Can East Asia Dare to Tie its Energy Security to Russia and Kazakhstan?

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Introduction

The title question is deceptively simple. But its answer is complex and lengthy. Nevertheless this essay attempts to answer that question and its underlying presuppositions. First, it assumes that Russia and Kazakhstan (or more accurately Central Asia as a whole) can replace the Middle East and the Gulf as energy providers to Asia. Thus it presupposes a common understanding of energy security among Russian and Central Asian energy producers and major Asian consumers. It also presupposes that Russia and the Central Asian producers can and will satisfy steadily rising demand for oil, gas, and other forms of energy like uranium and electricity among Asian and Russian consumers at acceptable market prices. And since energy is increasingly a state-owned product it also presupposes that policymakers in producer and consuming states can develop a consensus on energy security and prices. Thus this question implicitly raises a host of political issues at the highest level of the interested states’ policymaking process and reflects the politicization and even securitization of energy policy across Asia.¹

Today national interests now collide with each other in the international energy market, making access to energy supplies a strategic issue for many states. Diplomacy, defense, economic, environmental, and trade policies all intersect with energy issues across Asia and for many, if not all, Asian governments.² Simultaneously Asian and Central Asian states are also developing major infrastructural and energy projects to connect Central and East Asia. These states’ energy interests and investment needs are quite complementary. Russia, like Central Asian states, desperately needs markets, pipelines, and investment capital for its energy holdings. Japan, South Korea, China, and India need reliable and affordable energy sources to meet their
rising demand for energy without excessive dependence upon OPEC and have the capital and technical skills to invest abroad.

This complementarity of economic interests has stimulated Asian governments’ security interest in Central Asia’s internal stability as they now recognize the importance of stable diversified energy sources for their own vital national interests. Thus their economic and security interests appear to be very compatible with those of Russia and Central Asian governments who need foreign investment to help further develop their economies and prevent internal destabilization due to economic stagnation. This apparent harmony of interests creates or at least should facilitate creation of a durable basis for long-lasting energy cooperation between East Asia, South Asia, and Central Asia. And yet this rosy scenario faces many obstacles to its realization.

Why Russia and Central Asia Cannot Resolve Asian Demand

Despite the aforementioned premises of the title question, virtually every analysis of Asian energy demand, most notably China’s demand for energy but including Japan, India, and South Korea, concludes that this goal is simply not possible given the high rate of that demand. But there are also other reasons for reaching this conclusion. While a future Middle Eastern crisis might force this attempted solution on Asia, and the specter of such crisis is a constant preoccupation of China’s government, if not others, the infrastructure for both Central Asian and Russian energy producers to satisfy Asian demand under such conditions still does not exist and is only beginning to be built.

Even though a supposedly natural complementarity exists between energy abundant Russia and energy starved countries like China, Japan and South Korea, in fact all potential pipeline projects advocated for providing either oil or for gas from Eastern Siberia to Asian
countries are based on political advocacy rather than on the hard economic analysis that should precede major investment. Moreover, it is unclear how much energy there is in Russia that can be brought to market to satisfy not just Asian, but also European and domestic Russian demand, how much pipelines for this energy will cost, the price at which this energy must be sold for producers to make profit, and who will pay for what inevitably will be multinational pipelines -- the nightmare of energy companies. Often these questions are still in dispute. Critical feasibility studies either have not been done or are only starting now despite years of discussion, negotiation, and even prior feasibility studies. Yet pipeline construction on major projects like the East Siberia Pacific Ocean Pipeline (ESPO) has already begun before these questions have even been clarified let alone answered. As Transneft’s President, Semyon Vainshtock, said in April, 2006 after President Putin had unilaterally changed the route of the pipeline,

Vainshtock said that, as far as he knows, the task set by the president is as follows: to start building the pipeline and at the same time develop the new route and its feasibility study, to carry out an ecological assessment, finalize all agreements, and continue building the pipeline.

Similarly, James Dorrian observed in 2004 that,

I believe that the oil pipeline proposals in Eastern Siberia are a case where the cart was brought before the horse. The pipeline route was identified and even the terms of the contracts with Japan and China were identified and detailed for 20 to 25 years; yet they have not yet assessed the oil resources in Eastern Siberia. So that certainly would have to be done. All indications to this point suggest that the region is a much more gas-prone rather than oil-prone area. Production costs for oil fields in Eastern Siberia would be much higher than in Western Siberia. Many people believe that Eastern Siberia will resemble Western Siberia in terms of oil production potential, and that is not necessarily the case.

Yet according to Putin Russia will build two gas pipelines to China and the Pacific, one from Western Siberia whose construction is apparently already underway, and another, to be determined, from Eastern Siberia. However, there are at present no plans for an oil pipeline which is what China really needs now.
Therefore we should not confuse discussions, signed agreements on paper, and endless and often incorrect publicity about future projects for actually constructed pipelines and explorations. Indeed, Russia today only exports about 3-5% of its oil and gas to Asia, and one major reason is precisely this lack of infrastructure. Although everything points to Asia emerging as a primary consumer, this infrastructure is only now being put into place.

Since we should not confuse plans with actual realities, consumers and producers must start building that infrastructure now and investing enormous amounts of capital into those projects in order to make these energy sales feasible. For that to happen these investments must be both economically and politically justified because consumers have existing alternative sources of supply from the Middle East even if Asian consumers must pay the so called Asian premium. And the climate for foreign investment must be welcoming because the needs of countries like Russia, whose infrastructure is quite dilapidated are immense, far beyond Moscow’s ability to satisfy. This is not only due to the size or amount of money necessary, but also because Russian oil and gas companies are not investing in their own infrastructure but in acquiring more and more foreign assets. While Moscow trumpets plans to triple its investment to $20 Billion in infrastructure by 2008-09, in fact it needs $100 billion to meet its needs and foreign contracts effectively. Worse yet the cumulative effect of policies like those being conducted now against the owners of Sakhalin 1 and 2, Yukos, Ukraine, and Georgia make it clear that foreign investment is not welcome except under unsatisfactory conditions of risk to investors and that Russia invariably will use energy as a political weapon and break contracts with customers.

