

Energy Security in Northeast Asia: Putin, Progress and Problems

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This article explores Russia's role in Northeast Asian energy security. Energy cooperative efforts between Russia and its neighboring states are deeply rooted in Northeast Asia's traditional and imperative energy demand and security issues. Specifically, the Sakhalin gas project, Kovykta gas, and Trans Siberian oil pipeline project illustrate both how seriously Russia and Northeast Asian states cope with their energy security concerns, and the potential for active energy trades in the region. This article analyzes the progress and the problems of this multilateral cooperative energy scheme within the framework of energy security.

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Introduction

This article deals with Russia's role in Northeast Asian energy security. Energy cooperative efforts between Russia and its neighboring states are deeply rooted in Northeast Asia's traditional and imperative energy demand and security issues. Specifically, the Sakhalin gas project, Kovykta gas, and Trans Siberian oil pipeline project show both how seriously Russia and Northeast Asian states cope with their energy security issues, and the potential for active energy trades.

Russian-Northeast Asian energy relations are complementary in that several ongoing energy projects in the Russian Far East help Russia become a potential regional player in the Northeast Asian community, and that they also help each Northeast Asian states solve their own domestic energy shortage problem by diversifying its existing energy market.

This article intends to bring to light the energy security concept in the region, while analyzing how this multilateral cooperative energy scheme can contribute to building a new regional economic security. Energy projects, as part of the regional economic security building process, enhance economic security in the region, while promoting regional economic integration in Northeast Asia. Accordingly, this chapter concludes that possible energy diplomacy issues must be dealt with within multi cooperative framework considerations, which also include China, Japan and North Korea.

This article begins with the concept of energy security and its meaning for Northeast Asian region. Then it explains the overall energy situation in Northeast Asia and Russia's approach to Northeast Asian energy security. It also assesses Russia's energy export potential in the Russian Far East focusing on the Kovykta and Sakhalin gas projects, examining the possibility of Russia's role as an energy provider to Northeast Asian countries. The final section of this paper explores problems of energy security in Northeast Asia.

1. The concept of Energy Security

Energy security is an important element of bilateral and regional economic security today. It is a strategic factor in ensuring the economic development and stability of states. Because of the "increasing importance of traded energy, increasing dependence on Middle East Oil, no sign of slackening demand rise, continuing volatility of oil prices, and environmental and sustainability

concerns,”¹ energy issues are an increasingly important part of the security agenda in international relations in general.

Energy security is defined as the securing of reliable and affordable energy supplies that are sufficient to support social, economic, and military needs, while at the same time being environmentally sustainable.² More specifically, “in a state which enjoys energy security consumers and their governments are able to believe that there are adequate reserves from sources at home or abroad, and production and distribution facilities available to meet their requirements in the near future, at costs that do not put them at a competitive disadvantage or otherwise threaten their well-being.”³ In other words, energy security requires the ability to obtain reliable supplies of essential natural resources at affordable prices.⁴ Energy insecurity arises when the welfare of citizens or the ability of governments to pursue their other normal objectives are threatened, either as a result of physical failure of supplies or as a result of sudden and major price changes.⁵ In this sense, it can be argued that energy security constitutes an important part of economic security because it is the core prerequisite for sustainable development.⁶

One way to estimate the level of energy security is to measure the extent to which a country is dependent on particular types of energy and whether these can be obtained within its territory or must be imported. In the latter case, a second question emerges relating to the level of the dependency, the diversity of foreign sources, the relative vulnerability of the source areas to political turmoil, and hostile control. Similar questions apply to transportation routes and carrying systems. In the end, the energy security of a state is evaluated by its level of self

¹ Philip Andrews-Speed, “Energy Security in East Asia: A European View,” presentation material at the Symposium on Pacific Energy Cooperation 2003, Tokyo, 12-13 February, 2003.

² Hyun Jae Doh, *Perspectives and Measures for Energy Security in the 21st Century*, Abstract, published for Korea Energy Economics Institute, December 2003. Willrich defines energy security as, first, the guarantee of sufficient energy supplies to permit a country to function during a war; and second, and more broadly, the assurance of adequate energy supplies to maintain the national economy at normal levels. He argues that the first definition is too restrictive, and the second too permissive and expansive. Therefore, he proposes that for most purposes, the definition of energy security as the securing of reliable and affordable energy supplies that are sufficient to support social, economic, and military needs, while at the same time being environmentally sustainable is the most plausible approach. See Mason Willrich, *Energy and World Politics* (New York: The Free Press, 1975), p. 66.

³ Robert Belgrave, Charles K. Ebinger and Hideaki Okino ed., *Energy Security to 2000* (Boulder: Westview Press, 1987) p. 2.

⁴ Robert J. Lieber, “Energy, Economics and Security in Alliance Perspective,” *International Security*, Vol. 4, No. 4, Spring 1980, p. 141, and for a more detailed discussion and definition, see also David Deese, “Energy: Economics, Politics, and Security,” *International Security*, Vol. 4 No. 3, Winter 1979/80, pp. 140-142.

⁵ Belgrave, Ebinger and Okino, p. 2.

⁶ Doh.

sufficiency and its ability to adapt to temporary and prolonged supply interruptions without serious economic and military consequences.⁷

A useful distinction can be made between energy importing and exporting countries. An importing country is primarily concerned with the security of its energy supplies. However, each importing country tends to view foreign energy supplies as more or less vulnerable to interruption.⁸ Although interruptions, disruptions, and manipulations of existing supply arrangements can be caused by accidents and natural disasters, they are more vulnerable to potential political instability, economic coercion, military conflict, and terrorist acts.⁹ These concerns apply not only to the source of energy supplies but also to the routes and means by which they are transported.¹⁰

Energy exporters, on the other hand, are preoccupied with access to markets and security of demand. An exporting country may view energy security as national sovereignty over its energy resources, or it may view it more broadly as sovereignty over resources plus guaranteed access to foreign markets.¹¹ Moreover, an exporter may view security as sovereignty plus market access plus financial security for the assets it receives in exchange for energy raw materials. An exporter may adopt, as a result of sovereignty over its basic raw materials, a concept of energy security that includes guaranteed access to foreign markets. In short, demand security may be as important to energy exporters as supply security is to importers. As Willrich notes,

This raises possibilities for mutually beneficial negotiations between exporters and importers, based on overlapping areas of interest in stability and equilibrium. In addition to sovereignty and market access, an exporter may extend the concept of energy security to cover financial security for the investments made with its export earnings. This scenario may seem exaggerated but energy resources below ground are a precious national heritage. Once extracted, that heritage can easily be lost by an improvident government or eroded by inflation.¹²

⁷ Paul B. Stares, "Introduction and Overview," in Paul B. Stares, ed., *Rethinking Energy Security in East Asia* (Tokyo: Japan Center for International Exchange, 2000), p. 22.

