



russian analytical digest

www.res.ethz.chwww.russlandanalysen.de

RUSSIA'S NEW ENERGY FRONTIERS

■ ANALYSIS

Russian Energy Power Abroad 2
By Jeronim Perovic, Zurich

■ ANALYSIS

Russia's New Political Leadership and its Implication for East Siberian Development and Energy Cooperation with North East Asian States 5
By Yoshinori Takeda, Moscow

■ ANALYSIS

Shtokman and Russia's Arctic Petroleum Frontier 8
By Indra Øverland, Oslo

■ ANALYSIS

All Quiet on the Eastern Front... 13
By Nina Poussenkova, Moscow

■ ANALYSIS

Regional Influence in Oil and Gas Development: A Case Study of Sakhalin 18
By Elana Wilson Rowe, Oslo

Analysis

Russian Energy Power Abroad

By Jeronim Perovic, Zurich

Abstract

Energy lies at the heart of Russia's economic recovery. The wealth generated from energy exports has gone hand in hand with political stabilization and has contributed significantly to Russia's assertiveness in international politics. Energy has emerged as a key factor shaping Russian's foreign relations. But it is difficult for Russia to use energy as leverage in a market where buyers, sellers, and intermediaries are so inter-connected. The interdependencies in the energy market are complex, and changes in the system can easily lead to conflicts that might ultimately also affect Russia in a negative way. Russia thus has to maneuver carefully in its decision-making, since the stability of the system also depends on the choices that the EU, Russia's neighbors, and the US make.

Russia's Role for Eurasian Energy Flows

As a major supplier of fossil fuel, Russia plays an important role for global energy security. According to the most recent European Commission figures, 27 percent of the oil and 24 percent of the gas consumed in the EU are of Russian origin. Of EU imports, 30 percent of its oil and 44 percent of its gas come from Russia. Some of Russia's post-Soviet neighbors (e.g., Ukraine, Belarus, Armenia, Georgia, and Moldova) as well as other non-EU states (especially the western Balkan countries and Turkey) are likewise dependent on Russian energy.

Russia also represents the most important channel for Eurasian energy flows. The country is the main export outlet for Central Asian gas and oil and the most important consumer of gas from Kazakhstan, Uzbekistan, and Turkmenistan. Recent developments have only had a small impact on this picture. Some of the Caspian oil and gas exports sent westwards now circumvent Russian territory via newly constructed pipelines from Azerbaijan through Georgia to Turkey. Small amounts of Turkmen gas flow to Iran by pipeline, and some of Kazakhstan's oil is shipped to China via a new pipeline.

Furthermore, Russia is seeking to become a key player on the Asian oil and gas markets. While the Sakhalin fields already provide some energy to countries in the Asian-Pacific region, plans are underway to explore and develop East Siberian oil and gas fields and to build a network of oil and gas pipelines connecting this region to Asian consumers.

Concerns about Russia

Russia has received bad press for its foreign energy policy. The price dispute between Gazprom and Ukraine, for instance, which ultimately prompted Russia to cut off gas deliveries to Ukraine in January 2006, has some-

times been portrayed in Western media as a politically-motivated action and "punishment" from the Kremlin for the country's "Orange Revolution" of 2004. The construction of a pipeline from Russia to Germany under the Baltic Sea and the penetration of the European energy market by Gazprom and other Russian energy companies are often seen as part of a "divide and conquer" policy aimed at undermining efforts by European Union members to pursue a common European energy policy. Russia's declared goal of entering the Asian energy market is frequently depicted as an attempt to play off East against West.

Russians argue that their actions are driven purely by business interests as they seek to secure the highest possible return for their energy sales. While Russian motivations remain a matter of contention, many are beginning to fear that Russia is simply not investing enough in its production capacity to provide sufficient oil and gas to meet growing European demand while satisfying new Asian customers. Russia's ability to meet future world demand is becoming a question of increasing anxiety. Russian companies have been increasing their investment in upstream projects recently, but the question ultimately remains whether new fields will come online *before* existing production falls to a point where Russia will not be able to meet the projected output increase (see also Indra Øverland's article in this issue).

Nevertheless, Russia certainly has every interest in keeping a strong profile as an energy supplier to international markets. The energy sector is the motor of Russia's economic growth and the massive rents generated from oil and gas sales are highly important for Russia's state revenues. In 2006, the Russian budget received close to \$50 billion from oil export duties. Almost half of Russia's total export earnings are oil-related.

Russian-European Energy Relations

Europe is by far Russia's most important trading partner. Given the very strong mutual dependencies between Russia and Europe, it is at present hard to imagine that either side would see a benefit in applying sanctions against the other. Around two-thirds of Russian gas and oil exports go to EU member states, while the rest is sold to other European countries and the CIS states. According to European Commission figures, in 2005, the EU accounted for some 56 percent of Russia's exports and around 45 percent of its imports. In such numerical terms, the significance of Russia for Europe is relatively small. Russia is certainly important as a supplier of oil and gas to Europe, but its role is also confined to these two commodities. Overall, in 2005, the country accounted for only about 10 percent of EU overall imports and consumed a little more than 6 percent of EU exports.

Although in terms of overall trade volumes, Russia is clearly much more dependent on Europe than vice versa, it is the *quality* of the dependency that makes Russia equally important to Europe. Oil and gas are commodities of the highest strategic importance, and Europe at present cannot do without Russian supplies. A hypothetical stop of Russian oil deliveries would hurt Europe less than a disruption of gas supplies, however, simply because all of the gas that Europe imports from Russia arrives through pipelines and there are currently no alternative sources. The physical connection between consumers and producers is less immediate in the case of oil, where most imports arrive by tanker, and where shortfalls could theoretically be balanced via imports from other places.

Europe could gain leverage in dealing with Russia if the members of the EU decided to speak with one voice towards Russia. As long as European countries prefer to deal with Russia on the basis of individual bilateral relations, the EU cannot bring the full potential of its leverage to bear. This is why the EU has so far failed to achieve reciprocity in its energy relations. While Russian companies are allowed to enter the EU downstream market, EU and foreign companies still face obstacles when seeking similar access in Russia. The state-controlled Gazprom monopoly controls 85 percent of gas production and all major gas pipelines and the state monopoly Transneft operates Russia's oil transportation system.

The EU has made a series of efforts to increase the pressure on Russia, for instance by a EU Commission proposal in summer 2007 that aims to break up big utilities that control power supply, generation, and transmission. While this planned legislation is directed at some of Europe's own big energy utilities, it would also effectively bar foreign companies such as Gazprom from

controlling European networks unless they play by the same rules as EU companies and their home country has an agreement with Brussels. While this plan faces opposition from within the EU itself, Russia has also reacted angrily, and it still very uncertain whether this plan will be implemented in the near future. For the time being, however, the disputes in European-Russian relations are not reflected at the general level of business cooperation or in day-to-day politics.

Energy Dependencies between Russia and its Post-Soviet Neighbors

Energy is also a major element in Russia's relations with its post-Soviet neighbors. Russia is important for the region in two ways: as a customer and transit country for Central Asian gas and oil, and as a supplier of oil, gas, and electricity to energy-poor countries like Georgia, Armenia, Moldova, Ukraine, and Belarus.

But Russia is also dependent on some of these states. Russia relies on Central Asian gas imports in order to offset declining production from its own major fields in Western Siberia. Ukraine and Belarus are important as transit countries for Russian gas and oil to Europe: About 80 percent of Russia's gas destined for Europe transits Ukraine. Russia's biggest oil pipeline, Druzhba, which accounts for about one third of Russia's crude exports to Europe, crosses Belarus. Even after the new oil and gas pipelines circumventing Ukraine and Belarus become operational, the bulk of Russian gas, and a significant share of Russian pipeline oil, will still pass through these two countries.

There have been two notable changes in Russia's approach towards its former Soviet neighbors in recent years: A first change is that Russia has stopped its policy of subsidizing other economies with cheap gas. Thus, from about 2005–2006 onwards, it started to raise prices to world market levels. It has occasionally done so in very bad style by abruptly shutting down energy supplies. But, even if Russia's price hikes should cause more friction in the years to come, this development would still be a healthy one, as it would end the subsidies to these economies of cheap Russian energy and would eventually help to stabilize relations between Russia and its neighbors based on market principles. In fact, Russia has been raising prices for its adversaries (e.g., Georgia) and allies (e.g., Belarus) alike, although at varying speeds. In some instances, Russia has even accepted that the price increase will result in a loss of influence. For example, Georgia, which until recently imported all of its gas from Russia, is increasingly turning to Azerbaijan and Iran as alternative sources for its imports. Azerbaijan has stopped importing Russian gas altogether and has tapped into its own domestic sources.

A second change has occurred in the way Russia handles the Central Asian gas producers. Russia is still the major outlet for the gas (and oil) extracted in the region, but given the competition from the EU, the US, and China for Central Asian energy, Russia has decided to become a more attractive customer by offering higher prices. While Turkmenistan sold its gas to Russia for \$44 per thousand cubic meters of gas in 2005 (with only half of it paid in cash), the price was \$100 in 2007. In the meantime, the two sides have agreed to raise the price to \$150 by July–December 2008. Russia is also paying much higher prices for gas purchased from Kazakhstan and Uzbekistan.

In addition to price increases, Russia has also offered the Caspian states the opportunity to expand their direct outlets to the lucrative Western European market by using its transportation system. In December 2007, for example, Russia finally agreed to expand the capacity of the pipeline operated by the Caspian Pipeline Consortium, which transports mainly Kazakhstan's oil westwards. Moscow decided to expand the capacity after Kazakhstan consented to ship oil through the planned Bургas-Alexandroupolis pipeline, a trans-Balkan pipeline designed to take Russian and Central Asian oil from Bulgaria to Greece.

In the case of Caspian gas, Europe is now competing with China for supplies. Currently, Russia buys up Central Asian gas and uses it to supply its own domestic market and the markets of Ukraine and other CIS states, thus freeing Russian gas for export to Europe at a higher price than Russia paid for it in Central Asia. Should China manage to divert substantial parts of Central Asia's gas eastwards, however, the balance between the CIS and Russia will suffer, thus potentially leaving less gas for Europe. While both Turkmenistan and Uzbekistan have already concluded agreements with China on gas supply via new pipelines, Kazakhstan is also contemplating the construction of a gas pipeline eastward along the route of the existing oil pipeline.

