and resources, the MOFCOM and the MOFA. There is of course an overlapping of initiatives, competence, authorities and Guanxi networks. In order to solve this issue, a leading energy group, headed by Prime Minister Wen Jiabao, was created in 2005 as a consulting body with transversal competence.

The lack of institutional efficiency results also in a lack of energy efficiency. In spite of a strong centralised power, the implementation of rules seems to be difficult. This is the case for instance of coal and illegal mines or highly energy consuming and inefficient industries where, due to corruption networks, the center is unable to control the periphery, consisting of local governments or local enterprises with intertwined interests.¹⁹

The second and most important unsolved issue, is that of price fixing and the opening up and deregulation of the energy sector. In December 2006, the MOFCOM published *New guidelines for wholesale oil products and crude licence* in order to open the market to China's most recent or, in that field "weaker" state-owned enterprises, (SOE) Sinochem and CNOOC, and eventually to foreign companies.²⁰ In order to apply, companies must fulfill regulations regarding refining capacity and storage. The delay for authorization for Chinese companies will be 40 days, and for foreign companies four months.

¹⁶ C. Huang, op. cit, 30-03-2007.

¹⁷ E. Downs, op. cit.

¹⁸ Ibidem.

¹⁹ K. G. Nealer, op. cit.

²⁰ *China Daily*, 03-04-2007.

One of the main limits for foreign companies will be the pricing system which keeps oil in China much lower than the international price. China also has one of the lowest prices for electricity. For social and political reasons it would be very difficult for the authorities to lift this system of very low prices, at a time when inequalities are growing.

The building of a regional and global multilateral framework

Apart from improving energy efficiency there have been common talks in Japan and in China, limited as we will see, on the necessity to build a multilateral framework in order to improve energy security. Some progress has been made at the institutional level. In terms of the security of sea lanes, some Chinese analysts have mentioned the positive role played by the transportation group working under Apec, and by ARF (Asean regional Forum) new interest in maritime cooperation.²¹ Tokyo is strongly in favour of this institutional mechanism-building at the regional and global level in order to regulate energy supply. Japan's new national energy strategy supports the development of energy and environment cooperation in Asia through the diffusion of clean technology and the building of an East Asian energy conservation program based on transferring technology and training experts.²²

Japan also established an Asia Pacific energy research center in order to improve regional technological cooperation.²³ At the global level, Tokyo, as an OECD member, is also a member of the IEA whereas China is not, but Japan is trying to play an interface role between IEA and China. China and Japan are both members of the International Energy Forum.

At the regional level, there is the APEC energy working group and the meetings gathering the energy ministers of the five countries. The first meeting between the energy ministers of China, India, Japan, South Korea and United States, took place in Beijing in December 2006. Other multilateral mechanisms at the regional level dealing with energy issues both in terms of security of supply and environmental approach include: the Asean Plus 3 Oil Market Forum, the Energy Charter Treaty, Japan as a member and China as an observer, and the North East Asia Petroleum Forum established in 2003 under the Japan Institute of Energy Economics. At the East Asia Forum, in Cebu in January 2007, a declaration on East Asia energy security was published, focusing on energy conservation. Between Japan and China, there is a bilateral project on clean coal, funded by

²¹ Ji Guoxing, "SLOC Security in the Asia Pacific", *Occasional Paper*, Asia Pacific Centre for Security Studies, Honolulu, Feb. 2000.

²² *Japan's New National Energy Strategy*, op. cit.

²³ T. Tomihiro, op. cit.

JBIC under the APEC working group. In April 2007, a joint statement by METI and NDRC, on fostering cooperation between Japan and China in the energy field, was signed at the end of the first China - Japan policy dialogue on energy conservation that took place in Tokyo. The talks focused on technological cooperation, particularly in the field of clean coal technology, and on improving the multilateral framework in Asia.²⁴ The United States also initiated an Asia Pacific partnership on clean development to try to encourage the building of an energy community between China, Japan and Korea.²⁵

The accumulation of stockpiles in Asia

There is also a closer consensus between China and Japan on the building of stockpiles. The project for China started in 1998 and was revived in 2003 strongly encouraged by the IEA, with the establishment of the State Oil Reserve Office. Four sites were chosen along the coast in the Liaoning and Zhejiang provinces, and in Shandong. According to the 2003 plan, these four sites should hold 16,2 billion cubic meters of oil, less than 10 % of imports for 2005.²⁶

