

Chapter Three

Sergey Sevastianov

Russia and Northeast Asia Energy Security

Executive Summary

- Due to a high growth in its energy demand, China will remain a key factor in defining Northeast Asia (NEA) energy security, while Russia, as the only important regional supplier of energy, is capable of playing a critical role in it. Taking into account the composition and quantity of Russia's proven natural resources, the NEA countries could import substantial amounts of Russian oil, especially gas, in both pipeline and liquefied natural-gas (LNG) forms.
- To speed up the realization of international projects in NEA, and to contribute to the development of the Russian Far East (RFE), during the past several years, the Russian government has made large-scale financial investments into the extraction of natural resources and transportation in the RFE, and has announced immediate plans to construct several new oil- and gas-processing plants in the Far Eastern part of the country.
- An important feature of the NEA energy market is an increased role of state-owned national companies, which are investing huge amounts of money into buying and exploiting new oil and gas deposits abroad. Thus, regional energy-security problems often become not only economic, but also hot political issues.
- Due to its financial influence in Russia and several geopolitical factors, Beijing has become Russia's main partner in the NEA energy cooperation. At the same time, Moscow is interested in diversifying its energy exports and investments, as well as in the acquisition of new processing technologies. The APEC 2012 summit meeting in Vladivostok provides a unique chance to advance toward those objectives.

Introduction

In the twenty-first century, the center of world economic and political activities is moving to the Asia-Pacific region, with Northeast Asia (NEA) playing a critical role. In the NEA energy sphere, there are four main actors, China, Russia, Japan, and the Republic of Korea (ROK). Thus far, two NEA countries are staying on the periphery of the regional-energy cooperation: Mongolia (under pressure from Beijing, Moscow agreed to bypass Mongolian territory while constructing oil and gas pipelines from Russia to China) and the Democratic People's Republic of Korea (DPRK). However, the role of the latter is of paramount importance, because unsolved security problems on the Korean Peninsula are blocking realization of several key energy- and infrastructure-development projects in NEA. The NEA energy equation also includes external actors, such as the United States. Recently, India, which is interested in gaining access to regional energy resources, joined this group.

Energy security, the stable, cost-effective, and sustainable supply of energy, is a precondition for the continued economic growth of NEA that dramatically exceeds other world regions. On the other hand, the lack of energy resources will constrain the economic and social development of NEA. In addition, energy insecurity can lead to vicious competition for resources among energy-importing countries and may further increase political tension and hold back economic cooperation in the region.¹

Sizable amounts of natural resources are located in Eastern Siberia and the RFE. Thus, Moscow is able to make a critical input into NEA energy security. Natural gas is particularly attractive, because, in comparison with coal and oil, its use causes much less environmental damage. Besides, the coordinated development of natural resources would benefit the economic development of those remote Russian regions.

¹ Baseline Study for Energy Cooperation in Northeast Asia, (Seoul: Energy Economic Institute, 2007).

Main Principles of Russia's New Energy Policy

Global gas usage is expected to grow three times as fast as that of oil. While oil will remain the dominant fuel even in 2030, gas will become the world's second-largest source of energy (32 and 26 percent of the global needs, respectively).² Exxon analysts predict that, driven by the rapid economic growth of developing nations, especially in the Asia-Pacific region, the world will consume about 35 percent more energy in 2030 than in 2005.

During his second presidential term (2004–2008), Vladimir Putin introduced the New Energy Policy (NEP), which is based on the following principles: diversification of the energy-supply market, maintenance of state control over strategic decisions on oil and gas exploration and transit routes, conclusion of long-term contracts with foreign companies to develop Russia's natural resources, and regulation of foreign access to them. According to the NEP, Russia would only agree to invest in energy infrastructure projects if consumer states sign twenty- to thirty-year contracts.³ Russia plans to diversify the energy-supply market by increasing exports of natural resources to Asia. In July 2006, Putin made a commitment to increase the Asian share of Russian energy exports in fifteen years from the current 3 to 30 percent. This means Russia would sell to Asia at least 60 million tons of oil and 65 billion cubic meters of gas per year.⁴

² "Exxon Predicts Gas Use Will Surpass Coal's," *The Wall Street Journal* (January 27, 2011).

³ Sergei Sevastianov, *The More Assertive and Pragmatic New Energy Policy in Putin's Russia: Security Implications for Northeast Asia. East Asia*, (2008), No. 25, 35–55.

