

Energy Cooperation Problems in Northeast Asia: Unfolding the Reality

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It is a truism that Northeast Asian states could benefit *very much* if they were to cooperate in the *energy security* realm. However, to many, especially economists, their behaviour to this common sense solution has been bewildering: there has been simply no progress towards this end and it still remains a puzzle, even to many energy specialists. This article attempts to answer a simple question: Why do the Northeast Asian states, namely China, Japan, Korea, and Russia, not cooperate? For its analysis, the author of the article relies on content analysis of recently released official governmental long-term energy policy and strategy documents of these states, and notes that cooperation for energy security reasons at the regional level is conspicuously absent, which possibly implies a lack of desire and willingness to do so amongst themselves. The article, however, deliberately omits from its study Korea, simply because no such long-term energy policy exists today. It attributes the major cause to the strong propensity by energy specialists to interchangeably use the concepts of 'energy cooperation' and 'energy security' in their analysis.

Key words: Northeast Asia, general energy cooperation, energy security cooperation, energy security, and official long-term energy policy.

Introduction

Why have the Northeast Asian states not been able to cooperate on energy despite their growing concern with energy security?¹ For a region comprised of nations whose energy imports rank second (China), third (Japan), and sixth (Korea) in the world, and whose total consumption rank second (China), third (Japan), and seventh (Korea), cooperation would seem to be logical.

Common sense tells us that states with a permanent handicap in terms of energy resources would benefit from cooperation to the extent that their foremost priority would be energy security. However, their respective long-term energy policies and strategies tells a different story, i.e., that a desire for cooperation at the regional level is simply not there.

They *do* all agree on the importance of cooperation in improving energy efficiency and energy structure. The Northeast Asian states have actively pursued ties with other subregions, e.g., Southeast Asia and Central Asia, and with external organizations, e.g. ASEAN and APEC. However, these cooperative activities have been limited to discussing various aspects of transnational energy-related issues, ranging from the environment to technology transfer, information sharing to data base building, clean energy to renewable energy, and from energy efficiency to energy structure.

Yet, the possibility of cooperating in terms of *energy security* has been greeted with nothing but cold responses. Since 2004, for instance, the Korean government has initiated and organized ministerial-level energy talks in the hope of forging a foundation and framework for regional energy security cooperation. However, its efforts have only been partially successful due to the absence of China and Japan. At the same time, though, the regional states have been explicit in their support for what might be termed “general energy cooperation” (GEC) and energy security cooperation (ESC) at higher and broader regional levels, e.g. East Asia and Asia-Pacific, but not at the Northeast Asian level.

The support for the idea of cooperation at such venues as ASEAN+3 and APEC² is misleading for two reasons. Firstly there are conceptual differences between GEC and ESC. The former is much broader, whilst energy security has tended to be regarded as constricted. In other words, whilst GEC may include energy security issues within its ambit, the reverse cannot be true because energy security does not supplement the interests of other energy areas, e.g., renewable energy, energy technology, and environment, etc.

Secondly, is the target dimension of cooperation: cooperation with states that only either produce energy resources or have access to transit routes for the delivery of these resources, or with energy related international organizations. From each state’s long-term energy policy programmes it is apparent that they are not ready to cooperate. They still prefer to act on their own, either unilaterally or perhaps bilaterally. Their focus is on how to nurture a relationship with the lone regional energy supplier, i.e. Russia and the transit nation, i.e. again, Russia.

The author does not wish to appear prejudiced nor biased about the prospects for energy security cooperation in Northeast Asia. This article is an attempt to address the reasons why it will be difficult, at least for some time, to see energy cooperation in this region. The article begins by clarifying the concept of energy cooperation and energy security, denying any seeming interchangeability. Then, through content analysis of long-term energy policies, an attempt is made to study China’s, Japan’s, and Russia’s basic stance on cooperation in the energy security realm. The conclusion provides some thoughts on how to make cooperation feasible.

Conceptual Problem: GEC and ESC

GEC and ESC are fundamentally different. Yet, in drafting their long-term energy policy statements, the governments in question have tended to use them interchangeably. Improperly understood and ill-defined concepts (ideas) inevitably and easily result in misconceived policy direction, orientation, and implementation. Finding a common ground for cooperation is difficult, making the idea of cooperation unthink-

able, if not impossible, among these states. Thus, we may believe that the regional states do not actually want any energy cooperation.

The term “energy security” essentially means the maintenance of sufficient energy supplies, prices commensurate with purchasing power, and guaranteed safe delivery of energy resources.³ On the other hand, energy cooperation is often more concerned with the provision of energy services through improved management of international energy markets, wider availability and higher quality of energy resources and the expansion of choices in order to achieve sustainable growth.⁴ It thus incorporates the notion of a reliable ample supply of energy resources, ranging from fossil fuels to renewables and nuclear power.

In other words, energy policy-making and cooperation are now pursued for a much larger end than before, namely, sustainable growth. In recent years, the scope of energy policy goals have been expanded and enlarged by the demand and desire to achieve sustainable growth at the local, regional, and global levels. Table 1 outlines the shifting paradigm of energy cooperation.