Undoubtedly the Asian premium adds still more compelling economic reasons to fears about interdiction of supplies to Asia and thus reason for alternative suppliers. But because
energy issues are now major policy questions for every Asian government, unless the price and political conditions are right that infrastructure will not be built and both the price of the energy and the size of the initial investment outlays is a major issue in deciding whether or not to construct that infrastructure. Since the major questions antecedent to major investments in Asian energy infrastructures have not yet been answered. Here it must be understood that the price of the energy to be shipped to China, India, Japan, Korea, etc. from Russia if not many Central Asian sources as well has not yet been decided, without resolution of those issues not much can or will happen. So even though Asian consumers want to escape the burden of the Asian premium, this cannot and will not happen for several years under the best of circumstances. Moreover, if pipeline construction begins without preceding agreements on price, payment and reasonable estimates of the amount of the energy that is available for sale abroad, then it is quite likely that the outcome will be economically, if not politically sub-optimal from every standpoint, leaving consumers, if not producers, dissatisfied with the results. Therefore for long time the Middle East and the Gulf will remain the largest sources of Asian energy and Asian governments will have to continue paying the Asian premium for it.

Because Caspian producers earn their greatest or highest returns by selling to Western markets, all things being equal, pipelines will be built to the West rather than to Asia or already have been built to the West. For Asian countries to compete to buy vital supplies today, they must outbid Western consumers to compensate for the absence of infrastructure and for the higher risks incurred in selling Middle Eastern oil and gas to Asia.10 Furthermore, because Saudi Arabia can manipulate prices in the key regional markets of North America, Europe, and the Far East, Asian consumers must pay a premium on every barrel they buy which has grown steadily in the recent past to about $1-1.50/barrel. This premium represents a net annual transfer
of $5-10 Billion to Gulf oil producers even in times of tranquility. Actual or potential shocks to the regularity and availability of Persian Gulf supplies would only push this premium higher by magnifying the risks to future supplies. Since an estimated 30-40% of current oil prices is exclusively based on risk assessment which obviously grows in times of Middle Eastern crisis, every Asian consumer state, especially China, has a large financial incentive to find energy sources closer to home if possible even if this entails high initial costs of investment in infrastructure and pipelines.

Consequently to answer the title question positively a package of solutions needs to be found that includes increased Russian and Central Asian production marketed through pipelines from those countries to the Far East. Although that increase in Russian and Central Asian supplies of all kinds of energy, including nuclear energy, is not enough in and of itself to overcome this premium, it certainly is a key part of the puzzle in any effort to reduce Riyadh’s leverage and the Asian premium and to create what many analysts hope will be a regional energy system in Northeast Asia. But until then somebody will have to put up the enormous investment capital for those projects to reduce Saudi leverage. And it is worth adding that many Russian analysts believe that the amount of investment needed to make Siberian energy competitive far exceeds the available Sino-Russian capital and requires foreign investment on a large scale. Unfortunately Russia’s current autarchic and monopolistic policies of neo-Muscovite control over the state economy, as outlined in its energy strategy and actual policies impede foreign investment, and the integration with Asia necessary to effectuate sound economic interaction with Asian consumers. So an unhappy outcome is almost certainly guaranteed from the inception of construction. Meanwhile there also still is discord among the parties on
major projects over key issues of the price of oil or gas, the cost of building pipelines, and who will pay for them.14

Given the scope of these issues and the players involved a single paper cannot give a conclusive answer or explanations for it though we can try to set out a framework for analysis. But based upon observed behavior of Russia and the major other producers in and out of the former Soviet Union, as well as the needs and behavior of the Asian consumers in question, particularly China, it is highly unlikely that even in peacetime Russia and Central Asia could provide energy security to Asia and wholly supplant the Middle East and Gulf producers’ place in Asia.

**Central Asia, Russia, and East Asia**

This answer does not mean that energy sales of oil, gas, uranium, atomic energy, and electricity to Asia will not grow and occupy a considerable place in the calculations of Asian states as they enter the energy market. The growth of sales from Central Asia and Russia to East and South Asia is almost inevitable barring a major crash in demand. But it does mean that the signs point to sub-optimal outcomes as far as all the parties, both producer and consumer alike, are concerned. In large measure this is because in the producing states as well as in key consuming states decisions about energy are fundamentally political ones made by states rather than by firms. And because these states have been making decisions about energy policies for a long time they have created institutions and policies to deal with these issues who have become entrenched. They have thereby created a path dependence among both producers and consumers which is highly dysfunctional insofar as an efficient use of energy at home or its sale or purchase abroad are concerned. Thus efforts to reorient energy policies require immense political effort and are generally only taken over a long period of time and incrementally if at all.
At the same time they often involve some of the most sensitive issues in these states’ overall national security policies. For example, Indian Prime Minister Manmohan Singh has said, “energy security is second only in our scheme of things to food security.” And from the producers’ standpoint it is not farfetched to say that Russian energy holdings, particularly natural gas, are the strongest card in Moscow’s diplomatic arsenal. The same point probably applies equally to Kazakhstan and Turkmenistan. Consequently, once established, such policies and the institutions that administer them are highly resistant to change and often have strong points within the government from which to defend their established practices.

Hence in Asia’s energy politics more often than not politics and not the market or considerations deriving from market based logic is in command. Certainly this is true for Russia’s energy relations with its Asian neighbors. At the same time we can see a mounting interdependence and interlinking of both Central and East and South Asia thanks to globalization in general and the building of transportation and energy infrastructures. Due to these previous and ongoing efforts and the heightened importance of energy as a source of revenue and indispensable component of economic growth and security, Asian interest in Central Asia and Central Asian regimes’ interest in Asian markets and investment have grown steadily since the 1990s.