⁸ Willrich, p. 66

⁹ See both Daniel Yergin, "Energy Security in the 1990s," *Foreign Affairs*, Vol. 67, No. 1, 1988, pp. 111-132; and Stares, p. 22.

¹⁰ Stares, p. 22.

¹¹ Willrich, p. 94.

¹² *Ibid.*, p. 95.

2. Northeast Asian and Russian approach toward Energy Security

In Northeast Asia, new security concerns are emerging with regard to energy use, energy security, and the sustainability of economic growth. At present, China, Japan, and the two Koreas are desperately searching for economically rational, diversified, and reliable supplies to support their energy needs. Russian oil and natural gas in the Far East region represents a potential new source of supply to the Northeast Asian states, providing them with the opportunity to diversify their energy supplies both geographically and in terms of energy mix, thereby promoting competition and protecting the environment.¹³ In particular, Russia's natural gas could provide an alternative to coal and oil for power generation. As a fuel, it is cleaner than oil and coal, since it produces no sulphuric discharges and much less carbon dioxide.¹⁴ Thus the oil and natural gas pipeline projects on which Russia is currently engaged in Northeast Asia have great strategic importance for enhancing not only Russia's economic security, but also that of South Korea, and of Northeast Asia as a whole. Regional energy cooperation would facilitate a reconfiguration of political and economic ties, with Russia moving into a position of advantage.

From the Russian energy security perspective, Russia's reemergence as an energy power heralds an important change in international energy security structure in the early new century. Its strengthening of energy diplomacy has impacted on world energy markets and international strategic stability.¹⁵ Energy is a powerful force for creating a foreign policy agenda in Russian foreign policy. Because of the capacity of energy interest to bring desperately needed hard currency into the Russian economy and the sectors' already established ties within both the international system and the Russian government, the oil and gas conglomerate is a powerful force in today's Russian foreign policy. At the same time, the Russian government is itself using the issue of energy to achieve particular foreign policy goals within the Commonwealth of Independent States, Europe, Middle East, and possibly in Northeast Asia too.

Russian foreign policy goals in the energy sector include attracting foreign investment to help stabilize and develop Russian energy resources, increasing Russian investment in foreign exploration and development projects, and providing various services for Russia's foreign energy sectors. Ivanov suggests that Russian energy diplomacy generally tends to envisage three broad

¹³ Vladimir I. Ivanov and Mitsuru Hamada, *Energy Security and Sustainable Development in Northeast Asia: Prospects for U.S.-Japan Coordination*, Article for Economic Research Institute for Northeast Asia, Niigata, Japan, p. 6, on <http://gsti.miis.edu/CEAS-PUB/200013Ivanov-Hamada.pdf>, accessed on 4 December, 2004.

¹⁴ Ibid.

¹⁵ Feng Yujun, Ding Xiaoxing and Li Dong, "Russia's New Energy Diplomacy and Its Impact," *Contemporary International Relations*, Vol. 12, No. 10, October 2002, p. 14.

areas of activity: bilateral and multilateral relations with other countries, participation in international organizations, and selective cooperation with transnational corporations.¹⁶ President Putin, in particular, views energy diplomacy as an important means to promote economic recovery, to participate in the world economic system, to maintain Russia's geo-strategic influence and to improve the international environment.¹⁷ From the Russian perspective, energy diplomacy represents a tool to restore Russia's international status. But justifying the development of vast sources of energy is difficult without linking feasibility assessments to large neighboring markets and investment funds from external sources. In the past, the Russian gas sector has put great emphasis on its European markets and has been meticulous about maintaining Russia's image as a reliable partner of the West.

In this regard, the export of oil and natural gas resources to its Northeast Asian neighbors constitutes a potentially important engine for Russia's economic development and foreign policy goals. Improving relations with Northeast Asian countries in energy resource development might be a realistic way to secure capital investment and credits from the interested Northeast Asian governments and private sectors, and from the international financial institutions in the future.¹⁸ In particular, Russia's export of energy could facilitate the investment of Japanese and South Korean capital and technology in Russia's oil and gas sector.¹⁹ As far as South Korea is concerned, access to Kovykta and Sakhalin oil and natural gas is crucial for enhancing its economic security, given that the demand for oil is increasing steeply, as is the dependence on overseas sources. The CIA lists South Korea as the world's fourth largest oil importing country after the USA, Japan, and Germany.²⁰ South Korea has a vested interest in diversifying its energy supply sources, and its proximity to the Russian Far East would lead to a drop in the cost of transporting energy sources.

¹⁶ Vladimir I. Ivanov, *The Energy Sector in Northeast Asia – New Projects, Delivery Systems, and Prospects for Co-operation* North Pacific Policy Papers 2 (Vancouver: Program on Canada-Asia Policy Studies, Institute of Asian Research, University of British Columbia, 2000), p. 32.

¹⁷ Feng, Ding and Li, p. 1.

¹⁸ Ibid.

¹⁹ Amy Myers Jaffe and Robert A. Manning, "Russia, Energy and the West," *Survival*, Vol. 43, No. 2, Summer 2001, p. 143.

²⁰ See The CIA World fact book, Global oil consumption and production, [www.MarkTaw.com](http://www.marktaw.com), on http://www.marktaw.com/culture_and_media/politics/GlobalOil.html, accessed on 20 April, 2005.

3. Current Energy situation in Northeast Asia

3. 1 Energy demand and consumption in Northeast Asia

Northeast Asia has been one of the fastest growing energy markets over the past 30 years. The end of the Cold War has brought positive political changes in Northeast Asia, and the opening of the Chinese and Russian economies has also enhanced multilateral economic cooperation. In particular, the importance of energy security, primarily the energy demand issue in the region has risen rapidly in recent years, as a result of population and income growth, and this trend will persist in the foreseeable future at a higher rate than in other parts of the world. Accordingly, the energy sectors continue to change rapidly in response to issues such as increasing demand, resource availability, environmental concerns, changing technology and the need for regulatory reform, and sector restructuring that will attract investment capital to fund supply infrastructure.²¹

Currently, the majority of Northeast Asian oil imports come from the Middle East. This Asian dependence on imports from the Middle East is expected to increase in the future. Long term projections for China's economic growth, the possible unification of Korea, and energy consumption all lead Northeast Asian countries to consider that diversification of their energy supplies is inevitable. In this regard, development of energy projects in Central Asia and the Russian Far East provide Northeast Asian states with good options for securing their energy. In particular, the potential for extensive environmental deterioration caused by coal burning in China promotes the incentive to look at nearer and more competitive sources of natural gas in the Russian Far East. Regional demand for this efficient, plentiful, and clean-burning fuel is substantially increasing the momentum to produce, trade, and utilize natural gas. The demand for cross-border sale and purchase by both pipeline and Liquefied Natural Gas (LNG) ship is spreading in the region.²² For example, demand for natural gas has been rising at 9.3% per year since 1970 in this region.²³ Northeast Asia is a net importer of gas, and imports could potentially increase sharply in the 2010-20 period.²⁴ For example, three countries in the Pacific

²¹ *APEC ENERGY DEMAND AND SUPPLY OUTLOOK 2002*, Asia Pacific Energy Research Center, Tokyo, Japan 2002, p. 1.

