Japanese Energy Policy and Regional Cooperation^{*} in Northeast Asia

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1. Introduction

The fundamental objectives of Japan's energy policy were forced to undergo dramatic changes during the last decade of the 20th century as the cold war came to an end and globalization of the economy advanced, while problems of global warming took on greater urgency. As a consequence, in addition to the assurance of energy security, the objectives of Japanese energy policy have changed, and there is now a need for simultaneous achievement of the "3Es" goals—namely, "Economic Efficiency" aimed at reducing energy supply costs through deregulation and liberalization measures, and "Environmental Protection" aimed at reducing CO₂ emissions to counter the global warming problems, as well as conventional "Energy Security."

In order to accomplish the "3Es" goals, Japan—which is the largest energy importer in this region—has to look at its energy problems from a broader perspective, taking account in particular of the Asian region as a whole. The strong economic growth and progressive motorization of recent years are expected to lead to a rapid increase in the demand for energy in Asian countries, particularly in China. Dependence on the Middle East for supply of oil is projected to rise further in the future, because the regional oil supply in Asia will not be able to keep pace with the rapid expansion of demand. Natural

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gas imports in Asian countries are also expected to increase significantly as environmental concerns push the demand for it upwards. While it is naturally important for the individual countries to make efforts to secure their own energy supplies, there is also a danger that excessive pursuit of the national interest by any single country could adversely affect the energy security of the rest of the region. For this reason, it is becoming increasingly important that the issue be treated as one in which all countries in the region have a common stake.

The end of the cold war has resulted in the formation and expansion of new and existing regional economic zones, particularly in Europe and the US, along the lines of the EU and NAFTA. Although the past still overshadows the present in Northeast Asia, political and economic ties between Japan, Korea, China and Russia are moving in a positive direction, albeit at a somewhat slow pace. There have been notable improvements recently in Japan-Korea relations, as shown by the two countries' joint hosting of the World Cup soccer tournament in 2002 as well as current intense negotiations over a Free Trade Agreement. Russia is using development of its plentiful energy resources in the Far Eastern provinces to boost its economy, and is looking to Japan, Korea and China as promising new markets.

In essence, a new strategy that includes the Asian region as a whole is needed to replace that based on unilateral thinking. This paper examines policy issues and effective measures by which Japan can accomplish its long-term energy objectives from the viewpoint of bilateral and multilateral cooperation in the Northeast Asian region.

2. Framework of regional energy cooperation in Asia

Achievement of the long-term energy objectives of the 3Es will inevitably require Japan to realize a "global energy system" that is sustainable and flexible in the face of fluctuations in demand and supply, in addition to the country's own maximal efforts to develop alternative energies, diversification of supply sources, oil stockpiling, energy conservation, etc. In order to make such a global energy system work effectively, Japan must take the initiative in building up a multi-layer and multilateral "frame-

work" with bilateral, regional and global structures. In this initiative, special attention will have to be paid to strengthening the framework for relationships with Asian energy-importing countries.

In this connection, the recent development of ASEAN + 3 energy cooperation is a noteworthy initiative taken by Japan. In September 2002, the then minister of METI, Mr. Hiranuma, hosted an energy ministerial meeting in Osaka with the participation of Japan, Korea, China and the ASEAN countries. He proposed "Energy cooperation between Japan, Korea, China and ASEAN countries (Hiranuma Initiatives)" to strengthen energy security within the Asian region. The ministerial meeting of ASEAN + 3 has been institutionalized, and the first Ministerial Meeting held in Manila in June, 2004 discussed the following issues.

- 1 Setting up a network for emergencies
- 2 Promotion of establishment of a petroleum stockpiling system
- 3 Start of studies on the Asian petroleum market
- 4 Promotion of natural gas development
- 5 Promotion of energy conservation efficiency and new/renewable energy

Taking account of this situation, petroleum and natural gas issues in Northeast Asia will be discussed in the following. It is a well known fact that crude oil and LNG prices in Asian countries are not fixed on an acceptably competitive basis as compared with the prices in western countries. The principal reason for this so-called Asian premium problem is the excessively high dependency of Asian countries on Middle East oil. In other words, oil producers in the Middle East are able to impose discriminately higher prices of crude oil on Asian importers who have no major alternative suppliers. It is therefore very important for Asian countries to diversify their supply sources of crude oil as well as natural gas.