Kazakhstan, for example, has a “huge plan” to expand oil and gas links with China. Not only did the Atasu-Alashankou pipeline open in late 2005 with the promise of being extended westward to improve access to Kazakhstan’s Caspian fields, China seeks to build a second gas field to link Shanghai with the gas fields in the Amu Darya in Turkmenistan and potentially Uzbekistan or alternatively with Kazakh gas fields in Aktyubinsk or Aktobe.
Kazakhstan has also sought Japanese investment since at least 2002 if not before especially as it has equally huge plans to expand investment in its energy infrastructure in the next few years.\textsuperscript{21} For example, Kazakhstan will invest $800 million between 2006 and 2008 in gas pipelines to boost exports and diversify them to China and Asia “to avoid excessive dependence upon a single consumer.”\textsuperscript{22} And Astana also expects investment into development of the Caspian oil and gas sector to reach $12.9 billion in 2006-2010 and $16.8 billion in 2011-2015.\textsuperscript{23} Kazakhstan also plans to export electricity to China.\textsuperscript{24} Therefore Kazakhstan certainly seeks to increase energy sales to China if not other Asian markets. Obviously much of this foreign investment that it simultaneously hopes for will be Asian investment. Kazakhstan also is considering joining an Asian-Pacific trade agreement to broaden its overall economic profile in East Asia.\textsuperscript{25} Finally Kazakh experts also believe that because it controls 21-25% of world uranium stocks, Kazakhstan can also serve as a potential source for covering the global uranium shortage and providing nuclear energy for civilian purposes to foreign consumers.\textsuperscript{26}

Asian states, whose demand for energy is growing, also show increased interest in Russian and Central Asian energy sources. Mongolia, for example, is interested in laying a pipeline from Irkutsk to its territory.\textsuperscript{27} Japan has pursued an ever greater interest in Central Asia, its energy, and its politics since its Eurasian Initiative of 1997.\textsuperscript{28} In 2006 the Ministry of Economy, Trade, and Industry (METI) proposed a series of measures called “Securing Stable Energy by Strengthening Fuel Strategy.” These recommendations include

- Independent development of oil and natural gas in strategic areas such as Russia
- Diversification of supply sources
- Protection of Japanese mining rights in the East China Sea and elsewhere
- Strengthening of Japan’s relationship with other oil and gas supplier countries.\textsuperscript{29}
Commenting on this strategy Tsutomu Toichi, Senior Managing Director and CKO of the
Japanese Institute of Energy Economics also observed that,

The key issue is how to encourage oil companies to invest in the development of oil and
gas resources in Russia, In the “Action Plan for Global Energy Security” agreed at the
G8 summit in St. Petersburg in July of this year, emphasis is placed on strengthening and
expanding the rule of law as well as on establishing and empowering predictable,
efficient fiscal and regulatory regimes. It seems to me that this is a very important
implication for the foreign investment in oil and gas resources in Russia.30

These points of Japan’s new strategy are close to other calls for a comprehensive Japanese
energy strategy, suggesting an emerging elite consensus of energy strategy.31 Clearly Japan
fully intends to continue reaching out to Moscow and to Central Asia in pursuit of energy
security even if that aggravates the continuing rivalry with China for priority access to Russian
energy. And there is no doubt that Japan remains very interested in acquiring access to Russian
energy.32

As part of the effort to diversify sources Japan has also improved relations with
Azerbaijan to foster increased Japanese investment in exploration of Azerbaijani oil and natural
gas.33 More recently, in August 2006 Prime Minister Junichiro Koizumi traveled to Kazakhstan
and Uzbekistan to seek more access to negotiate oil, gas, and uranium deals so that Japan can
continue to receive oil and gas from this region which is important precisely because it is not the
Middle East. Japan also needs uranium to ensure that its nuclear powered electricity network
will not encounter shortages.34 And before Koizumi’s trip, a meeting of foreign ministers in
Tokyo agreed on an action plan for regional cooperation to include support for border
management programs, counter-narcotics and counter-proliferation in Central Asia. But beyond
acknowledging the need for action against poverty and in support of economic development,
Tokyo will also help construct infrastructural projects to connect Afghanistan to Tajikistan and
the broader Central Asian region and facilitate the movement of oil and natural gas across the region.35

Japan’s interests here are not strictly economic. Although it has long championed the reconstruction of Afghanistan and its integration into Central Asia observers believe that Tokyo’s growing interest in Central Asia is also intended to assert its position there in the face of Russian and Chinese opposition.36 Since Japan, like China depends now on Middle Eastern oil and gas for virtually all of its supplies and is no less vulnerable to possible cutoffs of supplies in a time of crisis, it competes with China for both Siberian and Central Asian energy access. So even if Japan confines itself, at least formally, to advancing only its economic interest it cannot sidestep the political rivalry among great powers for influence in Central Asia and over the distribution of Siberian energy assets. This remains the case even though Tokyo has stockpiled enough oil so that if another crisis breaks out in the Middle East that imperils oil supplies it has enough oil reserves to weather the crisis.37

Neither is South Korea neglecting the Caspian basin. Already in 2003 it saw pipelines from Russia as an alternative source of energy to North Korea in place of its nuclear reactors and selected the pipeline project as one of the government’s ten major tasks during its tenure along with the proposed “iron silk road” railway linking both Koreas to the Trans-Siberian railroad in order to turn South Korea into a regional economic hub.38 Simultaneously members of the government and the Presidential Transition Committee (PTC) envisaged the gas projects on Sakhalin as a means of achieving the same objectives.39 Since then South Korea, facing the same situation as its neighbors has moved to promote more efficient use of energy and to diversify its oil supply by acquiring equity in fields across the globe.40 A major part of this program is energy summit diplomacy conducted during President Roh Moo-hyun’s trips abroad to negotiate with energy producing countries.41 For example, he traveled to
Azerbaijan in the spring of 2006 and it was soon afterwards revealed that the South Korean National Oil Company was considering buying shares in Azerbaijan's State Oil Company (SOCAR) to exploit the promising Inam deposit. So, like Japan, the South Korean government has improved ties to Azerbaijan. Undoubtedly this “energy offensive owes something to the ROK’s disappointment with the failure to achieve tangible results in either oil or gas from Russia through 2005-06.