Whilst the ultimate goal of a state’s energy policy is to achieve sustainable growth at the national level, and thereby contribute to growth at the global level, there are many other interests that the state must take into consideration, and these interests

Table 1
Shifting Paradigm of Energy Cooperation

Traditional Paradigm	Emerging Paradigm
Energy considered primarily as a sectoral issue	Greater consideration of social, economic, and environmental impacts of energy
Limitations on fossil fuels	Limitations on the assimilative capacity of the earth and its atmosphere
Emphasis on expanding supplies of fossil fuels	Emphasis on developing a wider portfolio of energy resources and on cleaner energy technologies
External social and environmental costs of energy use largely ignored	Finding ways to address the negative externalities associated with energy use
Economic growth accorded highest priority (even in prosperous economies)	Understanding of the links between economy and ecology, and of the cost-effectiveness of addressing environment impacts early on
Tendency to focus on local pollution	Recognition of the need to address environmental impacts of all kinds and at all scales (local to global)
Emphasis on increasing energy supply	Emphasis on expanding energy services, widening access, and increasing efficiency
Concern with ourselves and our present needs	Recognition of our common future and of the welfare of future generation

Source: Michael Jefferson, “Energy Policies for Sustainable Development,” 418.

are now more effectively realized by means of cooperation for a variety of reasons. Technological discrepancies between developed and developing states in the oil refinery industry, for instance, must be overcome by cooperation because failure to do so only perpetuates energy and environmental problems. A widening gap in energy refining technology not only leads to increased wastage of energy, but also pollution due to the combustion of low quality energy products and the transnational character of air pollution. Hence, the scope and range of a state's energy interests are more extensive than ever because of their deepening interconnectedness.

For a state to secure a wide variety of interests that are interconnected, cooperation is widely perceived to be the best means. According to this view, these interests can be more effectively and sufficiently secured through systematic arrangements at both the regional and global levels. For a region greatly concerned with not only its own energy interests, but also transnational energy problems, including the environment and supply security, cooperation seems to offer "an array of powerful incentives." Linking energy infrastructure, for example, can "create synergies and market efficiencies as well as improve the cost and access to foreign capital",⁵ which are often critical to the development of the region's overseas energy exploration and production activities, not to mention improving energy structure and efficiency.

Furthermore, GEC at the regional level can help facilitate the materialization of interests in other energy-related areas, such as the environment and clean and renewable energy, by fully utilizing the region's capacity in capital, technology, knowledge, information, etc. In the same vein, a common regional practice of energy activities may eventually foster formal structures and informal norms that could broaden cooperation in the region.⁶ Thus, the potential benefits from this sort of cooperation are expected to be political trust, lower costs, economic development, deregulation, environmental improvements, decreased political reliance on oil exporters and increased national security.⁷

Many people approach the subject with an economic rather than a security and/or international relations mind set. One of the most prominent arguments suggested by the proponents of cooperation is that a sustainable energy supply will be realized by cooperation. It is not, however, applicable to the thinking of strategic planners in pursuit of strategic interests because they require a certain degree of engagement by non-economic and non-technological areas, namely, the security realm, i.e., when imports of oil exceed one hundred million tons per year, a state must rely on all types of available measures including military ones.

Thus, energy security interests are no longer merely economic interests, but also national security interests. Japan has long perceived energy interests to be an integral part of national security interests. Indeed, the country's need for energy was one of the main reasons for starting World War II in Asia.⁸ Following WW II, the US undertook a series of initiatives with respect to the conceptualization of 'energy security.' In 1979, former US president Jimmy Carter publicly proclaimed the 'energy threat' as a threat to national security. China was a latecomer in realizing the security aspect, not bringing it to light until the so-called "New Energy Policy" in 1997. Through further articulation and elaboration, it succeeded in securitizing energy interests at the national level, thereby formalizing, inventing, or reviving all energy-related state

systems, mechanisms and relevant apparatus. To meet the challenges arising from energy security, the work of shaping China's energy policy is no longer confined to energy institutions (i.e., the electricity and water resources departments, and the energy bureau). Other bodies, such as state-owned oil companies, the State Development and Reform Commission, the Development Research Institute, Ministry of Foreign Affairs, etc., have now also been brought into play.⁹

By securitizing energy interests, any economic value from cooperation has lost ground in the foreign-policy decision-making communities of the regional states. What should be thought of in terms of relative gains is instead, now being looked at in terms of zero-sum game.¹⁰ The political rivalry and distrust among the regional states is such that one state's advancement in securing oil resources, i.e., incurred a gain, makes the other states perceive they have incurred a loss. In Northeast Asia, especially China and Japan, there may never be any energy cooperation unless a clear line is drawn between the concepts of cooperation for energy security and energy cooperation.

As noted by many, "When major powers that are also the most voracious oil consumers compete over scarce resources, they find it difficult to coexist."¹¹ What makes the competition in Northeast Asia worse is that there is a supplier with a regional major power status that has to rely on its energy resources for fast and effective recovery of its economy. From the supplier's dimension, they tend to seek cooperation to secure and enhance their market access at a competitive price so as to maximize the return. Their desire to maximize the return is generating great competition among the purchasers and the situation is exacerbated due to the lack of any cooperative framework such as a market.

The concept of energy security is fundamentally different from that of energy cooperation in general. It is wrong to think that they are complementary one is not going to lead to the other. GEC does not necessarily have to lead to ESC, and ESC is not necessarily going to guarantee the realization of GEC because it would depend on the outcome of the former. If the regional states could acquire their much needed oil and gas at a cheaper price and through a stable group of diverse suppliers, then, it could have the converse effect on the prospect for GEC. The regional states might become less interested in GEC because their supply is guaranteed in their desired form. Unless there is another goal to achieve economic development in a more efficient way, perhaps only selective issues in the area of GEC such as the environment may be cooperative.

Review of Policies

The conceptual confusion between energy cooperation and energy security is clear in the national energy policies of the Northeast Asian regional states. Their expressed desire for cooperation is not with the regional states, but with energy suppliers, producers, and transit nations. None of the official documents mention cooperation at the regional level. This lack of commitment on the part of the member nations may perhaps, at least up until now, be attributed to the open characteristic of regionalism embedded in these frameworks. Another important fact about their statements at these meetings is that they are one-dimensional and focus heavily on the economic aspects of cooperation.