From a geographical point of view, Russia is an important partner from the viewpoint of supply source diversification not only for Japan but also for China and Korea. Therefore, in addition to the reinforcement of diplomatic and economic relationships among the Northeast Asian countries, it is very

important to promote energy cooperation in the Northeast Asian region by maintaining the project economics and proceeding with such projects as Sakhalin oil and gas development as well as the oil pipeline from East Siberia. In order to make these energy development projects attractive for foreign companies, it should be emphasized that the investment environment in Russia has room for improvement and is faced with problems in need of solution. Foreign capitals are currently participating in such projects as Sakhalin 1 (ExxonMobil, a Japanese petroleum development company SODECO, etc.) and Sakhalin 2 (R.D./Shell, Mitsui Co. and Mitsubishi Co.). However, new projects under consideration are facing various problems to be tackled, and there is a need for improvement in the regulatory system in terms of development of infrastructures such as pipeline systems, transparency of the transition from exploration license to granting of development license, etc. It is important to urge Russia to improve its investment environment in terms of the market-oriented economy and improvement of the regulatory system in cooperation with foreign investors.

3. Oil pipeline from East Siberia to Asia

One of the most controversial energy issues in Northeast Asia these days is the question of how to develop and transport oil resources in East Siberia to the Asian consumer-countries. It is a very unfortunate fact that Japan and China are competing fiercely for access to Russia's abundant oil resources. In 2001, the governments of China and Russia signed a framework agreement to build an oil pipeline linking Angarsk in Russia to Daqing in China. However, the Kremlin's attitude to the project became increasingly ambiguous when Japan offered a rival pipeline in January 2003 that would bypass China and stretch to Russia's Far East port of Nakhodka. This March, Russia's state-owned oil transportation company Transneft proposed a new route from Taishet, some 500 kilometers northwest of Angarsk, to Nakhodka with a branch line to China. While none of these pipeline options has yet been officially agreed on, it is reported that the Russian government has already decided on the Nakhodka route.

From the Russian point of view, the Nakhodka line is greatly preferable to the Daqing route, unless an economical aspect of pipeline construction costs is taken into account. The Nakhodka line would be better able to contribute to economic development in the Russian Far East as well as to diversification of export markets for crude oil. The Russians are concerned about depending exclusively on China as a single buyer, because their bargaining power as a seller would be weakened with regard to pricing and other contract terms.

From the Chinese viewpoint, the Daqing line is a very attractive project in terms of providing access to Russia's abundant oil resources. Since the oil production in the Daqing field has already started to decline, low-sulfur Russian crude is the most appropriate as an alternative supply source. The Chinese government is very eager to diversify its oil supply sources these years, because the country's dependency on Middle East oil will continue to increase in the future. In addition to that, there is no question that the Daqing line is economically more viable as compared with the Nakhodka line, because the construction cost would be much lower and CNPC (Chinese National Petroleum Corporation) has committed itself to buying the oil. Russian oil major YUKOS and CNPC had almost agreed to start building an oil pipeline this year, but the recent development of the YUKOS affair has dramatically changed the political environment surrounding the oil pipeline project.

From the Japanese viewpoint, the Nakhodka line can contribute to reducing the country's dependency on the Middle East oil, and also can provide a business opportunity for Japanese oil exploration companies to invest in oil development in Eastern Siberia. The big question, however, is how economically can the pipeline be built and the oil field developed? It is reported that the Japanese government is proposing a huge amount of financial support for the projects of the Nakhodka pipeline and oil exploration in Eastern Siberia by making use of financial scheme of the Japan Bank for International Cooperation (JBIC). However, it should be kept in mind that since the Japanese oil market is completely liberalized, the marketability of Russian crude oil in Japan is entirely dependent on its economic

competitiveness with Middle East crude oils. In other words, if the contract terms—especially pricing—are not attractive for Japanese buyers, it is possible that Russian crude oil may not be imported to Japan.