²² Peter Ross, "Gas Pricing," Workshop by Director, Wimbledon Energy for 11th Annual Seminar on Gas Pricing at Kuala Lumpur, 8-10, December 2003.

²³ This has not only been a product of the rapid economic development of the region, but also due to a desire to diversify away from oil following the shocks in the 1970s and growing appreciation of the economic and environmental benefits of natural gas. See Peter Cleary, "Development of East Siberian Gas for Export to China and Korea Markets," Presentation by President, BP Gas Power & Renewables Korea for Sakhalin & North Asia Oil, Gas & Pipelines 2003, Seoul, Korea, 12-13 November, 2003.

²⁴ *APEC ENERGY DEMAND AND SUPPLY OUTLOOK 2002*, Asia Pacific Energy Research Center, Tokyo Japan 2002, p. 5.

Basin – Japan, South Korea, and Taiwan – accounted for 68 percent of global LNG imports in 2002.²⁵ Many experts also predict that the growth of the demand for gas will be particularly strong in China and Korea.²⁶ In Korea, for example, demand for natural gas will double, increasing from 25bm³/in 2003 to almost 50bm³/by 2020, whereas demand in China is forecast to increase five fold from 30bm³/ in 2003 to more than 160bm³/by 2020.²⁷ In Korea, moreover, natural gas and heat consumption is expected to increase almost 2.5 fold over the forecast period, while oil which is at present the main fuel used in Korea, is expected to decline to 20 percent in 2020 from 47 percent in 1999.²⁸

It is important to question, however, whether and how this increasing demand should be met. It is estimated that gas reserves and undiscovered resources will be sufficient to meet the consumption needs.²⁹ The International Center for Information on Natural Gas (CEDIGAZ)³⁰ indicates that natural gas reserves and resources are approximately four times the cumulative world consumption forecast until 2020.³¹ This means that a huge volume of natural gas has yet to be discovered.³²

In this regard, Russia, as the world's No. 1 natural gas and No. 2 oil exporting country, becomes an energy solution for Northeast Asian countries. Although natural gas reserves are distributed more evenly across regions than oil, the majority are located in the former Soviet Union and the Middle East, which have 72 percent of total remaining reserves. There are also reports that of undiscovered resources, 50 percent are expected to be in those same regions.³³ And yet, Russia currently exports almost all of its gas to non-Asian economies, along with oil mainly to Europe for the most part due to the lack of hydrocarbons transportation infrastructure in Northeast Asia.³⁴ In order to meet growing demand for natural gas, infrastructure development requiring

²⁵ "Global Liquefied Natural Gas Markets: Status and Outlook/ LNG Importers," *Energy Information Administration (EIA)*, on <http://www.eia.doe.gov/oiaf/analysispaper/global/importers.html>, accessed on 9 September, 2005.

²⁶ Cleary.

²⁷ Ibid.

²⁸ APEC, p. 42.

²⁹ Ibid., p. 64 and BP Statistical Review of World Energy 2001.

³⁰ Paris-base gas industry information agency

³¹ For example, the mean estimate of worldwide undiscovered natural gas is 147.1 trillion m³. An even larger quantity of natural gas resources, ultimate remaining gas, is estimated at 450 to 530 trillion m³ by CEDIGAZ. See International Center for Information on Natural Gas (Paris-base gas industry information agency)(CEDIGAZ), *Natural Gas in the World: 2001 Survey*.

³² U.S. Geological Survey, *World petroleum Assessment 2000*, Washington, DC., 2000, quoted in International Energy Agency (IEA)(2000) and Energy Information Administration (EIA).

³³ APEC, p. 64.

³⁴ Konstantin V. Simonov, "Projects of Eastern Siberia Development," Speeches by Deputy Director, The Center for Current Politics in Russia for International Seminar on Policies and Strategies toward Korea-Russia Energy Cooperation, Vladivostok, 7 October, 2003.

massive investment such as transport either by pipeline or as LNG and distribution networks for industrial and residential use is crucial.³⁵

3. 2 The development of Natural Gas in Northeast Asia

3. 2. 1 LNG Facilities

In Northeast Asia, there are relatively well-developed facilities for reception, re-gasification, and distribution of LNG. This is particularly the case in Korea and Japan, which are heavily dependent on imported LNG supply. As demand for natural gas will continue to grow, more LNG facilities are planned. For example, it is reported that in Japan new storage tanks capable of holding 3.8 million m³ of LNG are to be built by 2006, and Korea is planning to build additional capacity for 3.7 million m³ by 2010.³⁶ Securing shipping and LNG terminal capacity are essential to key success in the oversupplied market, and particularly to the growing short-term and spot trades.³⁷ It appears that the LNG market, though not so structured as others at present, has begun developing into a spot delivery market. And although slower than in the Atlantic, spot LNG trade is expected to grow rapidly in the Asia-Pacific market, with the majority of gas trade still anchored on long term contracts. As major LNG importing economies such as Japan and Korea move forward to competitive national markets for power and gas, LNG trading patterns will respond to buyers' changing needs in risk management by allowing more flexibility in gas purchases.³⁸

3. 2. 2 Pipeline natural gas

Compared with well-developed trans-border transmission lines and local distribution networks in North America and Europe, the Northeast Asian regions lag far behind in the development of pipeline infrastructure. The natural gas market in Asia is largely restricted to LNG. However, since the end of the Cold War especially in the 2000s, international relations in Northeast Asia have changed dramatically and a serious plan is in the process of development for a natural gas pipeline connecting Japan, China, Korea, and possibly Mongolia and North Korea with Sakhalin and eastern Siberia.³⁹ A great deal of investments have already been established or are being considered by major global oil companies including Exxon Mobil, Royal Dutch Shell, and BP, with the additional participation of Japanese, Korean, Chinese, and Russian private sectors. For example, the Kovykta project, if completed, will be the largest single project in the world with an

³⁵ APEC., p. 51.

