China, Japan and Russia: Towards a New Energy Security Nexus

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1. Defining the Problem

Over the past decade, logistical and bureaucratic barriers between the economies of Northeast Asia have been lowered. New air routes have been opened and the time required for issuing visas reduced. Face-to-face interactions in business and other domains have improved and intellectual and cultural contacts have intensified. An overseas business trip now can be made in three to four days. In recent policy formulations, trade and investment facilitation have helped to take the sting out of the distressing experiences of the past. The examples are numerous, including the ASEAN+3 process, economic engagement between China and the ROK, Japan's deepening trade and investment involvement in China, and the new links between the Koreas. Russia, too, is expanding its ties with its eastern neighbors, including oil shipments and LNG contracts from the Sakhalin projects.

Despite the swift changes that have been seen, the long-term policy future for Northeast Asia is not predetermined and conflict cannot be ruled out. Among the concerns are (1) the growing power of China; (2) China's strained political and security policy dialogues with Japan; (3) the DPRK's nuclear program; and (4) a number of territorial disputes. Yet another source of tension that has recently surfaced is the relationship between China, Japan and Russia concerning new sources of oil supply and pipeline routes.

Energy has much to do with issues stemming from traditional definitions of national security. This paper, however, argues that today, energy mega-projects are presenting us with an opportunity to promote interdependence among Japan, China, Russia and beyond. These three countries would share common benefits if they were to establish a cooperative energy security regime in the subregion.

In the array of possible measures and policies aimed at achieving greater energy security, trilateral cooperation deserves special attention. The subregion of Northeast Asia is part of the problem, due to the growing demand for oil on the part of China, which alone could require net imports of 10 million barrels per day (Mbd) by 2030, approaching the level of US imports of oil and oil products in 2000. The subregion is also gradually becoming part of the solution, thanks to the progress of the Sakhalin projects and other plans that involve Russia. Building up additional supplies could help to balance the markets. The implementation of these and other mega-projects requires long-term commitments on the part of the countries involved in such projects and could potentially benefit in practical terms from policy support on the part of Japan and the US.

Moreover, Eastern Russia serves as an example of the geopolitical developments that have improved access to resources not only for the economies of Northeast Asia, including Japan, but also for the US. In the long run, Russia, along with the countries of the Middle East, will contribute to the stability of international energy markets, balancing demand with supply.²

Careful policy stewardship will be needed, however, to ensure that such a regime would not be constrained by hot issues and other hurdles, including territorial disputes for instance, which would precipitate paranoia on all sides in the case of a dispute.³ We should try instead to turn to the *prima facie* "Great Game" of energy trade in Northeast Asia, paying attention to the positive tendencies for mutual interdependence, which may facilitate further regional political and economic cooperation.

In this paper, the national circumstances of and strategic changes in China, Japan and Russia are illustrated. The paper attempts to offer an answer to a key question involved in thinking about energy trade in Northeast Asia: "Does the emerging interest on the part of China and Japan in Russian energy entail problems for regional stability, or create an opportunity for greater stability?"

In view of this question, we will first of all argue for an alternative conceptualization of the links between energy and security in the subregion. Secondly, we will provide a brief overview of the growing awareness within China and Japan of their dependence on offshore sources of energy, principally oil. Thirdly, we will suggest policy measures upon which attention could be refocused, helping

¹ The authors dare to use the word "beyond" for two reasons. Firstly, it is posited that trilateral cooperation could be more smoothly pursued by positively sanctioning the participation of the US in Northeast Asia. Secondly, it seems that cooperation in the energy field could be better promoted if it coincided with the prospects for environmental cooperation.

² In about ten years from now, Russia's oil exports to eastern markets could reach 2.5 Mbd, provided that policy responses from importers support these plans. Yet another point highly relevant to Northeast Asia is natural gas, which is an attractive fuel both in terms of uncertainties in the oil market and environmental constraints.

³ An exemplary type of regime is defined by Stephen Krasner as "principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given issue-area." "Structural Causes and Regime Consequences: Regimes as an Intervening Variable", *International Organization*, 36 (3): 185-205.

decision-makers in each country ultimately to find more feasible ways to protect national energy security interests. Finally, we will review some basic steps taken by Russia in reaching out to energy markets in Northeast Asia.

2. A New Perspective

China's growing dependence on offshore sources of energy, particularly oil, is already a decade-old phenomenon. In 1993, China became a net oil importer. Due to the rapid growth of its economy, energy demand has been accelerating. In 2003, the volume of China's imports of crude oil and products exceeded 100 million tons (Mt), an increase of more than 30% on the previous year. In 2004, China's imports of crude oil alone surpassed 100 Mt. Some predict that China's import dependency for crude oil will increase from 30% in 2000 to as much as 62% in 2020.

In November 2002, speaking at the Chinese Communist Party's Sixteenth Plenum, President Jiang Zemin outlined China's development goal of quadrupling GDP in 2020 based on 2000 levels. Accelerating economic development inevitably implies a higher demand for energy. The "Medium- and Long-Term Energy Development Program From 2004 to 2020", adopted by China's State Council at the end of June 2004, reaffirms the high importance of energy security and the need to diversify sources of energy supply and build a system of national oil stockpiles.⁵

2.1 China's energy vulnerability

China's imports are growing fast, making it the second largest importer globally and the largest importer in Asia. The average annual growth rate of primary energy demand during 2000-2030 will be 2.7%, surpassing the global average, which is estimated at 1.7%.6 The average annual growth rate of oil demand in China in the same period will be 3.0%, or almost twice as fast as the expansion in world oil demand. The rapidly growing number of motor vehicles, including privately owned cars, makes China the secondlargest importer of oil after the US. Some are of the view that strong demand for oil on the part of China was among the reasons behind higher oil prices. From 2000, China accounted for two-fifths of total growth in world oil demand and in 2003 its oil consumption exceeded that of Japan. China also leads in oil product demand and imports in Asia. Demand for oil is expected to reach 12 million barrels per day (Mbd) in 2030, exceeding by 2.5 times the level of 2000. China would then account for 10% of the world's total estimated demand, compared with 6.5% in 2000. With regard to natural gas, the average annual growth rate in China over these three decades will be 5.5%, expanding more than twice as fast as the world average.

The 2003-2004, however, saw a number of developments that were powerful reminders of the country's economic vulnerability when it comes to oil

supplies from overseas sources. In January-February 2003, China's imports of crude oil rose by 78% on the same period of 2002. Payments for oil imports accounted for the first month-to-month trade deficit in six years. In the absence of strategic oil stockpiling capacity, the pending US invasion of Iraq led Chinese oil companies into panic buying oil on the world market. When crude oil prices fell after the invasion began, the external dimension of China's energy security attracted much discussion among economic policymakers and the public at large.

It was little surprise that energy security became a prominent issue for debate among the deputies of the National People's Congress and the Chinese People's Political Consultation Congress, both of which were convened in March 2003. Summaries of views aired in the two congresses focused on reducing the level of dependency on offshore sources of oil. Policy proposals included the establishment of a national strategic oil stockpiling system, further development of the coal industry, diversification through building up the country's nuclear power capacity, promotion of hydropower generation and clean energy, and the relaxation of government policies for the purpose of enlisting private capital to finance the development of oil fields, both on land and in China's territorial waters. Obviously, such proposals were informed by a desire to reduce China's dependence on external sources of energy.

Energy security has also become a topic for discussion in the public domain. This was in part due to relaxed government controls on the media reporting of international affairs, beginning with coverage of the war in Iraq. More importantly, the new national leadership champions the notion of 'governing for the people'. Energy became one of those issues upon which concerns about the wellbeing of the average Chinese and the energy security of the nation as a whole were focused. The intensity of media coverage about energy-related developments – both domestic and overseas – became unprecedented. As is true in many other societies, such discussions are conducive to society-based initiatives for energy conservation but at the same time can complicate effective implementation of well-intended national policies.

However, while energy independence is a desirable goal, to implement policies so inspired would imply massive capital injections. These would require a recentralization of energy policy decision-making by way of re-establishing a ministerial level bureaucracy. In 1998, the government abolished the Ministry of Energy and put some of its functions under the control of the Ministry of Land and Natural Resources. The idea was to let the market play a larger role in meeting China's energy needs. The new leadership chose to maintain the status quo by setting up a small energy bureau under the restructured State Development and Reform Commission. A State Electricity

⁴ Liu Xinhua, TaiHan, "Zhongguo de shiyou 'anquan ji gi zhanlue xuanze", Xiandai guoji guanxi no.12, 2002.

⁵ Renmin ribao, I July 2004. The State Development and Reform Commission (SDRC) has estimated that, by 2020, gas consumption in China could reach 200 billion cubic meters (Bcm), two-thirds of which would be consumed by power plants and urban users. It has also been estimated that China's gas imports could reach 80 Bcm by 2020 via two main channels: LNG shipments to coastal areas and supplies via pipelines from Russia, Uzbekistan and Kazakhstan.