The ROK has also recently signed a deal with Uzbekistan to ship 300 tons of uranium ore concentrate to South Korea annually from 2010-2014. Both governments also agreed to explore oil wells in Uzbekistan with an estimated 820 million barrels and gas fields whose deposits are estimated at 191 and 84 million tons respectively. South Korea and Uzbekistan also signed an agreement giving South Korea’s state-run Korea National Oil Corporation (KNOC) a 20 percent stake in an international consortium to develop gas resources in the Aral Sea. During February and March, 2006 South Korean investors formed a consortium with a Canadian firm to explore for oil in Eastern Russia, in the Tigli and Icha regions of Kamchatka. These fields hold and estimated 250 million barrels of oil. And in February, 2006 its government set up an Energy Board composed of 14 state-run agencies and business conglomerates to target investment in multiple energy sources, particularly in Africa, Central Asia, and Russia. South Korea’s global drive is clearly closely tied to the global campaign by the KNOC to gain access to wells abroad, where it is working on 21 projects in 14 countries as of 2005. But overall South Korean firms are operating in 82 projects in 24 countries suggesting the extent of their search for energy access. And South Korean observers like Kim Hyun-tae of the Korea Institute of Geoscience and Mineral Resources argue that like Russia, China, and India,
the most effective way to accomplish the goal is to concentrate all resources into one enterprise by creating a world-class major energy corporation ---We’re facing a fierce competition against state-run companies from China and India fully backed by their governments, not to mention major energy corporations.\footnote{50}

Finally China’s explosive entry into the world energy market is now recognized not only as a fact of life but even as a potential threat to U.S. national security because of its penchant of “locking up” energy supplies with big long-term contracts.\footnote{51} And in 2005-06 China began to make big deals with Kazakhstan, opening up the oil pipeline from Kazakhstan to China, discussing gas pipelines from Uzbekistan, Kazakhstan, and Turkmenistan to China which it will build, and signing major deals with Iran for gas and oil from its share of the Caspian.\footnote{52} In September, 2006 China approved construction of the multibillion dollar pipeline from Turkmenistan to its Southern business center of Guangzhou. This pipeline will carry some 30BCM a year, but the cost is undisclosed although it could run into tens of billions of dollars.\footnote{53} China is also increasing the amount of oil it buys from Kazakhstan by buying another $1.9 billion on Kazakh oil reserves. It will be necessary to move that oil from Western Kazakhstan to the existing oil pipeline from Atasu to Alashankou.\footnote{54} And like everyone else, it is expanding ties with Uzbekistan and Azerbaijan to obtain energy sources from them even if it must loan them the money to begin exploration as it did by lending Tashkent $600 million.\footnote{55} Beyond that China is turning to Russia, Kazakhstan, Mongolia, and Australia for nuclear energy and electricity and discussing pipelines from Central Asia or Iran through Pakistan to China even if it has to go through the Himalayas.\footnote{56} Obviously the aim of such actions is to reduce dependence on oil and gas and upon one set of suppliers.\footnote{57}

And obviously Russia is also playing an increasing role in East Asian energy issues. Indeed, one might arguably say that outside of its overall strategic partnership with China and the
issue of North Korean nuclear proliferation (which in itself comprises a considerable energy
dimension) Russia’s Asia policy and the future development of Asiatic Russia is almost
completely staked on being the region’s main energy producer. Indeed, the scope of Russian
planned programs for energy exploration and sales to Asia is very ambitious.

**Russia’s Asian Program**

Precisely because energy is Russia’s only enduring card in East Asia so much rides on its
energy program for the region. As the Draft Russian Energy Reform Program proffered by the
UES electricity firm in 2002 began by stating that,

> Russia possesses substantial reserves of energy resources, enabling the development in
> the country of a powerful fuel-energy complex that is the foundation not only for the
development of the national economy, but also serves as an instrument of foreign policy.
> In large measure, the role of the country in world energy markets determines the
> country’s geopolitical influence. 58

As most recently stated, Russia intends to raise its share of oil supplies to East Asia from
3% to 10% by 2016. It plans to increase the number of Asia-Pacific countries to whom it exports
oil and natural gas ten and five-fold respectively by 2020. Thus the share of Asia-Pacific
countries who receive its exports will increase to 30% by 2020 and natural gas will go from 5%
to 25%. Obviously these figures depend on implementation of both new and developed eastern
energy projects, including those in Sakhalin. 59 Industry and Energy Minister Andrei
Dementyev also said that,

> A program for the development of natural gas resources in East Siberia and the Far East
would be submitted to the Russian government in 2006. A single system of gas
production, transportation, and supplies will be created in the region, with account for
exports to the markets of China, the world’s largest energy consumer, and other Asia-
Pacific countries. 60

According to Dementyev, construction of the East Siberian Pacific Ocean (ESPO)
pipeline whose estimated cost is $11.5 Billion (far too low given previous estimates) began in
April, 2006 since then over 100 kilometers have been built and 330 kilometers have been prepared for pipe installation. ESPO is supposed to pump 60-80 million metric tons of oil annually with 30 million going to China via an offshoot of ESPO whose construction is about to begin.61 In 2006 Russia plans to increase oil supplies to China (by rail--a vastly more expensive route than by pipelines) from 10 million metric tons to 15 million while China’s demand for crude oil is expected to rise 5-7% annually.62 Russia is also vigorously pushing President Putin’s idea for building an international center for spent fuel and nuclear energy, and nuclear waste in Russia and the construction of atomic power centers in Asia, hoping to raise its profile in the export of nuclear energy to the global market, and reach orders of $25 Billion.63 This program not only aims allegedly to curtail nuclear proliferation, it also aims to augment Russia’s capacity for getting a hold of the CIS members’ uranium stocks for its own purposes, depriving them of the means of exporting it and then on its own exporting atomic energy and the technology of building such stations abroad.

It is also clear from Dementyev’s and Putin’s statements that Russia may regard China as its primary intended partner in Asia, but it is not confining itself to an exclusive energy relationship with China. ESPO may yet produce energy for Japan and South Korea, or at least it is regularly stated that it will do so. Indeed, it is now reported that South korea will have to use it and pay market price for the energy it receives in order to get its energy from Russia. Yet this is also because China intransigently is holding out for price below market price for its energy which Russia opposes. Therefore the ROK’s subsidy is necessary to justify the cost of this pipeline, telling example of the bizarre political and anti-economic logic that apparently is now de rigueur in these deals.64
At the bilateral level Moscow continues to seek an active expansion of its economic and energy ties to both Koreas. Indeed, the idea of connecting the Trans-Siberian railroad to a projected Trans-Korean railway and supposedly trumping the European Union and China’s projected program is still very present in the minds of Russian policymakers. Moreover, the goals announced by Dementyev and Putin in September, 2006 envisage the completion over a decade of huge pipelines and equally enormous deals with Asian consumers for energy that would go far to validate Russia's ambition of becoming “an energy superpower in the Asia-Pacific region.” Indeed, these deals, if they were to be consummated with intended Asian partners would span China, Japan, both Koreas, and if we include the projected pipelines running from Turkmenistan and Iran to India, the South Asian subcontinent as well.

