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## RUSSIA'S NEW GAS PROJECTS

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## Analysis

# The Northern Dimension of the Russian Gas Strategy

By Jakub M. Godzimirski, Oslo

## Abstract

The gas conflict between Russia and Ukraine that broke out in January 2009 underscored again the vulnerability of Russia's main gas customers in Europe. In a situation when 70 percent of Russian gas exported to European customers has to be shipped through the territory of Ukraine, which has its own unsettled energy scores with Russia, any sharpening of the conflict between those two countries has dire consequences for security of supply of Russia's main gas customers further west and south. The EU, Russia and Ukraine are aware of the situation and each of these three actors has adopted a different strategy to cope with this difficult challenge. In order to understand what has been the Russian long-term strategic response to that challenge this article examines what could be termed the Northern dimension of the Russian gas strategy.

## The Northern Dimension of Russia's Natural Gas Strategy

Due to the adoption of a more comprehensive approach to the energy sector, the Russian political and energy authorities have realized the importance of the northern areas in the realization of the country's energy strategy. The need to address the problem of the possible gas crunch in Russia and possible problems with meeting the country's international gas commitments dictated decisions on the development of the Shtokman offshore gas field and Yamal deposits. The invitation to Western companies (Total and StatoilHydro) to join Gazprom in developing the Shtokman field probably reflects Russia's recognition of the need to share technological and financial risks and Gazprom's lack of offshore expertise, which prevents it from realizing the project on its own. Russia's focus on energy-related issues in the north is also linked to the wish to diversify transport routes, circumvent geographical bottlenecks and, not least, avoid problems with Ukraine in general.

Russia's renewed focus on the north also has much to do with the expectation that this area contains extensive discovered and undiscovered energy resources which may become more easily accessible due to global warming. Control over those areas and development of resources there is to secure Russia's position as an important global energy player for many decades. Those are the reasons why in September 2008, Russian president Dmitri Medvedev and his Security Council discussed Russian interests and policies in the Arctic. Russia has also taken practical steps and in March 2009 announced that it would reform its power structures to better protect the country's interests in the Arctic region.

Implementing Russia's comprehensive energy strategy would not be possible without consolidating the state's role in the energy sector. This goal was achieved

by taking back some assets from private owners, such as Yukos in 2003, and by limiting the role of foreign owners in the Russian energy sector. Russian oligarchs who still control parts of the country's energy sector were intimidated and those who were not cooperative enough – like the former owner of Russneft, M. Gutseriev – were forced to hand over their assets to those who – like Oleg Deripaska – had more understanding for the state's interests. The result was that by 2007 the Russian state controlled approximately 30 percent of oil and 87 percent of natural gas production in the country. As strengthening the state's role in the country's energy sector has been an important policy goal of Putin's team, it is highly probable that in the northern context the state is not going to be willing to relax its grip on strategic assets. The fact that Gazprom decided to develop Shtokman on its own in October 2006 and that Gazprom has retained the majority of the shares in the company that is going to develop Shtokman jointly with Total and StatoilHydro shows that that state control of the strategic assets is still a preferred option. The country's recently adopted law on subsoil resources, with its focus on strategic fields, is also an important instrument strengthening the state's role in that sector.

Strengthening the link between the country's political and economic elites facilitated greater state control of the energy sector. While Yeltsin appointed many Russian tycoons to various positions in the Russian government, during Putin's tenure, state officials took over key positions in strategically-important Russian enterprises. Putin delegated his close aides and allies to manage the most important jobs in the Russian energy sector, sending Alexei Miller and Dmitrii Medvedev to Gazprom, Igor Sechin and Sergei Naryshkin to Rosneft, and Sergei Vainshtokh and Viktor Khristenko to Transneft. At the same time, he effectively curbed the political and eco-

conomic power of the oligarchs and gave the state the upper hand in relations with this group of influential players. Under Putin it was the Russian state – or, more precisely, his team – that dictated the rules of the game and Russian oligarchs could survive only if they played by these rules. Putin effectively strengthened the connection between the political and economic elite of the country and made sure that his allies were the ones to take strategic decisions on the development of the energy sector.

On the international stage, he adopted a similar strategy of co-opting political players and placing them in key positions in the Russian energy sector. The most innovative use of this technique in the northern context was the invitation to former German Chancellor Gerhard Schröder to front the company realizing one of the strategic energy projects – the construction of the Nord Stream pipeline linking Russia with Germany and circumventing some of the trouble-making transit countries. Also, the recent appointment of former Finnish prime minister Paavo Lipponen as consultant to the Nord Stream project and the role played by, Matthias Warnig, a German banker who is now managing director of Nord Stream, are good illustrations of this policy of blurring the line between economic and political elites in the Russian energy sector.

The election of Dmitri Medvedev, the former head of the Gazprom's Board of Directors, as Russia's new president and the appointment of Putin as the country's prime minister have secured the continuation of Putin's energy strategy. This outcome will likely have far-reaching consequences for the realization of Russia's strategic gas projects in the north as Nord Stream and Shtokman seem to be the pet projects of those two leaders.

Although Russia has opened some projects to foreign companies, the overall trend seems to be that the state wants to limit the role of Western companies in the Russian energy sector. In recent years, several foreign companies – such as Shell, Mitsui, Mitsubishi and BP – have faced problems in Russia and there are relatively few examples of the Russian state opening the Russian energy sector to Western companies. In the northern gas context, the cooperation between E.ON and BASF, on the one hand, and Gazprom, on the other, in the development of the Yuzhnorusskoye gas field is going to be a good litmus test of Russia's long-term intentions towards cooperation with strategic Western partners. Also the final decision on whether to go ahead with the joint development of the Shtokman field by Gazprom, StatoilHydro and Total that is to be taken in the first quarter of 2010 will show whether the Russian

state is interested in giving Western companies a greater role and on which conditions.