⁶ World Energy Outlook 2002 (Paris: International Energy Agency, 2004).

Regulatory Commission was also created to oversee the nation's electricity development policies, but its record of success appears limited. In addition, the de facto fiscal federalism does not augur well for policy coordination countrywide.

2.2 "Competition" for an oil pipeline

Against this background, there were high hopes for the beginning of construction work on the Angarsk-Daqing oil pipeline. The entry of Japan from January 2003 as a party interested in the same sources of oil and a pipeline route to the Pacific coast was perceived as an untimely change of dynamics, at best. It would take a separate research project to provide a full account of the range of Chinese views about the pipeline project and issues originating from the ups and downs of its progression. A few recurrent themes in Chinese reactions to the protracted period of perceived indecision on the part of the Russian government deserve attention.

First of all, the problem was the failure to start construction of the pipeline, which, according to an agreement signed in the presence of the prime ministers in 2001, was designed to transport 20 Mt of crude oil annually beginning in 2005, rising to up to 30 Mt later on for at least 25 years. This was largely the result of the changing dynamics of government-business relationships within Russia. With hindsight, the China National Petroleum Corporation (CNPC) probably overlooked the complexities of domestic politics in the post-Yeltsin era by choosing as its partner the privately owned Yukos rather than one of the state-controlled trio of Gazprom, Rosneft and Transneft.

This seems to have been particularly true when the idea of a pipeline to Nakhodka emerged, promoted by Transneft. At that time, CNPC still pressed on with its plan, presenting the agreement with Yukos as a virtual certainty even when President Hu Jintao visited Russia in May 2003. In light of a number of contributing factors, including the fact that Gazprom had both experience and a share in CNPC's West-East gas pipeline project, it might have been more politically comfortable for Russia had CNPC opted to deal with Gazprom and Rosneft.

Secondly, in January 2003, Japan formally entered the equation, beginning with a visit by the Japanese prime minister to Moscow. In Beijing, this was perceived in the context of continuing difficulties in political ties with Tokyo and therefore further complicated understanding of the geo-strategic implications of the project. Some experts challenged the Russian government to live up to its prior commitments as a necessary manifestation of the rhetoric of 'strategic partnership' that has been so characteristic of bilateral relations in the post-Cold War era. Yet the weight of support on the part of Japan, which was willing to provide funding for the construction of the pipeline, was an undeniable advantage. Meanwhile, analysts felt that it would be both desirable and feasible to see between 20% and 30% of imported oil coming from Russian sources; however, now that the Pacific coast has become a viable option, CNPC will have to work harder to convince both Russia and Japan that its participation in the project is in their interests as well.

2.3 An alternative conceptualization

On the other hand, there is no cause-and-effect relationship between political ties in Sino-Japanese relations and Japan's pursuit of a Russian pipeline. After all, like China, Japan wants to diversify the sources of its energy supply. Moreover, energy featured as a key commodity in Chinese exports to Japan until the mid-1980s. Since then, Japan has become a key supplier of oil products (aviation fuel, for example) to China. In other words, there continues to be mutual dependence in terms of energy needs. The challenge now facing both governments is to apply wisdom and utilize the competitive setting as an opportunity for trilateral cooperation. What is unfortunate, however, is the current atmosphere in Sino-Japanese diplomacy that has made it difficult - if not impossible - to place the competing interests in the context of developing bilateral ties.

Realistic logic in international relations demonstrates that the competition between China and Japan for Russian oil is a zero-sum game. Moreover, the security postures in the Northeast Asian region remain virtually unchanged since the Cold War era: bilateral alliances and agreements with the US are still important. In this context, China's success in diversifying its sources of oil supply means a strategic gain on several grounds. The Daqing pipeline would indeed serve as a boost to strategic ties with Russia, in addition to aiding the development of China's northeastern provinces, a rustbelt industrial region that has fallen behind the coastal areas. China's gain would then mean a loss for Japan, a country that is struggling to regain the kind of regional prominence that it enjoyed until the burst of the bubble economy. It is therefore not surprising that the Japanese support for a pipeline to the Pacific coast appears strategic, as it serves third destinations, including the US, the ROK and Taiwan. However, such logic fails to pay adequate attention to a number of important issues associated with the search for reduced dependence on oil from the Middle East.

Firstly, China's securing of oil supplies through a pipeline would be conducive to avoiding the same kind of panic buying of oil as was seen in early 2003. This works against the interests of all oil-importing countries, as it pushes up oil prices for all. It is still in the interests of all oil-importing countries, Japan included, for China to have a high degree of confidence in its ability to secure an uninterrupted supply of oil from overseas sources.⁷

Secondly, the economic damage that could be caused by shortages of energy supply to China could be more widespread than expected. There is scope for perceiving economic growth in China that is free from major oil supply interruptions to be in the interests of all China's economic partners.

⁷ Theoretically, China can also avoid panic buying through building strategic oil reserves. The country has just begun to take concrete steps towards constructing such a stockpiling system.

Thirdly, there has been a quiet change in China's handling of military security in the Northeast Asian subregion. It has shifted towards enlisting international collaboration in order to put an end to the DPRK's nuclear weapons program. Although the parties to the international framework for dealing with the DPRK may have differences as to the process and eventual goal of engaging the DPRK, China has demonstrated its willingness to cooperate in a multilateral setting.

Furthermore, the Sakhalin projects may become a significant development in terms of providing a greater range of alternatives for natural gas supply to both Japan and China. Therefore, an alternative conceptualization of the China-Japan competition for sources of energy requires de-emphasizing the geo-strategic visualization of the pipeline route. Instead, we should begin to ask ourselves:

- What do China, Japan, and Russia each stand to gain from the joint development of oil and gas in Siberia and the Far Eastern region?
- How can China and Japan contribute to fostering overall economic development in those Russian regions that could serve as long-term alternatives in meeting the energy security needs of both countries?

Energy diplomacy has become a central theme in China's pursuit of its overall foreign policy agenda. At the 2004 Conference of the Boao Forum for Asia, Chinese President Hu Jintao outlined China's views regarding international economic cooperation:

It is China's sincere wish to cultivate with its fellow Asian countries an overall and close partnership geared to Asian rejuvenation, a partnership that features equality and mutual trust politically, mutual benefit and winwin [approach] economically, exchange and emulation culturally, and dialogue and cooperation on the security front.... China will work actively to promote the institutional building of all kinds of economic cooperation organizations with a view to consolidating resources, prioritizing the key areas and conducting performance-oriented cooperation.⁹

On June 22, 2004, addressing the opening ceremony of the Asia Cooperation Dialogue (ACD) Third Foreign Ministers' Meeting ¹⁰ in Qingdao, Chinese Premier Wen Jiabao stated that, "We stand ready to conduct energy dialogue and to cooperate with other countries in Asia and the world at large on the basis of equality and mutual benefits." Twenty-two participating countries – both oil producers and consumers – approved the "Qingdao"

Initiative" on energy cooperation, pledging to stockpile strategic energy reserves and develop a regional energy transportation network.

On the other hand, the Japanese government has identified Russia as an "important partner in view of supply source diversification" and referred to the Sakhalin oil and gas projects and the Pacific pipeline as a "reinforcement" of the diplomatic and economic relationship. 11 Again in 2004, the government of Japan came close to the central premise of this paper, stating that:

"Geographical proximity obviously matters significantly in supply-demand relations and trading of energy resources. It is also quite natural that a nation would try to cooperate with neighboring nations facing a similar energy situation. In my view, European integration in the form of the European Union is a case in point. I understand that the EU-Russian Energy Partnership and the EU-Mediterranean Energy Partnership are part of the process of energy cooperation between the EU and the surrounding regions." 12

Moreover, in late 2002, the Ministry of Economy, Trade and Industry announced plans for significantly raising the share of natural gas in the primary energy supply towards 2020, in line with the average for OECD countries, which also indicated the possibility of constructing a gas pipeline between Sakhalin and Honshu. ¹³ On April 12, 2004, METI presented a concept for an "Asian Energy Partnership" that should serve as a major pillar of Japan's international energy strategy up to 2030.

3. An Emerging Policy Agenda

Securing a sovereign state's access to energy resources is a very sensitive issue that could ignite patriotism to an unnecessary degree. However, given that the degree of economic interconnectedness among Japan, China and the ROK is deepening rapidly, we need to avoid the causes of distrust through dialogue. As energy-importing countries, Japan, China and the ROK already discuss energy security issues within the ASEAN+3 framework.