**Obstacles to Integration**

Given the scope of both Asian demand and of both Russian and Central Asian ambitions to connect with Asian consumers in many major projects why do we argue that Asia cannot rely on those sources of energy to supplant Middle Eastern and Gulf producers? In fact, beyond the arguments adduced above there are many reasons for this pessimism or skepticism about Russia and Central Asia. And those reasons are structurally embedded in the politics and economics of the producers, and even in the politics and economics of consumers like China.

For example, many states in Europe and Asia, including Ukraine and Russia, now depend on Turkmenistan to ship gas or to produce enough in the future to justify the deals that are now being made, e.g. the Sino-Turkmen pipeline plan. Yet Turkmenistan is an economic disaster area. As one 2004 account describes it,

The governance strategy in Turkmenistan is one familiar to many OPEC states: following the “no taxation, no representation” model, the state is failing to establish competence in taxing or budgeting. A complete lack of transparency has made even the most basic
statistics suspect yet -- based on the promise of hydrocarbons -- the international community remains willing to lend money where it is unwilling to invest.\textsuperscript{67}

Other accounts highlight the fact that the sultanistic rule of Sapirmurad Niyazov has created the most unfavorable investment climate in Central Asia, the currency is essentially worthless, as noted above statistical analysis of published figures is useless or misleading at best, and Niyazov and his family, and cronies, have completely personalized all economic ventures in the country, especially the crucial energy sector.\textsuperscript{68} Since one person controls the economy nondecisions and a lack of real coordination and implementation are rife.\textsuperscript{69} Exchange and interest rates have no function in the economy and governance is a mater of caprice.\textsuperscript{70} Accordingly it is impossible to put any faith in Turkmenistan’s ability to finish the pipeline on schedule, at cost, and to supply China with 30bcm of natural gas as promised. Moreover, it is impossible to put any credence in its ability to provide 30bcm a year to China and meet its contracts to Ukraine, Russia, and Iran. For example Turkmenistan’s contracts with Gazprom call for it to send at least 30bcm this year to Russia and between 70-80bcm by 2010.\textsuperscript{71} Given Turkmenistan’s governance, these figures are literally fantastic.

Kazakhstan is light years ahead of Turkmenistan in transparency and openness despite being corrupt and authoritarian in its governance.\textsuperscript{72} Nonetheless, even if Kazakhstan were to be fully developed it alone could not replace Middle Eastern supplies insofar as East Asia’s major consumers are concerned: India, China, South Korea, Japan. Their combined demand is simply too great and the investment in infrastructure needed to bring Kazakh energy to Asian markets is so huge that those states would have to build pipelines and refinery facilities and pay for the energy. Or else they would have to buy huge equity shares which Kazakhstan is not going to give them as it has moved to take ever greater control of its energy.\textsuperscript{73} So while Kazakhstan can
provide large amounts of energy to Asian consumers, it cannot replace Iran and Saudi Arabia, or even an efficient Russia, as a supplier of first resort.

However, even if Central Asian governments start today to behave in an optimally efficient way to provide Asian consumers with energy, Russia will do everything it can to block Central Asian gas and oil sales to other consumers. Russia and China are strong rivals for Central Asian energy assets. For example, Rosneft, Transneft, and Lukoil already want to sell oil to China through the Kazakh pipeline to prevent Kazakhstan from monopolizing such sales and this is only one example of a general pattern of Russia’s highly visible monopolistic practices in Central Asia. Russian energy producers have steadily rebuffed China’s projects for obtaining energy supplies in Central Asia. Russia is also determined to maintain autarchic control over energy firms its strategic resource and to be able to manipulate prices in its favor by being a monopolistic producer. Sergei Kuprianov, Gazprom's Press Secretary, stated in 2004 that,

Sharing mineral resources with foreign companies is against our policy. --- In fact, sharing oil with the Chinese would be even more inappropriate. After all, their stake in Yuganskneftgaz (the former main asset of the now defunct Yukos energy company-author) could complicate future price negotiations (for oil purchased by CNPC).

Similarly Russian and American energy companies have obstructed and are still obstructing China’s efforts to buy energy holdings in Central Asia, forcing China to depend on external suppliers or on its own bilateral deals rather than gain equity holdings there. Moscow has regularly sought to monopolize the transport of Kazakstan’s enormous oil and gas deposits, still opposes Kazakstan’s participation in the Baku-Ceyhan pipeline system (BTC), still deprives Turkmenistan of the free choice of markets and pipelines for its gas and obstruct efforts to build pipelines that would connect Turkmenistan with Pakistan and the Indian Ocean.
surprisingly these efforts anger Kazakstan’s officials, e.g. its Minister of Energy and Natural Resources who said “Russia must share the markets it controls.”

Indeed, in November, 2005 Gazprom concluded a deal with KazMunaiGaz, Kazakstan’s main gas and gas pipeline firm to increase gas transit of Turkmen and Uzbek gas via Kazakstan so that Gazprom will control virtually all of Central Asia’s gas exports. While observers say this is aimed first at Ukraine, it also will constrict Chinese options in Central Asia. Thus Moscow’s subsequent pressure upon Turkmenistan to join it has been notable, even to the point of helping to facilitate an attempted coup there in late 2002. More recently it negotiated a deal with Ukraine that stipulates that in return for Kyiv’s commitment to buy Central Asian and especially Turkmen gas exclusively from Russian pipelines, Ukraine could buy gas for 2007 at $130-135 per tcm of natural gas. That deal, whatever its implications for Ukraine, perpetuates Moscow’s stranglehold over Turkmen gas exports. So its efforts to block independent Chinese access to Central Asia are hardly surprising.