Although the Russian state may be willing, or forced, to give Western – or other foreign – companies a more prominent role in the country's energy sector in order to satisfy a need for capital and technology, it is highly unlikely that the state will ease its control over the pipeline system. The fate of the oil pipeline that was to be built by private companies in order to transport oil to Murmansk for shipping to global markets is a good example of the state's unwillingness to relax its monopoly in favor of privately-owned and operated pipelines in Russia. As far as gas is concerned, the state has also retained de facto complete control over export routes by giving Gazprom a monopoly on the export of gas and focusing more on implementing a strategy of avoiding transit countries. Especially this last element – avoiding transit countries – will shape Russian gas policy on the northern flank. Already today effects of this strategy are evident – the cancellation of the Yamal II pipeline that was to be built parallel to Yamal I through the territory of Belarus and Poland, and the decision to build Nord Stream.

The development of the Shtokman gas field is also partly driven by the strategy of avoiding transit countries as the gas from that field is to be shipped directly to Russia's gas customers either through a pipeline going via Russia and then through Nord Stream or as LNG from the LNG plant that is to be built at Teriberka, just east of Murmansk.

As Norway is the sole viable alternative source of gas in the northern part of the European gas market, Russia may be willing to implement measures that will raise the political and economic stakes for Norwegian involvement in the regional energy game in case Norwegian actions could be seen as detrimental to Russian gas interests. One of the projects that may suffer as a result of Nord Stream is the planned Skanled pipeline that is to supply relatively small volumes of Norwegian gas to the Polish market.

In recent years, as the Russian economy rebounded, Russia has been showing growing interest in downstream investments in the energy sector. However, as Gazprom and Russian energy policy have become not only politicized but also securitized in many European countries, the company's interest in downstream investments is seen as being politically and not necessarily economically motivated and as a challenge rather than as an opportunity.

Europe's reluctance to engage in closer energy cooperation with Russia and to accept Gazprom's down-

stream investments is partly due to the fact that Russia frequently has used its energy resources for political purposes. The two gas conflicts with Ukraine, gas and oil arguments with Belarus, problems with the supply of oil to the refinery in Mazeikiu in Lithuania, Russia's use of preferential gas tariffs and the use of gas prices as a political incentive have given many Europeans second thoughts about Russia's reliability as a strategic energy partner.

### **The Economic Crisis and the Future of Russia's Northern Gas Strategy**

After more than 8 years of relatively strong and rapid economic growth, driven partly by high oil and gas prices, the global economic crisis has hit Russia hard. In July 2008, the price of the Urals blend of oil reached almost USD 130 per barrel, Russia's European gas customers paid almost USD 500 per 1000 m<sup>3</sup> of Russian gas and Gazprom's capitalization reached almost USD 300 billion and was to reach USD 1000 by 2011. The Russian state budget in 2009 was to have a surplus and the country's economic future seemed bright. Also Gazprom's future in Europe was promising. In an article published in 2008, Alexander Medvedev, the head of Gazprom Export, outlined the history and future of his company's gas cooperation with Europe. According to Medvedev's calculations, Gazprom provided 26 percent of gas consumed in Europe and 85 percent of its export income was from sales on that market. Russia was to increase its export of gas to Europe to 180 billion bcm in the next few years, and then to 250 billion bcm by 2020. Gazprom's share in the overall volume of gas consumed in Europe was to jump from the current level of 26 percent today to 33 percent.

The European direction in the Russian gas strategy was indeed the most important one, not least due to the fact that Russia exports 63 percent of all exported gas to the EU, covers 45 percent of the EU's gas import needs and 19 percent of its total consumption of gas. By 2020, the enlarged EU is to increase its gas consumption by 50 percent and according to some Russian estimates, Russia could cover as much as 70 percent of the EU's gas import needs by 2020. In more general terms, it is expected that the EU25 production of gas is to decline by 59 percent by 2030 and its import dependence is to increase from 50 percent in 2000 to 70 percent. This situation could provide Gazprom and Russia with some new opportunities, but the increasing gas dependence on Russia is seen as a strategic challenge by a growing number of actors in Europe.

Until recently one of the main topics in the European debate on gas dependence on Russia was Russia's reliabil-

ity as a supplier, a reliability that could be undermined by the lack of investment in the Russian gas sector. This was a typical energy security debate focusing on security of supply conducted from the perspective of European gas customers who were afraid either of Russia's market power and its political and geopolitical consequences or of Russia's inability to provide the volumes of gas to cover their short-, mid- and long-term gas needs.

In early 2009, the tone in the European energy security debate changed. Gazprom has announced that the company will reduce its production by 10 percent due to the falling demand both on the domestic and international markets. Consequently, the focus is shifting from security of supply to security of demand. This situation will force Gazprom to reduce production from 550 bcm in 2008 to 510 bcm in 2009. What is even worse is that exports are to fall from 179 bcm in 2008 to 165/170 bcm in 2009 and that the average price will fall from USD 410 per 1000 m<sup>3</sup> on average in 2008 (USD 460–500 in the fourth quarter) to USD 280 in 2009. This will also have a very negative impact on sales revenues in Europe that could fall from USD 73 billion (USD 66 according to other sources) in 2008 to USD 42–44, or in the best case, 48 billion in 2009.

In April 2009, the leadership of Gazprom confirmed that the fall in production could be even greater and will have a more chronic character – Gazprom was to produce on average 10 percent less gas per year than in the peak year of 2008. According to revised estimates for 2009, production was to fall to 492 bcm (11.5 percent lower than in 2008 and lower than overall output in 1987) and it was not ruled out that in years to come the production could be as low as 460–470 bcm per year. This could mean a substantial drop in incomes in the coming years (USD 62–91 billion) causing huge problems for the realization of long-term plans.