Russian-Asian Energy Relations

The concern that Russia might divert increasing volumes of already scarce energy to Asia, mostly to China, thus leaving less for Europe, is a distorted view insofar as it leaves a key element of Russia's Asia strategy out of the picture: namely, that Russia intends to develop new fields in East Siberia and the Far East for the purpose of making additional oil and gas available for the Asian market (see also Nina Poussenkova's article in this issue).

However, Russia's diversification efforts towards Asia are not going as smoothly as planned. Apart from the Sakhalin oil and gas projects, other major projects – like the Kovytka gas field in Eastern Siberia – are

still in the early stage of development. If the fields of Eastern Siberia are to be developed, the building of an extensive pipeline infrastructure to East Asia is of paramount importance. This, however, has also proved to be more complicated than anticipated. Negotiations with Japan and China have been going on since the early 1990s, but it is still uncertain when the pipelines will be built and become operational. Even the routes are still under discussion.

There are multiple reasons for Russia's failure to make much progress on the Asian energy front. In the area of gas, a major obstacle is certainly that Russia and China have not yet been able to agree on a price that will guarantee that Russia's large planned up-front investments will pay off within a foreseeable time span. Yet another, potentially more important issue is that Russia's policy towards China still seems to suffer from a psychological blockade fueled by decades of mutual mistrust. Russia understands that it has to engage with China for economic reasons, but it feels uneasy providing the fuel for China's modernization, which will inevitably accelerate the rise of a neighbor that could, from the Russian point of view, not only surpass Russia economically, but also pose a military threat in the future.

Even if pipelines are constructed that tie Asia to the fields in Western Siberia (a region that has traditionally supplied the European market), the key issue would likely not be politics, but the price that Russia's customers in West and East are ready to pay. As of now, Europe remains by far the most lucrative market for Russian gas and oil, and the most important source for generating Russian export revenues. Under normal political and economic circumstances, Russia is unlikely to redirect gas destined for its traditional customers in Europe to Asia unless it can achieve similar or better conditions.

Contrary to what is often written in the Western media, the main point for Russia is not to balance Europe against Asia, but to establish a diversity of customers among the individual Asian countries (mainly China and Japan) and, in the case of Sakhalin, among Asia and the US. Russia seeks a diversity to reduce its dependence on any particular customer.

Energy and Russia's Future

The international markets are dependent on Russian energy, but Russia is also dependent on these markets. The real worry for Europe and Russia's neighbors is not so much with regard to Russia's foreign energy policy, but the role that energy plays for Russian domestic trajectories.

Energy has provided the fuel for Russia's economic growth and has helped to stabilize Russia after the political chaos and economic turmoil of the 1990s. But

this stabilization has come at the expense of democracy and uneven economic development in favor of the raw materials' sector. The massive new wealth from oil and gas sales has also helped spur an increase in corruption and authoritarian tendencies. Russia's stability is very much linked to the ability of the ruling elite to redistribute rents in a way so as to accommodate the various conflicting interests in Russian society. At least indirectly, Russia's stability is thus tied to a well-functioning domestic and international energy market and

stable prices. It also depends on Russia's ability to continue playing a significant role as a supplier of energy to international markets. Major disruptions would ultimately test Russia's precarious political stability.

The challenge for Russia's new president will be to manage Russia's energy wealth in the way that is best for the country's long-term political, economic, and social development. Such efforts can best succeed if Russia manages to develop a thriving liberal market that is at least to some extent dependent on an open society.

About the author:

Jeronim Perovic is the co-editor of the Russian Analytical Digest and a senior researcher at the Center for Security Studies, ETH Zurich.

Analysis

Russia's New Political Leadership and its Implication for East Siberian Development and Energy Cooperation with North East Asian States

By Yoshinori Takeda, Moscow

Abstract

The transition from Putin to Medvedev marks an important new beginning for the future of East Siberian energy resources and their impact on Russia's Asian neighbors. East Siberian resources have not been developed, but could have great impact on Russia's relations with Asia. China currently has the best relations with Russia, while Japan has made little progress, and Korea has secured one major deal. The Korean arrangements with Russia could serve as a model for future ties because they strongly favor the Russian side, which maintains a 60 percent share of the project while taking on little risk. In the future, Russia's energy decisions will continue to have strong political motivations, but they will be based on better defined rules of the game. Essentially, Russia will use its energy resources to develop the Russian state and only allow foreign companies to participate in projects that meet Russia's national interest.

From Putin to Medvedev

The process of political and economic modernization in Russia entered a new phase on December 10, 2007, when President Vladimir Putin chose First Deputy Prime-Minister Dmitri Medvedev as Russia's next president. Medvedev's nomination clearly demonstrates that over the next four years Russia will seek further economic growth and the social welfare benefits that derive from such growth. Medvedev has been a close ally of Putin's for the last decade, but he is not a former secret service officer. In addition, Medvedev is less hawkish than others surrounding Putin.

Meanwhile, the Russian government is moving extremely slowly in diversifying the economy, a move seen as necessary to ensure continuing economic prosperity regardless of the cost of raw materials. Since almost 70 percent of Russia's budget revenues and export val-

ue derive from primary commodities, Medvedev will have to take serious measures towards economic diversification while Russia remains dependent upon oil and gas. Against a backdrop of historically high oil prices, this economic course would help Russia pursue its geopolitical strategy in the foreseeable future and lead the nation to a position of global influence and power with its oil and gas reserves.

Among Russia's oil deposits, East Siberia is the most underdeveloped region. In 2006, its total crude oil production amounted to only 0.7 million tons, or 0.1 percent of the national total. Although East Siberia's oil reserve is estimated to be approximately 75 billion barrels (10.2 billion tons), proven crude amounts are only 7 billion barrels. In addition, exploration has barely begun beyond two fields – the Verkhnechon field in the Irkutsk region and the Talakan field in the Sakha re-

public. Even Putin, who has shown intense interest in the economic and social development of East Siberia and the Far East by funding a federal program for the region's growth with \$24 billion from the state budget in 2007, has done little to spur a search for crude oil in East Siberia. For Medvedev, encouraging exploitation of new fields may be key to averting an expected future drop in Russia's oil output. It may also provide important leverage vis-à-vis Asian countries, especially China, Japan and South Korea.

Russian-Asian Energy Relations: Current Circumstances

Throughout the second term of Putin's presidency, China has been undoubtedly the front-runner in energy cooperation with Russia. A major milestone of Sino-Russian energy relations was the \$6 billion loan from the China National Petroleum Corporation (CNPC) to Russia's highest-producing state-owned oil company, Rosneft, in early 2005. This financial resource made it possible for Rosneft to purchase Yuganskneftegaz, the main subsidiary of the former Yukos, at a state-run auction. 2005–2006 saw a series of important deals between Moscow and Beijing: Rosneft and CNPC formed a joint venture for upstream projects in East Siberia; CNPC and Transneft, Russia's state-owned oil pipeline monopoly, agreed to build a Chinese branch of the East Siberia – Pacific Ocean oil pipeline project (ESPO) funded with Chinese money; and CNPC and Gazprom, the world's No. 1 gas company, proposed an ambitious plan to build two huge gas pipelines to China by 2011. These projects are, however, being very slowly developed. While Vostok Energy, the joint company established by Rosneft and CNPC, won two small oil and gas wells in East Siberia at an auction for \$45 million, the spur of the ESPO has not yet reached the Sino-Russian border, and the gas pipeline projects are on the verge of collapse.

Japanese-Russian energy talks have been held around the ESPO project (a pipeline originating in East Siberia in Taishet, Irkutsk region, and extending to a Pacific port at Kozmino bay, in the Primorsk region). Regarding this colossal venture, Japan took the position that pipeline economics was not an issue since governments (Russia, Japan and other countries concerned) could provide long-term credits, tax exemptions and subsidies to lower the pipeline's cost. This perspective led Tokyo to raise two points at the negotiating table: exploring reserves in East Siberia and funding for feasibility studies and the construction itself. However, no real progress in Japanese-Russian cooperation in ESPO construction, including upstream projects in East Siberia, has been reported so far. In the meantime, Japanese companies have begun to show in-

terest in other spheres of energy relations, like participating in Gazprom's projects and Rosneft's downstream business (such as oil refineries).

The South Korean economy is not as large as that of China or Japan and, consequently, its energy cooperation with Russia is not substantial, so far. Still, the South Korean national oil company (Korean National Oil Corporation, KNOC) and Rosneft have made one impressive agreement to develop the West Kamchatka shelf that is estimated to hold about 900 million tons of oil equivalents at 26 sites. This deal will become a good model for Asian countries aiming at pragmatic energy cooperation with Russian state-owned oil companies for two reasons. First, KNOC could successfully avoid the strategic fields issue. While the Kremlin's definition of the phrase "strategic field" is not clear and is mostly subjective, one thing is beyond doubt: the participation of foreign companies in projects at strategic deposits is highly politicized and strictly limited. West Kamchatka, however, is apparently not a strategic field for Moscow due to its geographical location (11,000 kilometers, or 6,900 miles from Moscow) and the volume of its deposit. Second, the Koreans have agreed to two key conditions and thus could satisfy Rosneft. The first condition is a 60–40 share division, i.e. Rosneft holds a 60 percent share of this project. This number is important for Rosneft, which wants to promote projects with foreigners from a superior position. The other condition is that the Korean company will invest in prospecting operations, taking on 100 percent of the risk in exploration, and Rosneft will be able to claim a share of the revenues once commercial production begins.

After 2008: a New Hope for Foreigners, including Russia's Asian Neighbors

The slow development of Russian energy cooperation mentioned above has been a problem, not only for Asian countries, but for the U.S. and European partners, as well. Political uncertainties in 2007, due mainly to the lack of clarity about Putin's successor, and the lack of clear rules of the game in Russia's energy policy delayed many projects, while Russia's federal budget enjoyed extra revenues thanks to record-high oil prices.

Perhaps 2008 will see a change in such circumstances. Medvedev's presidency will bring some new elements into Russia's energy policy, including its relations with East Siberia. In attempting to read the future of East Siberia and its implications for Asian countries, it is worth paying attention to two points: political motivation and the formation of the rules of the game.

Political Motivation

Undoubtedly, Moscow can now effectively use its energy resources as tools of geopolitical strategy; i.e. most of

the Kremlin's decisions on energy issues are politically motivated. Since 2000, Russian President Vladimir Putin has strongly driven foreign and domestic policy under the slogan of a "strong and self-confident Russia." During the eight years of his presidency, the world's macroeconomic climate, including exceedingly high-priced fossil fuels, allowed Russia to consolidate its role in global politics and markets, especially in the energy field. In spite of criticism from the West towards Moscow's energy leverage, we see no setback to Russia's geopolitical strategy using its rich energy resources. On the contrary, Russia is coming to a position of global influence and power with its oil and gas reserves.