In this respect, it can be pointed out that the crude oil currently being produced in the Sakhalin 2 project is mainly exported not to Japan but to China, Korea and Taiwan. This is because the Sakhalin 2 crude oil with its light and low-sulfur quality is not economically attractive for Japanese refiners in terms of the current pricing formula. In addition, the Sakhalin 1 project is scheduled to start oil production in late 2005 or early 2006. Accordingly, if the Japanese government wants to encourage Japanese refiners to increase oil imports from Sakhalin, I believe that a very effective approach would be to introduce some tax incentives. For example, in Japan, all imported crude oil and oil products are subject to the so-called "petroleum tax" of about three dollars per barrel, and the resulting revenue is used for various measures to improve energy security, including diversification of oil supply from the Middle East. If a new policy of reducing the petroleum tax on non-Middle East crude oil is introduced, Russian oil may become an attractive alternative for Japanese refiners. In such a case, the Nakhodka oil pipeline would not be so crucial for Japan in the diversification of its supply sources, because oil imports from Sakhalin 1 and 2 would be a more attractive option for Japanese buyers. In any case, in order to promote oil development and trade in Northeast Asia, new ideas of this kind will be helpful in reducing the current tension between Japan and China.

In short, Russia is the biggest winner in the current situation in which Japan and China are competing for Russian oil. A particularly worrying consequence of the conflict of the two countries is the fact that it has a very damaging impact on regional cooperation in Northeast Asia, because the Chinese are very irritated by the Japanese "hijacking" of the pipeline project. In this connection, the question arises of how the current conflict between Japan and China can be changed to a win-win situation for the three countries concerned, including Russia, and this can be viewed as a kind of litmus test for regional en-

ergy cooperation in Northeast Asia. I would like to emphasize that the major role of government sectors is to formulate a framework of bilateral and multilateral cooperation, as well as to provide economic back-up to private sectors, which have the ability to make investments from a long-term viewpoint. Thus, in order to realize such a win-win situation, it is essential that the grand design of regional energy development planning should be based on mutual trust and confidence among the three countries.

4. Natural gas pipeline for Northeast Asia

The use of natural gas in the Asian region has increased substantially in recent years, driven by demand for diverse energy sources and environmental protection. However, whereas the percentage of use of natural gas as a primary energy source stands at 25% in the US and 23% in the EU, in Asia it is a mere 11%. Unlike the natural gas markets in the US and the EU, the natural gas market in Asia is for the most part restricted to liquefied natural gas (LNG). However, with the end of the Cold War paradigm, international relations in Northeast Asia have changed dramatically and a serious plan is in the works for a natural gas pipeline connecting Japan, China, and Korea with Sakhalin and Eastern Siberia.

Several pipeline projects including Sakhalin 1 are planned by major oil companies such as Exxon-Mobil and BP, with additional participation by businesses from Japan, Korea, China, and Russia. Since September 11, the US and Russia have expanded their strategic relationship in the energy sphere, and this is expected to stimulate the development of natural gas resources in the Russian Far East.

As far as the natural gas pipeline project to Japan is concerned, the country's long-lasting economic stagnation and deregulation policy of the electricity and gas markets have created conditions that are unfavorable to the project's promotion. Growing uncertainties about the future demand for natural gas make it difficult for electricity and gas companies to enter into long-term commitments. However, a big step forward for natural gas development in Northeast Asia is the fact that Japanese utility companies

have committed themselves to purchasing about 3 million tons/year of LNG from Sakhalin 2, which is scheduled to start exporting in 2007. For many years, Sakhalin 1 and Sakhalin 2 have been competing fiercely for Japanese buyers, but last year Japanese utility companies finally decided to select the LNG project of Sakhalin 2 instead of the pipeline project of Sakhalin 1 that is strongly supported by the Japanese government. It has been pointed out that Japanese buyers are concerned about security of supply by pipeline as well as the economic uncertainties of pipeline construction, including compensation for fishing rights. As a result, installation of the first international natural gas pipeline to Japan will be postponed until after 2010, but taking account of the huge reserves of natural gas in Sakhalin, it is safe to assume that a gas pipeline to Japan as well as to the Korean Peninsula and China will be built in the longer term.