This dramatic drop in expected sales revenues, combined with the lower capitalization of the company and problems with liquidity, may have a negative impact on the company's ambitious investments program, according to which the company is to spend USD 29 billion in 2009 alone. According to recently released plans, Gazprom plans to increase its export capacity to 304 bcm per year by 2020, while its planned exports in that year are to reach the level of 220 bcm. In order to achieve those goals, the company has to realize several highly complex and expensive projects in the north and south – the development of the new fields with infrastructure on the Yamal Peninsula (Bovanenkovo and the connection to Ukhta), the Shtokman gas field in the Barents Sea, the Nord Stream pipeline in the Baltic Sea

region and South Stream in the Black Sea region. Each of these projects involves serious economic, technological and political challenges. The fact that three of those four major projects are to be realized on the northern gas flank underlines the importance of that direction of the Russian energy and gas strategy. One can therefore say that much of the game for the future of Gazprom and Russia as reliable energy partners is going to be played in the north. The outcome of that game is, however, not given, not least due to the current economic crisis

*About the author*

Jakub M. Godzimirski is a Senior Research Fellow in the Department of Russian and Eurasian Studies at the Norwegian Institute of International Affairs (NUPI).

and lack of predictability in the area of energy pricing. According to various estimates, in order for Shtokman to be a profitable undertaking, the oil price should be as high as USD 80 per barrel, although also a lower price – USD 50 to USD 60 – is mentioned as guaranteeing the economic feasibility of that project. However, the oil price rollercoaster the markets have experienced over the last couple of years makes any predictions and planning a rather challenging task.

## Analysis

### Gazprom and Russia's Great Eastern Pipe-Dreams

By Nina Poussenkova, Moscow

#### Abstract

Gazprom maintains monopoly control of Russia's domestic pipeline and is the only company allowed to export Russian gas. Gazprom has long talked about expanding its capacity to produce gas in East Siberia and the Far East, but has made little progress toward these goals. Efforts to send gas to China have been stymied by the two sides' inability to agree on a price for gas and Russian concerns about China's growing power. Territorial disputes prevent deals with Japan. In contrast, Russia has moved ahead with plans to send gas to South Korea, which is not affected by the problems associated with China and Japan.

#### Gas Pipelines and Geopolitics

Controlling gas pipelines means wielding power over those dependent on the pipeline for access or gas consumption. Laying a pipeline from a gas-producing country to a consuming country means establishing a physical bond and long-term dependency between two parties. Disrupting this connection leaves the consumer without energy as there are often no alternatives available to quickly switch to other sources and suppliers. Thus, pipelines provide the producer with powerful leverage over the consumer – hence the geopolitical significance of gas pipelines, which is nowhere more significant than in the case of Russia, where the country's gas export pipelines, all controlled by Gazprom, connect Russia's huge gas reserves with dozens of European and CIS costumers.

Gazprom is Russia's single most powerful company and the world's biggest holder of gas reserves. It controls some 60 percent of Russia's gas reserves which equals 17 percent of the entire known global reserves of gas.

Gazprom produces around 85 percent of Russian gas and some 20 percent of the world's gas. What makes Gazprom dominant in the Russian gas market is also the fact that the company owns Russia's entire gas supply system, the so-called Unified System of Gas Supplies (USGS). This system comprises 155,000 km of trunk pipelines and their branches, 268 compressor stations, six gas and condensate processing plants and 24 underground storage facilities. Ultimately, every single gas producer in Russia is dependent on Gazprom for gas transmission.

Also, only Gazprom has the right to export gas abroad. So far, Gazprom has managed to resist any attempts from international organizations or Russian reformers to restructure the company by dividing its monopolistic control over gas transportation from the more competitive production sector, where several independent producers compete with Gazprom in bringing small amounts of gas out of the ground. A final important feature of Gazprom is that it is owned and protect-

ed by the Russian state, which holds a 51 percent share of the company. The state heavily influences all strategic company decisions.

As a commercial enterprise, Gazprom uses its gas pipelines to establish full control over the domestic gas sector and non-Gazprom producer companies. As a tool for achieving the Kremlin's geopolitical goals, Russia's leaders, via Gazprom, use gas pipelines to manage relations with European consumers, as well as with potential customers in Asia, which is now a priority region for Gazprom.

### **Big Brother: The Role of Gazprom in Russia's Gas Market**

Gazprom managed to retain its importance for the domestic Russian gas market because it was able to maintain control over the Soviet-era pipeline system. It remains the single most important producer of gas in Russia, mostly by exploiting existing gas fields developed in Soviet-times rather than commissioning new fields. In fact, since its creation in 1989, Gazprom opened only two new gas fields, the Zapolyarnoye in 2001 with a production of 105 billion cubic meters per year (bcm/y) and the Yuzhno-Russkoye field in 2007 (25 bcm/y). At the same time, the share of the so-called "independent" gas producers increased during the 1990s. While Gazprom controls and develops Russia's major gas fields, the independents were assigned the smaller and more complex fields that Gazprom is not interested in.

The independents are believed to play an increasing role in Russia's gas production. According to Gazprom's plans, the company intends to produce up to 580–590 bcm by 2020, up from 550 bcm in 2008, while it expects that the independents will by this time extract up to 170 bcm, up from 115 bcm in 2008. Their share in Russia's overall gas production is thus expected to increase from the current 15 percent to over 20 percent by 2020.

Gazprom says that it is interested in the development of Russia's gas market with an increasing share of Russia's gas output coming from independents as this will permit the satisfaction of increasing domestic demand and help Gazprom to meet its commitments to its clients abroad. Presumably, however, Gazprom is particularly interested in the development of the independents so as to free more of its own gas for the lucrative international market. Gazprom confirmed its monopoly on gas exports through the 2006 Law on Gas Exports.

Gazprom claims it is in favor of a more competitive market, yet it is consolidating its control in the gas sector by acquiring shares of independent gas produc-

ers or taking control of major gas projects from other companies. In 2002, Gazprom re-established control over the companies Zapsibgazprom, Vostokgazprom and Purgas by purchasing their shares and bought a 100 percent stake of Severneftegazprom. In 2004, it acquired Sevmorneftegas, Purgazdobycha and Stimul. In 2005, it took over 100 percent of Irkutskgazprom's shares and bought a controlling stake (51 percent) in Northgas. In 2006, it bought 19.4 percent of the shares of Russia's second largest independent gas producer – Novatek – and bought 51 percent of Sibneftegas.