Political incentive plays all the more vital a role in the development of East Siberia because, without special arrangements by the government, it is almost impossible, even for inefficient Russian state-owned companies, to tap new resources that sit under one of the world's most forbidding terrains. Tax holidays of up to ten years for companies developing oil deposits in East Siberia introduced by the Russian government in 2006 are a case in point. Then Minister of Economic Development and Trade German Gref explained the reason for this move, saying that the tax holiday decision and the ESPO project would help increase oil production in East Siberia. Moreover, the Kremlin has a strong political motive to utilize Rosneft and Surgutneftegaz, fourth in oil output among Russia's oil companies and totally loyal to Putin, as tools of East Siberian development. In May 2007, Surgutneftegaz's CEO Vladimir Bogdanov, announced that the company's future production in West Siberia would be flat, with all its output growth likely to come from East Siberia.

This political motivation will certainly lead the Siberian pipeline to the Pacific Ocean, despite uncertainty over the oil reserves and the profitability of this pipeline. 2007 saw some negative elements in the construction of the ESPO: a serious delay in the ESPO's first stage construction (up to Skovorodino, a town in the Irkutsk region near the Sino-Russian border) and the postponement of the start of the ESPO's second stage construction (to Kozmino bay). However, one should take into account the fact that the ESPO is Putin's project. His involvement practically assures the completion of this gigantic project, despite the many negative observations uttered by officials and specialists. A scenario in which the pipeline is not built can be excluded.

The Rules of the Game

The formation of the rules of the game in Russia's energy policy is another decisive factor that could encourage fundamental progress in energy-related business. Actually, throughout the eight years of Putin's presiden-

cy, especially after the Yukos affair in 2003, unwritten rules have been formulated. The essential one is simple: Russia has enormous natural resources and should utilize them effectively to attain the social and economic development of the state. Two more fundamental unwritten rules can be added: first, the state must control the export of its resources; second, foreign investors are welcome only when they are ready to participate in projects that answer principally to Russia's national interests.

Now, Moscow is moving to the formation of clear rules, particularly with the adoption of a new version of the subsoil law. For most of Putin's presidency there has been a heated discussion on the bill amending the existing subsoil law. The crucial issue over the proposed amendment is the extent of foreign companies' access to Russian deposits. Until quite recently, the draft completely prevented foreigners from working strategic deposits, which undoubtedly means all large promising oil and gas fields and whose ultimate definition will depend on the Kremlin's subjective decisions. After the nomination of Medvedev, a new move appeared: Minister of Natural Resources Yuri Trutnev stated that his ministry would make a change in the bill and that all issues, including foreigners' participation in strategic deposits and foreigners' access will be discussed by a government committee.

Who Wins?

The idea of establishing a government committee will not increase the transparency of the decision-making process, which is an essential element of corporate governance in the West, but will only add to the existing impression of decision-making behind closed doors. The important point is, however, that the Russian government has expressed its intention to form rules of the game in energy policy. After the long-term twists and turns in the amendments to the subsoil law, the bill will be approved by the newly formed State Duma in the near future, perhaps under Medvedev's presidency. Now, it is clear that political motivation and rules of the game matter for everyone who wants to profit from Russia's natural resources.

As discussed above, these two factors are decisive for East Siberian development since it requires strong political will and enormous funding. Among potential foreign partners, China is already two-three steps ahead since Beijing understands well the importance of the political incentive and has successfully formed a strategic partnership relationship with Moscow in recent years. Moreover, China and India, which buy Russia's military weapons and satisfy Moscow with the formation of a trilateral grouping against U.S. unilateral hegemony, enjoy the advantages of barter trade

with Russia and are ready to join upstream projects in East Siberia. However, Japan, South Korea, and even the United States and European countries are not too

late for this race. The winner will be the one that understands Moscow's rules of the game and can utilize Russia's political motivation and its own capital.

About the author:

Yoshinori Takeda is a Japanese diplomat in Moscow. This paper represents the author's personal views and should not be construed as reflecting the position of the government of Japan.

Analysis

Shtokman and Russia's Arctic Petroleum Frontier

By Indra Øverland, Oslo

Abstract

The need to develop new sources of natural gas to supply domestic and foreign customers is pushing Gazprom into the Arctic. Two key Arctic projects could, at least in theory, become the company's and the country's new mainstays: Shtokman and Yamal. The realistic time-scales, cost frames and sources of financing for these two projects remain highly unclear. It is also unclear whether the projects will be developed in parallel or sequentially. So far, however, there has been far more organizational stir surrounding the Shtokman field, which is therefore the main topic of this article. The Shtokman field is located close to the Norwegian border in the Barents Sea, and the Norwegian oil major StatoilHydro has been selected as one of the two main foreign partners for the project. The development of the project therefore has implications for Russian–Norwegian relations in the north, which are also discussed in this paper.

Russian Gas Production and the Eurasian Energy Balance

Events in Ukraine in January 2006 and Belarus in January 2007 fuelled worries in some circles about Russia's reliability as a supplier to European markets. More recently, concerns have shifted to whether Russia will be able to supply its customers, even if it wants to. The supply crunch is envisaged as occurring sometime between 2010 and 2012. These fears revolve around Western Siberia's Nadym Pur Taz Region and its three super-giant fields: Medvezhe, Urengoy and Yamburg. Over 90 percent of Russia's natural gas is extracted in Nadym Pur Taz, but production in the region is falling fast. The fields have all been producing for over 20 years (37 in the case of Medvezhe), and injection techniques applied during the Soviet period to boost output have shortened their life span and steepened the production decline. At the same time, Russia's economy is expanding and natural gas remains heavily under-priced. As a consequence, domestic consumption is increasing. Foreign customers and Russian pundits are left wondering where the gas is going to come from in the future, and the simplest answer is Shtokman and or Yamal.

The Russian Arctic and World Energy Supplies

In a widely cited survey, the US Geological Survey estimated that up to 25 percent of the world's undiscovered oil and gas may be located in the Arctic. What is less often noted is that a large part of these resources are located in the Russian part of the Arctic. This is not just because almost half of the Arctic littoral is Russian, but also because the seabed along Russia's Arctic coast includes some of the biggest finds ever in the Arctic, some of the most promising areas, and some of the least explored areas. Thus, Shtokman and Yamal are the gateways to an Arctic Russian adventure that could satisfy a substantial part of the world's future oil and gas demand.

Shtokman versus Yamal

Shtokman is located in North-Western Russia, close to the Nordic countries. Yamal is located further east in the Asian part of Russia. Choosing between the two projects therefore has implications not only for Russia's internal economic geography, but also for the proximity and linkages to the Nordic countries, the EU and overseas markets (for LNG).

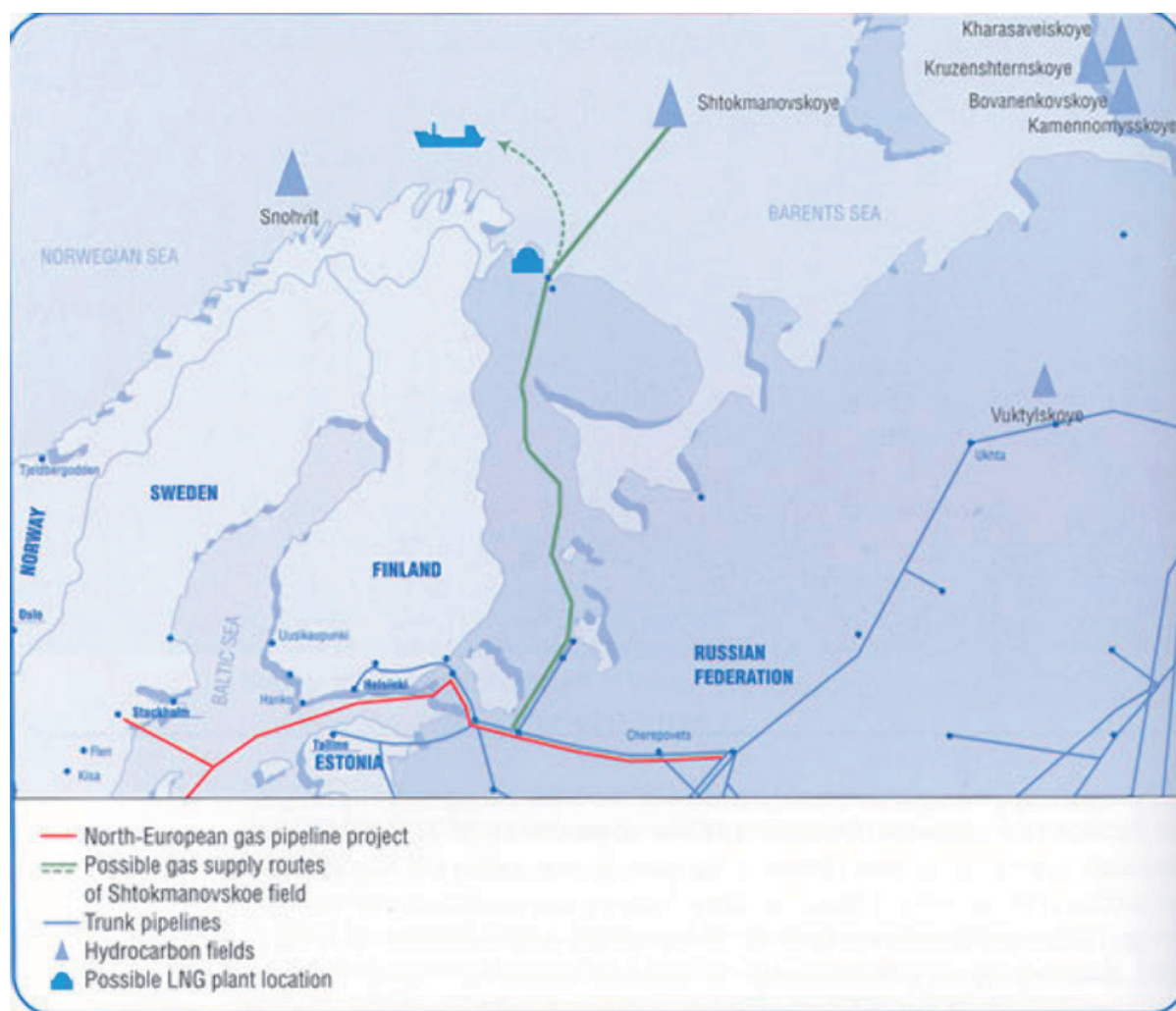
A commonplace perception of the Russian natural gas industry is that it is relatively well-equipped to build pipelines and carry out other operations onshore, its main tasks during the Soviet period. It is also thought that, whether the Russian actors admit it or not, the industry is woefully inexperienced and incompetent when it comes to offshore operations. This shortcoming has occasionally been cited as a reason why Russian industrial actors would prefer Yamal to be given priority over Shtokman.