On January 2007, a draft of the National Petrol Reserve Management Ordinance was published by the State Council. According to this draft, oil reserves should be divided between State and NOCs reserves. In 2015, Government reserves should hold 70% of crude oil reserves. Authorities at the provincial level should hold 15 % of petroleum products reserves and NOCs (CNOOC, Sinopec and CNPC) should hold 15 % of refined products reserves. No law has been drafted as to when and how the reserves should be tapped. By the end of 2008, four reserves, with a capacity of 88 million barrels, should be filled.²⁷ At the end of 2006, 27 tanks out of the 52 tanks at the Zhenhai base contained 17 million oil barrels from Congo, Angola and Russia. The Daishan base, with a 20 million barrels capacity, is being tested. The Huangdao base (representing a 20 million barrels capacity) is under construction as well as the Dalian base which has a capacity of 15 millions barrels.²⁸ Not being a member of IEA, China remains far from the 90 days worth of imports rule recommended by the Organization. Moreover, high oil prices have worked against the constitution of reserves. According to Chen Deming, Vice President of NDRC, the objective should be at the most 30 days of reserves by 2010 due to the high cost of oil and the poor economic policy of building reserves for China at the highest price.²⁹

²⁴ Japan's Agency for natural resources and energy, <www.enecho.meti.go.jp>.

²⁵ Y. Song, *Oil and Resources Competition among China, Japan and the US*, 11-06-2006.

²⁶ E. Downs, op. cit.

²⁷ « China accelerates SPR construction », *Oil brief*, 10-01-2007.

²⁸ Ibidem.

²⁹ Available on <www.ft.com>, 22-04-2007

Of course for Japan, being a member of IEA, accumulating energy stockpiles both in Japan and in Asia is part of the energy security equation. There are also projects to accumulate stockpiles for uranium and gas.³⁰ Stockpiling in Asia, particularly with Asean member countries, should be coordinated according to Tokyo. Tokyo has a project to help countries in Asia without stockpiles in terms of management and technological cooperation. Today in Asia, only Japan and Korea have stockpiles under the qualification of IEA; China and India have projects and there are some private stocks in Thailand, Singapore, Indonesia and Taiwan.³¹ For Japan, according to the Oil Reserve Law (1976), all private companies must own 70 days worth of consumption of refined products.³² The government has its own stockpiles consisting of 315 million barrels of crude oil in 10 national stockpiling bases. Japan also a plan to stock LPG and accumulate stocks representing 80 days in 2010, dispatched between the government (30 days) and private companies (50 days).³³ According to Tokyo, in order to improve energy security, the management of these stocks would be more efficient if coordinated with Asean countries and Korea.

However, in spite of all these positive evolutions - a convergence of analyses on energy security and efficiency, the link with environmental issues, the improvement of cooperation and multilateral mechanisms - national solutions and the delusion that security is based on the capability to control oil reserves still constitute a major paradigm of energy security challenges in Asia.

³⁰ *Japan's new national Energy Strategy*, op. cit.

³¹ "Japan Eyes Joint stockpiling with Neighbours", *Yomiuri Shimbun*, 14-04-2006 and T. Hosoe, "Japan's Energy Policy and Energy Security", *Middle East Economic Survey*, n°3, 17-01-2005

³² K. Naoaki, « Outline of Petroleum Stockpiling and Emergency Response in Japan », IEA Beijing seminar, 2002.

³³ *Ibidem*.

China's national solution for energy security

Diversification

For China, one of the first objectives is to diversify its supply sources both in terms of energy primary sources and geographical locations, and to preserve the strong reliance on domestic production based on coal pre-eminence. In spite of environmental preoccupations mostly outside China, coal will remain for a very long time China's core energy source.³⁴

In 2006, China's energy supply by fuel was coal (69,6 %), oil (21,1 %), gas (2,7 %), hydroelectricity (1,9 %) and nuclear (0,8 %). Coal will remain the basis of this energy mix and its share may even increase.³⁵ Nuclear power should rise to 4%, gas to 6%, oil to 27 % and hydroelectricity to 3 % by 2020. Gas production has increased (by 20,6 % in 2005, and 16,9 % in 2006) and gas imports have doubled from 1995 to 2005. Big LNG terminals are being built in Guangdong and the first import from Australia arrived in May 2006.³⁶

Nuclear power will remain marginal for China for even if the objective to produce 60 gigawatts by 2020 is impressive, it represents less than what is produced every year in terms of coal-based electricity.³⁷

The very ambitious objective to attain a share of 10% for renewable energy in 2010 seems to be overly optimistic in spite of China's efforts to win the technical battle for huge solar plants.