China

Although China became an oil product importer in 1993 and a crude oil importer in 1996, the energy issue failed to catch the attention of the top leadership in a highly hierarchical bureaucracy until 1997. That year, Premier Li Peng delivered the first national energy policy, “New Energy Policy (*Xin nengyuan zhengce*),” in which he proposed that “development in the petroleum sector should rely on two markets (domestic and overseas) and two resources (oil and gas).” To achieve this goal, China adopted a ‘going-out (*zouchuqu*)’ strategy. In short, the New Policy addressed the importance of expanding China’s involvement in domestic and overseas exploration and production of oil and gas, and encouraging its oil companies to share overseas oil and gas resources. This strategy was re-visited in 1998 by then premier Zhu Rongji as part of the broader policy of global engagement. The government also listed “three strategic regions” for the Chinese oil companies to target: Central Asia and Russia, the Middle East and North Africa, and South America.”¹² At that time, China’s energy policy had been couched more in economic terms, than strategic or geopolitical terms.

However, at the turn of the century, China began to identify its energy security with strategic thinking. This is simply the result of Beijing’s realization of the importance of energy supplies for sustainable economic development, and feeling the urgent need to seriously consider the effects of mismanaging energy in the long run. Especially in the wake of the 9.11 terrorist attacks in 2001 and the subsequent retaliatory measures undertaken by the US, China was quick to learn the “high politics” aspect of and rising strategic interest concerns about energy security policy. Finally in 2003, Premier Wen Jiabao formalized seven small research groups (*yanjiu xiaozhu*) to prepare for the first time a long-term ‘energy security’ strategy at the national level. Since then, energy security has been prioritized by the Beijing leadership as a national security issue. The present situation is summarized well by Lieberthal and Herberg:

In short, China’s domestic energy supply-demand gap poses challenges to ongoing rapid economic growth. As this problem becomes more acute over time, energy imports will play an increasing role in China’s economy. Put simply, energy security has become an issue of the “high politics” of national security, not just the “low politics” of domestic economic policy.¹³

From an economic perspective, Chinese strategic thinking was underscored by two factors. Firstly, the almost doubling of crude oil imports from 26.6 million tons to 70.2 million in 2000.¹⁴ Secondly, China’s total energy consumption growth rate since 2000 has exceeded its GDP growth rate by as much as five per cent. Thus, China’s energy security is not solely about securing foreign supplies, but also about managing domestic demand.¹⁵ For example, in 2004, as a result of the rapid rise in consumption and climbing oil prices, Beijing had to spend an extra US\$7 billion in foreign exchange, with payment totalling over US\$43 billion.¹⁶ Crude oil and oil products became the country’s largest single import item. This expenditure not only had a negative impact on consumption, investment, exports and imports, but it also caused a 0.8 per cent decline in China’s GDP.

In these pressing circumstances, Beijing began to realize the compelling need to plan for sufficient fuel to permit continued long-term sustainable economic growth, and alleviate ensuing changes in its social (i.e., rising car ownership) and energy industry structure. In order to meet these challenges, long-term energy policy and strategy reports were drafted starting in 2001. The different emphases of these reports reveal the limited capacity of the government and competing energy interests to pursue national energy security. They turned out more to be indicative than effective 'grand plans.'¹⁷ While both the 2001 and 2003 reports focused on oil and gas, the 2005 report primarily targeted domestic supply and demand, i.e., maximizing domestic supply and improving energy conservation, both of which require better planning and better coordination among different sectors of the economy. It called for a centralized 'authoritative institution' to make national energy policy.

Despite the numerous efforts, there is one underlying significant problem in all these reports: the goals are laid out without direction, priority, and orientation. It is indeed difficult to incorporate all the necessary criteria in a long-term energy policy, but the Chinese government is not generous in giving attention to the issue of cooperation with other needy countries, either regional neighbors or distant transit nations. When it comes to the names of potential cooperative partners, its emphasis on cooperation is narrow and selective in scope. Most "partners" are current energy producers, countries with energy production potential, or transit nations which are within its geographical proximity, i.e., Kazakhstan, Pakistan, India, ASEAN, and Russia.¹⁸ None of the long-term reports on Chinese energy security addresses the issue of cooperation with regional states. Thus, despite the chronicled rhetoric by Chinese officials about the necessity for energy cooperation at ASEAN, APEC, and Asian Cooperation Dialogue (ACD), Chinese words and action do not tally.

The last time China made explicit reference to regional cooperation in an official document was perhaps in 1999, with nothing similar thereafter.¹⁹ Since then, the official policy has been self-oriented, self-centric, self-helping, and to an extent selfish by neglecting the calls for cooperation at governmental level made by other regional players. In 2004, for instance, when China was invited to an inaugural ministerial level talk on energy cooperation at the regional level initiated by the Korean government, it totally neglected the cooperation aspect and gave no explanation.²⁰ (Japan did the same. See below).

As such, many Chinese and foreign energy observers believe that such behavior is not going to "get China anywhere until it can develop some consensus on what it wants in its energy development."²¹ In order to meet the challenges stemming from the complex web of interconnected goals and priorities of energy security, a ministerial-level group, known as the "National Energy Leading Small Group" (*Guojia nengyuan lingdao xiaozhu*), was founded in May 2005. It is to be in charge of developing a national energy strategy for the development and conservation of energy resources, energy security and emergency responses, and energy cooperation with other countries.²²

The formation of this Group indicates an enhanced awareness about energy security at the top levels of China's leadership. In March 2006, Premier Wen Jiabao stated that "energy is an important strategic issue concerning China's economic growth, social stability and national security."²³ Also, the 2006 Working Report (*Gongzuo baogao*), delivered by Vice Premier Zeng Peiyan to the People's Congress

in March 2006²⁴ summarized China's potential and existing energy challenges as in follows:²⁵

- sustained strong energy demand that places pressure on supply;
- shortage in resources that limits the growth of the energy industry;
- coal-centred supply structure that is detrimental to the environment;
- backward technologies that inhibit efficient supply of energy;
- international market fluctuations that negatively impact domestic energy supply.