In a seminal article from 2006 on Russia's Arctic petroleum sector, Arild Moe casts the choice between Shtokman and Yamal as battle between different groups within Russia's petroleum sector and within Gazprom. At the time, it appeared that the West Siberian lobby had won in pushing for Yamal and that it was unlikely any Western companies would be invited to participate in the project at all. Shtokman's current advantage over Yamal, however tenuous, probably does not indicate that the Western Siberian lobby has finally been

defeated, nor does it reflect a particular urge to cooperate with Western countries. Rather, it could be an implicit recognition that it is better to go for a project where the capital, technology, and (not least) organizational skills of Western companies can play a central role. Bringing in Western partners may help the project move forward, and if it does not, there will be more companies to share the blame.

Yamal

The Yamal Peninsula, along with the Kara Sea, into which the peninsula juts, likely holds over 30 trillion cubic meters of gas, enough to supply the whole world for a decade. Like Shtokman, however, Yamal involves daunting challenges. Railways and proper roads are non-existent. Melting and refreezing of the ground on the peninsula pose even more daunting challenges, since these changes may literally undermine transport infrastructure, gas extraction and treatment facilities, and living quarters built for workers. Any on-



Source: <http://www.gazprom.ru/eng/articles/article21712.shtml>

shore gas extraction would infringe on the large-scale reindeer herding operations of the indigenous peoples of the region. Finally, the cost of fully developing the Yamal fields would be on the order of hundreds of billions of dollars and could take up to 50 years.

On the other hand, Yamal is relatively conveniently located in relation to Russia's existing pipelines from Nadym Pur Taz to its domestic and foreign markets. The accelerated ice melting currently observed in the Arctic Ocean, which far outpaces the estimates of the relatively conservative International Panel on Climate Change, also opens interesting opportunities for LNG/marine transportation and for the offshore fields.

While Yamal is bigger and in many ways more attractive to Russian actors than Shtokman, it is the latter that seems to be progressing fastest at the moment—however unpredictable that progress is. The rest of this article therefore focuses on Shtokman.

Shtokman

The Shtokman gas and condensate field is the largest offshore gas field in the world. It was discovered in 1988 and was recently re-estimated by Gazprom to contain 3.8 trillion cubic meters of gas and 31 million tons of condensate (previous estimates had usually been on the order of 3.2 trillion cubic meters of gas). It is located 555 km north of the Kola Peninsula, in the Russian part of the Barents Sea. Although smaller than Yamal, Shtokman contains more than twice as much natural gas as Canada's total known reserves.

For several years after they were included in a Gazprom shortlist, the oil companies Chevron, ConocoPhillips, Hydro, Statoil and Total vied to acquire ownership stakes in the Shtokman field. In Norway, where the project has received a lot of attention, the result was a rollercoaster of rising expectations and subsequent disappointment as uncoordinated statements and accidental signals from the Russian side fuelled rumors and media speculation on the Norwegian side that a decision was imminent, or that one or both of the Norwegian companies might be awarded a significant stake, or that the game was over and no foreign companies would be included. In their endeavor to join the project, the two Norwegian companies had extensive support from the Norwegian government and diplomatic apparatus.

In July 2007 it was announced that the French oil company Total had been awarded a 25 percent stake in the joint company that is to develop the first phase of Shtokman. It had long been clear that Gazprom would retain 51 percent ownership, so the final competition for the remaining 24 percent was between StatoilHydro and ChevronTexaco. To some extent this was a competition between Norwegian technology and good-neigh-

borly relations in the North on the one hand, and US markets and big-power partnership on the other hand. StatoilHydro won the last 24 percent of the field on 24 October 2007.

It is important to understand the nature of the legal solution chosen for the inclusion of foreign companies in the Shtokman project. Total and StatoilHydro have not been awarded ownership of the field itself, but of parts of the company that will develop the field. This has resulted in a discussion about whether the two companies can count Shtokman as part of their reserves. The difficulties of replacing reserves is the main driver for Western companies to become involved in the Russian petroleum sector in spite of the difficulties already experienced by foreign companies in projects such as Sakhalin-II, Kovykta and Kharyaga. Therefore Total and StatoilHydro are fighting hard for Shtokman to be fully recognized as part of their reserves by international financial markets and on international stock exchanges.

Another important aspect of the deals that have been made is that they are more like options than ownership stakes. During the coming year or two Gazprom and the two foreign companies will attempt to hammer out the technical and financial details of the Shtokman project, which are far from clear at the moment. In 2009 Total and StatoilHydro are to decide whether they want to make use of their right to a quarter each of the project under the conditions which they must negotiate with Gazprom. In spite of the symbolic and political weight of the project and its importance for international cooperation and European energy security, this will ultimately have to be a business decision. It is worth remembering that perhaps the most disruptive point in the bumpy negotiations leading up to the decision to include Total and StatoilHydro was the distribution of the financial burden and risks between the Russian and Western sides. There is no guarantee that Total and Statoil, as the company will then most likely have been renamed, will find the terms offered sufficiently attractive when a decision is to be made in 2009.

The Importance of the Shtokman Field

The Shtokman field is now officially slated for production in 2013, though few believe it will be possible to stay within this timeframe or even near it. Should the project nonetheless develop according to schedule, it would both be the biggest energy-related event and the most important international cooperation project in northern Europe in the decade 2010–2020. There are several reasons for its importance:

(1) The Shtokman field theoretically contains enough gas to satisfy the entire consumption of the EU for seven years. In addition to Shtokman's direct

importance for European energy supplies and security, it is important for Europe because it includes the French oil company Total, and because it involves cooperation between Europe's biggest and third biggest external suppliers of natural gas – Russia and Norway (which jointly supply 65 per cent of EU imports). Russia and Norway are also respectively the world's second and third biggest oil exporters, and from this perspective the cooperation is also an interesting development in the global petroleum sector. It should not, however, be interpreted as a precursor to a Russian-Norwegian led gas cartel, as all of Norway's main political parties seem to be firmly committed to avoiding the politicization of Norwegian energy exports.

(2) Shtokman has widely been seen as driver of Russian–Norwegian cooperation across the border and of a joint Russian–Norwegian regional industrial boom in the High North, including northern Sweden and Finland. Expectations have run particularly high in northern Norway, where hopes for a petroleum boom with Shtokman at its centre have injected dynamism and optimism after decades of Cold War confrontation and unemployment in the fisheries. One of the most optimistic visions for the development of the region includes the so-called “Pomor Zone,” a joint Norwegian–Russian industrial and economic cooperation zone straddling the border near Kirkenes.

(3) Norwegian–Russian cooperation in the development of the Shtokman field has occasionally been cast as a possible precursor to a solution of the Norwegian–Russian border dispute in the Barents Sea. It is widely thought that the disputed area may include large petroleum resources, although the two parties have agreed to place a moratorium on exploration in the area. Due to the sensitivity of the topic, it is not possible to acquire reliable official information about the border negotiations, but several possible solutions have been discussed by people outside the negotiation process. One of these assumes that successful Norwegian–Russian cooperation on Shtokman could provide a precedent for a solution of the border dispute involving extensive cooperation in the formerly disputed area. According to this solution, the parties would first have to agree on a new borderline in the disputed area. Once the border were decided upon, the resources in the Norwegian part of the formerly disputed area could be owned 51 percent by Norway, and 49 percent by Russia, whereas those in the Russian part of the formerly disputed area could be owned 51 percent by Russia and 49 percent by Norway. Obviously such a solution would require a high degree of cooperation and coordination between the two countries, which could – it is thought – be demonstrated through successful cooperation on Shtokman. Due to the closed nature of the negotiation

process, it is not possible to ascertain whether such a solution is on the table. But the fact that it is discussed outside the negotiation process does say much about the importance for Norwegian–Russian cooperation ascribed to Shtokman.

(4) Developing the Shtokman field also involves making difficult choices about the marketing and transportation solution for the gas. The three main options are: (a) to build a liquefaction plant on the coast of the Kola Peninsula (most likely at the derelict fishing village of Teriberka) and export the gas as LNG by ship, (b) to build a pipeline from Murmansk to the Petersburg area and connect it to the Nord Stream pipeline going to Germany or (c) to lay a pipeline southwards through the Norwegian part of the Barents Sea and halfway down the Norwegian coast to connect with the Norwegian pipeline network. To some extent decision-making about Shtokman is thus also decision-making about whom Russia is going to trade and cooperate with internationally. Option (a) – exporting the Shtokman gas as LNG – is often thought of as synonymous with exporting it to the US, but the LNG could also be shipped to Europe. One of the advantages of an LNG solution is therefore that it gives some flexibility as far as the export market is concerned, although buyers would obviously need the appropriate terminals for receiving the LNG. So far it seems the preferred solution is (a) (LNG), later to be combined with (b) (a pipeline connection with Nord Stream). Solution (c) (connecting Shtokman with the Norwegian pipeline network) may be mostly wishful Norwegian thinking. Although it could make sense in some practical respects, it is hardly a politically or economically attractive option for Russia.

Lessons Learned from the Shtokman Experience

Above all, the many phases of hope, ambition and disappointment in Western attempts to become involved in Shtokman illustrate how Western actors often intensively debate cooperation with Russia on the basis of all kinds of assumptions and expectations, without in fact engaging properly with significant Russian actors or being in touch with the reality on the Russian side. In this respect it is interesting to compare Shtokman with Norway's Integrated Management Plan for the Barents Sea, which also involves great ambitions for involving Russian actors in environmental processes and solutions that rest on uniquely Norwegian and Western perspectives and assumptions.

The official reason most often mentioned by Russian actors for the initial decision to exclude all foreign actors from the Shtokman project was that none of the suitors made sufficiently attractive offers. If one takes this argument seriously, the Shtokman case indicates

that ultimately financial considerations and profit may be the main driver in Russian energy cooperation with Western countries.

On the other hand, the politicization of the Shtokman negotiations, with multiple meetings between Russian and foreign politicians and high-level state functionaries, indicates that while business is important for the Russian side, business is controlled by politics. Western actors who want to cooperate will need the support of sufficiently strong politicians on the Russian side.