However, if oil is far from being the major part of China's energy mix, it plays a vital role for transportation and military forces. According to Chen Deming, domestic supply based on coal can meet China's growing energy demand; however, the increasing dependency on oil and imported oil is evident in the case of transportation.³⁸

³⁴ Z. Guobao, Vice president of NDRC, *China's Energy Policy for the XXIst Century*.

³⁵ Ibidem.

³⁶ E. Downs, op. cit.

³⁷ C. Deming, Vice President of NDRC in <www.ft.com>, 22-04-2007.

³⁸ Declaration de Chen Deming in charge of energy at the NDRC in *South China Morning Post*, 04-05-2007.

In order to fulfill its growing oil demand, China is trying to maximize its own resources, particularly offshore. Chinese companies are investing in exploration in the East and South China Sea in spite (or because of) geopolitical problems, and in the gulf of Bohai. CNPC is building a new "ocean engineering vessel". The building of a deep sea drilling platform for national and international exploration, particularly in Africa, is described as a "major research and development priority".³⁹ On land, China is trying to "stabilize the east and develop the west" with rather disappointing results. As a result, diversification for China also implies going abroad for oil and diversifying its sources of supply in spite of the fact that the security policy is not evident given the very long supply chains (12 000 km to the Strait of Hormuz).

In recent years, oil supply sources have greatly changed in China. In 2005, crude oil imports came from the Persian Gulf (46 %) but also recently from Africa (31 %), from the Asia-Pacific area (8 %), from Russia and NEI (Kazakhstan) (12 %), and very recently from South America (Venezuela) (3 %).⁴⁰ In Africa, China's main partners are Angola (18,2 %), Sudan and the Republic of Congo with new players emerging like Equatorial Guinea, Nigeria, Chad, Gabon, and Cameroon. China is broadly investing in Africa to open new reserves in spite of geopolitical difficulties like in Nigeria, Ethiopia and Sudan. As part of its energy security strategy, China is trying to build a strong network of bilateral relationships with friendly oil-producing countries. In the words of Hu Jintao, China must make use of international markets according to the principle of equality, reciprocity, mutual benefit, and strengthen cooperation with other energy producing countries".⁴¹ Between June 2005 and June 2006, China signed 13 energy agreements with 9 countries representing a total of 12 billion dollars.⁴²

China is conducting a very active diplomacy in the Persian Gulf: in Iran, but also in Saudi Arabia. China's main partners are Saudi Arabia (16,2 %) and Iran (12 %) whose share is increasing. In 2006 an exchange of visits between King Abdullah and President Hu Jintao took place, and oil and gas energy agreements were signed in January 2006. According to these agreements, SA oil exports to China should increase by 39 %. In order to encourage Saudi Arabia's commitment, SA Oil Company was commissioned to build a new Chinese refinery, and Saudi Arabia could play a role in building oil reserves in China.⁴³

This is also the case in Africa with Sudan as an emblematic case, and in South America with talks of a strategic energy alliance with President Chavez of Venezuela

³⁹ *China Daily*, 3-04-2006.

⁴⁰ E. Downs, op. cit.

⁴¹ Jintao Written Declaration at the Saint Petersburg G8 meeting in Y.Song, op. cit.

⁴² Y.i Song, op. cit.

⁴³ Available on <[Hwww.China.org.cn](http://www.China.org.cn)H>, 23-01-2006.

China has also attempted to form alliances in Central Asia and Russia with a different incentive, based on geographical proximity and the possibility to build land routes for oil transportation. Energy cooperation today is an important part of SCO (Shanghai Cooperation Organization), and there are ongoing talks with Russia, maybe not as fruitful as China originally hoped. President Putin very clearly expressed to his Chinese counterpart that Chinese investments in the energy sector in Russia were not welcome.

However, China does not have an exclusive partnership with any of these countries, including Sudan, and is only one of the players in the game played by the oil-producing countries. Saudi Arabia has increased its partnership with China while remaining a major partner of the US and Japan. Angola sells oil both to the US and China. Iran's first partner remains Japan, and Central Asia and Russia are also playing a multipolar energy game with Europe, Japan and China.

In order to improve the security of its energy supply, China, through its own companies and their subsidiaries, has been encouraging equity investments in countries either friendly to China or that have commercial ties with China. With this objective, NOC's investments are supported by China's development aid, diplomacy and bilateral agreements. In Kazakhstan for instance, China bought majority shares (60 %) in Aktobernunai Gas and Unzemunaigaz in order to gain access to oil fields in Kazakhstan in 1997, and in 2005 CNPC bought the Canadian shares of Petrokazakhstan.⁴⁴ In 2006 in Kazakhstan, Chinese acquisitions accounted for 8 out of 12, representing a share control between 60 and 100 percent, South Korea 2 % and Japan only 1 %.