Indeed, those actions reflect equally compelling geoeconomic and geostrategic perspectives for Moscow. In 1998 the Kazak political scientist Nurbulat Masanov wrote that, U.S. and Western trans-national corporations are active in the exploration of Central Asian resources and are particularly interested in reducing Russia’s influence in the region. When new transport routes, such as the Trans-Caucasus corridor, become operational, Russia is expected to experience serious negative consequences. The point is that the flow of export goods from Central Asia across Russia, unites the Urals, the Volga region, Western Siberia, and the Far East into a single complex. If this flow takes alternative routes it is quite possible that the territorial integrity of Russia will be endangered. And With China playing a larger role in the eastern part of Russia, this process is fraught with even greater unpleasantness. (Italics author)

Russian officials have repeatedly reiterated their opposition to being merely China’s source for raw materials and demand equal status in economic-technological exchanges with China. Russian leaders also know that if they fail to be competitive economic players in East
Asia they will also be at a serious disadvantage at home and in Central Asia. For, if Russia fails to become “a worthy economic partner” for Asia and the Pacific rim, Deputy Prime Minister Aleksei Kudrin warned that, “China and the Southeast Asian countries will steamroll Siberia and the Far East.” China would then also steamroll Russia in Central Asia too. Certainly Russian energy policy betrays a definite reserve, if not something stronger, about ceding too much influence in Russia or Central Asia to China.

Russia and Central Asia are thus rivals in the energy market and much of Moscow’s neo-imperial designs upon this region stem from the fact that it must capture Central Asian energy rents to sustain its own autocratic and anti-market system. This is because Central Asia’s oil and probably gas too are cheaper to extract than is Russia’s. As Mikhail Khodorkovsky, Yukos’ Chairman and CEO told the Carnegie Endowment in 2002, a key reason why Russian oil has a high cost is transportation costs and its most pressing needs are for liberalization and new markets. But the state will not let go of its control of pipelines and this will maintain the excessively high costs of Russian oil and deprive Russia of markets even as Russia has to “push aide” other producers by expanding its pipeline network to take their oil through its pipelines.

Khodorkovsky conceded as well that Caspian oil is indeed competition for Russian oil so if that energy goes onto markets before Russian energy capabilities are developed, the latter will not have room to compete. And given the importance of oil companies to Russia’s economics, it is urgent for them to restrict Central Asian production and infrastructure to mainly or even exclusively Russian channels lest their oil and gas become less competitive due to its own high cost and wasteful monopolistic structure and dilapidated infrastructure. And since domestic consumption is subsidized and Russia will not undo this despite the EU’s demands for dong so, it must dominate Central Asian energy and restrict its flow to other consumers lest its
own economy become unhinged. Since the domestic economy is spending subsidized energy with little regard for its true price, it is obvious that if real market prices for energy were to be charged to private and public users like municipalities the ensuing economic hardship would be enormous and many economic organizations might well go under in the crash.

Central Asia’s abundant gas deposits, if marketed abroad, could erode Russia’s competitiveness in world markets, especially the Asian markets of India, Japan, China, and South Korea that are widely expected to surge with vastly increased rates of demand for fossil fuels. Given the centrality of oil and gas to Russia's economy that would be a catastrophe. Thus Moscow must realize the grand Eurasian design sketched out by Putin since 2000 and his proposals for an OPEC-like cartel over natural gas so that Central Asia’s efforts to build infrastructure be limited to those compatible only with Russia. Apart from the grand design for Asiatic railways and pipelines to major East Asian states this means the successful completion of not only those two goals but also of major transportation and energy projects in Central Asia, including the north-south corridor including Central Asia, Iran, and India. Then Russia could then truly become the Eurasian hub of a vast series of trade routes tying together Europe, Central, South, and East Asia together. 90

Meanwhile Moscow’s and Gazprom’s quest to monopolize Central Asian gas continues in order to use it to overcome the dangers facing Russia from a lack of investment in its own dilapidated gas and oil infrastructure and the unwillingness to end the domestic subsidization of natural gas. Although these factors predate Putin; the monopoly status of Gazprom and the gradual state takeover of oil firms creates an enormous incentive for lack of investment at home and for depletion of resources in a scramble to export, as well as stagnating productivity of labor and of gas fields. The natural gas industry, led by Gazprom, remains the least marketized sector
of the Russian economy and has proven highly resistant to efforts to introduce market reforms. Thus it already breeds conditions harmful to the growth of that sector and to Russia's long-term economic development. Since Gazprom controls both upstream production facilities and downstream distribution institutions, it constitutes a major obstacle to consumer choice and market economics in its chosen sectors. Moreover, it is the monopoly exporter of gas exports and the monopsonistic buyer of gas produced by oil companies even as it expands into the electricity and nuclear sectors. Gazprom expects domestic demand to rise steadily albeit slowly and demand for its exports to continue rising as well through 2010. Yet because of decaying infrastructure which still suffers from lack of investment output, has been and is likely to remain flat in the face of this rising demand.

As Lilia Shevtsova of the Carnegie endowment observes,

The limits of Russian bureaucratic capitalism are difficult to ignore. Despite extremely favorable conditions on the world market, economic growth in Russia is slowing down from 7.3 percent growth in 2003 to 6.4 percent in 2006. The Russian ruling elite seems not to understand that the country, as presently organized, is approaching the natural limits of the “petro-economy.” State-owned energy companies have proven far less efficient than privately owned companies: oil output has grown by 47 percent in the private sector over the last six years, compared to just 14 percent in the public sector. Independent producers of natural gas have doubled their output, while state-controlled Gazprom has increased output by just 2 percent.

Nevertheless the state juggernaut roles on seeking monopolies throughout strategic sectors of the economy and not just in energy. Because the domestic energy economy, especially in gas is anything but a market, Russia has to regulate exports in order to sustain it lest producers export everything they can to get the higher return on their product. For example the deal with Ukraine is for 55bcm to be shipped there in 2007 even though Ukraine’s previous annual use is 73-76bcm a year. As Ukraine is a notoriously inefficient consumer of energy it is virtually inconceivable that it could have made such economies in only one year. As a result observers
are speculating that Russia is holding back 18-20bcm of Central Asian gas in order to satisfy rising demand at home which it cannot do from its own production. For example, Roman Kupchinsky of Radio Free Europe writes that, “The fall in Ukrainian gas imports is likely not by preference -- but can rather be directly traced to Russia’s own rapidly rising domestic demand.” Under these circumstances Russia’s ability to satisfy East Asian demand for gas or for oil is not to be taken for granted. Meanwhile this lack of investment amidst rising consumption at home and abroad may lead to a “gas hunger” and major energy crisis in Russia. Indeed Russia already is undergoing a gas crisis.