3.1 A multilateral approach?

The creation of a similar regime and institution could be relevant in the context of Northeast Asia. Dependence on the Middle East as a source of oil supply on the part of these three biggest importers of energy resources is at a very high level. Moreover, Japan, China and the ROK still do not yet rely on competitive oil pricing, similar to

⁸ See the Agency for Natural Resources and Energy, *Energy and Resources Today 4: Natural Gas* available at: http://www.enecho.meti.go.jp/english/energy/lng/examination.html

⁹ Speech by President Hu Jintao of China at the Opening Ceremony of the Boao Forum for Asia 2004 Annual Conference, Boao, 24 April 2004.

¹⁰ The ACD Foreign Ministers' Meeting is an informal, non-institutionalized forum for dialogue and consultation, established in 2002.

¹¹ Global Energy Strategy Towards 2030 [Focused on the Relationships with Asian Consuming Countries], April 2004, Agency for Natural Resources and Energy, p. 15.

¹² Shoichi Nakagawa, Minister of Economy, Trade and Industry, "Achievements of the Osaka IEF and the International Energy Situation Since Then", 9th International Energy Forum, Amsterdam, May 22, 2004, p.3.

¹³ Energy and Resources Today / Natural Gas. 4-2. Examination of Policies Concerning Natural Gas, Agency for Natural Resources and Energy http://www.enecho.meti.go.jp/english/energy/lng/examination.html

the mechanisms employed by Europe and North America. A shift to competitive pricing requires the diversification of sources of supply. By encouraging energy exports from Russia, the energy-importing economies of Northeast Asia could reduce the so-called "Asian premium" imposed through current crude oil and LNG supply practices.

In April 2004, the Japanese Agency for Natural Resources and Energy published a report on its "Global Energy Strategy Towards 2030". The Ministry of Economy, Trade and Industry (METI) also presented a concept for an "Asian Energy Partnership" that should serve as a major pillar of Japan's international energy strategy. This concept is aimed at developing cooperation by Asian countries in tackling common energy challenges, covering the following

- Energy security, through a strengthened oil stockpile program in Asia, while also seeking a future cooperative emergency response scheme to supplement measures taken by the IEA.
- Market reforms particularly for oil and natural gas

 through nurturing spot and futures markets for oil
 and LNG; trade and investment liberalization through
 free trade agreements and the abolition of destination
 clauses in oil and LNG contracts.
- Formulating and regulating policies on the environment and energy efficiency in the domestic, regional and global context, including various policy dialogues, as well as efforts to implement these policies and persuade others to follow suit
- The enhancement of energy supply security through resource development, transportation (pipeline and sea lane shipments) and cooperation among relevant authorities.

The report prescribes that Japan should aim at a flexible and sustainable international energy system, ¹⁴ establishing multilevel and multilateral frameworks and consolidating energy links with other Asian energy-importing countries.

3.2 Engaging Russia and the US

The so-called Korean nuclear crisis has remained the single biggest destabilizing factor in Northeast Asia. Russia has begun to draw up a plan for constructing a natural gas pipeline to Busan, but realization of this plan depends upon the settlement of the Korean crisis. Predictably, without the north-south division of the peninsula, it would have been possible to build up transportation networks, including pipelines. On the other hand, the Korean crisis has provided us with a prototype framework for policy coordination in the form of the six-party talks.

The assumption of a greater role on the part of Russia and the US could help to establish an energy security regime in the area. In addition to their policy influence, both the US and Russia are important in terms of investment, technologies and resources. At their summit in Houston in October 2002, the two countries basically agreed to enhance cooperation in developing oil and natural gas resources in East Siberia and the Far East. This could be a step forward in advancing the New Energy Dialogue launched at their summit in May 2002. US oil majors, including ConocoPhillips, are extending their involvement in energy projects in Russia further west from Sakhalin. Furthermore, there are plans to import LNG from Russia. In addition, Moscow and Washington have also reached a basic agreement on cooperation in building strategic oil reserves.

Both the US and Japan are providing "investment support" for the Sakhalin oil and gas projects, contributing to future supply capacity and resource additions in both oil and natural gas, which have recently lagged considerably behind increases in demand.¹⁵ Advanced exploration methods have somewhat checked the decline in newly discovered reserves, albeit in areas with a challenging operating environment, such as the Sakhalin continental shelf. For Japan and the US, promoting energy cooperation with Russia and within the Northeast Asian subregion as a whole can be seen as a means of "policy bridging" concerning various gaps and uncertainties.

Moscow has been restructuring the oil and gas sector for the purpose of tightening governmental control over the development of energy resources as strategic goods. Export-oriented energy projects could serve as the biggest lever in developing Eastern Siberia and the Far East. Currently, oil and natural gas exports, together with products manufactured in related industries, account for more than half of the federal government's revenue.¹⁶

3.3 Russia looks east

The Energy Strategy 2020¹⁷ approved in August 2003 envisages the expansion of the energy sector and the growth of energy exports. Russian energy planners proposed diversifying energy exports and accessing new oil and gas markets in the Asia-Pacific region, Northeast Asia in particular. The government proposes to diversify energy supplies to the "north, east and south", in light of new projects aimed at oil and natural gas production in capitalintensive environments, including Eastern Siberia, the Far Eastern region, the Arctic and also the continental shelf of the northern and Caspian seas. The economies of Northeast Asia and the US are seen as supplementary markets. The Energy Strategy 2020 stated that oil exports to the Asia-Pacific region could reach about 100 Mt, including about 25 Mt produced by the Sakhalin offshore fields. According to this plan, Russia aims to increase the share of its oil exports to the Asia-Pacific from 3% to 30%.

¹⁴ In the report, the international energy system is defined as a chain of energy supply and consumption in international oil and gas markets.

¹⁵ Harry J. Longwell, Executive Vice President, ExxonMobil, Remarks at the Offshore Technology Conference, Houston, May 7, 2002.

¹⁶ In 2002, Russia produced 380 Mt of crude oil and exported 180 Mt. In 2003, oil production reached 421 Mt (11% of the world total), with exports totaling 228 Mt. For 2004, the forecast for production is 450 Mt, with 255 Mt to be exported.

¹⁷ Available on-line: http://www.mte.gov.ru/docs/32/189.html

Gazprom, Russia's leading producer of hydrocarbons, has also begun to pay attention to Northeast Asia and the Pacific region only recently. In this regard, the blueprint for natural gas transportation schemes in Eastern Russia announced in Tokyo in June 2003 referred to a Trans-Siberian gas pipeline and two LNG terminals located in the vicinity of Vladivostok and Vanino Port.18 It is also projected that gas exports to China and the Korean Peninsula via pipelines could reach 25-35 Bcm by 2020, but these volumes could be larger, given that advanced natural gas conversion and utilization technologies could help to alleviate the region's high dependence on oil. The decision has been taken to transform the representative office of Gazprom in Beijing into a regional office that will also cover Japan and the Korean Peninsula, in order to promote gas exports and Gazprom's participation in various projects, including gas-to-liquid (GTL) production.

In total, the share of Northeast Asia in Russia's gas exports could reach 15-20% by 2020. The integrated West-East trunk pipeline plan envisages building a high-capacity gas pipeline in parallel with the Pacific oil pipeline. Yet the Sakhalin 2 LNG project will export 9.6 Mt annually in the form of LNG by 2015 and these volumes could double, responding to the growth in demand.

In his 2004 Address to the Federal Assembly, President Vladimir Putin made special reference to energy projects and transport infrastructure in Eastern Russia, including oil and gas pipeline projects. ¹⁹ According to Transneft, the project has been revised and the target capacity of the Pacific pipeline is now 80 Mt per annum, rather than the 50 Mt p.a. proposed initially. A branch pipeline could deliver another 30 Mt p.a. to China. On the other hand, from 2007, Russia is prepared to export about 15 Mt p.a. of crude oil to China by rail.

These plans are related to the energy security interests of the economies of Northeast Asia, including Japan, China and the ROK, as well as the US, all of which are seen as the principal export markets for oil, oil products, natural gas, coal, and, in some cases, electricity. However, the scale of ongoing and proposed ventures, the enormous costs involved and the energy security concerns of the energy-importing economies would require new partnership-type relationships and foreign investment.

The investment needed to support these intentions and plans is estimated to total tens of billions of dollars. However, cross-border energy undertakings are expected to serve several strategic purposes by (1) cementing improved political relationships; (2) promoting trade, investment, and technological and manufacturing links among regional neighbors; (3) providing additional incentives for economic advancement at the local and regional levels; and (4) supporting increased efficiency and lower environmental impacts in energy use.

3.4 Strategic joint oil stockpiling

By the second oil shock of the late 1970s / early 1980s, Japan had succeeded in maintaining oil reserves equivalent to 90 days of imports. By 2001, total reserves in the state and private sectors exceeded the equivalent of 150 days of imports. The ROK achieved the IEA's 90-day minimum requirement in 2001 and attained official membership of the IEA in 2003. As for China, the Tenth Five-Year Plan, endorsed by the Fourth Session of the Ninth National People's Congress in March 2001, also advocated the need to build a strategic oil stockpiling system.