One can argue that the SOE play their own game with the support of the Chinese government's money and it is difficult to estimate the amount of equity oil sold to China. However, in times of crisis, NOC's controlled oil may be used in order to guarantee China's access to oil.⁴⁵ In 2004, 79 % of China's equity oil production was in Sudan, Indonesia and Kazakhstan. Since then, new players have emerged in Angola and Nigeria.

The illusion of security of supply and the safety of Sea Lanes of Communication (SLOC)

For China the security of SLOC regarding oil supply is rather specific. The issue does not concern the risk of terrorist attacks; Chinese analysts tend to speak of the Malacca dilemma in order to express their own preoccupations with the security of sea lanes. According to Chinese strategists, the main threat of disruption comes from the US

⁴⁴ E. Downs, op. cit.

⁴⁵ E. Downs, op. cit.

and its allies, in the Indian Ocean and along the SLOC in South East and East Asia because of a potential war with Taiwan. One of China's priorities is to reduce at least part of China's dependency on SLOC for oil and energy supply and develop land routes and pipelines. For the time being, China's dependency on SLOC for oil is over 90 %.⁴⁶

Inside China, Beijing has an ambitious plan to increase the network of pipelines by 60 % in 2010.⁴⁷ From 2000 to 2005, more pipelines were built in China than between 1949 and 2000. In December 2004, the first West-East pipeline, 4 200 km long, was completed between the Tarim basin in Xinjiang and Shanghai. A second is planned for Guangzhou.

The fact that these pipelines are linked to Central Asia and China represents a strategy to reverse the historical flow of Kazakh and Turkmen oil and gas from the west and in Russia to the east, 70% of Kazakh oil currently flows towards Russia. In December 2005, the first portion of a pipeline connecting Atasu in Kazakhstan to Alashankou at the border in Xinjiang was completed. The Alashankou-Dushanzi refinery branch was finished in 2006. On the other side of China, a project linking the pipeline network towards the Caspian Sea should be completed in 2011.⁴⁸

In the case of Turkmenistan, a gas agreement was signed between President Hu Jintao and the Turkmenbechi Niyazov in April 2006, but this agreement could be renegotiated following Niyazov's death in 2006. In Russia, the fate of the future Siberia East Asian pipeline, which Yukos started negotiating in 1998, is not completely sealed, and the pipeline is being built only as far as Skovorodino, for now, with a possible branch to Daqing, but it remains problematic.

A new project to build a China-Myanmar pipeline, involving Sinopec, between Sittwe's deep water port and Kunming (Yunnan), started in 2007 and a gas pipeline has also been planned for a total cost of 1,4 billion dollars; a development aid package of 83 million dollars was allocated to help Myanmar develop its own oil fields. In the case of all of these projects, and particularly in the case of Burma, strategic motives seem to have won over a purely economic calculation and the advice of NDRC.⁴⁹

⁴⁶ E. Downs, op. cit.

⁴⁷ *China Daily*, 03-04-2007.

⁴⁸ L. Simonnet, op. cit.

⁴⁹ *Xinhua*, 22-04-2007. In April 2004, according to an Indian newspaper, China's CNOOC oil and gas exploration interests in Burma were attacked by anti-Chinese rebels in Arakan state along the Gulf of Bengal shores. <www.mizzima.com>, 02-05-2007. The same happened in Ethiopia in Ogaden during the same period.

Japan's national answer to energy security challenges

Japan's national energy policy focuses much more than China on the building of effective multilateral mechanisms and on the necessity to continue improving the reduction of demand and energy efficiency. However, partly as a way to respond to China's security discourse, Japan's energy security discourse has gradually changed in the last few years. Concerning oil, one can find in Japan, albeit not at the same level as in China, the wish or the temptation to control access and secure supplies through direct production.

Diversification of energy supply

For Japan, the diversification of primary sources of energy is an important objective, as it is for China, although Japan's strategy is more efficient. According to the METI report, by 2030, the part of oil in the energy mix should be reduced from 50% today to 40 % of the total. The oil share was 77,4 % in 1973 and 55,2 % in 1996. In Japan's future energy mix, nuclear power should come first as one of the best ways to guarantee Japan's energy independence and respect environmental constraints. According to the National Strategy Report, Japan should build four new reactors by 2010, and 6 by 2030, down from the initial plan to build 12 new reactors by 2010. The plan, to complement the 55 reactors in activity today still remains ambitious. Nuclear energy represented 0,6 % of the total energy mix in 1973, up to 12,8 % in 1996, and 28 % in 2005.