⁴ Proceedings of President Putin's third meeting with international discussion club Valdai members, (Moscow: 9 September 2006), President of Russia Official Web Portal site, English: <http://www.kremlin.ru>.

Energy Security and Energy Market in Northeast Asia

The combined influence of several negative factors and trends threatens Northeast Asian energy security as follows:

- Rapid growth in demand (particularly in China, where, by 2020, oil consumption is projected to increase more than twofold and gas consumption more than fourfold);
- High dependence on Middle East oil (Japan depends on it for 88 percent of its imports, the ROK, 82 percent, and China, 45 percent);
- Environmental vulnerability: high dependence on coal (China, 70 percent, Mongolia, 78 percent) and oil (Japan, 47 percent, ROK, 46 percent).⁵

Nowadays, state-owned national companies are undermining the dominance in NEA of such giant private companies as Exxon Mobil, BP, Total, and Royal Dutch Shell. China, India, Japan, the ROK, and Russia are subsidizing the activities of state-owned companies that are investing huge amounts of money into buying and exploiting new oil and gas deposits abroad. Beijing is the main driving force in the realization of such strategies. During the past several years, three leading Chinese state companies (CNPC, Sinopec, и CNOOC) made huge financial investments, and signed numerous, long-term contracts in all world regions (about 200 projects in fifty countries) aimed at importing oil and gas by borrowing money from Chinese state banks. Japan is 100 percent dependent on imports of oil, gas, and coal, and to secure foreign delivery of natural resources, this country relies on large state companies. On the international energy market, they are competing with Chinese state companies and, recently, the latter have often been the winners while bidding for contracts against Japanese or Korean companies.. The NEA energy-security situation is also aggravated by the territorial dispute between China and Japan over the Senkaku and Diaoyu islands in the East China Sea.

⁵ Baseline Study for Energy Cooperation in Northeast Asia (2007), (Seoul: Korea Energy Economic Institute).

The recent events at the Fukushima nuclear-power station have dampened enthusiasm for using nuclear-power energy in Japan and several other countries. Liquefied natural gas (LNG) has become much more affordable in price, and, nowadays, it represents the most promising substitute to compensate for a decreasing share of nuclear energy in the Japanese energy balance. The Korea National Oil Company (KNOC) and Korean Gas Company (KOGAS) are the two largest ROK state companies that are buying rights to extract and deliver oil and gas all over the world. However, in comparison with Chinese state companies, they are not as competitive, because, first, they have less state money, and, second, while realizing these projects should secure their financial profit, that is not always the case with Chinese companies, which are mostly oriented to maximizing access to natural resources. There are no state oil and gas companies in the United States, and Washington considers Beijing's energy policy a threat to free access to natural resources by other importers. However, it is important to clarify a new trend: Beginning in 2006, the United States has drastically increased its gas-extraction quantity due to the development of shale gas deposits. As a result, the United States has decreased its gas imports. There is a possibility that in the near future it will be exporting LNG, with part of these supplies going to Asia.

Russia's Activities and Vision of Energy Policy in Northeast Asia

In 2007, Putin approved a proposal granting the two primarily state-owned companies (Gazprom and Rosneft) exclusive rights to develop oil- and gas-extraction projects on the Russian continental shelf. This decision effectively blocks foreign companies, as well as Russian private companies, from getting a major share in these projects, and, in the future, the only option for them would be to seek an invitation from Gazprom or Rosneft for joint development of oil and gas shelf deposits. The RFE is a critical area for Gazprom's expanded investment activities. The first gas exports from the RFE began in 2009 when Gazprom started to sell LNG to Japan and Korea from the Sakhalin-2

project. Overall gas extraction at Sakhalin in 2011 reached 25.5 billion cubic meters: Sakhalin-1 contributed 9.1 billion cubic meters, and Sakhalin-2, 15.4 billion cubic meters. In September 2011, Gazprom completed the construction of the first part of the gas pipeline “Sakhalin – Khabarovsk – Vladivostok,” with an annual capacity to deliver 6 billion cubic meters of gas (at the final construction stage this pipeline capacity will reach 30 billion cubic meters). This will make it possible to achieve Gazprom’s goal of making gas available to the residents and industries of the RFE as well as NEA countries.