Gazprom also exerts indirect control over independent gas producers by regulating their access to its pipeline system. In 1995, the Russian government allowed the independents to sell their gas to consumers at free market prices. But they either did not get access to the Gazprom-owned USGS, which meant they were not able to transport their energy, or were forced to sell their gas to Gazprom at very low domestic prices, while Gazprom later resold this gas at much higher export prices.

In 2008, claiming that there was not enough transportation capacity available, Gazprom reduced the gas pumping quota for Rospan (a company that belongs to TNK-BP) to 1.2 bcm/y – despite the fact that Rospan can produce three times more gas. It seems unlikely that Gazprom will grant Rospan more capacity unless it takes control over the company itself or unless Rospan agrees to invest \$250–300 million in a pipeline project connecting to Gazprom's USGS. (Now Rospan uses Gazprom's feeder pipelines to get access to USGS, but there is not enough space in these pipelines for its gas, according to Gazprom). Even the mighty Lukoil oil company had to reach an agreement with Gazprom on selling gas it produces from the Nakhodkinsk field at the low price of \$41.40 per 1000 cubic meters.

Gazprom is also establishing gas transportation tariffs in an arbitrary manner: the monopoly does not provide information about gas transportation costs and there is no way for independents to verify whether a pumping tariff is justified or not. Gazprom claims that the current tariffs do not even permit it to recoup expenditures on modernizing the gas transportation system and keeping gas in underground storage facilities.

The ambitions of Gazprom to establish absolute control over the domestic gas market are particularly visible in Russia's East. In 2002, the Russian government officially appointed Gazprom as the sole coordinator for developing Russia's eastern gas province. In order to establish control over the gas sector in this part of Russia, in 2006–07, the company signed three agreements on

gas sales with local companies – Bratskecogas, Irkutsk Oil Company and Urals Energy. The blue fuel produced by these companies will be sold to Gazprom which will use it to supply the Irkutsk region.

With the financial crisis of autumn 2008, third-party access to Gazprom's pipeline system has become an ever more important point of leverage for the company. The crisis hit Gazprom very hard: in January–February 2009, it had to reduce its gas production by 15.6 percent from the level of January–February 2008. During this period, the second biggest gas producer in Russia, Novatek, increased production by 10.7 percent. Now, Gazprom says that because of its production decline, independents will also suffer: the monopoly will constrain their access to the USGS, and Novatek will be one of the first companies to be affected by this limitation – Gazprom believes that the crisis should affect everybody equally.

### Marching East with High Ambitions

The plan to develop gas fields in East Siberia and connect these via pipelines to the expanding gas markets of China and East Asia has long been a priority goal of Russia and Gazprom. Yet while Russia and China recently made significant progress regarding the construction of an oil pipeline, the gas pipeline projects do not seem to move anywhere at the moment.

Gazprom, in cooperation with the Ministry of Energy, was to develop a “Program of Creating in East Siberia and the Far East a Single System of Gas Production, Transportation and Supplies with Due Account for Possible Gas Exports to China and other Asia-Pacific Countries.” The essence of Gazprom's eastern strategy lies in forming a new gas-producing center and an expansion of the USGS in Russia's east. Gazprom formulated two key tasks for this program: first, meeting the growing domestic demand in Russia's east and expanding gas service to new customers and, second, maintaining a single channel for Russian gas exports.

The government approved the final version of the Eastern Gas Program only in 2007, after many changes and disputes between the interested parties. The Eastern Gas Program envisages gas production in the region of 27 bcm/y by 2010, 85 bcm/y by 2015, 150 bcm/y by 2020 and 162 bcm/y by 2030. Pipeline gas exports to China and South Korea are planned to increase to 25–50 bcm/y by 2020, while LNG exports to Asian countries expand from 14 bcm/y in 2010 to 28 bcm/y in 2030.

To implement these plans, Gazprom has set out to achieve the goals formulated in the eastern strategy. In 2005, it acquired 72.7 percent of Sibneft, a com-

pany that has licenses to work on Sakhalin and in Krasnoyarsk Krai via its subsidiaries. In spring 2008, former Prime Minister Viktor Zubkov granted Gazprom the Chayandinsk field in Yakutiya, the Kirinsk field on Sakhalin and eight fields on the Yamal peninsula. These “gifts” were made possible thanks to the Law on Gas Supplies, which envisaged that fields of major significance for Russia (strategic or “federal” fields) are to be allocated to state-owned companies without any tender.<sup>1</sup> The gas monopoly might not be able to commission them in the nearest future, but shows no intention to let other companies participate in these fields either.

Most importantly, Gazprom joined the Sakhalin-2 project in 2006 as majority shareholder becoming a global LNG player: the 9.6 mt/y LNG plant being built within the framework of Sakhalin-2 is the world's biggest liquefied natural gas project to date. Long-term agreements on buying Sakhalin LNG have been signed with seven Japanese companies, Korean Kogas, and the US Shell Eastern Trading Ltd.

### Taking Over the East: The Kovykta Gas Field

In 2007, Gazprom took another step towards establishing itself as a key player in Russia's east by acquiring the huge Kovykta gas field with reserves of an estimated 2.13 trillion cubic meters (tcm). Since Kovykta is located close to the Chinese border, the issue of building an export gas pipeline was of paramount importance when Gazprom decided to take over the project from TNK-BP, until recently the biggest shareholder of RUSIA Petroleum (62.89 percent), which held the license for the Kovykta field.

In 2003, British Petroleum (BP) began to target China as the key market for Kovykta gas. RUSIA, CNPC and Kogas expected that 4 bcm/y would be provided to meet Russia's domestic needs. They planned to build an export pipeline to pump 20 bcm/y to China and 10 bcm/y to South Korea. Gazprom torpedoed their expectations by insisting that the gas should be exported via a single export channel, that is through the USGS, rather than from any individual field. Gazprom criticized the intention of RUSIA Petroleum to export the bulk of Kovykta's gas, claiming that gas sales to China could face serious price risks.