The development of the Shtokman field provides yet another illustration of the importance and sensitivity of strategic resources to the Kremlin – which is determined to stay in control. These Kremlin priorities are also mirrored in other developments in Russian-Western energy cooperation, where Russia has been taking back control from Western companies that bought into Russian fields in the 1990s. On the other hand, because the legal-institutional infrastructure for the Shtokman field is being developed under the full control of a sober Kremlin from the outset, cooperative relations may prove more stable, and it will be more dif-

ficult for the Russian authorities to unilaterally blame problems on Western partners, though the pain of industrial delays and cost overruns may provide strong incentives to attempt to do so.

All discussion about Shtokman and other major petroleum developments in the North is generally disconnected from the EU's Northern Dimension, Barents cooperation, the Arctic Council and other multilateral frameworks for cooperation. One could get the impression that cuddly multilateral cooperation is acceptable, as long as it does not deal with the really big issues, which are handled in bilateral or narrow ad hoc multilateral settings. This situation may in particular be due to Russian preferences and Russia's image of itself on the international stage (not as one country among others, but as an exceptional case) or to hardcore Russian realism in international relations. In that case it may be questionable whether the West in the short run can really lull Russia into full-hearted participation in a multilateral framework such as the Energy Dialogue, the Northern Dimension or other multilateral options that are available, while buying its resources at the bargain prices that importing countries expect.

About the author:

Indra Øverland is Head of the Energy Program at the Norwegian Institute of International Affairs (NUPI)

Recommended reading:

- Johan Petter Barlindhaug, *Petroleumsvirksomhet i Barentshavet: Utbyggingsperspektiver og ringvirkninger* (Tromsø: Barlindhaug a/s, 2005), pp. 14, 19, 20
- Andrew Kramer, "French Oil Giant Agrees to Work on Russian Natural Gas Project," *New York Times*, 13 July 2007.
- Valery Kryukov and Arild Moe, "Russia's Oil Industry: Risk Aversion in a Risk-Prone Environment," *Eurasian Geography and Economics* 48, No. 3 (2007): 341–357.
- Norwegian Ministry of the Environment, *Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands* (Oslo: Ministry of the Environment, 2006).
- Arild Moe, "Shtokman-beslutningen: Forklaringer og implikasjoner," *Nordisk østforum* 20, No. 4 (2006): 389–403.
- Jonathan Stern, *The Future of Russian Gas and Gazprom* (Oxford: Oxford University Press, 2005).

Analysis**All Quiet on the Eastern Front...**

By Nina Poussenkova, Moscow

Abstract

A priority of Russia's energy policy is to diversify oil and gas exports, which are currently focused on the stagnating European markets, by entering the Asian energy market and accessing consumers as far away as the US. Since the fields of West Siberia are all mature and declining, Russia needs to develop new oil and gas fields in East Siberia and the Far East, which are located closer to potential customers in Asia. The imperative to "turn east" is also determined by Russia's urge to revitalize its eastern territories and is thus in line with a broader national security agenda to develop a region which was long neglected. Geopolitically, Russia needs to build new relations with China, India and other countries of the Asia-Pacific region (APR). Therefore, an eastern energy strategy will have to cope with a tangled web of economic, social, political and geopolitical considerations.

Eastern Oildorado

East Siberia and the Far East have 13.5 percent of Russia's total initial oil reserves and 19 percent of gas reserves. Resource estimates for East Siberia and the Far East vary between 15 billion and 22 billion tons of oil and 35 thousand cubic meters (tcm) and 61 tcm of gas. The lion's share is located in remote Arctic regions and will not be in demand for 20-30 years. Russia's east is poorly explored: the average density of drilling there is 2 meters of deep wells per 1 sq km, while the Russian average is 23 meters per 1 sq km. Since all discoveries were made in the pre-1991 socialist era, modern prospecting technologies might identify many more reserves. For example, Petromir booked the major Angaro-Lensk gas field in the Irkutsk Region in 2007.

Production estimates vary enormously. The *Energy Strategy of Russia up to 2020* forecasts 3 million tons/year (mt/yr) of crude under a critical scenario by 2020, and 80 mt/yr under an optimistic scenario. Given their enormous range, these predictions seem closer to educated guesses than data-based conclusions.

This issue has political connotations, since competing governmental agencies offer different views. The Ministry of Natural Resources is optimistic, anticipating production of 30 mt/yr of oil and 50 bcm of gas in the nearest future, while railroad representatives doubt that crude output in East Siberia will increase from the current 0.5 to 30 mt by 2011. Their skepticism is determined by a desire to promote oil deliveries to China by rail rather than through new pipelines.

Oil in East Siberia is sweet and light and could be sold at a higher price than the traditional Urals export blend. Additionally, major eastern gas fields contain valuable products for the gas chemical industry. Despite these attractions, oil and gas exploration and production in this greenfield province will be very expensive

because of harsh climatic conditions, difficult geology and lack of infrastructure.

Russian academician Alexei Kontorovich from the Siberian Branch of the Russian Academy of Sciences estimates that developing east Siberian oil will require an investment of \$87 billion. When expenditures for creating social infrastructure and general-purpose industrial facilities are factored in, the sums become awe-inspiring. The government intends to shift the financial burden of creating the eastern petroleum industry onto the companies, and, despite the windfall oil revenues that Russia enjoys today, its domestic funds might not be enough.

Though financially the eastern petroleum project seems too challenging, it is not a purely commercial endeavor since it has serious political implications. The problems that the region faces jeopardize Russia's security, and they stem both from the socialist legacy and the turbulent transition period.

Territory of our Discontent

East Siberia and the Far East are plagued by economic and social problems, including slow growth, the obsolescence of fixed assets, a "colonial" type of development, underinvestment in production facilities, an ongoing energy crisis, environmental degradation, general poverty, a great social disparity among regions, a lack of transportation infrastructure, and the absence of trunk pipelines to move oil and gas.

Demographic problems in the East threaten Russia's national security. In 1989-2002, the population of the Far East declined by 16 percent, compared to 4 percent for Russia as a whole. The average population density is 2.1 persons/sq. km in East Siberia and 1.1 in the Far East. There is an acute shortage of manpower combined with illegal immigration from neighboring

countries. The situation particularly deteriorated after 1991, when Moscow largely forgot about East Siberia and the Far East.

All the King's Horses, all the King's Men...

Now Moscow is changing its attitude to its "eastern stepchild." In 2006 President Vladimir Putin described the situation in the Far East as "a threat to national security" and stressed the need "to invest money in the Far East." As a result, the federal government is now compiling a targeted aid program entitled *The Development of the Far East and the Trans-Baikal Region up to 2013*.

The Kremlin is taking practical steps to transform these backward territories. First, the government is combining several of the regions in this part of Russia, creating fewer and larger entities, presumably to strengthen Moscow's control over them.

Second, the Kremlin is using the power it took in 2004 to appoint governors to carry out a major personnel reshuffle. The result is the appointment of a new regional leadership with either a St. Petersburg background or unquestioned loyalty to the Kremlin.

The third line of activities involves engaging big business in the solution of the region's social and economic problems through the fashionable use of public-private partnerships.

Simultaneously, the government is promoting oil and gas development in the East through fiscal innovations, as additional tax benefits are required to attract investors. Changes in the Russian tax code concerning differentiation of the mineral production tax are being considered, as well as tax holidays for greenfield territories, including in East Siberia and the Far East.

Also, efforts to modernize the Subsurface Law are underway; amendments to it are being discussed that are largely aimed at limiting the involvement of foreign majors in the development of Russian strategic deposits.

All the eastern challenges are clearly reflected in the problems of the East Siberia – Pacific Ocean (ESPO) oil pipeline, which should carry oil from East Siberia to the coast. Because this is a project where political considerations have so far prevailed over economic feasibility, ESPO is often compared to the Baikal-Amur Mainline (BAM), a gigantic railroad project that became a stillborn child of socialism. The construction of ESPO's first stage will probably be delayed, mainly because the pipeline was rerouted by some 400 km north of Lake Baikal. The deadlines for the second stage have yet to be determined. According to Transneft, everything depends on how

quickly the oilmen can explore and develop eastern oil fields.

The risk factors for ESPO are significant. Since the proved reserves of East Siberia are relatively small, no one knows the true size of the resource base in the region. Another problem is connected with ESPO's competition with the Russian Railways, an important transporter of crude in Russia's east. Some groups in the government wish to revitalize BAM, which can be used to transport oil.

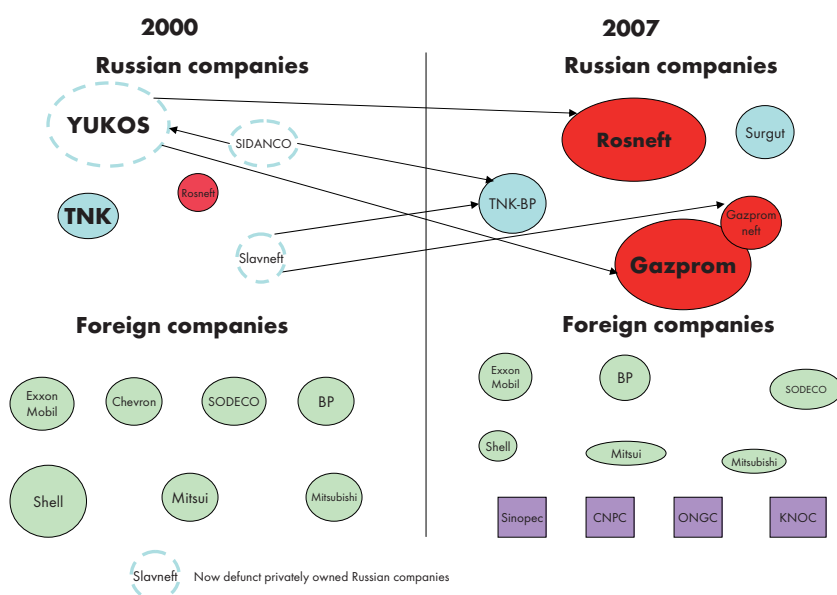
Also, the price tag for the first stage of the project has already gone from \$6.65 billion to \$11 billion because of the longer path for the rerouted pipeline and higher costs. The greater outlays will result in higher tariffs for transporting the oil, which raises questions about whether ESPO will be viable commercially.

Who is the Mightiest of Them All?

Until recently, state companies were poorly represented in the East, where private actors dominated the petroleum landscape. Gazprom had no presence in the region, while Rosneft, though owning eastern assets, was too weak to be considered a serious player.