Investments and development slowed down during the 90s both for environmental reasons, public opinion opposition and the low price of oil. However, the Kyoto protocol, global warming and the increase of oil prices, have influenced public opinion regarding nuclear energy. In spite of numerous technical incidents and an initial strong opposition from public opinion, Japan intends to develop nuclear energy in all forms, from a light water reactor, a pressurized water reactor, to a fast breeder reactor in order to reduce the dependency on uranium. Japan' plans to build a new advanced prototype fast breeder reactor before 2025 and use a commercial breeder by 2050. In spite

of its failure, the Monju reactor will also reopen.⁵⁰ In terms of international cooperation, an agreement on joint research with the United States concerning clean coal technology and nuclear energy was signed in January 2007.

Diversification for Japan also means an increase of gas imports, 75 % of it coming from the Asia Pacific (Indonesia, Malaysia and Australia), while 90 % of Japanese oil comes from the Middle East, which is considered to be a more unstable region. The proportion of national gas in Japan's energy mix should reach 15 % in 2010.

Renewable energy is also an important element of this diversification strategy. Solar photovoltaic production is already important in Japan for individual housing. The production was 330 megawatts in 2000, and reached 1422 megawatts in 2005. Japan established a new energy technology incubator to increase research in this field, with funding reaching 250 million dollars annually to cooperate with private industry. The objective is to increase the proportion of clean energy in Japan's energy mix: solar photovoltaic energy, wind power, hybrid vehicles, up to 3 % in 2010.⁵¹

An increase of the proportion of oil produced thanks to Japanese upstream investments

This is not for Japan a new temptation. After the oil shock of the 70s, Japan's strategy, has been to try to increase the volume of oil imports produced by Japanese companies. The objective at the end of the 60s was to encourage the consumption of oil produced by Japanese companies to reach 30 %. This figure was never attained. The Japan National Oil Corporation, created in 1967 in order to achieve this objective through investments in oil producing countries, was dismantled in March 2005 by Prime Minister Koizumi due to its lack of economic efficiency. The proportion of oil produced by Japanese companies consumed in Japan is currently under 15 %.⁵² However, in its last report (2006), the official target fixed by the Meti for "hinomaru oil", produced and imported by Japanese companies, is 40 % for 2030, a very high number that may be difficult to reach.⁵³ The incentive apparently is less the control of prices, as after the 70s oils shock, than the wish to control a share of oil production in a more competitive environment, with China emerging as a worrisome challenger. The risk of a fight between Japan and China to procure oil in other countries cannot be excluded. The economic motive for this rivalry has nothing to do with a broader power game of influence in this case.

⁵⁰ « Japan's PLD Brings Forward Nuke Reactor Plan », *Dow Jones International News*, 23-05-2006.

⁵¹ P. C. Evans, op. cit.

⁵² Meti report, May 2006.

⁵³ *Hinomaru* (the round red sun) is the name given to the Japanese flag.

The improvement of bilateral relations and the commitment of oil producing countries

Japan is also trying to diversify its supply sources in geographical terms in order to guarantee a “stable and sufficient supply of energy”.⁵⁴ In spite of the fact that Japan’s dependency on Middle Eastern oil has been reduced from 90,2% in 2005 to 88, 6% of its oil supplies in 2006, it remains very high. In the Middle East, the first purveyor is Saudi Arabia representing 30%, the United Arab Emirates 25,4%, Iran.11,5 %, Qatar 10,2%, and Kuwait 7 %. Imports from Iraq have increased by 76,2 % in 2006, but the percentage is still very low, a little under 1% of Japan’s oil imports.⁵⁵ However, the Iraqi oil ministry visited Tokyo in November 2006 and Japan pledged an aid program of 170 million dollars that could help Tokyo get a better share of Iraq’s untapped oil reserves.

Japan has been trying to diversify its sources of oil supply closer to home. However, whether in Russia, in Central Asia, in Africa or even in the Middle East, Tokyo faces an aggressive Chinese competition which raises the feeling of vulnerability and uncertainty concerning energy security in Japan. Tokyo views energy rivalry with China on foreign markets as an expression of the difficult relations between the two countries. As a result, concerning energy supply, Japan positions itself up to a point in a framework of balance of power, competing with China for access to markets, regardless of the economic rationale, through a more active energy diplomacy.