To achieve these goals, the Report listed these strategies: (1) develop multiple oil import sources and import locations by increasing imports from Russia and Central Asia; (2) raise the proportion of crude oil imports from areas other than the Middle East so as to achieve diversification of energy suppliers; (3) prepare against unexpected interruption of oil supplies by building strategic oil reserves; (4) promote and strengthen regional and bilateral energy cooperation with energy-producing nations; and (5) participate in the Energy Charter Treaty. Once again, China's attitudes regarding cooperation in Northeast Asia are conspicuously missing. At the governmental level or Track-I level, China is simply not interested in cooperating with the Northeast Asian oil importing nations.

There are perhaps several causal factors. China's desire to counteract the rapid growth in oil consumption and demand may be the top priority. Beijing may think it can secure energy resources more efficiently through strengthening relationships with energy-producing nations on its own, rather than trying to collaborate with rivals. Perhaps, without a formal ministry, China has had difficulties in learning about cooperation possibilities and may thus inadvertently ignore them. Without redefining and re-conceptualizing the idea and meaning of energy cooperation in Northeast Asia, regional cooperation in any realm is impossible without China's active participation.

Japan

In June 2006, based on *The Basic Energy Plan of 2003* and *The Basic Energy Policy of 2004*, Japan finally released its first long-term national energy policy entitled "New National Energy Strategy (NNES)."²⁶ It was prepared out of concerns about the future scarcity of fossil fuels and against the peak-production-theory. It posits firstly that Japan will face the strong possibility that "fossil fuel supplies and energy politics will be fraught in the coming years",²⁷ and secondly that global oil output "will peak in 2050 and natural gas output will reach its zenith in 2100."²⁸ Due to external and internal factors that will cause energy prices to rise, a "very tight squeeze" between demand and supply will be protracted.²⁹ Driven by the specter of another oil crisis, the global rush for energy resources and a simmering gas dispute with China, the NNES was published amid fears about whether the nation will be able to ensure oil and other energy supplies to fuel its economy.³⁰

The aims of the NNES are threefold: (1) to establish energy security measures that the Japanese people can trust; (2) to establish a foundation for sustainable development through a comprehensive solution combining both energy and environmental issues; and (3) to commit to assist Asian and world nations address

the energy problem.³¹ Other goals are to boost upstream investment, add refined products to the government's strategic oil stockpiles, and reduce the country's oil dependency.³² There are three points the report emphasizes as fundamental: Firstly, the establishing of a state-of-the-art energy supply-demand structure. Secondly, the goals are expected to be realized by strengthening diplomatic efforts and comprehensive measures to address energy and environmental issues. Thirdly, improving emergency measures is critical. By co-ordinating public and private organizations, the following five specific long-term targets are to be attained jointly by the government and private entities:³³

- Another 30 per cent improvement in efficiency by 2030.
- Reduction of dependence on petroleum to lower than 40 per cent in 2030.
- Reduction of dependence on petroleum in the transport industry to around 80 per cent by 2030.
- Maintain nuclear power as a proportion of total power production at 30 to 40 per cent until 2030 or beyond.
- Increase the self-development ratio of overseas natural resources development to around 40 per cent by 2030.

In addition, various programs to be actively pursued at the national level were reviewed and evaluated, including: energy-conservation frontrunner plan, transport energy evolution plan, new energy innovation plan, nuclear power national plan, energy and natural resources securing strategy, Asia energy environment cooperation strategy, reinforcement of emergency countermeasures, and energy technology transfer.³⁴

In light of the energy and natural resources securing strategy, the NNES notes that this goal will be realized by actively pursuing more equity production through strengthening relations with oil/gas producing countries. One of the most prominent measures adopted by the NNES is the provision of technical assistance beyond the energy sector (i.e., official development assistance and economic cooperation) as well as by increasing overall "investment" in those countries.³⁵ To enhance the investment capacity of the Japanese firms in the equity participation of foreign energy sources and companies, the Japanese government is now aiming to raise the participation limits on the government-owned Japan Oil and Gas and Metal National Corporation in upstream projects from the current 50 per cent.³⁶ In addition, it has also been steering Japan's overseas upstream investment policy towards more proactive participation by Japan National Oil Corporation (JNOC) in exploration and development overseas for a percentage of production.³⁷

One salient example is when Japanese gas companies Osaka Gas, Tokyo Gas and Chubu Electric were able to purchase gas from the Chevron-led Gordon LNG project in Australia, which was already being lined up by the Chinese state-owned China National Offshore Oil Corporation (CNOOC). The case was entangled in a heated competition in which CNOOC appeared to be closing in as the favorite. However in the end, Japan was able to "steal in secure" supply of their Chinese rivals.³⁸ As Japan prepares to offset the dominance of oil against cleaner-burning natural gas and raise the proportion of natural gas in the total energy supply from 13.5 per cent in 2000 to 17.8 per cent in 2030, the competition between the two countries to secure natural gas has recently intensified.

Japan's fierce rivalry with China over securing energy resources in Northeast Asia is also apparent in their tug of war over Russian and Siberian oil and natural gas. Japan appeared to be the winner after the announcement by the Kremlin of its decision to lay a pipeline to Nahodka, which is the end point of the pipeline that Japan has long sought. Nonetheless, Japan will not feel satisfied until the plans are executed.