³⁶ Ibid.

³⁷ APEC, p. 51

³⁸ Ibid., p. 69.

³⁹ Tsutomu Toichi, "Energy Security in Asia and Japanese Policy," *Asia-Pacific Review*, Vol. 10, No. 1, 2003, p. 47.

estimated development cost of US\$ 23 billion on the Russian side, and a feasibility study is still being carried out. Another major project is the Sakhalin project that will supply gas and oil to Japan and Korea and potentially other Asia Pacific markets.⁴⁰ Among the six Sakhalin projects, so far Sakhalin 1 and Sakhalin 2 have started substantial exploration and development.

4. Putin's role

Russia has abundant natural energy resources, while possessing almost the largest of the world's proven reserves of natural gas (33 percent of the world total), 4.7 percent of the world's proven oil reserves and 16 percent of the world's coal reserves.⁴¹ And the energy industry accounted for approximately 30% of the GDP.⁴² Being more than self sufficient in all hydrocarbon fuels, Russia exports substantial volumes of natural gas and liquid hydrocarbons to areas outside the former Soviet Union.⁴³ Oil and gas exports comprise 55 percent of total merchandise exports in 2005. For example, oil exports held up better than output throughout the 1990s, and in 2001 Russia became the world's second-largest oil exporter after Saudi Arabia. According to RosStat figures, in 2004 Russia exported 56% (257m tonnes, or 5.2m b/d) of its crude oil exports.⁴⁴ The relative weight of the energy sector in the national economy will be maintained in the next two decades.

Russia's energy policy goals largely include three elements: "1) to strengthen the positions of Russia in the international energy markets, 2) non discriminatory access to the international markets and advanced technologies, and 3) to stimulate foreign investment."⁴⁵

In this sense, creation of a favorable investment climate for domestic and foreign investors is a prerequisite for this process. The Russian Energy Strategy estimates investment needs in the order of US\$ 40 to \$70 billion over the period from 2001 to 2020.⁴⁶

⁴⁰ APEC, p. 66.

⁴¹ Ibid., p. 211.

⁴² 2005 Russian Report, The Korea Export-Import Bank (EXIM Bank), 9 August, 2005.

⁴³ Eugene M. Khartukov, "Russia," in Paul B Stares, ed., *Rethinking Energy Security in East Asia* (Tokyo: Japan Center for International Exchange, 2000), p. 152.

⁴⁴ "Russia: Business: Industry overview, Russia: Energy provision," Economist Intelligence Unit (EIU) Views Wire, 20 April, 2005, on http://www.viewswire.com/index.asp?layout=display_article&doc_id=488217648, accessed on 10 September, 2005.

⁴⁵ Alexey M. Mastepanov, "*O perspektivah osvoeniya gazovuih resursov Vostochnoi Sibiri I Dalnego Vostoka*," *Dokladuivaet: Zamestitel nachalnika Departamenta perspektivnogo razvitiya, nauki i ekologii. Gazprom*. Presentation by Deputy Head, Gazprom for International Seminar on Policies and Strategies toward Korea-Russia Energy Cooperation, Vladivostok, 7 October 2003.

⁴⁶ "Russian Energy Survey: 2002," International Energy Agency (IEA), Paris, 2002.

Energy exports will be maintained at a considerably high level, especially in natural gas and liquid fuels, with special emphasis on petroleum products. Energy exports can become more diversified through penetration of the energy markets of East Asia and increasing direct supply of oil and products to the United States. In my opinion, it is important to understand that Russia is particularly interested in developing Eastern Siberia and Sakhalin natural gas fields due to Gazprom's gas policy. Whereas Russia's oil sector has become increasingly competitive since privatization in the early 1990s and the onset of consolidation after 2000, the gas sector continues to be dominated by the state-controlled gas giant Gazprom. Although Gazprom controls one-third of the world's natural gas reserves, it has not faced the kind of market pressures that have been behind the recovery in oil output. Gas output peaked at 643bn cu meters in 1991 and fell gradually to stand at 561 cu meters in 2002. Gas output has been rising since then, reaching 591bn cu meters in 2004, and the government plans to increase gas output to 950bn cu meters in 2005, backed by US\$4.5bn investment spending on prospecting and expansion. Gazprom sold 181bn cu meters (or 11.8% more) abroad in 2004, with a year-on-year rise of around 15% in exports to Europe, its largest and most lucrative export market. Gazprom uses its export earnings to subsidize loss-incurring domestic sales, which earn around 20% of world market prices. Since cheap gas powers much of Russia's industrial sector and keeps household energy bills low, the government has been reluctant to liberalize domestic gas prices. This has starved Gazprom of the investment capital needed to replace its declining west Siberian fields with new ones in the far north and east, and to build new storage and transportation facilities.⁴⁷

Russia aims to increase oil export volume from 3 % to 30%, and gas export volume from 0% to 15% in the future in the Asia Pacific region.⁴⁸ Yet, the traditional European export direction will still be a priority.⁴⁹ Given Russia's geopolitical position and the existing transportation infrastructure, energy exports are still mostly designed for Europe and as such can only indirectly influence Northeast Asian energy markets.⁵⁰ In the longer term, however, as a massive energy provider, Russia can still play a very important role in shaping cooperative energy schemes in Northeast Asia. Several ongoing and planned energy projects in the Russian Far East and eastern Siberia enable Russia to increase supplies of its fuel and electricity to Northeast Asia.⁵¹

⁴⁷ Although the company has access to foreign borrowing to fund its capital expenditure, its investment plans are held back by high levels of debt and continued uncertainty about gas market reform. The government hopes that the removal of the "ring-fence"—which limits foreign share ownership in the company—will finally allow Gazprom to raise much-needed investment capital. See "Russia: Business: Industry overview, Russia: Energy provision," Economist Intelligence Unit (EIU) Views Wire, 20 April, 2005, on http://www.viewswire.com/index.asp?layout=display_article&doc_id=488217648, accessed on 10 September, 2005.

⁴⁸ Alexey M. Mastepanov's presentation.

⁴⁹ APEC, p. 215.

⁵⁰ Khartukov, p. 152.

⁵¹ Ibid.