The concept of Joint Oil Stockpiling (JOS) could be relevant to Northeast Asia. It would ameliorate the risks arising from conflicts of interests. The system could also help in reducing the maintenance costs of oil stockpiling. In September 2002, when the energy ministers of Japan, China and the ROK gathered in Osaka, they proclaimed an "Energy Cooperation Initiative" that includes the oil stockpiling. In June 2004, ASEAN decided to introduce JOS, and Japan and the ROK showed their readiness for technological cooperation, including an offer made by Japan to provide financial assistance for the feasibility study. 20 However, a similar multinational effort ought to be realized in Northeast Asia. Moreover, the existing concepts and frameworks of regional economic cooperation, such as "ASEAN+3" and some kind of "East Asian community", should be flexible when it comes to energy security and the roles to be played by both Russia and the US. On the other hand, Japan, China and the ROK could support Russia's increasingly serious intention to become integrated into the region.

It seems very important, however, that East Asian countries should convince Moscow not only of the need to develop energy infrastructure for the sake of the mutual benefits that it can deliver, but also in the context of Russia's responsibility as a regional power and an important energy supplier. As a supplier, Russia can also expect significant benefits from the emergence of a relatively large JOS system in this region, because the market for oil imports would expand accordingly, as long as guarantees regarding stability, adequate volumes and competitive pricing were provided.

3.5 Energy and the environment

In order for an energy security regime to take root in the region, it is not enough to build efficient energy supply routes and increase the volumes of energy trade. It is also essential to make efforts to achieve more effective utilization of energy. For example, according to one estimate, due to different levels of energy efficiency, the US needs about twice as much crude oil than Japan per unit of GDP, while China needs about five times as much.²¹ Japan is less vulnerable to crude oil prices, both because of its enhancement of energy efficiency by approximately 30% compared with the 1970s and the higher value of the yen than in past decades. It will, however, also be indirectly

Alexey B. Miller, "The Eurasian Direction of Russia's Gas Strategy", Keynote Address, 22nd World Gas Conference, Tokyo, June 4, 2003, p. 6. See also *Green Paper–Towards a European Strategy for the Security of Energy Supply* (Technical Document), European Commission, 2000, Figure 5. Gas of the Russian East.

¹⁹ Vladimir Putin, Address to the Federal Assembly of the Russian Federation, May 26, 2004

²⁰ Nihon Keizai Shinbun, 21 June 2004.

affected by economic slowdowns in the US and China.

The benefits generated by international technology transfers are not limited to energy conservation in a narrow sense, but could also support environmental protection. With the Kyoto Protocol coming into effect in February 2005, the basic schemes of CDM (Clean Development Mechanism) and JI (Joint Implementation) could support environmentally friendly projects. In addition, China has the biggest potential for new business in this field. China's energy development program to 2020 aims at environmental protection, efficient energy utilization and sustainable development. Much the same basic concepts were incorporated into the energy strategies of Japan (to 2030) and Russia (to 2020).

In order to meet simultaneously rising energy demand and promote environmental protection (e.g. the reduction of greenhouse gas emissions) in China and Russia, Beijing and Moscow may well find it to their advantage to cooperate with Japan. At the same time, Japan can find a vast market in China and Russia that ranges well beyond mere business matters: greenhouse gas emissions trading can be implemented by way of the CDM and JI schemes. The joint development of renewable energies also seems to be very promising in the long run.

3.6 Energy cooperation and conflict prevention

The ROK government has also made a proposal regarding the future of Northeast Asia. ²² In 2003 alone, the Presidential Committee on a Northeast Asian Business Hub conducted 26 working meetings, conferences and workshops, developing as result of this effort a comprehensive plan for regional economic cooperation in a number of areas, including the energy sector. The Committee stated that the "super consumers" of Northeast Asia (the ROK, China and Japan) lie adjacent to a "potential super supplier" (Russia), giving rise to a framework for energy cooperation within the subregion. The Committee proposed the following steps in order to promote energy cooperation:

- The construction of a natural gas pipeline network
- Joint exploration and processing of petroleum
- Cooperation in supplying energy to the DPRK on a long-term basis
- The development of cleaner energy sources, such as Siberian hydroelectric power.

The Committee also proposed that, in pursuing energy cooperation, broader considerations other than immediate economic needs to be taken into account, including long-term energy security, environmental constraints and the impact of energy cooperation on overall relations among the

countries of Northeast Asia. The government is supportive of new initiatives by Korean energy companies, which are seeking contact with those involved in the Sakhalin projects in order to discuss the prospects for imports and investment. During the 2004 September Russia-ROK Summit in Moscow, the two sides agreed to cooperate in oil and natural gas resource development in Eastern Russia and work out an agreement on long-term natural gas cooperation, launching a strategic energy dialogue.

Basically, there are three major infrastructure projects supported and/or under discussion that involve the ROK, the DPRK and Russia:

- The reconnection of the railways connecting the two Korean states, linking the ROK to Europe via Russia and /or China
- A natural gas pipeline constructed from Sakhalin to the ROK via the DPRK
- Power grid interconnection, involving the electric power plants in the southern belt of Far Eastern Russia and the Koreas.

Provided that the political obstacles were removed, these mega-projects could serve as the long-term foundations for stability in Northeast Asia and change in the DPRK. The economics of the two energy projects appear sufficiently strong, attracting the interest of industrial entities.²³

4. Conclusions

In other regions, cooperative relationships in the field of energy are proliferating. In Europe, an energy dialogue is developing between the EU and Russia that could potentially lead to an energy partnership. There is also room for cooperative arrangements in Northeast Asia, but this depends on the policies of the neighboring countries. The ASEAN+3 energy dialogue brings together consumers, but not potential producers such as Russia. Expanding this framework should not be seen as a goal in itself. What is important is that cooperation, even in "soft formats", could both speed up large-scale energy projects and lead to concerted changes in policies. Indeed, some changes in policies are already taking place.

Compared with Europe, where the desire for unity has prevailed, in Northeast Asia the legacy of the Cold War is still deeply rooted. Against this background, competition over access to natural resources may apparently heighten the "walls" between sovereign states. At the same time, the turmoil in the Middle East and the spread of terrorist attacks has increased the degree of attention paid to energy supplies worldwide. In addition, demand for oil is increasing rapidly, especially in China.

²¹ Yomiuri Shinbun, 14 September 2004. The IEA's estimate suggests that, if the crude oil price rises by \$10 per barrel, global GDP growth will slow by 0.5%. Consequently, there would be falls of 0.3% and 0.8% in the GDP of the US and China, respectively.

²² See: *Toward a Peaceful and Prosperous Northeast Asia*, (Seoul: Presidential Committee on a Northeast Asian Business Hub, 2003), p. 24.

²³ See papers by Victor Minakov, "The 500kV Cross-Border Transmission Line Project Linking the Russian Far East with the DPRK (Chongjin)" and by John Fetter and Rimtaig Lee "Energy and Political Cooperation in Northeast Asia: The KoRus Gas Pipeline," in Vladimir I. Ivanov and Eleanor Goldsmith, eds., *The Niigata Energy Forum 2004*, published in *ERINA Booklet*, vol. 3, December 2004, p. 65-75.

The realist school of international relations argues that policies of states are ultimately zero-sum-based. This refutes the possibility of positive-sum outcomes, which, according to the liberal approach, could be encouraged by institution building, respect for international law, interdependence and regional cooperation. Indeed, realist explanations usually provide more clear-cut pictures for which it is easier to garner support from the general public. People tend to prefer a simple picture and the mass media is a key source of simple answers. In the contemporary world, unfortunately, this tendency becomes even stronger when impending issues touch upon limited sources of energy.

Our goal is to shed light on this problem in a way that opens up the unlimited opportunities for cooperation. In reality, it goes without saying that cooperation may not be easy: it is not China or Japan, but Russia that wants to bring its oil and natural gas to the markets of Northeast Asia in very large volumes using the most economical mode. Moreover, it was not that Japan and China were competing for a pipeline route; rather, diverse interests inside Russia were the true contenders. Indeed, there are interest groups, which would prefer to monetize the oil and natural gas reserves without much coordination with or benefits for local industries and local communities, and without considering overall development needs, including the discovery of new reserves. There are also groups that prioritize regional development, social advancement and national energy security, as well as access to multiple markets in Northeast Asia. Tokyo was only supporting (not proposing) the pipeline route that Transneft had already advocated and President Putin strongly favored. On the other hand, while Russia's readiness to integrate into Northeast Asian energy markets of has intensified, China, Japan and the ROK all increasingly consider Russia to be an important energy supplier. The United States has also shown an interest in the development of oil and natural gas fields in Eastern Russia. The issue we are facing is how to avoid excluding any of the big consumers or the supplier from the energy market and to find a way in which all of these would benefit from the possible emergence of an energy security regime. There remains much room for such regional energy stability if we consider the following points

Firstly, aiming for the establishment of JOS in Northeast Asia would be a starting point for the possible establishment of a regional energy security regime. If the decision-makers of the region seriously intend to institutionalize a multilateral partnership for achieving greater energy security at affordable prices, they must ensure that each party shares the burden.