Forecast extraction is from 610bcm in 2004 to nearly 640bcm Billion in 2010 while domestic consumption is expected to rise from 430 to 470bcm. Thus Russia may lack about 30bcm in 2010 to meet its domestic and foreign commitments. Central Asian gas, bought at cheap prices may be used to supply Russia's domestic markets, thereby forcing those producers to bear the costs of the domestic subsidy and forego the profits they would accrue by selling on the open market. Accordingly Russia's drive for monopoly reinforces its drive for empire. And both these goals are attainable only at the cost of perpetuating Central Asia’s socio-economic backwardness which most observers believe will sooner or later trigger a massive explosion there. The geopolitical and commercial implications of this policy, which redounds neither to Russian, Central Asian, on or Chinese long-term interests are obvious and potentially ominous.

So it is hardly surprising that despite protestations of mutual identity of interests and eternal friendship in high-level Sino-Russian meetings, in energy and economics the reality has been mutual suspicion and tough bargaining. Putin has at least twice publicly voiced suspicion of Chinese economic power in Asia and Russian officials have publicly opposed any
Chinese military presence in Central Asia. Consequently, despite an anti-American strategic partnership on strategic issues, Russo-Chinese energy relations reflect mutual irritation and suspicion. This Russian pressure over Central Asian energy capabilities constitutes one of the fundamental question marks hanging over any Central Asian ability to satisfy East and South Asian demand, apart from the unsettled situation in Afghanistan and Indo-Pakistani rivalries. And it is bound as well to the nature of the Russian energy industry as a whole which has come under ever greater state control.

**Russian Oil and Gas Industries**

These geostrategic and geoeconomic trends also powerfully reflect the internal constitution of the Russian energy sector which is the most strategic sector of the state and subjected to increasingly stultifying state control. Given the monopolistic, rent-seeking, and suboptimal tendencies that are structurally embedded in this industry it is unlikely that Russia can satisfy China, let alone South Korea, Japan, its own consumers, and Europe or achieve sufficient revenues for investment in its own infrastructure with regard to gas and oil. Since the gas industry is subject to vastly greater state control and even ownership than is the oil industry the Russian government can exercise much greater ability to manipulate gas prices at home and abroad and gain increased control over natural gas markets. But while the oil industry does not yet reflect quite this degree of state control it is falling under greater state control as time passes and is at the mercy of the state agency Transneft which controls the pipelines.

There are ten private oil firms but five major ones dominate it. Julia Nanay listed these five dominant firms: Lukoil, Yukos, TNK, Surgutneftgaz, and Sibneft. Since then Yukos has been destroyed and taken over by the state and Sibneft has also been brought under state control. Juxtaposed against the private oil firms are three key state-owned firms, Rosneft, the oil
company, Gazprom, the gas company and Transneft, the pipeline monopoly. In September, 2004 the government announced the takeover of Rosneft by Gazprom (thus demonstrating the latter’s ambition cited above to be a major energy firm on a global scale and to be a monopolist in the field. When Yukos was taken over shortly thereafter by Rosneft, which was already earmarked for assimilation to Gazprom this displayed the ambition, spelled out by Putin earlier, to crate companies which would be the Russian equivalent of Saudi Arabia’s Aramco. And since then Gazprom is evidently moving also to take control of Russia’s electricity and nuclear energy industries. This trend, though of global significance, has a particular significance for Sino-Russian energy relationships.

A Russian political analyst even suggested that the merger between Gazprom and Rosneft would only be the starting point of the establishment of the biggest energy company in the world. The analyst pointed out a kind of holdings company named “Gosneftgaz” composed of Gazprom, Rosneft, Surgutneftgaz, Lukoil, Yukos, and Sibneft could be established before the end of president Putin’s second term, that is 2008. He added that approbation of creation of a single state oil and gas corporation will be under the control of the St. Petersburg Chekists group which is very conscious of China’s rise. So they are determined to control the oil and gas supply sources to China.

But since Gazprom is legally constrained to supply natural gas to producers, especially the existing state-run electricity firm, RAO UES, at ridiculously low and subsidized domestic prices, its profits come almost exclusively from its ability to export. If it cannot export the whole house of cards might collapse and force major fuel and electricity price hikes in Russia that Putin has ruled out even though the EU has demanded them. Consequently any attempt to establish a truly market based energy economy inside Russia would lead to an economic and thus political crash.

But to the degree that Gazprom and Transneft can establish control over the entire energy sector, they will export all the deficiencies of their monopolies to that sector and to its foreign policies. Nevertheless the creation of an ARAMCO like company in Gazprom and the status of
Transneft as “king of the castle” in the Russian oil sector is a logical culmination of the outlook shared by Putin and other officials. Therefore those hoping to obtain access to major Russian energy supplies are likely to be quite disappointed.

The natural gas industry, led by Gazprom, remains the least marketized sector of the Russian economy and has proven highly resistant to efforts to introduce market reforms. Thus it already breeds conditions harmful to the growth of that sector and to Russia’s long-term economic development. Since Gazprom controls both upstream production facilities and downstream distribution institutions, it constitutes a major obstacle to consumer choice and market economics in its chosen sectors. Moreover, it is the monopoly exporter of gas exports and the monopsonistic buyer of gas produced by oil companies even as it expands into the electricity and nuclear sectors. Gazprom expects domestic demand to rise steadily albeit slowly and demand for its exports to continue rising as well through 2010. Yet since infrastructure still suffers from lack of investment output is not growing in the face of this rising demand which is outstripping supply especially because it is subsidized. And it is likely that domestic demand is rising faster than it predicted leading to the gas hunger stated above and the diversion of exports to the domestic market.