Gazprom chose to rely on gas from the Sakhalin-3 project as a main source of supply for domestic and foreign customers in the near future. This project consists of four gas and oil fields producing more than 700 million tons of oil and 1.3 billion cubic meters of gas. Gazprom’s selection of Sakhalin-3 as its principal source of gas indicates the priority it places on the Sakhalin projects, while developing the gas from the Kovykta field in Eastern Siberia appears to be a more distant goal.

Current prospects for large-scale foreign investments in Eastern Siberia and the RFE differ country by country. The only example of substantial American investments is the Sakhalin-1 venture. However, Exxon Neftegas clashed with the Russian side over cost overruns for the project and the right to determine the primary customers for the resources produced. In February 2012, Exxon offered Gazprom a gas component of the Sakhalin-1 project on “certain conditions” that are, so far, undisclosed.⁶ Although the two Japanese companies had to sell part of their shares in the Sakhalin-2 project, Tokyo is still interested in Russian resources. Japan’s Osaka Gas signed a contract with Sakhalin-2 operator Sakhalin Energy to buy annually 200,000 tons of liquefied natural gas produced at a plant in southern Sakhalin and then shipped to Osaka. The Japanese contract will account for 98 percent of the LNG plant’s productive capacity and, according to the contract terms, Sakhalin Energy will provide Japan

⁶ “Exxon Neftegas predlagaet peredat Gazpromu gas s Sakhalin-1”, *Vesti economica* (08 February 2012). URL: <http://lenta.ru/news/2012/02/08/exxon/>.

with this amount of LNG for twenty-three years. Due to the lack of non-contracted LNG resources, Russia could not immediately help Japan to compensate for the deficit of energy that occurred after the Fukushima incident. Nevertheless, Japanese companies reached a preliminary agreement with Gazprom to construct a new LNG-producing plant in Vladivostok aimed at selling LNG mostly to Japan and, in early 2012, presented this plant-construction proposal to Gazprom for approval.⁷ Since 2010, South Korea has been importing oil from Eastern Siberia through the new Russian oil port, Koz'mino. Furthermore, the Korea National Oil Company is exploring for oil off the Kamchatka Peninsula and planning to start oil extraction in 2012.

In June 2009, the number one LNG importer in the world, KOGAS, established a 100 percent subsidiary, KOGAS Vostok, to take part in gas businesses and seek potential projects in the RFE. This company is interested in increasing its annual Russian LNG imports from the current 1.5 million tons to 7.5 million tons in 2017. These projected numbers include gas that should be produced at the new LNG plant to be constructed in Vladivostok in the next several years.

In August 2011, then North Korean leader Kim Jong-il visited Russia and met with President Dmitry Medvedev. The two leaders agreed to develop a plan of Russia-DPRK cooperation in arranging initial annual transit of about 10 billion cubic meters of Russian gas to the ROK through the North Korean territory. It should become a trilateral project, with the participation of the Russian Federation, ROK, and DPRK, aimed at construction of a gas pipeline from Russia to ROK (its overall length would be more than 1100 kilometers, while 700 kilometers would pass through the DPRK territory). Thus far, it is not clear whether this project will be implemented, due to political, technical, and other obstacles. Seoul considers it unsustainable unless the bilateral ties between DPRK and ROK are im-

⁷ Rossiya i Yaponiya planiruyut postroit zavod spg vo Vladivostoke, Forbes.Ru, (Moscow, January 8, 2012), URL: <http://www.forbes.ru/news/78214>.

proved. KOGAS has an alternative way to gain access to the Russian gas by taking part in the construction of a new LNG plant in the Russian Far East. The United States does not seem to be happy with the way Pyongyang wants to get compensation for transit through the DPRK territory. Not having a natural-gas distribution system, Pyongyang is interested in getting transit payments in cash. However, there is a risk that Pyongyang may use the money to further develop nuclear armaments. The recent death of Kim Jong-il added uncertainty to this project.⁸ The active exploitation of the Chinese energy market is a key condition for Moscow to achieve its energy-strategy aims. In 2004, Russia proposed to build a new, complex gas-transportation system to deliver gas to China through two (western and eastern) pipelines. The western pipeline would run from the Altai territory in Western Siberia to the Xinjiang Uighur Autonomous Region in China, supplying up to 30 billion cubic meters of gas annually. The eastern pipeline (projected annual capacity up to 40 billion cubic meters) would run from Eastern Siberia and Sakhalin Island to Northeast China and Vladivostok, and then possibly to the Korean Peninsula. According to Gazprom, the natural-gas-resource basis for the western pipeline is fully available (it is the Western Siberia deposits). Moscow and Beijing came to mutual consent on the main aspects of the long-term contract to deliver Russian pipeline gas to China. However, as this chapter was being written (March 2012), it was still not signed, due to remaining disagreements on gas delivery price.