In the meantime, China has entered an agreement with the Russian government to proceed with natural gas development in Eastern Siberia. The participation of Japan and Korea is also being sought in the hope that they will assist both with financing and securing demand. Since almost 70% of China's energy is derived from coal, increased use of clean-burning natural gas will be a significant factor in any solution to its environmental problems. However, negotiations between Russia and China are mired in disagreements over selection of a pipeline route, pricing, and various other issues. Russia views a natural gas export project with China alone as a significant financial risk, and is therefore strongly urg-ing Korea and Japan to become involved.

It is obvious that there are many as-yet-unresolved problems associated with the Northeast Asian pipeline project. However, the issues of a stable energy supply, environmental improvement, and national security concern everyone in the region, and decisions regarding long-term national strategy need to be taken. Fortunately, there are many lessons to be learned from the experience of Europe. Improvement of natural gas pipelines proceeded rapidly on the European continent; however, the real drive for this accomplishment came in the late 1960s with the accession of the Brandt administration in what was then West Germany. Through its policy of *Ostpolitik*, this administration sought during the

Cold War to improve relations with the former Soviet Union. This policy included the laying of a natural gas pipeline to West Berlin. There have been efforts in Japan to strengthen financial ties with Russia in a bid to improve diplomatic and security relations, and the Sakhalin natural gas pipeline plan is expected to play a symbolic role in these efforts. In such an event, Japan must do its utmost to achieve real economic gains, while not losing sight of its national interests in relation to its territorial disputes with Russia.

5. Japan's energy diplomacy and Russia

Securing a stable supply of energy is—and will continue to be—of vital national interest for Japan. However, the end of the Cold War paradigm and the acceleration of globalization have resulted in the need for a comprehensive overhaul of Japan's energy diplomacy.

First, coordination of energy policy and security policy has become more important than ever before. Japan must fully consider how it would respond in the event of a recurrence of political instabilities or major wars in the Middle East, or of threats to the sea-lanes by which oil is brought to Japan. This forward-planning must also take account of the issue of collective self-defense. If the US judges that Japan is delinquent in the fulfillment of its obligation to maintain its own energy security, the very foundation of the US-Japan security alliance could be threatened. Now, more than ever, energy problems and security problems are inseparable from one another.

Second, to strengthen Japan's influence with the oil-producing countries of the Middle East, cooperative relationships must be built up with Korea, Taiwan and China, and the bargaining power of the entire Northeast Asian region must be increased. Development of oil and natural gas pipelines from Russia's Far East will also generate leverage with oil-producing countries in the Middle East. Naturally, even after the end of the Cold War, vestiges of historical enmities still remain in Northeast Asia. Against this background, and with dependence on Middle East resources expected to increase in the

twenty-first century, efforts to create a multinational framework aimed at resolving regional energy and environmental issues will also contribute greatly to the establishment of a regional security system. To achieve this, Asia will have to confront its own specific regional issues, including the "China problem." Furthermore, whatever approach is adopted, it must be based on the US-Japan strategic partnership.

Third, despite the importance of Russo-Japanese energy cooperation, the Japanese government must be very careful not to give Russia the wrong message with regard to the territorial issue. Since Japan is proposing very generous financial assistance in order to encourage construction of the Nakhodka line, the Russians may take this as a sign that Japan has changed its fundamental attitude towards the territorial issues and is giving higher priority to energy security. If such a perception becomes widespread among Russian policy makers, the Japanese government must take steps to correct it.

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