The desire of the Kremlin to control the strategic sectors of the economy will greatly affect the development of East Siberia's resources. The government believes that the monumental task of revitalizing the region and forging energy ties with Asia can be entrusted only to loyal companies. Therefore, Moscow is creating conditions for displacing private actors in this territory with state-owned corporations and for limiting the role of global majors. Figure 1 shows these changes in graphic form.

Figure 1. Key Eastern Players, 2000 – 2007



Gazprom

Russia's natural gas monopoly is quickly founding its eastern empire. In 2005 it acquired Sibneft, which owns licenses on Sakhalin, Chukotka and in the Bering Sea. Its new subsidiary has 50 percent of Slavneft, which holds licenses in Krasnoyarsk Krai, and Gazprom hopes to acquire the other half of Slavneft, which currently belongs to TNK-BP.

Gazprom made an important step forward by joining Sakhalin-2 as a majority shareholder, and thus entering the LNG market. During the course of 2006 the authorities threatened to shut Sakhalin Energy, the company running Sakhalin-2, because of alleged environmental violations. Those problems ended in December 2006 when Gazprom acquired 50 percent + 1 share in the company.

In 2007, Gazprom finally gained control over Kovykta. Under pressure from Gazprom and the state authorities, who complained about license violations, TNK-BP agreed to sell its share of RUSIA Petroleum, which held the rights to develop Kovykta. (Now it seems that Gazprom would like to acquire a stake in TNK-BP itself, rather than simply take over this project).

With its purchase, Gazprom started preparing a new plan for developing Kovykta. This plan assumes that commercial production will begin in 2017 and the gas produced will be sold domestically to cover the potential shortage of blue fuel in Russia, though a certain proportion will likely go to China. Presumably, Gazprom is not interested in commissioning Kovykta more quickly since the project could divert funds from higher priority plans to develop fields on the Yamal Peninsula.

Gazprom's success in putting the field on stream will hinge primarily on the results of negotiations with China, the leading potential foreign market for Kovykta gas. These talks are now deadlocked because the two sides cannot agree on a price. Gazprom claims this failure was caused by the generous terms of the previous ExxonMobil-China National Petroleum Corporation (CNPC) agreement on Sakhalin-1 gas deliveries.

Gazprom has further ambitions: it has announced plans to acquire the Chayandinsk field in Yakutiya, with 1.24 tcm of gas reserves, and blocks of Sakhalin-3 uncontested. Making these acquisitions will require changes in Russian legislation.

Gazprom's role in the east is unique since in 2002 the government appointed it coordinator of the state's eastern gas policy and instructed it to develop the Eastern Gas Program. This work was completed only in 2007 after numerous revisions. Even the latest version of the program contained 15 different scenarios for developing eastern hydrocarbon fields through 2030. Investments in the Eastern Gas Program to 2030 would be \$60.1 bln, and gas production is en-

visaged at 27 bcm/yr by 2010, and at 162 bcm/yr by 2030.

The results of Gazprom's initial five-year effort leaves much to be desired. According to one government representative, the versions of the program were selected "under conditions of equal economic inefficiency." It would probably be too optimistic to expect that this document will help achieve a real breakthrough in gas industry development in East Siberia.

In 2006, Gazprom further entrenched itself in the region by signing a protocol with CNPC on deliveries of up to 80 bcm of gas starting in 2011. Consequently, Gazprom is developing the Altai pipeline project, which is designed to pump to China 30 bcm/yr of gas from the Nadym-Pur-Taz region, whose reserves may be insufficient for this purpose. As a result, East Siberian gas might be needed to fill the pipeline.

Through its aggressive asset grabbing and the use of administrative resources, Gazprom turned from a virtual player with high authority, but no actual assets, into a formidable force in the region.

The key question is: Can Gazprom provide enough gas to meet its commitments to Europe, satisfy the growing domestic demand, and supply China?

Rosneft

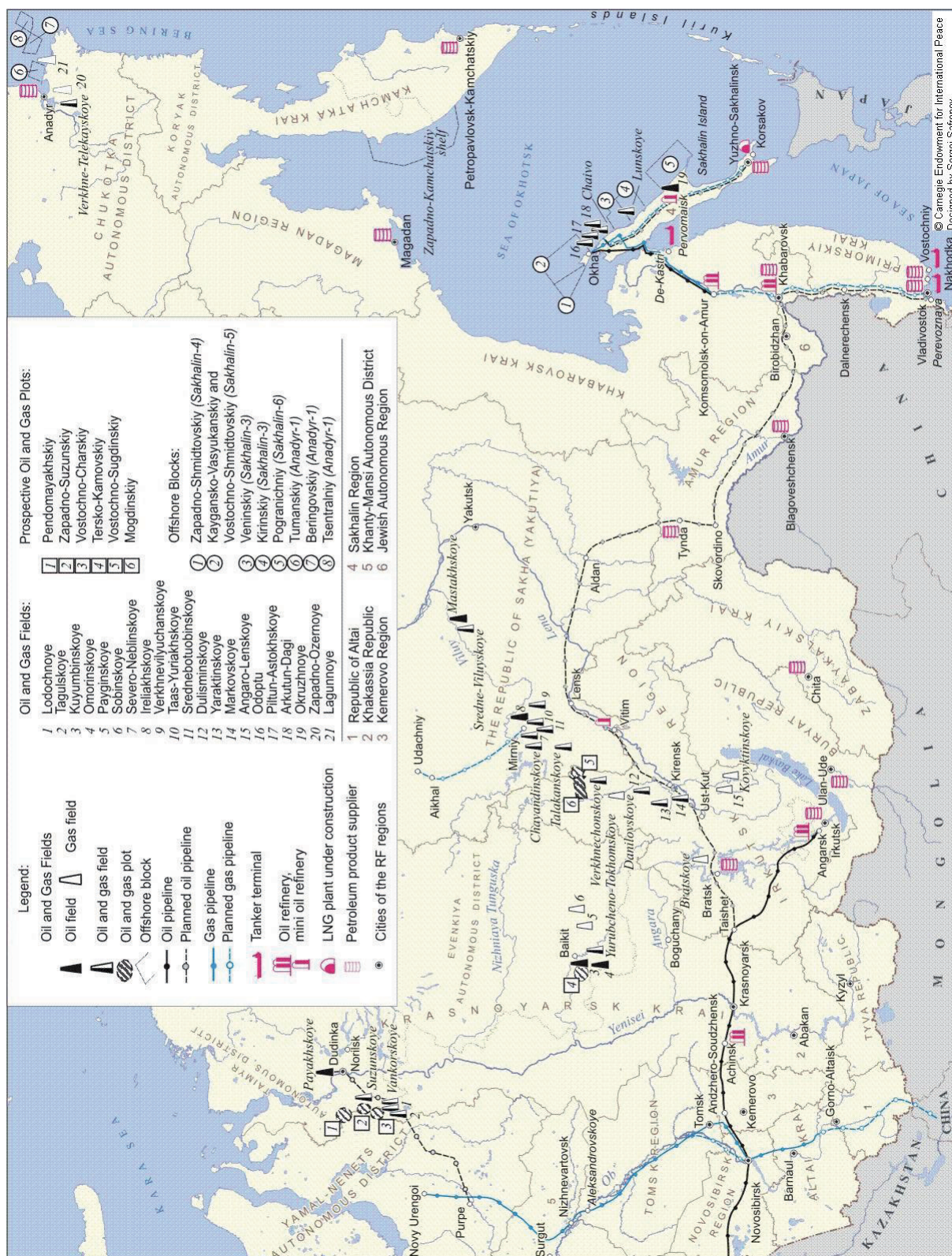
Rosneft is Russia's state-owned oil national champion. Having acquired the bulk of YUKOS's oil assets, Rosneft was transformed from a minor player into the undisputed leader of the domestic oil industry.

East Siberia and the Far East are the zone of Rosneft's strategic interests. It has a strong presence in the Far East: its subsidiary Sakhalinmorneftegas is involved in the Sakhalin-1, -3, -4 and -5 projects. Sergei Bogdanchikov, Rosneft's CEO, originally headed Sakhalinmorneftegas, and this region is psychologically important to him.

In addition to Sakhalin, Rosneft established a foothold in East Siberia. In 2003, it acquired Vankor in Krasnoyarsk Krai, defeating Total and YUKOS, companies that both coveted the field. In 2005 Rosneft announced that Vankor's recoverable reserves had increased to 250 mt through additional exploration.

In addition to expanding its reserve base, Rosneft fought for Vankor because it could not cede this field to a foreign major. Vankor is important since it represents a potential new channel of oil export not controlled by the state. Vankor oil can be shipped along the Northern Sea Route, bypassing Transneft's bottlenecks, and diversifying markets. Also, sending the oil north would avoid mixing the high-quality Vankor crude with the lower quality Urals blend.

However, after studying several transportation options, Rosneft decided to pump the Vankor crude to



ESPO, because without Vankor it will be impossible to fill the pipeline. Thus, the patronage of the Kremlin sometimes requires Rosneft to sacrifice profitability for political objectives.

Filling the ESPO line has become an important priority for Rosneft. In 2005 the company further strengthened its eastern positions by buying 25.9 percent of Verkhnechonskneftegas, license holder for the Verkhnechonsk field. Rosneft needs this oil for ESPO, which after its rerouting passes near Verkhnechonsk. In 2007 it acquired eastern assets of YUKOS, including in the Yurubcheno-Tokhomsk Zone in Evenkiya, also a potential supplier of ESPO.

Rosneft's downstream positions in the East are strong and expanding: initially, it owned the Komsomolsk refinery, two petroleum product distributors and three export terminals. Then, Rosneft acquired all YUKOS refineries in 2007, including Angarsk and Achinsk in East Siberia, and its eastern fuel stations. Also, Rosneft intends to build a 20 mt/yr refinery at the end point of ESPO by 2012 – in line with Russia's intentions of shifting from exports of crude to higher value-added products.

Geopolitically, Rosneft now plays an important role in Russia's relations with China, South Korea and India. Rosneft opened the door to Russian oil for the Chinese – in 2005, Rosneft invited Sinopec, with a 25.5 percent share, to conduct and co-finance exploration of the Sakhalin-3 Veninsky block. Then, in mid-2006, Vostok Energy JV was established between Rosneft (51%) and CNPC (49%) to work in Russia's upstream market, and in 2007, it won an auction for two fields in the Irkutsk Region, close to the ESPO route. Another Russian-Chinese JV in China will deal with refining and marketing.