Japan's unilateral pursuits for energy resources are also clear in the East China Sea. In 2005, for instance, Japan decided to build the country's first surveying ship for offshore oil deposits. This was to counter China's alleged drilling of the *Chunhao* gas fields in the region. The government also allocated 8.2 million yen in its fiscal 2006 defence budget to increase the nation's ability to cope with submarines and armed spy ships in seas close to Japan.³⁹ This is also believed to be a countermeasure in response to the intrusion of a Chinese submarine in its public waters in 2004. Furthermore, the Liberal Democratic Party (LDP) coalition introduced a bill to create off-limits zones near structures set up for resource exploration and development in the Japanese EEZ.⁴⁰ These are actually to target potential conflict with the Chinese and Koreans in such areas as *Diaoyu dao* (*Senkaku* Islands) in the East China Sea and the *Dok-do* Islands (*Takeshima* Islands) in the East Sea (Japan Sea), respectively. Although China and Japan have held five rounds of talks since October 2004 on energy disputes in the East China Sea area, they have yet to make any noteworthy progress.

As reflected in the contents of the long-term energy policy, Japan does indeed seem to regard domestic measures as more viable than foreign ones. Its foreign activities in relation to energy security have been somewhat unorthodox: engaging in steep competition with rivals, notably China, and being apathetic to cooperation for territorial sovereignty reasons. Apart from some cases of energy technology cooperation for the enhancement of energy efficiency and environmental cooperation, Japan has been relying on a unilateral approach to secure untapped energy resources in Northeast Asia.

The NNES and other related documents seem also to limit the scope of cooperation with energy producing nations and regions. Whether deliberate or not, omitting mention of cooperation with regional rivals to secure better energy supply from Russia is a clear indication of Japan's current stance on this issue. What is more perplexing in the eyes of many observers is the contrasting support for regional institutions at a broader regional level. For example, Japan has been proactive in promoting energy cooperation in South East Asia and the Asia-Pacific region. Perhaps the territorial dispute with Russia over the Kurile Islands is the major obstacle impeding regional energy cooperation in Northeast Asia. Until it is settled, perhaps Japan does not want a third party involved in its handling of energy issues with Russia and Siberia in particular. It may still prefer to deal with Russia in bilateral terms. Thus, Japan's energy security interests seem to be dealt with in the broader context of security.

Russia

Russia's position as an energy supplier is fundamentally different from that of the other regional states that are heavy importers. While it may be a well calculated policy on Russia's part to reclaim its position in the regional international order

by manipulating the needs of the regional states, many in Northeast Asia fear that such reassertions could unilaterally enhance its geopolitical leverage and influence in the regional affairs.

After having undergone several major revisions since 2000, Russia's long-term energy strategy, "The Energy Strategy to 2020 ("the Strategy", hereafter)" was finally approved by the *Duma* in August 2003.⁴¹ It constitutes the Russian government's official, long-term energy security plan, direction and goals. Much of it deals with energy production forecasts. The development of the energy sector is still treated with utmost priority. The importance of the energy sector development is underscored by the fact that Russia's substantial energy resources are the foundation of its economic development, accounting for quarter of its GDP, a third of the total industrial production and about half of the federal budget, exports and currency return.⁴²

Thus, it is no exaggeration to say that the government recognizes the imperative of using the energy resources to maximum efficiency so as to achieve maximum economic growth and improvements to the quality of life of the Russian people.⁴³ Thus, the Strategy focuses on a stable domestic energy market, cost-efficient energy system, secure financial market, and environmental acceptability of the production structure. Economic success will depend on whether it can create a rational market environment. Under this assumption, the Strategy lays down two different scenarios for Russia's future economic development based on the "optimistic" and "temperate" outcome of the implementation of intensive reform measures and rapid liberalization of prices and tariffs on goods and services of natural monopolies as recommended by the Strategy. Although a strong variation is expected by the two scenarios, to achieve either, Russia will require cooperation not only within the government and market, but also with the foreign nations.

Russia needs to advance cooperation with the outside world. All of its energy development projects are expensive and the costs seem continually to rise above the original estimates. For example, it was originally estimated to cost around \$10 billion to build a pipeline from Siberia to Nakhodka, but this has risen to US\$16 billion. According to the Strategy, to meet the global and domestic demand for energy, Russia will need about US\$170-200 billion for the gas industry, US\$230-240 billion for the oil complex, US\$120-170 billion for the power industry, US\$100-140 for modernization of the generative outputs, US\$20 billion for the coal mining industry, and US\$50-70 for the energy-saving reform measures. All in all, total capital investment in the reconstruction and development of the power sector ranges from US\$260 to \$300 billion in 2001-2010 and from US\$400 to \$510 billion in the following decade.⁴⁴

Against this background, Russia's energy strategy to 2020 has two main objectives. Firstly, it proposes to diversify energy exports, accessing new oil and gas markets in the Asia-Pacific region, Northeast Asia in particular.⁴⁵ Exports have been predominantly destined for Europe (more than 80 per cent of Russian oil exports and more than 60 per cent of natural gas exports are delivered to Europe),⁴⁶ and it would like to expand its market simultaneously with the expected rise in both production and demand. Secondly, it would like to diversify energy supplies to the "north, east and south," implying its desire to promote energy production in new, capital-intensive environments including Eastern Siberia, the Far Eastern region, the Arctic and continental shelf of the northern and Caspian seas.⁴⁷ Despite possible fluctuations

in the potential production capacity of these regions, pending their feasibility, the Strategy makes a bold prediction of rapidly increasing energy supplies to the Asia-Pacific region. It forecasts that Russia's oil exports to this region will rise from the current 3 per cent of the total volume to 30 per cent in 2020, reaching 105 million tons a year, whereas those to Europe will stand at 150-160 million tons per year.