Secondly, an energy security regime in the broader sense of the expression would require policy coordination in the field of energy conservation. Given the potential for new business in the environmental industry, we had better make the best of the current opportunity to promote environmental interdependence as a "substructure" of overall energy cooperation. Technological transfer as a means of raising energy efficiency could be the most important element of this substructure. In other words, in order to promote energy security throughout Northeast Asia, the experts should think not in terms of competition among countries, but of competition among fuels and

technologies, and of the price competitiveness of oil and natural gas supply routes.

The benefits can be multiple and significant, or narrow and limited, depending on the willingness of the parties to develop strong, long-term bonds in the energy sector. In order to adopt and implement such policies effectively, political leadership and longer-term outlooks are needed, as well as a tradition of working together. Among the economies of Northeast Asia, such a tradition has yet to be cultivated, but this subregion obviously has "sub-regional" opportunities to enhance energy security by promoting choice in long-term investment planning, the diversification of supply sources and competition between fuels.

Recent Developments

Leaving policy challenges aside in terms of theory, we ought carefully to watch practical developments that support the main assumptions we have made in this paper. This is to say that there is enough space in Northeast Asia, more specifically for China, Japan and Russia, for them to embark upon a long-term pragmatic trilateral partnership in the field of energy resource exploration, development and rational use. Two announcements made in Moscow in the closing days of 2004 clearly demonstrated that both Japan and China are strategically important counterparts in Russia's national energy strategy.

One such announcement came on December 31, 2004, when the Russian government officially launched the Eastern Siberia-Pacific oil pipeline project, issuing Directive No. 1737-p. The document approved the proposal made by Transneft to construct an integrated oil pipeline system with an annual capacity of 80 Mt, along the Taishet-Skovorodino-Perevoznaya Bay route. The directive incorporated the following instructions and measures that define the project logistics and implementation strategy:

- The Transneft Company was authorized to serve as chief contractor in the design and construction work for the project.
- The government proposed that, in collaboration with the Ministry of Industry and Energy and the Ministry of Economic Development and Trade, the Ministry of Natural Resources develop a program for the geological exploration and licensing of hydrocarbon resources in Eastern Siberia and the Far Eastern region.
- It requested that the Ministry of Industry and Energy and the Ministry of Natural Resources and Transneft jointly define the construction schedule and the construction phases of the pipeline by May 1, 2005, coordinating these with the opportunities for accessing hydrocarbon resources.
- The Ministry of Transport and Ministry of Defense were instructed to define the shipping routes and schedules in Perevoznaya Bay, near oil terminal facilities.
- With the participation of the Russian Railways Company (RZD), the Ministry of Transport was asked to design the railway logistics for (a) shipping construction materials and equipment for the ESP oil pipeline; and (b) crude oil shipments by rail, in coordination with the construction schedule and the

implementation phases of the pipeline.

- The regional authorities of the provinces to be traversed by the pipeline were advised to provide support for the project.
- The Federal Tariff Service was instructed to ensure that oil transportation tariffs would support the reconstruction and operation of the existing pipeline system to Taishet and facilitate financing of the construction of the new pipeline.
- By May 1, 2005, along with the Ministry of Economic Development and Trade and the Ministry of Finance, the Ministry of Industry and Energy is expected to propose measures that enhance the economic feasibility of pipeline construction (possibly indicating a parallel gas pipeline project).

At the same time, on December 30, 2004, in comments regarding the ongoing merger of the companies Gazprom and Rosneft, Viktor Khristenko, Minister of Industry and Energy, noted that Yuganskneftegaz - Russia's largest and most successful oil-producing enterprise - will not be part of this merger. The assets of this former Yukos subsidiary will be transferred a new company wholly owned by the state. However, Khristenko said that up to 20% of the stock of this newly formed company could be offered to the China National Petroleum Corporation (CNPC) in exchange for assets controlled by CNPC, both in China and in third countries. The minister specified that this possibility was envisaged in earlier agreements signed with CNPC. He stressed that these plans are in line with the strategic agreements achieved by Russian and Chinese leaders in the sphere of energy cooperation.

中国・日本・ロシア:エネルギー安全保障の新しい関係 構築に向けて(抄訳)

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1.問題の所在

過去10年間、北東アジア諸国間の経済障壁が低くなりつつある。例えば、ASEAN+3の進展状況や中国と韓国間の経済関係の発展、日本の対中貿易・投資増大、南北朝鮮間の新しい関係の発展等が挙げられる。貿易や投資を促進する最近の政策は、痛ましい過去の経験を塗り替えつつある。ロシアも、サハリン・プロジェクトに見られるように、北東アジア諸国との関係を拡大しつつある。

以上のような変化がある一方、北東アジアの将来に向けた長期的政策の帰趨は未知数であり、しかも諸々の衝突は排除できていない。とりわけ、1)中国の国力増大、2)日中間の政治・安全保障対話の緊張、3)北朝鮮の核開発問題、4)数々の領土問題などが典型例である。最近、原油供給源やパイプライン・ルートの確保を巡り、日中口間には、新たな緊張関係が生じつつある。

エネルギー問題は、国家安全保障に係わる伝統的な問題と往々にして直結する。しかしながら、本稿では、今日話題となっている巨大エネルギー・プロジェクトが、むしろ日中口間の相互依存及びそれ以上の機会を提供する可能性があることを論ずる。ここで言う日中口間における相互依存以上の機会とは、第1に北東アジアにおけるこれら3国間関係の発展が米国の同地域に対する積極的参入によって更に円滑化し得ること、第2にエネルギー分野の地域協

力が環境分野における協力と同時進行することで一層促進され得ることを意味している。北東アジア地域内にエネルギー安全保障レジームを構築することにより、日本、中国及びロシアは共通の利益を享受し得るのではなかろうか。

今日、北東アジア地域内では、中国の石油需要増大という問題が発生している。中国の原油純輸入量は、2030年までに1,000万パレル/日、つまり2000年時点での米国の原油・石油製品輸入量に匹敵する量に拡大することが予想される。他方、サハリン・プロジェクトを含め、ロシアとの様々なプロジェクトを推進することにより、この問題が解決し得る兆候を見せている。いずれにしても、これらを始めとする巨大プロジェクトの実現に際しては、当該諸国による長期間のコミットだけでなく、実質上、日本や米国との政策協調が大きな意味をもつ。

しかしながら、協調的なレジームの構築を目指そうとするならば、領土問題をはじめ当該各国内にパラノイア(被害妄想)を引き起こす火種となるような問題に関し、慎重な政策コントロールが必要とされる。本稿では、相互依存関係の肯定的側面に着眼することにより、同地域内で新たな政治・経済的な地域協力の可能性が生み出され得ることを論じる。

本稿では、日本、中国及びロシアの現況や各国の戦略的 変化を描く。また、北東アジアにおけるエネルギー貿易を 考える上で、日中両国においてロシアのエネルギーに対する関心が高まりつつあることが、北東アジアの地域的安定への障害となるのか、それとも地域的安定を促す機会となり得るのか、といった点を問い質してみたい。

以下では、最初に北東アジア地域内におけるエネルギーと安全保障の関係を再検討する。第2に、日本と中国においてエネルギー資源(特に、原油)輸入依存に対する関心が高まりつつある現況を概観する。第3に、国家エネルギー安全保障上の利益を確保する上で、各国の政策決定者たちが究極的にどのような方策を実現可能なものとして再検討するべきか論じる。最後に、対北東アジア・エネルギー市場進出を目指すロシアの最新動向を参考情報として加えたい。

2.新しい可能性の模索

中国が原油の純輸入国に転じて以来10年余が経つ。中国の石油(原油と石油製品)輸入量は、2003年に前年比30%以上増加し1億トンを超えたが、2004年には既に原油輸入量のみで1億トンを超過した。

2002年11月に開催された中国共産党第16回大会の席上、 江沢民国家主席は、2020年までに同国のGDPを対2000年 比4倍増にすることを図る旨表明した。経済発展の加速化 は、エネルギー需要の増大を招く。2004年6月末に開かれ た中国人民代表大会常務委員会議で承認された『2004年か ら2020年までの中・長期エネルギー発展プログラム』は、 エネルギー安全保障の重要性を再確認し、エネルギー供給 源の多様化及び国家石油備蓄制度構築の必要性を謳った。