<sup>1</sup> In 2007, the Ministry of Energy and Industry made a list of 37 gas fields which were deemed strategic. These fields contain total gas reserves of 11 trillion cubic meters (tcm). The biggest fields in the list are Kruzenshternsk (ABC1+C2 of 1.67 tcm of gas), Chayandinsk (1.24 tcm), Leningradsk (1.05 tcm) and Severo-Tambeisk (929 bcm).

Under the license, the commercial development of the field was to commence in 2006, while gas export from Kovykta was to begin in 2008. Without the construction of an export pipeline (which Gazprom blocked), gas production could not reach the planned level. Starting as early as 2003, Russia's Ministry of Natural Resources thus has been threatening to revoke RUSIA's license because the planned targets were not reached.

In the summer of 2007, TNK-BP reached an agreement with Gazprom on selling its share in the project to the monopoly. Gazprom is preparing a new plan of field development that will correspond to the Eastern Gas Program. Presumably, commercial gas production in Kovykta will begin in 2017, and the blue fuel will be pumped to USGS to cover the potential shortage of gas in Russia – though it is possible that a portion of this gas may in the future also be exported to China.

Gazprom's success in developing the field and building an export pipeline to China will hinge primarily on the results of its negotiations with China, the leading potential market for Kovykta gas. Back in spring 2008, then Minister of Industry and Energy Viktor Khristenko confirmed that Gazprom's discussions with China were very intense, and the key issue was the gas price. "No mutual understanding has been achieved in this respect. And without this mutual understanding there will be no gas pipelines to China, since the basis for the decision on building a pipeline are the long-term contracts for gas deliveries." The Chinese are taking a very tough stance on gas prices since gas must compete with Chinese low-cost coal, which is primarily used for the Chinese power-generation market.

Gazprom, however, represents its failure in negotiations as a result of an agreement on Sakhalin-1 gas deliveries between ExxonMobil and CNPC (see below), as it believed that the contract between Sakhalin-1 shareholders and the Chinese on gas exports to China created competition to its own export plans and permitted the Chinese to insist on lower prices in negotiations with Gazprom.

### Apple of Discord: The Sakhalin-1 Project

The key challenge for Gazprom with regard to the Sakhalin-1 project is to reach an agreement with Rosneft<sup>2</sup>, to export all gas produced via a single Gazprom-controlled export channel and at the same time make sure enough

gas is being made available to supply the Khabarovsk Krai in Russia's Far Eastern region.

Although Rosneft, which is a state-owned company, has the right to export Sakhalin-1 gas independently of Gazprom, because the project is implemented under PSA terms, which Russia concluded in the 1990s, it admits that cooperation with the gas monopoly might be feasible.

Rosneft is also involved in the programs to provide gas to the Sakhalin, Khabarovsk and Primorsk regions using the Russian share of gas in the Sakhalin PSA projects. Gas is to be delivered to consumers through Rosneft's pipeline from Sakhalin to Komsomolsk-na-Amure, and a new Komsomolsk-na-Amure–Khabarovsk–Vladivostok pipeline is to be constructed. Today, only the 4.5 bcm/y Komsomolsk-na-Amure–Khabarovsk section has been built.

In order to become a key player in Russia's east, Gazprom needs to secure control over gas produced by the Sakhalin-1 project. Therefore, when in October 2006 Exxon Neftegas, the Sakhalin-1 project operator, signed an agreement with CNPC to build a 8 bcm/y pipeline from Sakhalin to northeastern China, Gazprom strongly resisted the plan.

In 2007, Alexander Ananenkov, Deputy Chairman of Gazprom's Managing Board, declared that "We consider it necessary to have a directive passed requiring that Sakhalin-1 gas be sold to Gazprom in order to supply the Russian regions and not for export, as ExxonMobil wants."

This position of the monopoly is dictated not by its concern over the fate of the Eastern regions of Russia, but the desire to eliminate competition from ExxonMobil in gas exports to China.

In summer 2008, Russian President Dmitry Medvedev was forced to intervene in the conflict between Gazprom and the Sakhalin-1 shareholders, ordering Rosneft to help the gas monopoly reach an agreement with ExxonMobil on purchases of gas and to sell to Gazprom its stake in Daltransgas, the joint venture that is building the Komsomolsk-na-Amure–Khabarovsk pipeline.

Ultimately, Gazprom wants to buy Rosneft's Sakhalin–Komsomolsk-na-Amure pipeline, to extend the pipeline from Khabarovsk to Vladivostok and then to pump gas through it to China and South Korea.

### The Role of Energy in Russia's Relations to China

Gas pipelines play an important role in energy relations between Russia and potential consumers of its gas in

2 Shareholders of Sakhalin-1 project are: 1. Exxon Neftegas Ltd. (30%) – operator of the project; 2. Rosneft-Astra (8.5%); 3. Sakhalinmorneftegas-Shelf (11.5%); 4. SODECO (30%); 5. ONGC Videsh (20%).



East Asia. China is particularly interested in Russian hydrocarbons. However, until recently energy relations between the countries have been impeded by Russian perceptions that China is becoming too formidable, and fears that Russia's eastern territories might turn into a "resource hinterland" for China. Another obstacle arises in the difficulty of achieving a compromise on gas prices. Russia has no clear understanding of China's long-term objectives in its energy policy: does China strive for more pipeline gas or LNG, what will be the share of gas in the Chinese fuel mix, how long does the Chinese government intend to subsidize domestic gas and electricity prices? As long as these questions remain unanswered, Gazprom faces insecurity of demand and is reluctant to commit to the construction of an expensive new pipeline.

Thus, relations between Gazprom and China are only slowly expanding. During President Putin's state visit to China in 2006, leaders of Gazprom and CNPC signed a Protocol on Natural Gas Deliveries from Russia to China. According to the agreement, first shipments of gas were scheduled for 2011. The 2006 agreement was an important step forward in implementing Russia's plans to diversify its gas markets, and corresponded to the Russian policy of establishing closer ties with Asia.