With respect to Russia's natural gas exports, Europe is expected to remain the major market, absorbing about 60 per cent of its total annual production. Nonetheless, the prospects for the Asia-Pacific market for Russian natural gas will be enhanced as it plans to ship 35 billion cubic metres by 2020, accounting for 25 per cent of Russia's total exports. These figures translate into 30 per cent of the Asia-Pacific oil market and 15 per cent of natural gas market.

The driving force behind Russia's desire to expand its foreign market is the notion of energy partnership, which Russia has tried to forge in its relationship with those states seeking greater energy cooperation. The government "aims to improve investment opportunities in Russia's energy sector in order to upgrade infrastructure, promote efficient and environmental friendly technologies and enhance energy conservation."⁴⁸ So far, Russia has succeeded in forging energy partnerships with the European Union, the United States, China, Japan and Korea, to name a few. Nonetheless, diplomatic rhetoric and symbolism are not a cure for development of Russia's energy economy. It needs to equip itself with proper transportation infrastructure in order to generate needed capital, as well as to attract foreign investment. One of the reasons why Russia has not been able to uncap the Asia-Pacific market is due to the absence of transport infrastructure, including pipelines.⁴⁹

Realizing this, the Kremlin began to re-assert control over local governments, i.e., returning to the centralism after the regionalism that prevailed in the 1990s as a result of former president Yeltsin's concession of maximum autonomy to the country's 89 regional governors.⁵⁰ Equipped with full autonomy, authority and power, the local governments became infamous for being uncooperative and corrupt. Under these circumstances, the Kremlin lost its ability to guarantee the full implementation of national energy projects because they could not be realized without cooperation at the local level.

Despite Putin's efforts to regain control of the Eastern and Western regions, foreign investment and commerce seemed doomed due to their lack of confidence in Russia's investment environment. Although a variety of reform efforts in various sectors and related areas (i.e., legal, market, price and tax reforms, etc.) have been extensively performed by the Kremlin, its indecisiveness in dealing with foreign counterparts has only undermined confidence. For example, the final destination(s) and route(s) of the transportation infrastructures leading to the Asia-Pacific region have undergone numerous changes. Although the Kremlin in 2004 seemingly announced the final decision by signing a decree to build a pipeline that would go from Eastern Siberia (Taishet) to the Pacific (Khabarovsk), it still does not solve the puzzle for China and Japan who have been competing to get the final destiny of this pipeline.

As for the American factor, Russia regards the US as part of the Asia-Pacific region (market). However, the Chinese do not welcome this as they are already engaged in a heated competition with the US and its allies, notably Japan, to secure energy resources. Russia's desire to recognize the US as an Asian market would

undermine Chinese strategic thinking about Eastern Siberia because the US has a definite advantage over China when it comes to financing capital-intensive projects. This would be even more so if the efforts of the United States were combined with those of the Japanese. The synergy effect of the combined efforts would simply overwhelm the Beijing leaders.

Conclusion

By questioning the fundamental concepts of GEC and ESC, this article presents a pessimistic view about the prospects for ESC in Northeast Asia. The misunderstanding and misperception of these two concepts is reflected in each government's energy policies. Bad conceptualization of a concept can lead to an unexpected outcome. While GEC requires a broader framework that incorporates both regional and global aspects and political and economic considerations, SEC is much narrower in scope, and exclusive in its theme (i.e., security).

In terms of comprehensive energy goals, the Northeast Asian regional states on the demand side share many similarities in their long-term goals. They all want to achieve energy efficiency by restructuring their energy structure and also want to proficiently achieve this end by allocating considerable resources to the development of renewable energy and clean energy. In order to effectively realize these goals, cooperation is emphasized. In the end, their ultimate goal is to achieve sustainable development. In terms of securing a stable supply of energy, especially oil and gas, they tend to diverge significantly in their strategies and tactics. While the primary focus is on the relationship with suppliers, cooperation at the regional level seems to be out of question.

Although each national energy program seems to highlight the value of cooperation as a viable means to improving energy security, the means and measures needed to achieve this end are ignored. Thus, it is concluded here that the Northeast Asian states actually care little about the prospects for energy cooperation. Each individual perspective on the issue of cooperation is unilateral (self-centred), bilateral (level of cooperation), omni-directional (all the world energy producers) and multifaceted (from exploration to production to transportation). Such orientation completely precludes any prospect for cooperation amongst the regional states, and consequently intensifies the competition for energy resources among themselves. Thus, energy rivalries in Northeast Asia have reached unprecedented levels.

Russia seems to be contributing little to alleviating the competition between the two major energy consumers in the region. Instead of presenting feasible and viable blueprints for the development of its energy resources, it is actually contributing to the intensification of the competition by upholding its mercantilist stance.

In short, the regional states must recognize and differentiate the concept of energy cooperation in comprehensive terms (i.e., GEC) and cooperation to effectively and efficiently overcome their most vulnerable aspects of their energy interests (i.e., securing energy supply). These two concepts are fundamentally different in that they have different goals and therefore require different policies and strategies. Unless these points are clearly understood and precisely reflected in their respective energy policy programs, energy security cannot be secured on a cooperative basis. The prevalence of GEC will result in further indecisiveness, just as with the idea

of creating a regional free trade area. The essence will again be missing, thereby aggravating rivalry and fierce competition.