In fact, the Russian Far East (RFE) and East Siberia are emerging as potential new sources of energy for East Asian fuel markets. The RFE has about 30 percent of Russia's coal deposits, half of which can be mined in open pits. Oil, natural gas and hydropower sites are abundant and widely dispersed, capable of both producing annual exports of crude oil to 15 million-25 million tons (Mt),⁵² and providing 30 billion-50 billion cubic meters (bm³)⁵³ of natural gas a year to neighboring Asia Pacific countries.⁵⁴ East Siberia represents 20% of proven natural gas reserves in the world today. For example, the natural gas supply potential from this basin in 2020 could be as much as 130 billion cubic meters (bm³), which is equivalent to the level of Russian exports to Europe today.⁵⁵ Moreover, over 3 million tons of oil was produced in Sakhalin in 2002. And up to 45 million tons are forecast to be produced annually at Sakhalin after 30 years. Oil production development in East Siberia and the Russian Far East would increase the production level up to 95 million tons of oil annually after 30 years.⁵⁶

So far, the most successful upstream developments in the Russian Far East at this stage are the Sakhalin-1 and Sakhalin-2 projects, which will be discussed in detail in the later part of this chapter. Overall crude oil production levels for Sakhalin can be estimated at 0.7 million barrels per day (Mb/d) in 2020, with corresponding export volumes of about 0.5Mb/d. Production figures for East Siberia can be estimated at 0.8 Mb/d in 2020 with probable export figures of 0.4 Mb/d. The eastern part of Russia as a whole could supply the Asia-Pacific market with up to 0.9 Mb/d in 2020 under favorable pricing conditions. Natural gas production is expected to start around 2010, though transport remains the main problem to be overcome.⁵⁷ At the beginning of 2002 the state oil transport company Transneft announced a plan to build by 2008-2010 a 3,765km oil pipeline on an Angarsk-Khabarovsk-Nakhodka route with a capacity of one Mb/d. It should be filled with a great amount of oil from the West Siberian fields and new prospective deposits in East Siberia.⁵⁸

In short, the potential of the Russian Far East is not only likely to reshape energy flows in Northeast Asia but may also redefine the region's geopolitical relationships. Although Russia is quite often portrayed as a waning political and economic force in Asia Pacific these days, the

⁵² Stephen White, "Is Russia a Country in the Globalization Era? (With special reference to the Far East)," Presentation prepared for a conference: The Regional Cooperation of Northeast Asia and Russia's Globalization for the 21st Century, Seoul, Korea 22-24 June 2003.

⁵³ Billion Cubic Meter (bm³)= BCM

⁵⁴ Khartukov, p. 141.

⁵⁵ Cleary.

⁵⁶ Simonov.

⁵⁷ APEC, p. 215.

⁵⁸ Ibid.

country cannot be simply ignored in the “new geopolitics of energy” because of its current enormous energy production and export potential.⁵⁹ Russia’s geographic proximity to the Northeast Asian energy importers gives Russia a regional geopolitical position as a desirable alternative to the now dominant Middle East energy suppliers. From the Korean perspective, as long as Russia’s natural gas projects in the region provide competitive terms and guarantee the stability of supply, Russia clearly emerges as a potential competitive energy supplier.⁶⁰

5. Obstacles

Nevertheless, a number of problems and obstacles still hinder energy security cooperation in the region. As Peter Cleary, President of BP Gas Power & Renewables Korea outlines, there are four major requirements to establish energy security cooperation in the region: “1) political will for regional cooperation, 2) the right partnership to deliver major projects, 3) enormous investment in infrastructure and supply, and 4) simulation of market development.”⁶¹ However, I would argue that Russian-Northeast Asian bilateral and multi-lateral energy security cooperation in the region has been delayed due to either the relative underdevelopment or the absence of the above mentioned four requirements as well as other factors such as the persisting problems of the Russian Far East and the Northeast Asian energy pattern.

One of the main obstacles to energy security cooperation in the Northeast Asian region is the lack of confidence between Russia and the Northeast Asian states. For example, the proposed Kovytkta gas pipeline project remains uncertain because the Russian government has been indecisive about what route to choose and whether Kovytkta gas should be used for export or for domestic purposes. This makes it very difficult to bolster the confidence of Northeast Asian investors in the Russian government.⁶²

Moreover, concerns have been raised about the potential vulnerability of the extensive network of oil and gas pipelines that are either under development or still in the planning stage.⁶³ As

⁵⁹ John V. Mitchell, *The New Geopolitics of Energy* (London: Royal Institute for International Affairs, 1996), p. 61.

⁶⁰ Hong Shik Jeon, “Review of Gas Industry in Korea and requirements from future LNG contracts,” Speech by Vice President for LNG Purchase Division, Korea Gas Corporation, for International Seminar on Policies and Strategies toward Korea-Russia Energy Cooperation at Vladivostok, 7 October, 2003.

⁶¹ Clearly.

⁶² Petr Vinokurov, “Problems of Energy Cooperation and Energy Security in North-East Asia,” The report for a seminar Problems of Energy Cooperation and Energy Security in North-East Asia by the Carnegie Moscow Center, 19 February, 2004..

⁶³ See Keun-Wook Paik, and Jae-Yong Choi, *Pipeline Gas in Northeast Asia: Recent Development and Regional Perspective* Briefing No. 39. (London: Royal Institute of International Affairs, 1998); and Mark J. Valencia, and James

Kent Calder notes, some pipelines are likely to pass through areas now considered to be politically volatile. Besides the risk of short-term dislocations from terrorist attacks and other threats, the pipelines will also give the countries that host them the potentially vital leverage to disrupt or cut them entirely in crisis and war.⁶⁴ For example, the unresolved North Korean nuclear issue as well as territorial disputes among Northeast Asian countries, such as the dispute over the Kuril Island, may interrupt supplies. This makes creating an institutionalized multilateral energy cooperative structure necessary in Northeast Asia. Moreover, I argue that Russia's refusal to build the Kovykta gas pipeline project and its delayed oil pipeline route decision between China and Japan can be viewed as contributing to energy insecurity in the Northeast Asian region.

Second, the development of the Kovykta and Sakhalin gas projects has been affected by general Russian-South Korean bilateral diplomatic relations and trilateral relations among Russia, North Korea, and South Korea, due to the complementary nature of economic structures. For example, one of the possible Kovykta pipeline routes to pass through North Korean territory, suggested by the South Korean government in 2003, was ruled out primarily because of the unresolved North Korean nuclear crisis.