In 2006, Gazprom took the decision to build the so-called Altai gas pipeline with a capacity of 30 bcm/y in order to connect to the gas fields in West Siberia. The project envisioned the construction of a 2,800-km pipeline from Urengoi to China's Sinytzyan-Uigursk District. From there, it was to connect to the Chinese West-East pipeline, which delivers gas to Shanghai.

Since then, however, serious doubts have arisen about whether the Altai project will be implemented at all in the near future. According to Gazprom, the main obstacle is that Gazprom was not able to achieve an agreement on price with its Chinese counterparts. The strategic goal of announcing the Altai project might be that Russia wanted to demonstrate to its traditional costumers in Europe that it was eventually ready to redirect gas flows from west to east.

The situation regarding oil is different. In mid-February 2009, Russia and China signed an intergovernmental agreement on the construction of a pipeline branch from Skovordino to the Chinese border and long-term Russian oil supplies of 110 million barrels of crude per year from 2011 until 2030. In return, the Chinese Bank of Development will provide a \$10 billion loan to Russia's oil pipeline operator Transneft and a \$15 billion loan to the state oil company Rosneft in order for them to strengthen their balance sheet, complete the

East Siberia–Pacific Ocean pipeline project and to develop oil fields in East Siberia, ensuring that the sales to China can proceed.

So, while Russian–Chinese oil cooperation expanded rapidly, it seems that Gazprom is not ready to commit to investing in a pipeline to China when it is not sure this project will bring stable long-term profits. Also, there are more deeply-rooted psychological fears on the side of Russia, which does not want to become dependent on China as its single most important Asian customer. In order to balance its risks, Russia is thus seeking to establish relations with other Asian countries as well, mostly Japan, but also South Korea and even the US (via the shipping of LNG from Sakhalin).

### **Energy Cooperation with Japan and South Korea**

Cooperation with Japan is very important not only to counterbalance China, but also in order to attract investments and new technologies in order to develop its eastern territories. The revival of East Siberia and the Far East is a prerequisite for Russia to emerge as a major player in East Asia, beyond the role of a mere supplier of raw materials.

However, the energy dialogue with the Japanese companies is limping along, presumably because of the difficult political relations between Japan and Russia that are colored by the legacy of World War II (the two countries still have not signed a peace treaty) and the on-going disputes over the Kuril Islands. Gazprom played an important role in undermining the plans of the Sakhalin-1 project (in which the Japanese SODECO is involved) to build a gas pipeline on the bottom of the Okhotsk Sea to Hokkaido Island. Whether this pipeline will be built ultimately depends on the general trends in Russian–Japanese relations and also on the overall balance of forces in the Russia–China–Japan triangle.

In contrast, gas cooperation between Russia and South Korea seems to be viewed by the two countries as a win-win situation. Russia might benefit from the future diversification of energy sources contemplated by South Korea and further development of the Korean gas transportation network. South Korea enjoys a unique blessing in its relations with Russia – Russia's attitude to South Korea is not affected by the security concerns that define its relations with China nor overshadowed by territorial disputes or any other World War II legacy as with Japan.

Back in October 2006, Russia and South Korea signed an intergovernmental agreement concerning conditions of Russian gas deliveries to South Korea.

However, a real breakthrough in gas relations with South Korea happened in September 2008, when Gazprom and Kogas signed a “gas package” worth \$100 billion envisaging supplies of 10 bcm/y over 30 years starting from 2015. There are plans to build in 2011–2014 a gas pipeline to South Korea from Vladivostok via North Korea<sup>3</sup>, a gas chemical plant and an LNG facility near Vladivostok. Kogas seems to be a convenient partner for Gazprom because the former is getting the last chance to establish itself in the Far East of Russia and will be receptive to Gazprom’s terms.

### Outlook

Gazprom, owner of Russia’s pipelines and exclusive exporter of gas, is the key player in the Russian gas market. This unique position permits it to establish full control over the sector by eliminating domestic competition, limiting the involvement of international compa-

nies in the development of strategic reserves and dictating terms of gas deliveries to its customers.

However, this super-monopolization may ultimately undermine Gazprom: as the state company that became fully responsible (together with Rosneft) for developing new petroleum frontiers, such as Russia’s East, the continental shelf and the Arctic, it might be unable to implement these formidable tasks in due time, particularly given the economic crisis and lower global oil prices. Gazprom currently lacks not only the finances but also the technical skills to develop difficult new projects – especially offshore. It needs to work together with other companies both national and international on new projects; otherwise, it will simply fail to produce enough gas to fill all its existing and planned export pipelines.

*Edited by Jeronim Perovic*

<sup>3</sup> If North Korea does not permit Gazprom to pump gas through its territory, Russian gas will be delivered to South Korea in a liquefied or compressed form.

#### *About the author*

Nina Poussenkova is a Senior Researcher at the Institute of World Economy and International Relations (IMEMO) of the Russian Academy of Sciences in Moscow.