Notes

1. "Northeast Asia" is taken here to include China, Japan, South Korea and Russia. However, South Korea is deliberately omitted from this article for two reasons. Firstly, it does not yet have a long-term energy policy. It is the only country that has yet to come up with such a policy in response to its energy security challenges. As early as in June 2004, Korea's lack of long-term energy strategy was publicly criticized by the former Russian Ambassador in Seoul. "Russian Ambassador's 'Energy Warning,'" *Chosun Ilbo*, (8 June 2006). Secondly, to date, it is expected to come up with a long-term energy strategy and/or policy some time in the near future (no specific date), according to the report released as a result of the Fourth National Energy Advisory meeting in May 2006. Ministry of Commerce, Industry and Energy, "The Fourth National Energy Advisory Meeting: Assessment on the Achievements of Energy Policy and Future Strategies," (19 May 2006).
2. For a comprehensive, detailed study on the roles and contribution of China and Japan to energy cooperation with ASEAN and APEC, see "Case Studies of Regional Energy Cooperation Program: APEC and ASEAN," a report prepared by Nexant for USAID SARI/Energy Program, (January 2005).
3. Philip Andrews-Speed, "Energy Security in East Asia: a European View," a paper presented at the Symposium on Pacific Energy Cooperation 2003, (Tokyo: 12-13 February 2003), 2-4.
4. Michael Jefferson, "Energy Policies for Sustainable Development," in *World Energy Assessment: Energy and the Challenge of Sustainability*, ed. Jose Goldemberg (Geneva: UNDP, 2000), 418-19.
5. Amy Myers Jaffe, "World of Plenty: Energy as a Binding Factor," *ERINA Report* (2001) [<http://www.erina.or.jp/En/Research/Energy/Jaffe42.pdf>], 12. (accessed on 30 July 2005).
6. Amy Myers Jaffe, "World of Plenty," 14.
7. Niklas Swanstrom, "An Asian Oil and Gas Union: Prospects and Problems," *The China and Eurasia Forum Quarterly* (November 2005), 88.
8. Xu Yi-chong, "China's Energy Security," *Australian Journal of International Affairs* 60: 2 (June 2006), 265.
9. For a detailed study of the actors involved in the decision-making process of Chinese energy policy and their specific roles, see Erica S. Downs, "The Chinese Energy Security Debate," *The China Quarterly* (2004), 21-41.
10. Niklas Swanstrom, "An Asian Oil and Gas Union: Prospects and Problems", 86. The concept of zero-sum game needs some clarification in the context of state's strategic calculation and perception. It does not mean that if someone takes one barrel of oil, this would mean one less barrel for others, because the petroleum market is a global one and oil and gas can be purchased at cost-effective prices. However, for many energy strategic planners and policy makers heavily dependent on imports of oil and gas, a competitor's advantage or preoccupation with energy-producing states means losing ground in competitions over favourable treatment (i.e., lower taxes, lower tariffs, cheaper prices, first service, favourable quotas, etc.) for competing states. For a critique of the zero-sum argument, see Xu Yi-chong, "China's Energy Security," 275.
11. Amy Myers and Stevens W. Lewis, "Beijing's Oil Diplomacy," *Survival* 22: 1 (2002), 115-34; Zaid Haider, "Oil Fuels Beijing's New Power Game," *YaleGlobal Online* (11 March 2005), Xu Yi-chong, "China's Energy Security," 265.
12. Xu Yi-chong, "China's Energy Security," 274.
13. Kenneth Leiberthal and Mikkal Herberg, "China's Search for Energy Security: Implications for U.S. Policy," *NBR Analysis* 17: 1 (April 2006), 13.
14. Zha Daojiong attributes this dramatic increase to: (1) insufficient domestic crude production to meet the rising consumption, (2) significant improvement in China's refining capacity, (3) rising demand for more types of oil products, (4) price reform in June 2000 and subsequent profit generation that enabled refineries to increase imports, and (5) nationwide crackdown on oil smuggling activities and subsequent improvement in accurately determining the true volume of