2.1 中国エネルギー事情の脆弱性

中国の石油輸入量は急速に増大化しており、今日すでに、 米国に次ぐ世界第2位、アジア第1位の輸入国である。一部の専門家は、原油価格高騰の理由が中国の需要増大に起因するものであると分析する。2000年以降、中国は世界の原油需要増の5分の2を占めており、2003年にその需要量は日本を抜いた。中国の原油需要は、2030年までに1,200万バレル/日に達し、対2000年比2.5倍に達すると予測されている。他方、天然ガスについては、同じ30年間に中国の需要量が年平均5.5%で増加すると試算されている。

2003~2004年、中国は海外からの原油輸入問題について、 自国経済の脆弱性を知る局面を幾つも経験することになった。例えば2003年1~2月、中国の原油輸入量は前年同期 比78%増となった。その結果、石油輸入代金支払のために 過去6年間で初めて月当りの貿易赤字を計上した。戦略的 石油備蓄制度の欠如の下、米国のイラク攻撃は世界市場で 原油を買い求める中国の石油会社をパニックに陥れた。中国の対外的なエネルギー安全保障に関する多くの論議が、 経済政策決定者及び一般大衆の間でなされた。

2003年3月に召集された全国人民代表大会や中国人民政治協商会議でも、エネルギー安全保障問題は主要議題として取り上げられ、原油の輸入依存率を下げる必要性に焦点が当てられた。その際になされた政策提言には、国家戦略石油備蓄制度の構築、石炭産業の更なる発展、原子力発電能力の向上、水力発電やクリーン・エネルギーの促進、そして中国の陸海領土内における油田開発に向けて民間資本を導入することなどが含まれた。

エネルギー安全保障問題は、大衆レベルでもホットな話題となった。その理由の1つには、イラク戦争を始め、政府が国際情勢に関するメディア報道規制を緩和したことがあろう。しかしより重要なことは、新指導部(胡錦涛政権)が「人民のための統治」を謳っていることであり、エネルギー問題が国民の福祉及び国家全体のエネルギー安全保障問題として注目を浴びるようになったことである。現在、マスメディアが国内外のエネルギー関連問題を取り上げる度合いは、かつてない程高い。その様な議論は省エネに向けて社会を動かす役割がある反面、国策の効果的な履行を困難にし得る。

エネルギーの独立性確保は望ましい目標であるが、相当の努力を要する。その中には、省庁再編によるエネルギー政策決定の中央集権化が含まれよう。1998年、政府は中国のエネルギー需要を満たす上でより大きな役割を市場に担わす目的からエネルギー省を廃止し、以前は同省の管轄下にあった幾つかの機能を国土・資源省の管轄下に組み入れた。新指導部は、改組された国家発展改革委員会の中に小規模のエネルギー局を設置することで現状維持を図った。

2.2 パイプラインを巡る「競争」

以上を背景として、アンガルスク~大慶間の原油パイプライン建設計画への期待が高まった。2003年1月以降、日本がアンガルスクから太平洋に至る原油供給ルートに参画する意向を明らかにしたことは、中国では時ならぬ風向きの変化と受けとめられた。これら一連のプロセスを詳説する紙幅上の余裕はないが、中国側にとり問題点は次の通りであった。

第1に、2001年に中口両国首相出席のもとでCNPC(中国石油天然ガス総公司)とユコス社が調印した合意事項(2005年に2,000万トン、それ以降少なくとも25年間に亘り3,000万トンまで原油輸出量を増大)が実現しなかったことである。後知恵ではあるが、恐らく当時CNPCはポスト・

エリツィン時代のロシア国内政治の複雑性を見過ごした為に、ガスプロム社やロスネフチ社、トランスネフチ社といった国営企業でなくユコス社をパートナーとして選んだのであろう。ナホトカへのパイプライン・ルートをトランスネフチ社が推進したことや、ガスプロム社の経験や同社がCNPCの西気東輸プロジェクトの株式を所有していることなど、その他多くの要素を鑑みた場合、仮にCNPCがガスプロム社やロスネフチ社との交渉を選択していれば、ロシアにとっても政治的に受け容れやすかったのかもしれない。

第2に、小泉首相が2003年1月にモスクワを訪問し太平洋パイプライン計画への参入意向を示したが、中国は日本との政治的関係が困難な状況下に置かれるなか、上記パイプライン計画を地戦略的(geo-strategic)な視点から捉える姿勢を強めることになった。

尚、太平洋パイプライン計画が実現した場合、太平洋岸に出された原油の20~30%を中国に供給することが可能であるとの見方があるが、その為には、中国の同計画への参加が日口両国の利益に繋がる旨、CNPCが両国に強い働きかけを行う必要性が生じよう。

2.3 パイプライン・アクセスを巡る新たな視点

日本がロシアからの原油パイプラインに関心を示していることと、日中間の政治的関係の間に、因果関係があるわけではない。1980年代半ばまで、エネルギーは、中国の対日主要輸出品目であり、それ以降、日本は石油製品(航空燃料等)の主な対中輸出国となった。中国同様、日本もエネルギー供給源の多様化を目指している。エネルギー源の調達という点について、日中間には相互依存関係が続いてきた。現在、日本と中国双方の政府が挑まなければならないことは、両国間の外交関係が硬直化傾向を見せている状況下で、お互いに英知を出し合い、競争的な状況を、むしる3国間協力関係に向けた好機と捉えることである。

国際関係論でいうリアリズムの観点からすれば、ロシアの原油を巡る日中間の競争は、ゼロサム・ゲームとなろう。さらに、北東アジア地域内における安全保障の構図は、事実上、冷戦時代と変わらない。米国との同盟関係・同意は、未だなお重要である。大慶へのパイプライン建設は、中口間の戦略的関係を強化することになろう。他方、バブル経済崩壊後の日本が地域内経済プレゼンスを低下させつつあるなか、中国の利益は日本の損失を意味する。リアリストたちの観点からすれば、日本の太平洋パイプライン支持は、このパイプラインが米国、韓国、台湾も利するという意味で戦略的である。

しかしながら、北東アジア地域内諸国が中東への過度な原油輸入依存率を低下させるという観点からみれば、リアリストたちの見解は、日中が共同で考慮すべき幾つもの重要な問題を見落としている。

第1に、もし中国がパイプラインによる原油確保を実現すれば、2003年初めに起きたような原油購入を巡るパニックを回避出来ようが、他の国々の不利益となるような原油価格の高騰を招きかねない。それでも尚、中国が海外から間断なき原油確保に確信をもてることは、結局、日本を含めた全ての輸入国の利益となろう。

第2に、中国への原油供給不足が招来する経済的ダメージは予測されるよりも深刻になるかも知れない。中国の経済的成長の鈍化は、全ての対中経済パートナーたちの損失になり得るからである。

第3に、中国の北東アジア地域内における軍事的安全保 障政策に関し、目立たない静かな変化が生じ始めている。 北朝鮮の核兵器開発に終止符を打たせる為、中国は国際協 調の枠組を重んじ始めている。

さらに、サハリンのエネルギープロジェクトについても、 日本と中国に対する天然ガス供給ルートの選択肢の幅を広 ばょう

つまり、日本と中国はエネルギー供給源を確保する上で、パイプライン・ルートへのアクセスを巡る地戦略的な発想に重きを置くのではなく、次の2点について双方が自問し始めるべきであろう。

日本、中国、ロシアは、ロシア東シベリア・極東地域 からの原油・天然ガス共同開発を巡りどの様な形での 協力が可能であるのか。

長期的なエネルギー安全保障上の選択肢を考える際、 経済発展の遅れたロシア東シベリア・極東の開発に対 し、日本と中国はどのような形で貢献できるのか。

2004年 4 月に開催されたボアオ・アジア国際フォーラムのオープニング・セレモニーの席上、胡錦涛国家主席は、エネルギー外交が中国外交の中心課題となった旨表明した。同年 6 月に青島で開かれた第 3 回アジア外相会議の席上、温家宝首相は、中国には、平等と相互利益を基盤とするエネルギー協議をアジア諸国及び世界全体と開始する用意がある旨明らかにした。

他方、日本政府は、2004年4月に資源エネルギー庁が発表した『2030年に向けた国際エネルギー戦略』の中に記された通り、ロシアをエネルギー供給源多様化上の重要なパートナーと見なしており、サハリンの原油/天然ガス・プロジェクトや太平洋パイプラインを外交・経済関

係を「強化」する上での手段であると考えている。同年5月にアムステルダムで開催された第9回国際エネルギー・フォーラムの席上、中川昭一経済産業相は、ヨーロッパにおけるEUの経験を鑑みる際、ロシア-EUエネルギー・パートナーシップ及びEU-地中海エネルギー・パートナーシップがEUと周辺諸国間のエネルギー協力を促す要因となっている点に言及した。

3. 政策アジェンダ

主権国家がエネルギー供給源を確保することは非常に 繊細な問題であり、時として不必要なまでに愛国主義 (patriotism)に火を付けてしまう。日本と中国、韓国の 間では経済的相互依存が急速に深まりつつあるなか、これ ら3国は既にASEAN+3の枠組内でエネルギー安全保障問 題について協議し始めている。

3.1 多国間アプローチ?