Evaluation of Russia's Input into NEA Energy Security

To evaluate Russia's future input into NEA energy security, we should analyze the RF government's latest financial commitments and plans in oil and gas extraction and export. In October 2010, Prime Minister Putin attended two important meetings devoted to the discussion of plans to develop Russian oil and

⁸ Sergey Sevastianov, *The Role of New Russian Infrastructure Development Projects in Supporting Energy Security of Northeast Asia*, Oikumena, 2012, vol. 1, 48–60.

natural gas industries. He stated that, during the next ten years, Russia would maintain annual oil output at its current level of 500 million tons. This means that Moscow has no plans to increase extraction of oil, because oil reserves in Russia are already worked out by 50 percent, and there are no new deposits around to which there is easy access.

At another meeting, Putin declared that, in the foreseeable future, there would be no viable alternative to natural gas as a main source of energy. Thus, during the next twenty years, Russia would increase annual extraction output from 650 billion cubic meters of gas (extracted in 2010) to 1 trillion cubic meters (about half of this huge amount should be exported). To achieve this strategic aim, new gas-extraction areas would be formed on the Yamal Peninsula, in Eastern Siberia, and on the continental shelf, and more than 25,000 kilometers of pipelines would be constructed. Besides, the share of private gas producers in Russia should increase from the current 20 percent to 30 percent. Finally, Russian natural gas is practically an inexhaustible source of energy (total gas-reserve forecast in Russia is about 165 trillion cubic meters).

Conclusions and Recommendations

The author believes that, due to a high growth in its energy demand, China will remain a key factor in defining NEA energy security. By 2030, Russian annual deliveries of oil to China would reach 30 million tons to 35 million tons. In 2011, Gazprom extracted 520 billion cubic meters of gas (overall Russian gas output reached 671 billion cubic meters). For 2014, the extraction plan for Gazprom is 570 billion cubic meters of gas, and, for the whole Russian gas industry, 741 billion cubic meters. This means that Russian gas export quantities to NEA will keep growing.

The Russia-China energy partnership has developed a firm inter-governmental and business foundation, and the allure of Chinese proposals to develop bilateral cooperation has become irresistible for Moscow. Interestingly enough, Beijing accepted one of the principal features of the Russian NEP. During the past several years, China either signed or achieved principal agreements on contracts with Russia on oil, coal, and gas, using the same model: allocating

substantial financial loans to guarantee long-term supply of Russian energy resources. However, to avoid placing Beijing in the position of a buyer's monopoly in price negotiations, Moscow should find ways to deliver a substantial part of its energy resources to Japan, the ROK, the United States, and other countries. In this context, a multilateral approach to energy cooperation in NEA has considerable advantages for Moscow. That was why Russia became one of the founding members of the Intergovernmental Collaborative Mechanism on Energy Cooperation in NEA. As far as the wider Asia-Pacific is concerned, Russia is an active participant in the APEC Energy Working Group (its Tenth Energy Ministerial annual meeting took place in St. Petersburg in June 2012), and is preparing to discuss practical aspects of the regional energy cooperation at the APEC summit in Vladivostok in September 2012.

To increase Gazprom's abilities to realize international projects in NEA, the company should establish closer ties with foreign companies to share production capabilities, financial burdens, and new technologies. To make the eastern gas pipeline a sustainable project, Gazprom plans to construct a new gas-transportation system from the Yakutsk-area deposits all the way to Khabarovsk, and to connect it there with the Sakhalin – Khabarovsk – Vladivostok pipeline. Korean and Japanese companies are bidding to participate in the LNG plant construction in the Primorsky region. To implement these projects, the cash-stripped Gazprom would have to borrow money from the Russian government or international financial markets. However, to speed up the realization of these significant projects, Gazprom has a better alternative: include foreign companies not only as gas consumers, but as direct investors. Such an approach, especially in a multilateral format, would be very helpful in developing trust among regional countries and facilitating NEA energy security.