Rosneft has a special relationship with China, as the Chinese banks provided \$6 billion for Rosneft's Yuganskneftegas acquisition. Chinese oil companies aspired to player status in Russia for many years, but their achievements were practically nil before the Yugansk deal, which changed their fortunes.

The Chinese further strengthened ties with Rosneft by becoming its shareholders. Their successes may be attributed to the socialist legacy of both countries, which makes it easier for the Chinese to understand the specifics of doing business in Russia. Also, the Chinese not only try to access Russia's upstream, but let Rosneft work in their downstream market as well.

South Korea is another country with which Rosneft does business by allowing the Korea National Oil Company (KNOC) to participate in the West Kamchatka shelf exploration on a 60%:40% basis.

India, through its state-owned Oil and Natural Gas Company (ONGC), is also an important Rosneft part-

ner. Their cooperation started in 2001 on Sakhalin-1. Then, in 2007, Rosneft and ONGC signed a memorandum, under which the Indians would access Russian offshore fields, in return, paying for their development and admitting Rosneft to the Indian downstream market.

Gazprom and Rosneft: Bitter Friends

In the past, Rosneft was too weak to compete with the almighty Gazprom. Recently, however, it has emerged as its rival on a variety of fronts – and is winning in many instances.

This rivalry will probably intensify in the East. First, there might be further disputes about exports of Sakhalin-1 gas. Despite the credibility provided to Sakhalin-1 by Rosneft's involvement, the project faces serious obstacles created by Gazprom's desire to control its gas exports. Therefore, when in 2006, Exxon Neftegas signed an agreement with CNPC to build a 8 bcm/yr pipeline to China, Gazprom strongly resisted the plan.

In 2007, Gazprom demanded that Sakhalin-1 gas should be used to gasify eastern regions and not exported, though this PSA project can export gas independently of Gazprom. Gazprom's demand is not dictated by its concern for the Russian regions, but its desire to eliminate competition with ExxonMobil, since an agreement with the Sakhalin-1 shareholders permits the Chinese to lower prices in negotiations with the concern.

Rivalry between Gazprom and Rosneft aggravates instability in the domestic oil and gas industry (and hinders development of Russia's east). Nevertheless, the two competitors ensure a de facto system of checks and balances.

Since Gazprom and Rosneft have radically strengthened their positions in Russia's east, it has become a testing ground for the new state petroleum policy. "Russification" and "etatization" of the domestic oil and gas sector will probably continue. Global majors will be delegated the role of junior partners: thus, Rosneft permitted BP to join Sakhalin-4 and Sakhalin-5 with 49 percent. Up to now Sakhalin-1 and Sakhalin-2, both managed by foreigners, were the only eastern projects that showed real progress; and global majors remain the essential providers of technology and know-how.

Private companies will be further displaced by Gazprom and Rosneft, probably not to the benefit of Russia's East. Gazprom has its own corporate agenda that may differ from the national interests and hinders the development of some eastern regions. Rosneft might be spread too thin after its recent acquisitions to undertake major projects. Also, the state commissions them to perform additional social and politi-

cal functions, which might further undermine their efficiency.

In sum, the development of Russia's East and efforts to work in the Asian energy markets face formidable challenges. Major breakthroughs in creating an eastern hy-

drocarbon province appear unlikely in the immediate future. Most likely, sporadic progress will be achieved in easier-to-implement projects where national objectives coincide with the corporate interests of Gazprom and Rosneft.

About the author

Nina Poussenkova is a Scholar-in-Residence at the Carnegie Moscow Center.

Analysis

Regional Influence in Oil and Gas Development: A Case Study of Sakhalin

By Elana Wilson Rowe, Oslo

Abstract

The offshore oil and gas reserves off Sakhalin Island in Russia's Far East are one of Russia's more promising locations for new field development and by 2010 Sakhalin's oil production is expected to account for 7 percent of the demand in the Asia-Pacific region. Not surprisingly, Sakhalin regional authorities seek to ensure a level of regional control over offshore oil and gas development, along with the corresponding economic benefits, despite a relatively weak position in light of Moscow's efforts to centralize authority. This article examines ways in which regional administrations can and do influence the process of offshore oil and gas development in the Russian federation through a case study of the Sakhalin Oblast Administration. Regional authorities on Sakhalin have managed to retain an influential role for themselves via: 1) encouraging onshore infrastructure for offshore oil and gas operations; 2) working to smooth the way for development at the federal level; 3) insisting on local content and contracts when possible; and 4) finding opportunities for regional and local benefit via impact assessment processes. This analysis is based on a review of publicly available primary sources (e.g. company documents) and interviews carried out with regional authorities and foreign executives in Yuzhno-Sakhalinsk in September 2006.

Changing the Federal-Regional Relationship

The early days of the post-Soviet period were marked by a pronounced decentralization, with many formerly centrally-held competencies being delegated to regional governments. Technically, sub-soil development was considered a shared federal-regional competency, with the federal government leading new initiatives and the regional government enjoying more involvement in proposal approval and implementation. However, most regional governments took a more pro-active role by establishing their own oil and gas concerns and taking an active and influential interest in negotiating licenses and monitoring projects.

Upon taking power at the end of 1999, President Vladimir Putin reversed the decentralization trend and replaced it with a policy to recentralize power and revenue. In August 2004, the State Duma passed a revised law on subsoil resources that effectively returned their management to the federal government exclusively. The recentralization of power helped the feder-

al government gain greater control over regional revenues, including profits from oil and gas development. While the regions used to retain 50 percent of tax revenues, this balance has shifted in favor of Moscow, which then is to allocate revenues back to regional budgets. As becomes clear with the case of Sakhalin, much of the activity of the regional authorities is directed towards locating ways in which the revenues of oil and gas development can, despite recentralization, be captured at the regional level.

Regional Interventions and the Ambiguities of Russian Federalism

Historically, Sakhalin Oblast authorities did not gain as much control as other resource-rich regions during the post-Soviet decentralization, as offshore oil and gas fields fell clearly under federal jurisdiction. Regardless, regional authorities have been largely supportive of development and can continue to be characterized as pro-development. In fact, it was primarily regional voices (although still only a few) that publicly supported the

companies of the Sakhalin-2 consortium when the consortium announced cost overruns that could delay the stage at which the Russian federal government would gain substantial revenue from the project as outlined in the relevant production sharing agreement (PSA). The cost overrun, in tandem with record-high oil prices, a general push for greater federal control of energy projects and dissatisfaction with PSAs, resulted in enough regulatory and political pressure being placed on the consortium to ensure that Gazprom became the controlling shareholder. At a point where the tenor of the debate within Russia had become rather apocalyptic, Evgeny Galichanin, a member of the State Duma from Sakhalin and chairman of the Duma subcommittee on the oil industry stated, calmly: "The situation must not be exaggerated and there must be no panic... Sensational statements and threats to withdraw the license are unacceptable."

Representing Sakhalin oil and gas interests at the federal level is perhaps the most important (and only) role that regional authorities have to play for projects in early licensing or exploration phases (such as the Sakhalin-3,4,5 and 6 projects). The regional government had, throughout the 1990s and early 2000s, been pro-active at the federal level in working to speed such nascent projects along, lobbying authorities in Moscow for improvements and clarifications to PSA legislation. Although it is now clear that Russia will not sign any further PSAs due to dissatisfaction with the existing PSAs concluded in a period of economic turmoil in Russia and low world oil prices, regional authorities continue to work in Moscow to facilitate further development. As one oil executive put it in an interview with the author, "the regional government is our primary cheerleader because of the jobs and revenues that are evident at the local level." This interviewee argued that regional authorities often work at the federal level to expedite Sakhalin-related issues. More room, however, for regional influence opens up within advanced projects and a brief review of aspects of the Sakhalin-1 and Sakhalin-2 projects illustrates ways in which this influence is acquired and wielded.

Sakhalin-1

Sakhalin-1 consists of Exxon (30%); Japan Sakhalin Oil (30%); India's ONGC (20%); Sakhalin Morneftegaz (11.5%) and RN-Astra (8.5%). A Sakhalin-1 PSA became effective in 1996, but the project developed slowly until 2002. By 2006, Sakhalin-1 was one of the five biggest oil projects worldwide.

Sakhalin's regional leadership was reportedly unhappy with the Sakhalin-1 consortium's early decision to use primarily sea transport, as its aim had been to involve both Sakhalin-1 and Sakhalin-2 in order to spread

the risk and investment needed to build an oil and gas pipeline along the length of the island. Exxon, the operating company for Sakhalin-1, balked at the cost of the pipeline. Some critical approvals were then delayed until the Kremlin's recentralization process greatly diminished regional authority and Exxon was able to pursue its preferred plans despite dissatisfaction at the regional level. Even though the regional authorities failed to realize their objective, this moment illustrates the overall desire of the regional government to bring offshore projects more "onshore" as soon as possible. Once projects are reliant on onshore infrastructure, there are more opportunities for local and regional influence. While the Sakhalin Oblast administration and constituent municipal governments do not exercise control over the continental shelf, they do have significant authority over important onshore elements, such as land and rights of way for onshore construction.

One such example of onshore activity is an airport construction project in the northern town of Nogliki. Extensive upgrades of this local airport were carried out by Sakhalin-1 and Sakhalin-2 consortia working in tandem and the airport opened with regional approval for public and company use in 2004. This airport is also an example of how ambiguity and uncertainty in the division of competencies between the federal and regional levels can play an unpredictable role in the process of development – the airport was closed by federal authorities for general use in 2005 due to an alleged lack of necessary federal permits. Reportedly, an important element for re-opening the airport to the public was a letter written by the president of Rosneft directly to Putin, who then ordered that the Nogliki Airport should be opened to commercial travel by June 2007.

Sakhalin-2

Sakhalin-2 – the largest integrated oil and gas project in the world – is run by a consortium of corporations collectively called the Sakhalin Energy Investment Company (SEIC). Royal Dutch Shell was the majority partner until Gazprom gained a controlling share of the project as the result of a December 2006 deal. The Sakhalin-2 project illustrates: 1) ways in which regional authorities wield influence when new infrastructure or impact assessments are needed and 2) how the federal-regional fiscal relationship motivates the pursuit of such indirect power.

In terms of infrastructure and assessment, the first phase of the project involved the installation of an offshore platform with no onshore construction beyond staff housing and office space. With the commencement of phase two in 2003, the influence of the regional and municipal administrations increased as Sakhalin-2 needed to move its primarily offshore activities onshore.