It is important to understand that government industrial policies are essential for the market penetration of gas. For example, several trans-border gas projects in the Russian Far East will never materialize unless they receive the active political support of all the nations involved. The region's energy security is closely associated with the security of international energy investment.⁶⁵ Governments set the rules and partly determine the costs and benefits of economic activities.⁶⁶ State authorized third-party access or open access to essential facilities such as LNG terminals, pipelines, and storage allows both suppliers and consumers easier access to the gas market. This also facilitates the substitution of natural gas for other fuels. Governments could also lead gas-to-gas competition to increase, and thus force existing facilities to be used more efficiently and gas supply costs reduced. Consequently, increased competition produces higher profits for facility owners, while inviting more participants to the market.⁶⁷ However, though Putin and

P. Dorian, "Multilateral Cooperation in Northeast Asia's Energy Sector: Possibilities and Problems," in Michael Stankiewicz, ed., *Energy and Security in Northeast Asia*, Policy paper No. 36 (Berkeley: University of California Institute on Global Conflict and Cooperation, 1998).

⁶⁴ Kent E. Calder, "Energy and Security in Northeast Asia's Arc of Crisis," in Michael Stankiewicz, ed., *Energy and Security in Northeast Asia*. Policy Paper No. 35 (Berkeley: University of California Institute on Global Conflict and Cooperation, 1998).

⁶⁵ Khartukov, p. 162.

⁶⁶ APEC, p. 70.

⁶⁷ Ibid.

Roh Moo Hyun showed some initiatives in 2003 at the government level, diplomatic relations between Moscow and Seoul have been stagnant without any special agenda from either side.

Third, this minor economic activity is also explained by the following factors: cultural dissimilarity between the two countries, lack of information about Russia among South Koreans, and the absence of South Korean experts on the Russian economy has further slowed down the pace of energy cooperation between the two countries. In Korea, in particular, energy specialists are virtually non-existent especially in resolving complex government-related issues and administrative litigation, with special emphasis on energy regulatory rule. For example, South Korea's recent Sakhalin oil scandal further illustrates its inexperience and lack of strategy in dealing with energy cooperation with the Russians. On 30 April 2005, South Korean prosecutors issued an arrest warrant for a senior railway official in connection with a failed Russian oil deal which cost the state-run railroad agency millions of dollars. Wang Young-yong, a director at state-run Korea Railroad, was suspected of pursuing the project without properly investigating its profitability. In 2004, Korea Railroad had agreed to invest in an oil project on Russia's Sakhalin Island, and paid a deposit of US \$ 6.2 million to Russian investment group Alfa-Eco. Yet, the Russian government later denied approval for the project, and the Korea Railroad withdrew from the contract. In April 2005, Alfa-Eco announced that it would return only US \$ 2.7 million to the Korea Railroad according to the terms of the agreed contract. The Board of Audit and Inspections of Korea stated that the railroad agency incurred damage to the nation by jumping into the project without legal basis or survey of profitability, not to mention any appropriate internal decision making process.⁶⁸ Although this incident did not happen because of government-to-government miscommunication, it is undeniable that it fueled general skepticisms toward the Russian energy infrastructure in the Russian Far East, among the Korean public and the private energy sectors. Moreover, the financial crisis that Russia and South Korea both suffered almost at the same time during the late 1990s has also contributed to delay mutual energy cooperation between the two countries.⁶⁹

Fourth, protectionism in Russia, which is overwhelmingly new Russian natural resource nationalism is the most important barrier for establishment of energy security in the region. From the perspective of energy project host country, direct foreign investment is the key instrument in developing the project. In fact, the export component of the Russian Far East's

⁶⁸ The Associated Press, 18 April, 2005.

⁶⁹ Jeongdae Park and Jaeyoung Lee, "Industrial Cooperation between Korea and Russia: Current Situation and Prospects," *Journal of Asia Pacific Affairs* Vol. 3 No.2 Asia- Pacific Research Center, Hanyang University February 2002, pp. 61-62.

fuel and power balances is extremely sensitive to other Asian countries' involvement in this region's energy resource development.⁷⁰ In this sense, the investment climate of the host country is crucial because the combination of taxes, tariffs, laws, and regulations determines the extent and speed of such investment flows. An improved legislative and regulatory base in the energy sector promotes standardization, certification, and better licensing of energy market participants.⁷¹ However, changing legislation and an unstable tax regime pose additional barriers to the development of effective businesses.⁷² Putin failed to provide the legal and institutional infrastructure for external energy transactions for foreign energy companies. Moreover, non-transparent procedure in the Russian bureaucracy created additional difficulties for economic cooperation with Russia.

Specifically, institutional barriers such as Russia's production sharing agreements concern investors.⁷³ In the upstream operations of oil and natural gas, a production sharing agreement law is still under consideration in the Russian Parliament, and is subject to revisions. Again, for long-term investment decisions, political risks are still high for foreign investors.⁷⁴ Russia has not been particularly successful in energy price reform, nor has it made a dramatic improvement in corporate transparency and energy efficiency while ensuring proper safeguards against the diverse environmental effects of increased energy production and use.⁷⁵ Russia's regulatory reform has also been so slow that it has had disturbing impacts on energy supply.⁷⁶

The Kremlin has been reluctant to encourage foreign participation in the energy projects. Instead, Moscow has pursued Gazprom's more involvement in every gas project. For example, as the paused Kovykta project shows, "China and South Korea was highly concerned that the Kremlin had appointed Gazprom as coordinator of all gas projects in the country, making it unclear whether business negotiations should be held with RP or Gazprom. And the situation was aggravated by the fact that the working groups had not met for almost six months."⁷⁷ Moreover, Gazprom's recent objection to developing the Kovykta project and its policy of

⁷⁰ Khartukov, p. 152.

⁷¹ APEC, p. 215.

⁷² *Ibid.*, p. 211.

⁷³ APEC, p. 116.

⁷⁴ *Ibid.*, p. 211.

⁷⁵ "IEA Commends Russian Efforts on Energy Security, Calls for Full Implementation of Reforms," *Russian Energy Survey 2002*, International Energy Agency (IEA)/PRESS (02)05, Moscow, 6 March 2002, on <http://www.iea.org/new/releases/2002/Russia.htm>, accessed on 28 September, 2003.

⁷⁶ The transition from a regulated market to a competitive one is not always as smooth as might be set out in a text book. Challenges abound, and there is no one size fits all remedy. From the projected energy demand perspective, the bottom line is that regulatory reform, unless well planned and executed, may well lead to more problems than it solves. See APEC, p. 116

⁷⁷ Simonia, p. 9.

diverting foreign investors' attention to the Sakhalin project also show that Kremlin leaders pursue nothing more than a protective nationalistic energy policy and simply seeks financial benefits.