#### *Literature and sources*

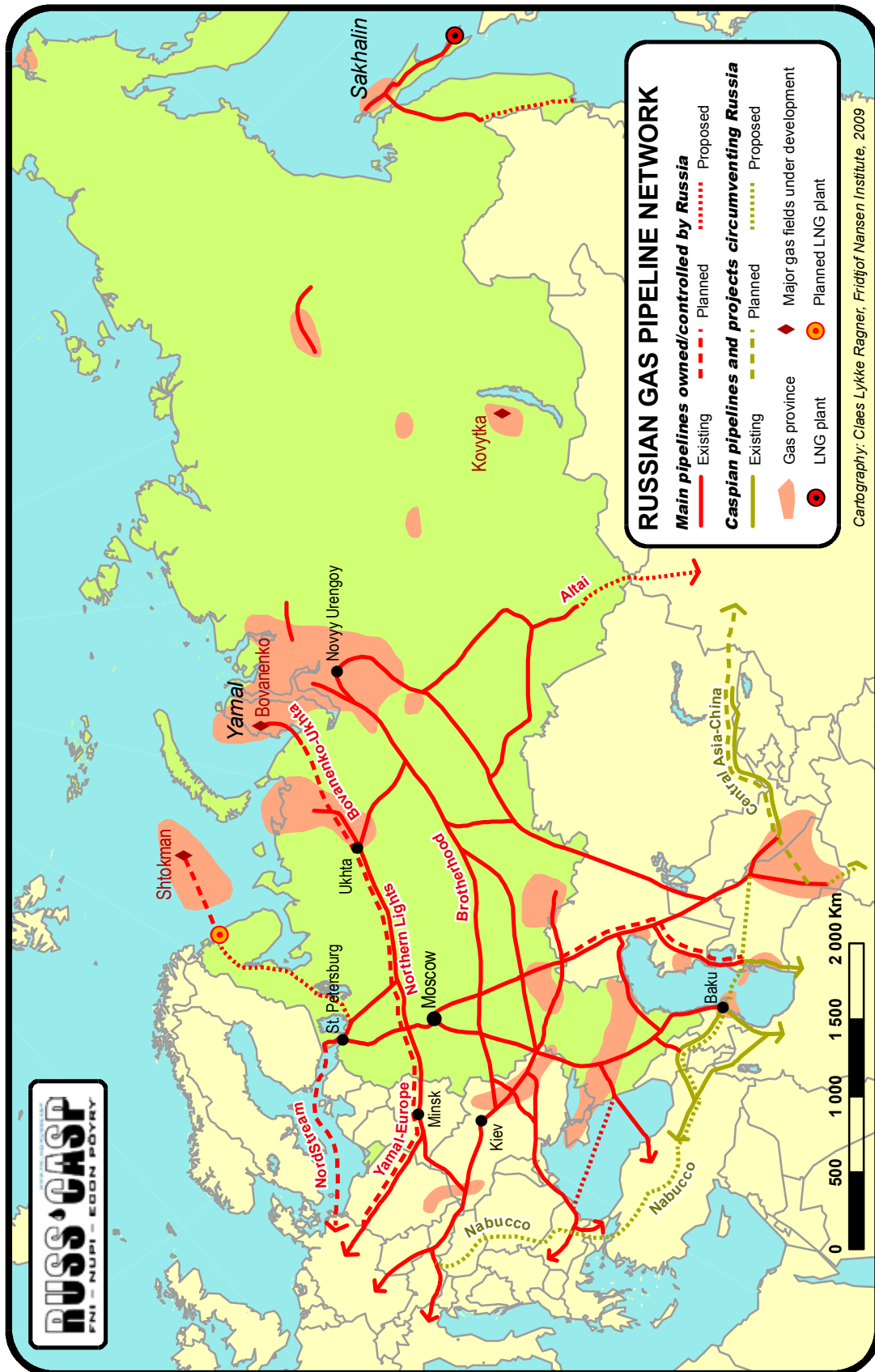
Data and information on Gazprom and Russia’s gas market can be found at Gazprom’s web site at [www.gazprom.ru](http://www.gazprom.ru) (in Russian) and [www.gazprom.com](http://www.gazprom.com) (in English).

Other information and data for this article was obtained from the following journals: *Oil and Capital*, *Vedomosti*, *Oil and Gas Vertical*.

Russia’s Energy Strategy to 2020, approved as decree no. 1234-r by the Russian government on 28 August 2003, can be viewed at: <http://www.minprom.gov.ru/docs/strateg/1/>

This issue of RAD builds on the output of the project “RussCasp’ - Russian and Caspian energy developments and their implications for Norway and Norwegian actors”. This project financed by the PETROSAM program of the Research Council of Norway. It is carried out by the Fridtjof Nansen Institute, the Norwegian Institute for International Affairs and Econ Pöyry as consortium partners and also includes other institutions and researchers as participants.