Japan has been fighting over the oil pipeline with Russia since 2003 in spite of the possible lack of rationality in economic terms. Recently a hard liner influential adviser of Prime Minister Koizumi and Abe, Okazaki Hisahiko, director of the Okazaki Institute, asked for Japan to make the right choice: to consider the strategic situation in Asia and prioritize issues concerning China which represent threats and remaining historical issues with Russia concerning the Kuril Islands in order to build an alliance with Russia to check the emergence of China. Tokyo started to buy oil from the Sakhalin 1 project in October 2006 and Russian oil share in Japan’s oil import rose by 3,5 % in 2006 still only representing a low percentage, less than 0,7 %.⁵⁶ However, Japan’s uneasiness concerning Russia’s energy strategy was aggravated by Russia’s decision to suspend the environmental permit given to the Sakhalin 2 project led by Royal Dutch Shell jointly with Mitsui and Mitsubishi.

Japan is also trying to improve its relations with central Asian republics. Launched in 2004, as a direct challenge to the SCO sup-

⁵⁴ T. Taniguchi, op. cit.

⁵⁵ Natural Resources and Energy Agency, METI, in Hisane Masaki, « Oil Hungry Japan Looks to other Sources », <[Hwww.atimes.com](http://www.atimes.com)>, 21-02-2007.

⁵⁶ The Sakhalin 1 project is led by Exxon Mobil with Japan’s government Sakhalin oil and gas development Company and Rosneft. H. Masaki, “Oil Hungry Japan looks to other Sources”, op. cit.

ported by China, the Central Asia plus Japan forum, met in June 2006 with Afghanistan as an observer. In August 2006, Prime Minister Koizumi paid an important visit to Central Asia just before he left office. Japan started to import oil from Azerbaijan through the Baku-Tbilissi-Ceyhan pipeline and by boat.⁵⁷ Whereas China is trying to encourage the building of a pipeline network reversing central Asian oil flow from Russia and Europe to China and Asia, Japan on the contrary is financing the pipeline network from Central Asia to Europe. JBIC participated by contributing 580 million dollars to the completion of the BTC pipeline.⁵⁸

Concerning uranium, Japan signed a memorandum to develop uranium mines with Japanese companies in Uzbekistan. Another project with Kazatom in Kazakhstan was launched in 2006. To foster cooperation for uranium and energy projects, the minister of METI Atari Akira also paid an important visit to Kazakhstan and Uzbekistan in March 2007, accompanied by more than 150 people from private companies. Japan reached 24 agreements with Kazakhstan concerning uranium mine development and energy, and particularly nuclear energy cooperation. Japan currently imports only 1 % of its uranium from Kazakhstan, 33 % from Australia and 27 % from Canada but the share from Kazakhstan should increase to 40 %.⁵⁹

Japan has also diversified its oil supply by importing oil from Africa. In 2006, Japanese oil imports from Africa increased by 30,5 %, mostly from Angola and Sudan where China's role and influence is particularly important. In spite of this increase, the total share of African oil in Japan's total oil imports is still very low, representing 4,4 % in 2006.⁶⁰

In the Middle East, Japan is also trying to improve relations with Iran and Saudi Arabia where competition with China has been growing. In the year 2000, Japan lost one of its oldest oil concessions in Saudi Arabia, the most important source of oil supply controlled by a Japanese company. At the time, following the market economy at a time when the price of oil was low and the role of China as a buyer less important, Tokyo refused to accede to Saudi Arabia's demand for renewing the concession. Today, the rules have changed in Tokyo due to a different price and strategic situation, and China's increasing influence in Saudi Arabia. Following China's strategy, Tokyo has aimed to give Saudi Arabia a direct interest in the Japanese oil industry. In 2004 and 2005 Saudi Aramco bought a total share of almost 15 % in Showa Shell Sekiu. This share could be raised up to 25 %.⁶¹

Japan has also been trying to globally improve its business ties with Saudi Arabia and other Gulf cooperation council countries.

⁵⁷ H. Masaki, "Oil Hungry Japan looks to other Sources", op. cit..

⁵⁸ M. Tatsuo, op. cit.

⁵⁹ M. Hisane, *Japan Focus*, op. cit.

⁶⁰ Ibidem.

⁶¹ T. Hosoe, op. cit.

At the end of April, Prime Minister Abe visited the region, after the United States, with stop-overs in Saudi Arabia, United Arab Emirates, Kuwait, Qatar and Egypt with a delegation of over 180 businessmen. Talks started in September 2006 for the signature of a free trade agreement between GCC countries and Japan.⁶² For Japan, one of the major objectives includes a clause mentioning the stability of oil supply for Japan. GCC countries also began FTA talks with China and soon will negotiate with India as well, demonstrating the importance of the Asian market as a whole for oil and gas-producing countries and their ability to exploit rivalries between Asian countries.⁶³

Prime Minister Abe's visit to the Middle East also demonstrates Japan's willingness to play a more important political role in the region. Apart from Saudi Arabia, it was the first visit by a Japanese prime minister in the region for the past 29 years. Faced with new challenges coming from other important buyers in Asia, starting with China and India, Japan needs to raise both its economic and political standing and be viewed as representing an economic opportunity as important as China. Japan is striving to improve its image and play a role in contributing to the economic transformation of oil-producing countries through technology transfer and investments.