Fifth, the inherent problems of the Russian Far East also contribute to the delay of energy cooperation in the region. Despite its sizable energy resources, it is undeniable that the Russian Far East is still facing a severe energy crisis because of an insufficient infrastructure and ineffective economic policies. The lack of a land based transportation infrastructure connecting this region with the country's major fuel sources in neighboring Siberia and distant European Russia means that only summer seaborne transportation is possible.⁷⁸ Moreover, long haul deliveries of liquid and solid fuels are too costly because of high railroad tariffs and sea freight costs. Even since *perestroika*, the Russian Far East has been considered Russia's most vulnerable and least protected region in terms of energy supplies.⁷⁹ This region has suffered serious depopulation, and the major southern cities often still experience cutoffs of electricity and hot water during winter.⁸⁰ For example, since 1991, the region lost nearly 1 million of its estimated 8 million inhabitants.⁸¹ And the exceptionally high price of energy bills meant pit managers could not afford to pay their workers. In August 1996, coal miners protesting wage arrears staged hunger strikes that shut down the Primorskugol mines.⁸²

Most of all, harsh environmental conditions hinder the development of the region's energy resources. Climatic and operating conditions in these regions are extremely tough. From October to June, these conditions are characterized by an ice cover exceeding 2 meters (m), icebergs up to 20-m thick, frequent typhoons, currents with widely varying directions, and low air temperatures. Field development under such conditions would require technologically advanced and capital intensive ice resistant fixed platforms for drilling and production and underwater pipelines protected against icebergs.⁸³ It is important to point out that environmental challenges in the region often create an unexpectedly wide gap between the initial feasibility study and the later actual process, in terms of project cost. For example, in July 2005 Yuzhno-Sakhalinsk Executives at the Sakhalin-2 project said that the project could cost US \$ 20 billion, twice as much as expected, partly because of the overruns and delays to going ahead

⁷⁸ Khartukov, p. 142.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ "Russia Demographic Trends Up to Year 2015," *Moscow Zdravookhraneniye Rossiyskoy Federatsii*, 2 March-April 1999, pp. 27-32, translated in *Foreign Broadcasting Information Service (FBIS)* January 2, 1999, pp. 1-8.

⁸² Gilbert Rozman, "The Crisis of the Russian Far East: Who Is to Blame?" *Problems of Post- Communism*, vol. 44, no. 5, September/October 1997, p. 4.

⁸³ Khartukov, p. 145.

caused by insufficient information. “The company did not properly model the geology of the area and was unprepared for the effect of ice on the pipeline and environmental concerns.”⁸⁴ Sakhalin Energy Chief Executive, Ian Craig, also states that the company underestimated ice-related working limitations during the operational setup of the platforms. “Speed is greatly reduced by sea freeze in winter... and time is cost without detailing the overruns.”⁸⁵ Consequently, according to Guyt, Sakhalin Energy’s pipeline manager, insufficient data led to a high-profile decision to reroute a subsea pipeline, leading to more overruns. Following a late-2003 survey, Sakhalin Energy announced in April 2004 that ice was formed even deeper into the seabed than previously expected and that, as a result, the pipeline would have to be buried to greater depth. Guyt added that Sakhalin Energy had relied on old data that underestimated the depth. The deeper burial implied the use of more powerful and expensive equipment. In short, increased concerns about environmental issues significantly contributed to an expected delay in gas production.

The chronic economic, social, and political backwardness of this region remain of concern to the development of future energy markets. As Rozman notes, the region’s problems are nothing new, suffering as it does from five general negative aspects, tendencies that clearly hinder today’s further economic development. These include:

“Localism flirting with separatism, including threats to revive the short-lived Far Eastern Republic of the early 1920s; near domination by organized crime in a region already criminalized by Stalin’s labor camps; xenophobic paranoia about international conspiracies; dictatorship by local demagogues; and an economically inspired population exodus-an inviting vacuum for nearly overpopulated China.”⁸⁶

The economically depressed region represents only 4 percent of the Russian Duma seats but covers 36 percent of Russia’s territory.⁸⁷ The substantial loss of federal support has further eroded what was once a relatively prosperous region. Some skeptics still believe that the future of this region is not that bright and Moscow does not seem to pay enough attention. Moreover, one might argue that the current Russian nationalism in the region, often seen in the form of

⁸⁴ Benoit Faucon, *Dow Jones Newswires*, in “Shell Ties Woes of Russia Project To Lack of Data,” *The Wall Street Journal Europe*, Vol. 23, No. 157, 12 September, 2005.

⁸⁵ Ibid.

⁸⁶ Rozman, p. 5; Viktor Larin, “‘Yellow Peril’ Again? The Chinese and the Russian Far East,” in *Rediscovering Russia in Asia: Siberia and the Russian Far East*, ed. Stephen Kotkin and David Wolff (Armond, NY: M.E.Sharpe, 1995), pp. 296-299; and John J. Stephan, *The Russian Far East: A History* (Stanford: Stanford University Press, 1994), p. 3.

⁸⁷ Tom Wuchte, “Northeast Asia’s Forgotten Worry: Russia’s Far East,” *Pacific Focus*, Vol. 16, No. 2 Fall 2001, p. 47.

anti-Chinese rhetoric or fear of Asian dominance, may spoil the potential for energy cooperation with Northeast Asian nations.⁸⁸

Sixth, “supply infrastructure, technologies for utilization and supply, development of markets for gas products and services, and facilitating policies and regulations at both domestic and international levels are essential.”⁸⁹ Development of local distribution networks is particularly crucial for natural gas markets to form and for projects to proceed. However, efficient distribution networks are lacking in the region.

There is no denying that both bilateral and multilateral energy cooperation within Northeast Asia have high potentials for bringing shared prosperity. While taking advantage of the diverse energy profiles of each country based on economies of scale, they can advance the frontiers of cooperation in areas such as trans-boundary power interconnections, natural gas pipeline networks, joint use of existing supply infrastructure, transfer of technology and know-how, and joint exploration and development of energy resources.⁹⁰

Nevertheless, unlike most other regions including Europe, North and Latin America, Southeast Asia, even Africa, energy cooperation among Northeast Asian nations is a relatively new phenomenon mostly because there was no such discussion in the past. Northeast Asia has no general economic or institutional agreements or unions like the European Union, ASEAN, OPEC, the European Energy Charter, or the ASEAN Council on Petroleum (ASCOPE). Until recently, if there were any, they had still been developed on the basis of bilateral relations rather than a multilateral framework.⁹¹ The political tensions, cultural, ethnic and institutional obstacles, as well as economic differences among the nations in Northeast Asia have often compelled each country to cope individually with their own energy problems while blocking the development of an effective regional system of energy security.⁹²

Some experts also suspect that the competing national goals for energy projects might lead to more tensions rather than cooperation.⁹³ Moreover, in Northeast Asia, there are currently no

⁸⁸ Wuchte, p. 48.