Phase two construction included a pipeline extending more than 600 kilometers down the length of the island to a newly constructed LNG (liquefied natural gas) plant and oil export facility at the southern end of Sakhalin. Phase two, according to a 2005 company document outlining public consultation plans, resulted in \$300 million in infrastructure development on Sakhalin, including the construction of new bridges, upgrading of public roads and improvements to docks and railways.

The expansion of onshore infrastructure opens another window for regional influence via the municipal level. In 2001, Putin proposed devolving more authority to the municipal level, partly as a counterweight for recentralization. This proposition resulted in a 2003 law "On Local Self-Government" outlining reforms that thus far remain largely unimplemented. The reform itself does not devolve specific authority relating to subsurface resource development and it is notable that regional governors and administrations, rather than municipal representatives, were involved in the commission that developed the law. However, the clarification of the land boundaries of municipalities may strengthen a card the municipal level already has to play – authority over land. As it stands now, oil and gas companies are frequently required to negotiate with municipal authorities when construction, such as a new pipeline, crosses municipal boundaries. Given the relatively low capacity of many municipal governments, it is likely that the regional administration intervenes in this supposedly municipal process and works to extract maximum benefit, including additional desirable infrastructure and lease payments, from the relevant companies.

Phase two of the project also necessitated new rounds of consultation with local, regional and national stakeholders and environmental and social impact assessments. The impact assessment process is one in which regional law can be brought to bear in some ways. On the federal level, the SEIC impact assessment process was subject to 22 federal laws, 13 regulations and procedures and 8 guidance documents. On the regional level, 11 regional laws ranging from town planning to endangered species to taxation and 10 gubernatorial decrees had to be taken into consideration as well. It is noteworthy, however, that a 2003 SEIC text outlining the company's approach to environmental impact assessment states clearly that the assessment is in keeping with federal law and *considers* regional law. Obviously, regional law remains of secondary legal importance in the assessment process.

The question of federal-regional revenue sharing and the dramatic changes introduced in this field during the Putin presidency does much to explain why the regional level seeks to exert influence and capture

profit in the rather indirect ways described above. The Sakhalin-2 PSA illustrates this change vividly. Once Sakhalin Energy recovers the cost of its initial investment it will begin sharing profits on a greater scale, as specified in its PSA, with the "Russian party." When the Sakhalin-2 PSA was first set up, there was no clear line made between the federal and regional components of the "Russian party." Subsidiary agreements clarified that the oblast would receive 60 percent of profits and the federal government 40 percent. The actual profit split between the regional and federal administrations, however, remains contingent on presidential decree and can be lawfully changed yearly or counteracted by new decrees. At present, and reflecting Putin's recentralization of authorities and revenues, the regional administration now receives 5 percent of those revenues already generated today with 95 percent going to Moscow.

The contingency of regional profits on federal decisions creates problems for the Sakhalin Administration, as it cannot achieve the level of revenue certainty required to secure long-term loans independently for infrastructure development. One interviewee from within the oil sector with a long-term involvement on Sakhalin described this uncertainty as motivating the municipal and regional levels to look for large-scale and concrete benefits, such as school and hospital infrastructure, from oil companies in exchange for granting approvals and leases on land use. The administration also seeks other opportunities for regional economic development and benefit. For example, the Sakhalin-2 consortium paid \$100 million into the Sakhalin Development Fund in the five years following the commencement of commercial oil extraction. The oblast administration has also taken a keen interest in following how contracts are awarded and has promoted a "Sakhalin First" policy in relation to the award of tenders whenever this has been feasible, despite a lack of industrial capacity in the Russian Far East and the problem this poses to companies seeking to meet such local content requirements.

Conclusions

Despite political and fiscal centralization, Sakhalin authorities continue to exert indirect, albeit greatly reduced, influence over the process of oil and gas development. Regional authorities have endeavored to expedite project development to the point where onshore infrastructure is both necessary and desirable. When offshore development requires onshore access, oil and gas exploitation becomes more directly profitable to, and controllable by, the region itself and the opportunities for capturing economic benefits at the regional level increase. This facilitating and expediting role is exemplified by regional authorities using their contacts in Moscow to intervene at the federal level on behalf of

oil and gas consortiums active in Sakhalin and lobbying for expedited award of PSAs and stable PSA legislation, when these agreements still seemed like a feasible alternative for moving development forward.

However, local authorities have not refrained from intervening and sometimes slowing projects' development in order to increase regional involvement/control and potential regional benefits. For example, Sakhalin Oblast has lobbied for local awards of contracts whenever possible, forwarding a "Sakhalin-first" policy, and successfully ensured that payments to the Sakhalin Development Fund were included in Sakhalin-1 and -2's PSAs. This points to ways in which regional authorities are vigilant in holding oil and gas consortiums to the requirements of their contracts, particularly when these requirements result in direct benefit at the local

and regional levels. Regional authorities also seem to be able to exercise some authority over the impact assessment process – an undertaking that certainly requires their knowledge of the local political and social environment.

Although the authority of the region is doubtlessly diminished, the ability of regional administrations to act as "cheerleaders" or "brakes" should not be underestimated. Thus it seems that although regional governments no longer possess the authority they once had, the complex and detailed processes entailed in oil and gas development necessitate good relationships on all levels of government. The regional level, in this way, retains residual power and also actively works to build up both formal and informal authority in new capacities.

About the author:

Elana Wilson Rowe is a Senior Research Fellow at the Norwegian Institute for International Affairs (NUPI).

Recommended Literature:

- Michael Bradshaw, "Prospects for oil and gas exports to Northeast Asia from Siberia and the Russian Far East, with a particular focus on Sakhalin," *Sibirica* 3, No. 1 (2003): 64–86.
- Michael Bradshaw, "Sakhalin-II in the Firing Line: State Control, Environmental Impacts and the Future of Foreign Investment in Russia's Oil and Gas Industry," *Russian Analytical Digest*, No. 8 (2006): 6–11.
- Valeriy Kryukov and Arild Moe, "Hydrocarbon Resources and Northern Development," in *Tackling Space: Federal Politics and the Russian North*, Helge Blakkisrud and Geir Hønneland, eds. (Lanham, Maryland: University Press of America, 2006).
- Tomila Lankina, "President Putin's Local Government Reforms," in *Dynamics of Russian Politics: Putin's Reform of Federal-Regional Relations*, Vol. 2, Peter Reddaway and Robert Orttung, eds. (Lanham, Maryland: Rowman & Littlefield Publishers, 2005).

About the Russian Analytical Digest

The Russian Analytical Digest is a bi-weekly internet publication jointly produced by the Research Centre for East European Studies [Forschungsstelle Osteuropa] at the University of Bremen (www.forschungsstelle-uni-bremen.de) and the Center for Security Studies (CSS) at the Swiss Federal Institute of Technology Zurich (ETH Zurich). It is supported by the Otto Wolff Foundation and the German Association for East European Studies (DGO). The Digest draws on contributions to the German-language Russlandanalysen (www.russlandanalysen.de), the CSS analytical network on Russia and Eurasia (www.res.ethz.ch), and the Russian Regional Report. The Russian Analytical Digest covers political, economic, and social developments in Russia and its regions, and looks at Russia's role in international relations.

To subscribe or unsubscribe to the Russian Analytical Digest, please visit our web page at www.res.ethz.ch/analysis/rad

Research Centre for East European Studies [Forschungsstelle Osteuropa] at the University of Bremen

Founded in 1982 and led by Prof. Dr. Wolfgang Eichwede, the Research Centre for East European Studies (Forschungsstelle Osteuropa) at the University of Bremen is dedicated to socialist and post-socialist cultural and societal developments in the countries of Central and Eastern Europe.

The Research Centre possesses a unique collection of alternative culture and independent writings from the former socialist countries in its archive. In addition to extensive individual research on dissidence and society in socialist societies, since January 2007 a group of international research institutes is participating in a collaborative project on the theme "The other Eastern Europe – the 1960s to the 1980s, dissidence in politics and society, alternatives in culture. Contributions to comparative contemporary history", which is funded by the Volkswagen Foundation.

In the area of post-socialist societies, extensive research projects have been conducted in recent years with emphasis on political decision-making processes, economic culture and the integration of post-socialist countries into EU governance. One of the core missions of the institute is the dissemination of academic knowledge to the interested public. This includes regular email service with nearly 15,000 subscribers in politics, economics and the media.

With a collection of publications on Eastern Europe unique in Germany, the Research Centre is also a contact point for researchers as well as the interested public. The Research Centre has approximately 300 periodicals from Russia alone, which are available in the institute's library. News reports as well as academic literature is systematically processed and analyzed in data bases.

The Center for Security Studies (CSS) at ETH Zurich

The Center for Security Studies (CSS) at the Swiss Federal Institute of Technology (ETH Zurich) is a Swiss academic center of competence that specializes in research, teaching, and information services in the fields of international and Swiss security studies. The CSS also acts as a consultant to various political bodies and the general public.

The CSS is engaged in research projects with a number of Swiss and international partners. The Center's research focus is on new risks, European and transatlantic security, strategy and doctrine, state failure and state building, and Swiss foreign and security policy.

In its teaching capacity, the CSS contributes to the ETH Zurich-based Bachelor of Arts (BA) degree course for prospective professional military officers in the Swiss army and the ETH and University of Zurich-based MA program in Comparative and International Studies (MACIS), offers and develops specialized courses and study programs to all ETH Zurich and University of Zurich students, and has the lead in the Executive Masters degree program in Security Policy and Crisis Management (MAS ETH SPCM), which is offered by ETH Zurich. The program is tailored to the needs of experienced senior executives and managers from the private and public sectors, the policy community, and the armed forces.

The CSS runs the International Relations and Security Network (ISN), and in cooperation with partner institutes manages the Comprehensive Risk Analysis and Management Network (CRN), the Parallel History Project on NATO and the Warsaw Pact (PHP), the Swiss Foreign and Security Policy Network (SSN), and the Russian and Eurasian Security (RES) Network.

Any opinions expressed in Russian Analytical Digest are exclusively those of the authors.

Reprint possible with permission by the editors.

Editors: Matthias Neumann, Robert Ortung, Jeronim Perović, Heiko Pleines, Hans-Henning Schröder

Layout: Cengiz Kibaroglu, Matthias Neumann

ISSN 1863-0421 © 2008 by Forschungsstelle Osteuropa, Bremen and Center for Security Studies, Zürich

Research Centre for East European Studies • Publications Department • Klagenfurter Str. 3 • 28359 Bremen • Germany

Phone: +49 421-218-7891 • Telefax: +49 421-218-3269 • e-mail: fsopr@uni-bremen.de • Internet: www.res.ethz.ch/analysis/rad