Moreover, Gazprom as a monopolist is not content with regulating exports it also acts to suppress potential rivals. Thus One of things Gazprom wants is to ensure that BP’s entrance into the ranks of the Russian majors does not mean an end to Gazprom’s export monopoly. BP merged its assets with Russian oil firm TNK in 2003 to create TNK-BP. One of the merged firm’s major goals was to export natural gas from the Kovykta superfield near Irkutsk to China and Korea -- an $18 billion project. To protect its interests, Gazprom will continue to sabotage the Kovykta project until TNK-BP relents and allows it in as the operator -- an operator that has every intention of letting the other “partners” pay its way.
Obviously this means more delays for China and the ROK who hoped to buy the gas from the Kovykta site and higher costs, assuming that the pipeline ever gets built. And sure enough, in 2006 BP announced that it was selling its majority share in its joint venture with TNK in Kovykta to Gazprom which has waged an unrelenting campaign to gain control of that field and other TNK-BP projects for its own purposes. Even so, it is not clear whether the gas from this field will go to Asia or to domestic consumers. And we cannot make any assumption because of the pervasiveness of the struggle of Gazprom and Transneft, the state monopoly over pipelines, backed by powerful government authorities to establish monopolies not just over domestic industry but also over neighboring foreign producers. Thus Gazprom has hinted at an interest in Russia’s foreign oil company Zarubezhneft and we know that the energy sector, acting under state direction is a powerful, if not the most powerful leverage Russia has in foreign policy towards the Baltic States, Poland, Belarus, Ukraine, Moldova, and Georgia.

**Energy Security ESPO and Kovykta**

Given the nature of the Russian energy industry it is not surprising that Russia's concept of energy security clashes with that of every consumer, not just Asia. Essentially this concept is autarkic, i.e. Russia alone controls the pipelines that take its oil and gas to consumers, and that they must be locked into long-term contracts with Russia alone at a price Russia sets. Energy security duly translates into a guarantee for protected markets free from any outside scrutiny or regulation by the market. Energy security here entails a supposedly risk-free privileged domain in the CIS if not beyond which diminishes the sovereignty of CIS members and forces consumers to subsidize Russian oil and gas and pay Russian prices for the privilege of doing so. Decisionmaking is essentially political, not economic and inherently sub-optimal and inefficient.
China’s approach on the other hand is governed by its paranoia, not to strong a word, about controlling energy under all circumstances and bypassing its so called Malacca issue, i.e. that the U.S. or Indian Navy can interdict supplies from Middle Eastern producers.\textsuperscript{111} Hence China’s interest in overland pipelines from Iran, Pakistan, and Central Asia. China also, as everyone has noted, pays top dollar to “lock up” oil and gas supplies for years and to gin equity access so it owns the oil or gas at all stages of production and transport to China. This too is an essentially anti-market, political approach to the problem of energy security. But in Central Asia and Russia China has sought to induce both Russia and local producers to sell it oil and gas through projected pipelines that have yet to be built at below market prices.\textsuperscript{112} This naturally triggered staunch Russian resistance and delayed negotiations showing just how incompatible the two countries’ approach to energy security is and how hard it is therefore to reconcile them.

Similarly the experience of Russia's on and off decisionmaking about the ESPO and the gas fields at Kovykta through 2005 cannot inspire confidence that Russia will make and implement an economically rational decision that provides energy supplies for all consumers at reasonable prices.\textsuperscript{113} Nor does the new crisis around the Sakhalin gas fields help matters. Russian claims of environmental violations and of tax defaults look and feel like other previous attempt to drive Gazprom’s rivals out of business and to revise by unilateral pressure and coercion existing Production Sharing Agreements (PSAs) and have raised a storm of protest in Japan and Europe.\textsuperscript{114} But since the Kovykta project failed to get off the ground, Sakhalin remains the only available functioning source of LNG to East Asia and Gazprom is clearly determined to monopolize it.\textsuperscript{115} Moreover, it is making many hints about taking the gas from South Korea and Japan and buying out the foreign companies in order to give it to China to reflect the political necessity of reaching a deal with China.\textsuperscript{116} Thus Japan and South Korea
might not even receive the gas they have come to expect. Similarly ESPO’s final terminus remains to be determined along with the cost, along with the issues of who will pay for it and the price of energy supplies exported to China. So while major projects are being discussed or are just now beginning to be built, in fact numerous question marks continue to surround the realization of Russia’s grand design.

Conclusions

The foregoing analysis has suggested numerous reasons why Russia and Central Asia cannot serve as reliable surrogates for the Middle East and the Gulf with regard to Northeast Asian demand. In some respects this is simply because that demand is too great to be supplied by Russia and Central Asia. But this fact also emerges out of the preexisting economic and politically embedded structures of the strategic energy industry and state decision making in those countries. Indeed, as noted above Russia is already beginning to feel the effects of a gas shortage and is trying to change its strategy to relieve the pressure of its own demand on its domestic supplies. However, barring fundamental structural political change in these countries, efficient and rational decisionmaking with regard to energy is not likely anytime soon. China too must move faster to change its approach because it is excessively expensive economically in terms of paying top dollar for overvalued energy access and because of the strains it places upon its relationship with key countries like the United States, India, and Japan. Though Washington is stating this to China and some Chinese and Asian academics are making the point too, Beijing has yet to come to terms with the need for systematic reconstruction of its overall energy policy process.

Nonetheless, the points made here highlight the need for greatly enhanced international cooperation among consumers. India and China talked about doing this earlier this year but little
has come of it so far. More recently, there are signs of discussions among China, India, America, Japan, and South Korea about establishing a viable form of multilateral cooperation on energy. Market based cooperation of this kind would go far to alleviate both the security anxieties and the market shortcomings that currently undermine efforts to deal with potential energy shortages and great power rivalries. But these activities remain in their infancy for now. Nevertheless it is clear that this is the only way for consumers and producers to reach a sustainable supply equilibrium and genuine energy security. For the kinds of monopoly practiced by OPEC and by Russia have become nothing more than pillars for autocracy, backwardness and neoimperialism. And whether or not East Asia gets the energy it needs from Russia and the CIS under these conditions or not. Those outcomes of the current Russian and CIS political economy inevitably will cause new security threats even as they are likely to fail to meet Asia’s needs for energy.


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