⁸⁹ APEC, p. 69

⁹⁰ *Ibid.*, p. 116.

⁹¹ Khartukov, p. 176.

⁹² *Ibid.*

⁹³ Valencia, Mark J., and James P. Dorian, “Multilateral Cooperation in Northeast Asia’s Energy Sector: Possibilities and Problems,” *Energy and Security in Northeast Asia: Supply and Demand; Conflict and Cooperation*, Integrated Gasification Combined Cycle (IGCC) Policy Paper 3, February, 1998, pp. 41-58.

common legal and institutional frameworks for energy collaboration.⁹⁴ Only Russia and Japan have signed both the European Energy Charter and the Energy Charter Treaty⁹⁵, and South Korea and Japan are the only members of the International Energy Agency (IEA) in this region. As previously discussed, energy security is still seen as quite vulnerable considering the complexity of the Northeast Asian political situation. Northeast Asian countries do admit however that ongoing energy projects in the Russian Far East are likely to play a crucial role in integrating the Northeast Asian community and promoting regional energy cooperation.

Nevertheless, they all fear possible overdependence on any single source of energy supplies at the same time. For example, China is clearly concerned about the possibility of exclusive dependence on future supplies from Russia, whereas Japan has a similar concern about China. The majority of the considered projects are oriented to the Chinese market. Russia also worries that China, as the monopoly consumer of Russian energy resources, will come to dictate its rules in the pricing of Russian energy resources.⁹⁶ Once again, South Korea is afraid of possible disruptions in pipeline supplies through North Korea and China. In short, Russian oil and gas may not be that likely to dominate Northeast Asia's energy markets.⁹⁷ Rather, it is highly likely that Russia will become 'a key supplementary supplier' able to counterbalance the traditional sources of Northeast Asian energy imports, which is mostly the Middle East at this moment.⁹⁸

Perhaps, in my opinion, one of the positive ways to look at energy security in the Russian Far East is to broach multilateral energy framework on the basis of the region's energy importers and exporters, instead of focusing on either supply or demand side.⁹⁹ The experience of the past suggests that any attempt to enhance energy security focusing on one side turns out to be unsustainable in the end. On the contrary, multilateral cooperative frameworks involving both exporters and importers prove more advantageous¹⁰⁰ because they reinforce stability and support economic development. As Ivanov points out, the size of the market for natural gas in the Russian Far East is not particularly small, but at the same time it is not big enough to justify the

⁹⁴ Khartukov, p. 176.

⁹⁵ Ibid.

⁹⁶ Boris Saneev, "Kovykta, Yakutia and Sakhalin Energy Project: Barriers and Solutions," Speech at International Seminar on Policies and Strategies toward Korea-Russia Energy Cooperation, Vladivostok, 7 October 2003.

⁹⁷ According to Khartukov, neither Russia's gas exports (even at maximum possible levels of 50 bm^3/y -70 bm^3/y in the 2020s) nor the country's crude supplies (up to 20 Mt/y -30 Mt/y) can replace East Asia's traditional sources of energy imports. He adds that the looming energy imports from the Russian Far East should not be regarded as the long-awaited panacea for all of East Asia's energy ills. See Khartukov, pp. 176-177.

⁹⁸ Ibid., p. 177.

⁹⁹ Ibid.

¹⁰⁰ Such efforts include the Council for Mutual Economic Assistance's (COMECON) energy programs and trade protocols, the Caribbean's San Jose Pact, and the ASEAN Council on Petroleum and its Petroleum Sharing Agreement. See Kharutkov, p. 177.

construction of the infrastructure for a major pipeline. A more serious problem is that the multi billion dollar funds needed for such large-scale projects are simply not available either inside Russia or inside Korea.¹⁰¹ Therefore, it is necessary to diversify the export markets for Russian energy resources in Northeast Asia with the active involvement of China, Japan, the United States, two Koreas, and other nations, possibly Mongolia. Specifically, as for the joint ventures for the pipeline project, it is vital to look for a way to take in those various joint venture agreements, and consolidate them in such a way that none of the participating countries or companies lose value in their ownership of these assets. Then, such multilateral cooperation would link the region in an energy community and thus contribute to the process of regional integration.¹⁰² Finally, the issue of energy security in Northeast Asia is no longer only a regional concern but becomes more and more a global concern too.¹⁰³

Conclusion

Since the dissolution of the Soviet Union, Russia has always wanted to become a pivotal regional player virtually everywhere its borders meet. The Korean peninsula was no exception to this, although not quite as imperative as Russia's western and southern fronts. Putin's Russia is clearly hoping to upgrade its prestige and influence on the Korean peninsula by promoting its role as an objective mediator and by creating a multilateral security framework in Northeast Asia. Although Russia has often been portrayed as a waning political and economic force to Koreans especially since the end of the Cold War, the country cannot be simply ignored in the "new geopolitics of energy" because of its enormous current energy production and export potential.¹⁰⁴ Simultaneously, considering that Russia's economic growth depends both on its vast natural resources and their efficient use, Russia has the economic interest to expand its energy exporting market in Northeast Asia. From the regional economic security perspective, Northeast Asian regional integration depends upon a certain degree of shared economic, political, and ideological interests before it can be successfully launched. Specifically, economic interdependence is essential for regional security cooperation. In this regard, the Kovykta and Sakhalin oil and gas

¹⁰¹ Ivanov, p. 33.

¹⁰² This is similar to the IEA's approach. Three key policy challenges derived from implications of energy demand and supply can be applied to Northeast Asia. These are the so-called three essential E's: Energy security, Economic development, Efficiency and environmental sustainability. See "The Ramifications of Energy Demand and Supply for International Cooperation in Northeast Asia," *Economic Development and Environment on the Sakhalin Offshore Oil and Gas Fields II* (Slavic Research Center, Hokkaido University, 1999), on <http://src-h.slav.hokudai.ac.jp/sakhalin/eng/71/kalashnikov2.html>, accessed on 23 November 2001.

¹⁰³ Sang-Gon Lee, "Welcoming Address," Speech by President of Korea Energy Economics Institute for Towards Multilateral Energy Cooperation in Northeast Asia Workshop, Seoul, Korea 5 September, 2003.

¹⁰⁴ John V. Mitchell, *The New Geopolitics of Energy* (London: Royal Institute for International Affairs, 1996), p. 61.

projects clearly provide Russia and Northeast Asian countries with a possible key to energy security. From this point of view, it will be extremely interesting to observe the development of these two projects over the next several years.

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