At the political level, Japan is renewing its traditionally pro-Arab foreign policy, one of Japan's specificities since the oil shocks of the 70s. During a meeting in March 2006, Tokyo launched the initiative to establish a corridor for peace and prosperity, meeting with representatives from Japan, Israel, Jordan and the Palestinian authority. Tokyo is already one of the main purveyors of aid to the Palestinian authority and there is a new project to build an agro-industrial park for Palestinian workers on the West Bank. During his tour of the Middle East in April 2007, Prime Minister Abe also discussed the Middle East peace process with President Mubarak in Egypt.⁶⁴

In Iran, the position of Japan is difficult, first because of the increasing role played by China but also because of the pressure put on Japan by the United States. In 2006, Japan's oil imports from Iran decreased by 16,9 % after an 8,7 % reduction in 2005.⁶⁵ Japan still is Iran's number one oil partner ranking before China; however, for political as much as for economic reasons, Iran's President declared in 2006 that he hoped that China would soon become Iran's number one partner. In 2006, Japan's Inpex also lost its 75 % share in Azadegan oil field.

⁶² The Gulf Cooperation Council Countries are Saudi Arabia, United Arab Emirates, Kuwait, Qatar, Oman and Bahrain. Japan imports 75 % of its oil from the GCC countries.

⁶³ H. Masaki, *Japan Focus*, 06-05-2007.

⁶⁴ Ibidem.

⁶⁵ H. masaki, "Oil Hungry Japan looks to other Sources", op. cit.

Different conceptions of security: consequences for the future equilibrium in Asia

Japan and China share the same feeling of vulnerability, partly due to their dependency on long supply chains crossing through potentially unstable and vulnerable choke points in the straight of Malacca or the straight of Ormuz. Although both countries are sensitive to destabilization risks in the Middle East; their situations are very different. China, due to its own objectives related to its political system, is actually much more isolated than Japan. Even if analysts talk about new risks linked to piracy and terrorism, China's objective is to keep its freedom of decision and action in the eventuality of a war with Taiwan. In other terms, Beijing wants to be free to choose its own strategic priorities, without any outside interference, including the possibility to wage war with Taiwan.

The United States-based guarantee of free right of passage along major sea lanes applies to China, as long as common interests prevail.⁶⁶ Japan also feels vulnerable because of its dependency on outside energy supplies. However, Japan's uncertainties are of a more global nature, and could be solved, at least partially, in a multilateral way. As a developed democratic country, Japan shares similar preoccupations and objectives as its OECD partners. Therefore, the issue of safety and the solutions envisioned for Japan, are not the same as for the PRC. The potential for future conflicts or misunderstandings lies in these differences. For constitutional reasons, Japan cannot play a direct significant military role in securing the sea lanes; however, Japan has no qualms about letting the United States fulfill that role. Indeed, Japan is ready to play a part in the US' new strategic position in Asia, focused on security in South East Asia in the framework of the Nippo-American alliance. Japan is also part of the PSI, of the regional maritime security initiative in Asia and of the containers security initiative. Recently, Japan signed a security agreement with Australia, another ally of the US in the Pacific. Since 2002, when the war on terror was launched by Washington, the role of Japan's navy has increased in the Indian Ocean: two Japanese vessels patrol the sea, on non combatant missions.

⁶⁶ Admiral Yang Yi, Director of Strategic Studies Department, National Defence University.

The role of the military in China

China does not participate in any of these US-led arrangements and on the contrary considers these arrangements to be part of a tacit containment strategy put in place by the US and its allies, mostly with Japan, against China's interest. China denounced the Japan-US defence guidelines as being a threat to the security of sea lanes in East Asia. China also considers that Japan's transportation of radioactive waste from Europe represents a potential threat to the security of sea lanes.⁶⁷

According to Chinese strategists, free access to energy represents one of China's core national interests, as defined in the PLA navy strategic mission which could be defended by using force.⁶⁸ China today is not capable of playing a major role in securing its own sea lanes, and Chinese strategists fear an embargo in the case of a war with Taiwan. Increasing China's uneasiness regarding the South China Sea, military preparations and the building of an airstrip on Itu Aba, one of the Spratley Islands controlled by Taiwan, could help to disrupt China's SLOC with the help of the United States.⁶⁹