- imports. Zha Daojiong, "China's Energy Security: Domestic and International Issues," *Survival* 48:1 (Spring 2006), 180.
15. Zha Daojiong, "China's Energy Security: Domestic and International Issues," 179-90; Xu Yi-chong, "China's Energy Security," 265-86.
 16. Wenran Jiang, "China's 'New thinking' on Energy Security," *Alexander's Gas & Oil Connections* 11: 9 at [<http://www.gasandoil.com/goc/news/nts61820.htm>] (accessed on 28 June 2006).
 17. Xu Yi-chong, "China's Energy Security," 265-86.
 18. "2005 nian guoneiwai nengyuan zhengce zongshu (2005 domestic and foreign energy policy summary)[http://nyj.ndrc.gov.cn/gjdt/t20060331_64917.htm] (accessed on 24 June 2006), 3.
 19. See *Guojia jiwe hongguan jingji yanjiuyuan ketizhu* (Assignment Group, Macroeconomic Research Institute, National Planning Commission), "*Zhongguo changqi nengyuan fazhan zhanlue yanji yongbaogao* (Comprehensive report on China's Long-term Energy Development Strategy Studies) [<http://www.arm.gov.cn:8080/xszz.nsf/aa677dcef4839b048256840002>], 28, 46 (19 July 2006).
 20. The Korean Ministry of Industry and Natural Resources, in collaboration with the UN ESCAP initiated the meeting in 2004. Only South and North Korea, Mongolia, and Russia were represented by their respective ministers. The second meeting in November 2005, in Ulaanbaatar, Mongolia, however, was represented by high governmental officials from the four nations while China, Japan, and the United States came as observers. The meeting was held under the "First Session of Senior Officials Committee on Energy Cooperation in North East Asia." In the end, it officially launched an "Inter-governmental Collaborative Mechanism on Energy Cooperation in North East Asia." The meeting also produced the so-called "Working Group on Energy Planning and Policy (WG-EPP)" that was held in May 2006 in Thailand, with official participation from South and North Korea, Mongolia and Russia, with China and the US as observers. See *ENB Newcenter*, 16 May 2006 at [http://www.ebn.co.kr/search/s_view.html?id=244955&keys=%C0%FC%C3%BC%B4%BA%BD%BA&kind] (assessed 19 June 2006); and Jaewoo Choo, "Energy Security and Cooperation in North East Asia," *Korea Journal of International Studies* (2004).
 21. Xu Yi-chong, "China's Energy Security," 274.
 22. *Ibid.*, 265-286
 23. Wen Jiabao, Statement Given at the First Meeting of the Leading Energy Group, "Energy Leading Group Set Up," *China Daily*, 4 June 2005.
 24. The Chinese Communist Party's official stance was confirmed on 27 December 2005 as the same. See, "Dangqian woguo nengyuan xingshi yu nengyuan anquan wenti: zai shijie chuanguo renda changweihui dishijuci huiyishang Zeng Peiyan fuzongli baogao" (Our Nation's Current Energy Situation and Energy Security Problems: Vice Premier Zeng Peiyan's Report at the 10th Plenary National People's Congress Standing Committee's 19th Conference) [http://nyj.ndrc.gov.cn/zywx/t20060123_57786.htm] (accessed on 23 June 2006).
 25. Wenran Jiang, "China's 'New Thinking' on Energy Security."
 26. Already in 2003, the Japanese government gave top priority to energy security, ensuring stable energy supplies and confirming nuclear power as the nation's key energy source. For a critique of The Basic Energy Plan, see "Basic Energy Plan: No Reflection on the Past, Remaining Long-standing Government Policy," *Kiko Network News*, 32, (September 2003).
 27. Hisane Masaki, "Japan's New Energy Strategy," *JapanFocus.org* [<http://japanfocus.org/articles.asp?id=500>], 1 (accessed on 23 June 2006).
 28. Shigeru Sato, "Japan Creates Long-Term Plan for Its Energy Sources and Usage," *Wall Street Journal*, 14 September 2005, B3H.
 29. The internal factors were the unusually cold weather and subsequent rise in the cost of heating oil, winter vegetables and other products. The external factors were systemic problems such as the robust economic growth of two large states (China and India), the shrinking margins of spare production capacity by the major oil producers, and economic challenges to developing new resources. See Hisane Masaki, "Japan's New Energy Strategy".
 30. Hisane Masaki, "Japan's New Energy Strategy," 2.
 31. "New National Energy Strategy," Standing Group on Long-Term Cooperation Round Table - Japan, (June 2006) [http://www.iea.org/Textbase/publications/free_new_Desc.asp?PUBS_ID=1013] (accessed on 24 June 2006).

32. Takeo Kumagai, "Japan Finalizes New Energy Strategy to 2030," *Platt's Oilgram News*.
33. "New National Energy Strategy," Standing Group on Long-Term Cooperation Round Table (Japan: June 2006).
34. *Ibid.*
35. Takeo Kumagai, "Japan Finalizes New Energy Strategy to 2030," *Platt's Oilgram News*, 84:104 (1 June 2006), 6.
36. Takeo Kumagai, "Japan Finalizes New Energy Strategy to 2030".
37. "Japanese Energy Policy Focuses on Supply Security," *Oil & Gas Journal* (28 Feb. 2005), 103.
38. As a result, Osaka Gas and Chubu Electric will each get 1.5 million tons/year over 25 years beginning around 2010, and Tokyo Gas will get 1.2 million tons/year. See "Tokyo's Global LNG Ambitions," *Petroleum Economist* (Feb. 2006), 1.
39. Hisane Masaki, "Japan's New Energy Strategy," 6.
40. According to a draft of the bill, trespassers are to be punished with prison terms of up to one year and fines worth 500,000 yen. This is already widely believed to be a protective measure for Teikoku Oil's experimental drilling in the East China Sea. It was granted concessions in the summer of 2005. Hisane Masaki, "Japan's New Energy Strategy," 6.
41. The initial strategy is entitled "Main Provisions of the Russian Energy Strategy to 2020." The "lack of market orientation" that it mentions refers to the lack of market economy fundamentals, such as understating of the taxation and price regulation regimes, economic stimulus for less energy intensive economy, understanding of export tariff policy and development of the energy infrastructure. "The Hard birth of the Russian Energy Policy," Institute of Energy Policy at [<http://www.enerypolicy.ru/enep.php?printversion=yes&id=1001476>] (accessed on 23 June 2006).
42. "Russia's Energy Strategy," (1 Nov. 2003) at [<http://www.rustrade.nl/default.asp?Profile=public&Item&Code=4209>] [29 June 2006].
43. "Russia's Energy Strategy."
44. Vladimir I. Ivanov, "Russian Energy Strategy 2020: Balancing Europe with the Asia-Pacific Region," *ERINA Report*, 53 (Aug. 2003) [<http://www.erina.or.jp/En/Research/Energy/Ivanov03-2.pdf>] (accessed on 30 May 2004), 12.
45. Other benefits from the Asia-Pacific market taken into Russian consideration are: (1) its desire to reduce dependence on transit routes and therefore, additional transit fees to European markets; and (2) routes.
46. Vladimir I. Ivanov, "Russian Energy Strategy 2020: Balancing Europe with the Asia-Pacific Region".
47. Russian Federation, Ministry of Energy, "Summary of the Energy Strategy of Russia for the Period of Up to 2020," (2003), 10-11, 14-16.
48. Vladimir I. Ivanov, "Russian Energy Strategy 2020: Balancing Europe with the Asia-Pacific Region," 2.
49. Keun-wook Paik, "Russia's Oil and Gas Export to North East Asia," *Asia-Pacific Review* 12: 2, (2005), 58.
50. Keun-wook Paik, "Russia's Oil and Gas Export to North East Asia," 61.