似たようなレジームないし制度(institution)の構築は、北東アジア地域内でもなし得るであろう。日中韓3ヵ国の原油輸入に占める中東依存度は極めて高く、ヨーロッパや米国に対するのと比べ、競争力ある原油価格がこれら3ヵ国には適用されていない。この問題を克服するには、原油の供給源を多角化する必要があり、これら諸国がロシアを新たなエネルギー供給源と出来るならば、現行の原油・LNG供給システムから生じる所謂「アジア・プレミアム」問題の解消にも役立つ効果があるかも知れない。

上記『2030年に向けた国際エネルギー戦略』では、「アジア・エネルギー・パートナーシップ」が日本の国際エネルギー戦略上、1つの柱となることが明示された。この概念は、アジア諸国が直面する、主として次の4つの共通課題(同文書ポイント2「アジア消費国に関わる主な課題と対応のあり方」の項目名より抜粋)に立脚するものである。

アジア石油備蓄制度の導入・強化。

アジア太平洋における石油・天然ガス市場の環境整備と機能強化。

省エネ・環境対策に向けたアジアでの取り組みの強 化。

アジアにおける資源の安定供給基盤の整備。

3.2 ロシアと米国を関与させる必要性

今日の北東アジアにおいて、北朝鮮の核開発を巡るいわゆる朝鮮半島危機は、最大の不安定要因となっている。 例えば、ロシアには朝鮮半島を縦断し釜山を目指す天然ガス・パイプライン建設構想が出来つつあるが、同構想1つ とっても朝鮮半島危機をどう克服するかによって左右されるであろう。他方、朝鮮半島危機は、我々に6ヵ国協議という多国間政策協調に向けた枠組の典型例を提示したという側面を持つ。

ロシアと米国が北東アジア地域に、より一層積極的に引き入れられることによって、同地域内エネルギー安全保障レジームの形成が促される可能性があろう。2002年10月の米口首脳会談の際、両国は、東シベリア及び極東の石油・天然ガス開発において協力関係を促進することで基本的に合意した。また、米口両国は、戦略的石油備蓄制度の構築に向けた協力関係についても、基本的合意に達している。

日本と米国は、サハリンの石油・天然ガス・プロジェクトに対する投資協力を行っている。北東アジアにおいて、日米協力のもとにロシアを引き入れることは、同地域内で生じ得る様々な政策ギャップや不確実性を埋め合わせる効用を持ち得よう。

3.3 東方を向き始めたロシア

2003年8月、ロシア連邦政府はエネルギー部門の成長及びエネルギー産品輸出量の増大を目指した『2020年までのロシア・エネルギー戦略』を発表した。その中では、アジア太平洋地域、とりわけ北東アジア諸国の石油・ガス市場も重要視されている。また、ロシア政府は国内エネルギー供給ルートの多様化を目指しているが、東シベリアや極東も例外でない。

ロシアにおける主導的エネルギー企業であるガスプロム社が北東アジアや太平洋地域に目を向けるようになったのは、ごく最近のことである。2003年6月に東京で開催された第22回世界ガス会議の席上、A. ミラー・ガスプロム社長が発表した、ロシア東部地域における天然ガス輸送の青写真の中には、シベリアを横断し太平洋に至る天然ガス・パイプラインや極東のウラジオストク及びワニノ港付近に2つのLNG基地を建設する構想が含まれた。天然ガス・パイプラインを太平洋パイプラインに平行する形で建設する構想もある。他方、すでにガスプロム社は、北京事務所を日本及び朝鮮半島も管轄する地域事務所とする決定を行った。

プーチン大統領は、2004年5月に行った年次教書演説の中で、ロシア東部地域における原油・天然ガス・パイプライン計画やインフラ整備問題にも言及した。トランスネフチ社は、太平洋パイプラインによる原油輸送量を当初の年間5,000万トンではなく、8,000万トンにすることを目標としている。同社は、さらに中国に至る支線によって、年間3,000万トンを輸送することを目指している。尚、ロシア

は2007年から中国に対し、年間1,500万トンを鉄道輸送する予定である。

以上の諸計画は、日本、中国、韓国を含む北東アジア諸 国及び米国の安全保障上の利益とも関係している。これら の国々は全て、原油、石油製品、天然ガス、石炭及び電力 等の輸出対象国である。現行の諸プロジェクトに必要な巨 額のコスト、エネルギー輸入国側のエネルギー安全保障に 対する懸念解消といった問題を解決する為は、新しいパートナーシップ関係の構築や外国投資が必要とされる。

国境を越えたエネルギー事業は、幾つかの戦略的目的に適う。1)政治的関係の補強;2)貿易、投資、技術及び製造を巡る地域内リンケージの促進;3)地方及び地域レベルにおける経済インセンティブの強化;4)エネルギー効率性の向上、を期待することが出来よう。

3.4 戦略的共同石油備蓄

1970年代末~1980年代初頭の第2次オイルショックの頃までに、日本は石油輸入量90日分相当の石油備蓄を達成し、2001年までに国家備蓄と民間備蓄を合わせれば150日分を超えるようになった。韓国は、2001年に90日分という国際エネルギー機関(IEA)加盟の最低条件を満たし、2003年に同機関の加盟国となった。中国に関しても、2001年3月の第9回中国人民代表大会によって承認された第10次5ヵ年計画の中に、戦略的石油備蓄制度の構築の必要性が盛り込まれた。

北東アジア地域にとり、エネルギーを巡る利害衝突を緩和し得るという意味では、共同石油備蓄制度という考え方は一考に値しよう。2002年9月、大阪で開かれた日本及び中国、韓国のエネルギー相会議では、石油備蓄問題を含む、「エネルギー協力イニシャティブ」が提唱された。2004年6月にASEANが石油備蓄制度の導入を決めた際、日本と韓国はその為の技術協力を提供する用意があること、さらに日本は同計画のFSに資金協力する意向を表明した。同様の多国間協力は、北東アジアでも可能であろう。既に提唱されている「ASEAN+3」や「東アジア共同体」という様な地域経済協力の概念や枠組は、エネルギー安全保障及びロシアや米国が果たし得る役割を鑑みた場合、融通性をもって捉えられるべきであろう。また、日中韓の3国は、北東アジアへの地域参入を次第に図ろうとするロシアをバックアップすることも出来よう。

同時に、これら東アジア諸国は、ロシアに対し、以上のような相互利益に適うためのインフラ整備のみならず、ロシアが地域国家及び重要なエネルギー供給国としての責任を果たすよう働きかけることが非常に重要である。仮に北

東アジアに共同石油備蓄制度が導入されることになった場合、ロシア産石油の安定供給及び競争価格が保障される限り、それに伴い同地域の石油市場は拡大化し、ロシアはそこに自国の利益を見出せよう。

3.5 エネルギーと環境

エネルギー安全保障レジームを地域に根付かせる為には、エネルギー供給ルートやエネルギー貿易量を増加させるだけでは、十分でない。つまり、北東アジア地域内において、エネルギー利用の効率性を向上させることが重要である。

例えば、エネルギー利用の効率性については、差異が大きく、今日、ある試算によれば、一定のGDPを達成しようとすれば、日本と比較した場合、米国は2倍、中国は5倍の原油を消費しなければならない。日本の原油価格に対する脆弱性が中国や米国よりも低い背景には、現在までにエネルギー効率性を1970年代と比べ約30%高めることに成功したことや、円の通貨価値が高まったことがある。しかしながら、中国や米国の経済が失速することになれば、日本も間接的な影響を受けることになろう。

国際的な技術移転問題は、狭義な意味での省エネルギー対策に止まらず、環境保護にも繋がり得よう。2005年2月に京都議定書が発効するが、CDM(クリーン開発メカニズム)やJI(共同実施)の枠組は、環境分野を通じた国家間関係を発展させよう。さらに、中国は環境ビジネスにおける最大の市場を提供することが見込まれている。2020年に向けた中国のエネルギー発展プログラムは、環境保護、エネルギーの効率的利用及び持続可能な成長に主眼を置いている。同様の基本的考え方は、日本(2030年まで)・ロシア(2020年まで)のエネルギー戦略の中にも取り入れられている。

中国やロシアは、経済発展に伴うエネルギー需要増大対策と環境保護を同時に図る上で、日本と協力することに利益を見出せる。他方、日本にとり、中国やロシアとのCDMやJIプロジェクトは、新たなビジネス・チャンスである。長い目で見れば、再生利用可能エネルギーの共同開発も視野に入ってこよう。