China's military budget has grown by double digit figures since 1990. This growth has accelerated since the end of the 90s, up to 18, 6% in March 2007. China has the ambition, to develop its military capacity, including "blue water" naval projection forces; its objective being increasingly motivated by the will to secure sea lanes and oil supply. In October 2006, an incident involving a Chinese submarine and an American aircraft carrier, far from the Chinese coastal waters, was a testimony to China's new ambition to become a naval power. China is building more up-to-date submarines, both conventional and nuclear powered, to be able to counter a possible US military intervention in the case of a war with Taiwan, and to improve its ability to control and protect its own sea lanes.⁷⁰

This ambition concerns the water close to the Chinese coast. China is elaborating its own 1000 miles protection zone like Japan did at the beginning of the 80s. The routes between the Chinese coast and Australia, an important purveyor of gas and iron ore to China, and an ally of Japan and the US, are also important. Chinese strategists also focus with a long term perspective on the Strait zone in South East Asia as well as on the Indian Ocean. However, in spite of significant efforts to build more up-to-date submarine forces and a surface combatant fleet, which seems to be one of China's priorities among its military modernization objectives, China's real

⁶⁷ Ji Guoxing, « SLOC Security in the Asia-pacific », *Occasional Paper*, Asia Pacific center for security Studies, Honolulu, Feb. 2000.

⁶⁸ Admiral Shi Yunsheng in Ji Guoxing op.cit. This mission is to resist foreign aggression from the sea, defend territorial sovereignty, and safeguard the unity of the motherland, as well as maritime rights and interests.

⁶⁹ *BBC Monitoring, Asia Pacific*, 11-01-2006.

⁷⁰ *South China Morning Post*, 04-05-2007.

naval strength, particularly in times of war, is still weak and cannot yet compare with the US' or even Japan's naval strength. However, in spite of this weakness, the constant speculation in Chinese military circles on the necessity for China to secure sea lanes contributes to increasing tension in Asia, particularly in Japan. In this context, co-operation between the People's Republic of China and Japan, or even the US, to implement a multilateral system to secure sea lanes is not a viable option.⁷¹

Oil reserves for national use

This tough security view on energy security issues in China can also be found in China's policy regarding strategic oil reserves. Whereas Japan views the reserves as a protection against potential disruptions from the Middle East, China's views on oil reserves, according to the draft of the national petroleum reserve management ordinance, is first to be able to counter the risk of disruption due to war, the need to ensure strong military forces in the case of war or natural disasters, and only secondly to answer severe supply shortages in the provinces or drastic fluctuations of the domestic oil price. With this objective, SPR can only be managed at the national level, to protect China's national interests. Significantly, according to the draft ordinance, the next four reserves bases should be built far inland before 2012, following the Maoist theory of the third front line for industries moved inland in the 70s in order to protect production from war with the US or with the Soviet Union. At least two of these reserves bases should be underground.⁷²

The same confrontational and balance of power view on energy security can be found in China's interest in building "coalitions, of buyers", with Japan for instance, against Russia or, on the contrary with Iran, Venezuela or Russia as a kind of new anti US oil front that could be also used against Japan.⁷³ However, the limits of this strategy lie in the obvious willingness of oil-producing countries, including Saudi Arabia, to keep a safety margin between different players.

⁷¹ Captain Yuan Ying, Research fellow, Academy of Military Science.

⁷² « China Accelerates SPR Construction », *Oil Brief*, 10-01-2007.

⁷³ K. G. Nealer, op. cit.

Conclusion

In Asia, we remain very far from the implementation of a multilateral mechanism to regulate energy supplies. Energy issues are part of a broader power rivalry, particularly between China and Japan, but not only, and Japan and China's views on energy security remain very different, in spite of the development of a certain level of consensus on issues like the environment. A growing uneasiness in Japan concerning energy security issues, linked to the growing assertiveness of China's energy strategy, and the lack of Beijing's transparency concerning its objectives, could lead to growing tensions in Asia. Tensions already exist in the East China Sea, where China started producing gas at the Chunxiao's gas field, in August 2006, in spite of Japan's opposition. Both countries are patrolling the region and, in times of renewed tension, this could lead to a naval incident and escalation, particularly if China's leadership is facing difficulties at home.

Although the risk of war is not negligible, energy issues are not the principal cause of that risk, and they are only a manifestation of deeper divergences, including ideological divergences, between Tokyo and Beijing. As long as these conflicting views exist, the construction of a regional mechanism for oil supply regulation will be difficult in spite of progress.