3.6 エネルギー協力と紛争予防

2003年、韓国では、北東アジアのビジネス・ハブに関する大統領諮問委員会が、エネルギー分野を含む地域経済協力についての各種会合を26回以上開催し、包括的計画をまとめ上げた。同委員会は、北東アジアのエネルギー大消費国(韓国、中国及び日本)が「潜在的な大供給国」である

ロシアと隣接していることが地域内エネルギー協力の枠組 を形成しつつあることを指摘した上で、エネルギー協力の 促進に向けた次のステップを提案した。

- ・天然ガス・パイプライン・ネットワークの建設。
- ・石油の共同探査・精製。
- ・北朝鮮に対し長期的なエネルギー供給をする上での協力。
- ・シベリアの水力発電のようなクリーン・エネルギー源の 闘発

また同委員会は、エネルギー協力を推進する上で、短期的な経済的必要性に止まらず、長期的エネルギー安全保障や環境上の制約、エネルギー協力の北東アジア諸国間関係全般に対する影響も考慮する旨提案を行った。韓国政府は、国内企業のサハリン・プロジェクトへの参入を支持している。2004年9月、モスクワで開催された韓ロ・サミットでは、ロシア東部地域の原油・天然ガス開発で協力することや、戦略的エネルギー対話の始まりとなる長期的天然ガス協力に関する協定を策定する点で両国は合意した。

韓国、北朝鮮及びロシアの3国にかかわる可能性のあるインフラ整備プロジェクトは、基本的に3点挙げられよう。

- ・韓国・北朝鮮間の鉄道を再連結することにより、ロシア (and/or) 中国を経由して韓国をヨーロッパと結びつけること。
- ・サハリン産天然ガスをパイプライン利用により北朝鮮経 由で韓国に送ること。
- ・ロシア極東南部地帯にある発電所と韓国・北朝鮮間の電 線網を構築すること。

4 . 結論

北東アジア以外の諸地域では、エネルギー分野における協力関係が進展しつつある。EUとロシアの間で進められているエネルギー対話は、潜在的にエネルギー・パートナーシップに発展するであろう。北東アジアにおいて同様の可能性があるが、それは隣国間における政策協調の帰趨次第である。ASEAN+3の枠組でのエネルギー対話は、消費国を団結させているが、ロシアのような供給国は含まれていない。枠組を拡大すること自体が目的とされるべきではない。協力という発想が、大規模エネルギー・プロジェクトの推進を促し、協調的な政策変化を導き得るであろう。既にその様な変化は見えつつある。

統一への希求が広まったヨーロッパとは異なり、北東アジアには冷戦期の遺産が未だに根ざしている。こうした背景下において、天然資源へのアクセスを巡る競争は、一見したところ、主権国家間の「壁」を高くしてしまうかも知

れない。中東での混乱やテロ攻撃といったことが、世界中でエネルギー供給への関心度を高めている。それに加えて、とりわけ中国のエネルギー需要が急増している。

国際関係論のリアリスト学派によれば、国家政策は究極的にゼロサム・ゲームに基づいており、リベラリスト学派が唱えるような制度(institution)構築、国際法の遵守、相互依存及び地域協力といったプラスサムの結果になる可能性は否定される。リアリスト学派の主張の方が明示的な発想を提供するという意味では、大衆受けし易いのかも知れない。大衆は単純化された見取図を好む傾向があり、マスメディアは簡潔な答えの情報源となる。今日の世界では、不幸にして、直面する事柄がエネルギー問題に係わる際に、この様な傾向が強くなりがちである。

本稿の目的は、まさに一見利害衝突が目立ちがちなエネルギー問題であっても、発想を変えさえすれば協力への機会に転じ得ることに焦点を当てることであった。実際、言うまでもなく、協力は容易でないかもしれない。例えば、北東アジア市場に大量の石油・天然ガスを持ち込みたがっているのは、中国や日本と言うよりも、むしろロシアである。パイプラインのルートを巡って争っていたのは、日中両国ではなく、むしろロシア国内の様々な利害対立だ。確かに、地元産業や地元社会との調整やそれらの利益に対する配慮及び全体的な発展を図る際の必要性を考慮することなく、石油・天然ガスの利鞘をあさる利益集団もあろう。日本は、自分から太平洋パイプライン・ルートを提案し始めたのではなく、トランスネフチ社が主唱しプーチン大統領が納得したものを支持したのであった。

ロシアの北東アジア・エネルギー市場への参入意向は 積極化しつつあり、日中韓の3国もロシアを重要なエネル ギー供給地と見なしている。また、米国もロシア東部地域 の石油・天然ガスに対する関心を高めつつある。我々にと り焦眉の課題は、どの当該国も排除されることなく、何ら かの形で利益に授かる方途を、どのようにして見出すかと いう点にあろう。そしてその余地が、北東アジア地域内の エネルギー協力には残されているのだ。

第1に、北東アジアにおいて共同石油備蓄制度が域内エネルギー安全保障レジームの構築を目指す上での端緒となり得ることが挙げられよう。但し、仮に同地域内の政策決定者たちが、妥当なコストでエネルギー安全保障に向けたパートナーシップを真剣に構築しようとするならば、各国は相応の責任分担を負う必要があることを認識しなければならない。

第2に、エネルギー安全保障レジームは、広義の観点からすれば、省エネルギー分野での政策協調を意味している。

今日、環境産業における新しいビジネス・チャンスが拡大化しつつあるなか、我々は環境上の相互依存を全体的なエネルギー協力の「下部構造」として活かすべきであろう。エネルギーの効率性向上を目指した技術移転は、この下部構造における重要な要素となり得よう。北東アジア全体規模でエネルギー安全保障を確立しようとするならば、専門家は国家間レベルの競争よりも、様々な種類のエネルギー源や技術間の競争及び原油・天然ガス供給ルート間の価格競争力の観点から考えるべきであろう。

以上の成果が、多元的で重大なものになるのか、それとも小さな限定的なものとなるのか予断を許さないが、それは当該諸国がエネルギー分野において長期的な協力関係を構築していく意思を持つか否かによって左右されよう。つまり、政策協調をスムーズ化していく為には、当該諸国の政策決定者たちが長期的視野を持ちつつ、共同で取り組む姿勢を作り上げていくことが肝要である。エネルギー分野において、北東アジア地域内におけるその様な傾向はまだまだ弱く、今後開拓の余地があろう。

参考情報

ロシア政府が2004年末に行った2つの決定は、今後、ロシアの国家エネルギー戦略にとって日本と中国が重要な相手となってくることを明確化したものであると言えよう。

2004年12月31日、ロシア政府は東シベリアから太平洋岸に至る原油パイプライン計画を正式承認する政府決定第1737-r号に署名した。同文書は、トランスネフチ社が提案したタイシェットを起点としてスコヴォロディノを経由し、ベレヴォズナヤ湾に至る年間輸送能力8,000万トンの原油パイプライン・ルートの建設を承認するものであるが、その要点は以下の通りである。

・同パイプラインのプロジェクト行程作成及び建設にあたり、 トランスネフチ社が主要請負者としての役割を果たす。

- ・産業エネルギー省、経済発展貿易省及び天然資源省が、 東シベリア及び極東の炭化水素資源の地質学的探査や開 発ライセンス権の発行に関するプログラムを策定する。
- ・産業エネルギー省及び天然資源省は、トランスネフチ社 と共同して2005年5月1日までに、パイプライン建設行 程を策定する。
- ・運輸省及び国防省は、ペレヴォズナヤ湾の石油ターミナル施設近辺の輸送ルート・行程を吟味する。
- ・ロシア鉄道会社及び運輸省は、パイプライン建設に必要 な建設資材の輸送方法、ならびにパイプライン建設の発 展段階に応じた鉄道による原油輸送に関する調査をす る。
- ・パイプラインが通過する各連邦構成主体は、本プロジェクトの実現を支援する。
- ・連邦税務局は、既存のパイプラインからタイシェットに 向けて石油を輸送するパイプラインの再建に不可欠な資 金や、新パイプラインの建設にあたり必要な資金調達を 促すような石油輸送税を設定する。
- ・2005年5月1日までに、経済発展貿易省、財務省、及び 産業エネルギー省は、パイプライン建設の経済的実現性 を高める為の手段を提案する。

他方、2004年12月30日、フリステンコ産業エネルギー相は、ロシア最大且つ最も成功した石油生産企業であるユコス社の子会社ユガンスクネフチガスが、ガスプロム社とロスネフチ社合併後の企業の一部とならずとも、完全に国有化されることになる旨述べた。同時に、フリステンコ産業エネルギー相は、新会社が発行する株式の20%までは、CNPCが中国国内及び第3国に有する資産と引き替える可能性があることに触れ、それが既に中口間で達成されたエネルギー協力に関する戦略的合意に沿ったものである旨言及した。