Map

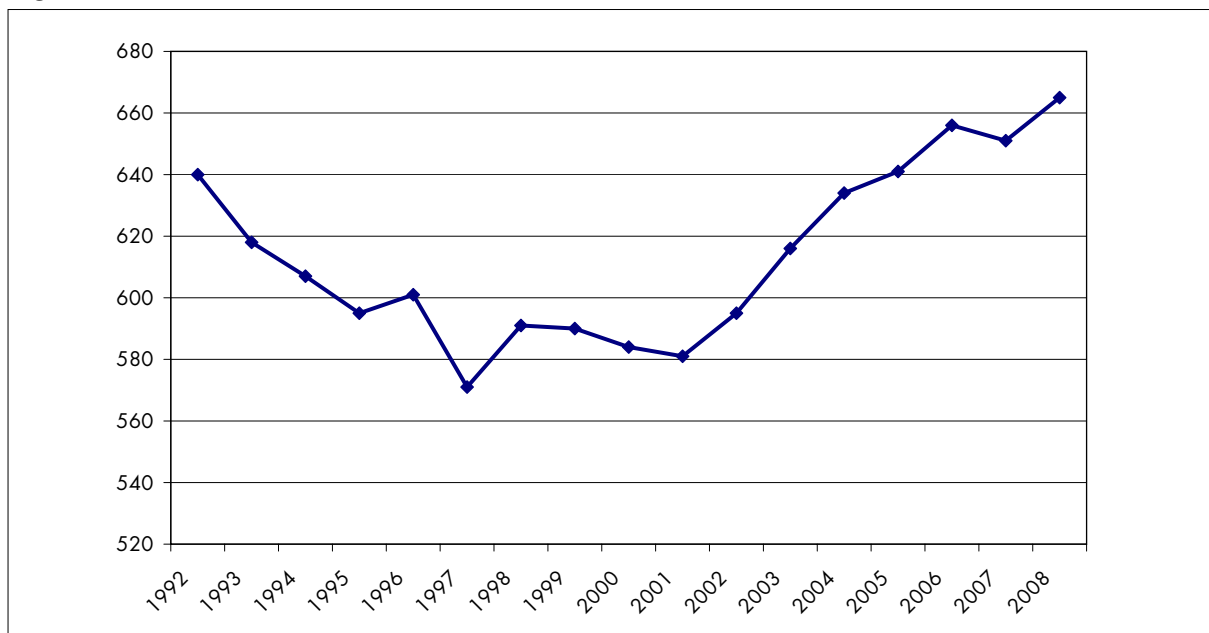


Cartography: Claes Lykke Ragner, Fridtjof Nansen Institute, 2009

**Statistics**

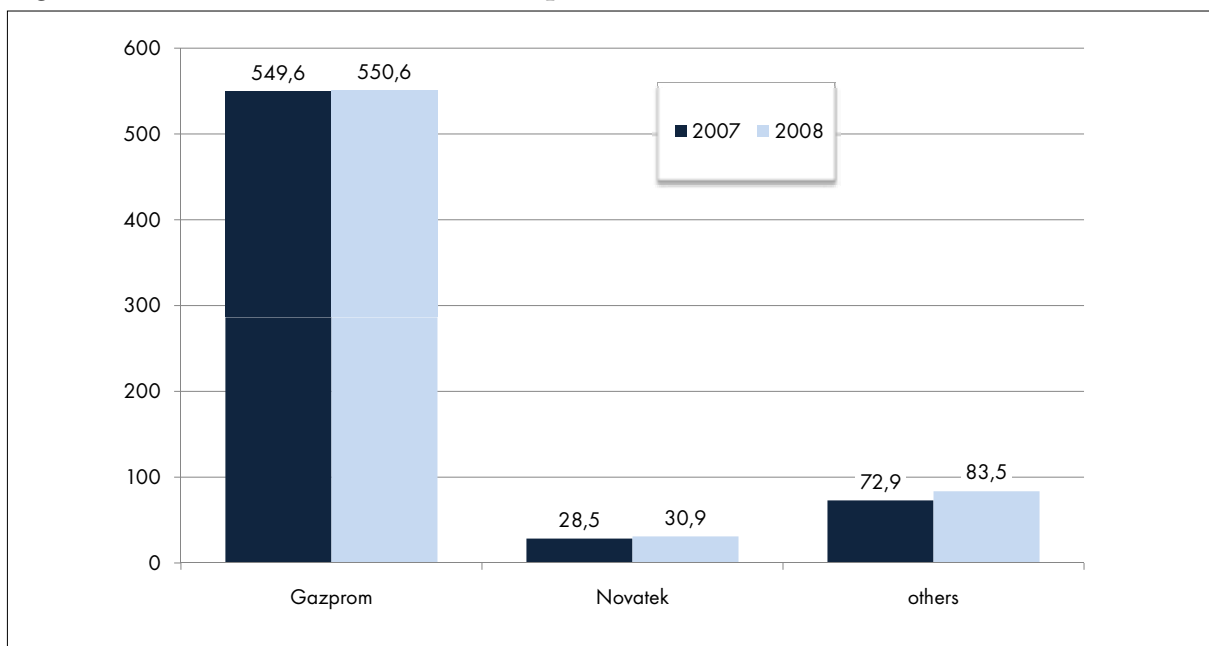
## Russia's Natural Gas Industry

Figure 1: Russia's Natural Gas Production 1992 – 2008 (bn cubic meters)



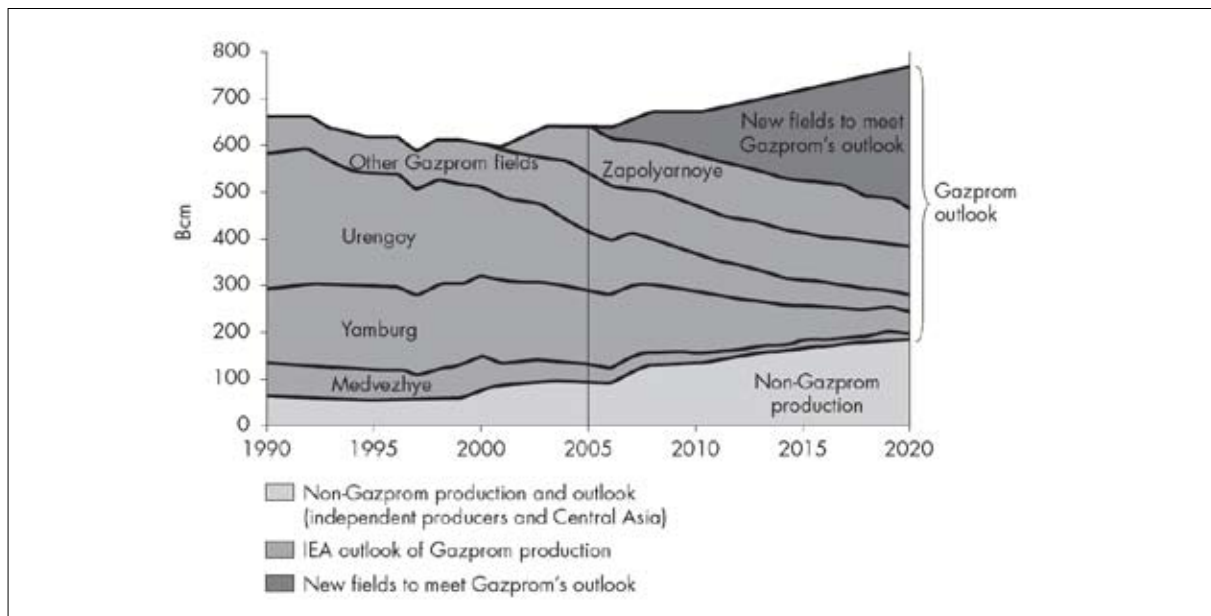
Source: Russian Federal Service for Statistics, <http://www.gks.ru/dbscripts/Cbsd/DBInet.cgi>

Figure 2: Russia's Gas Production by Company (bn cubic meters)



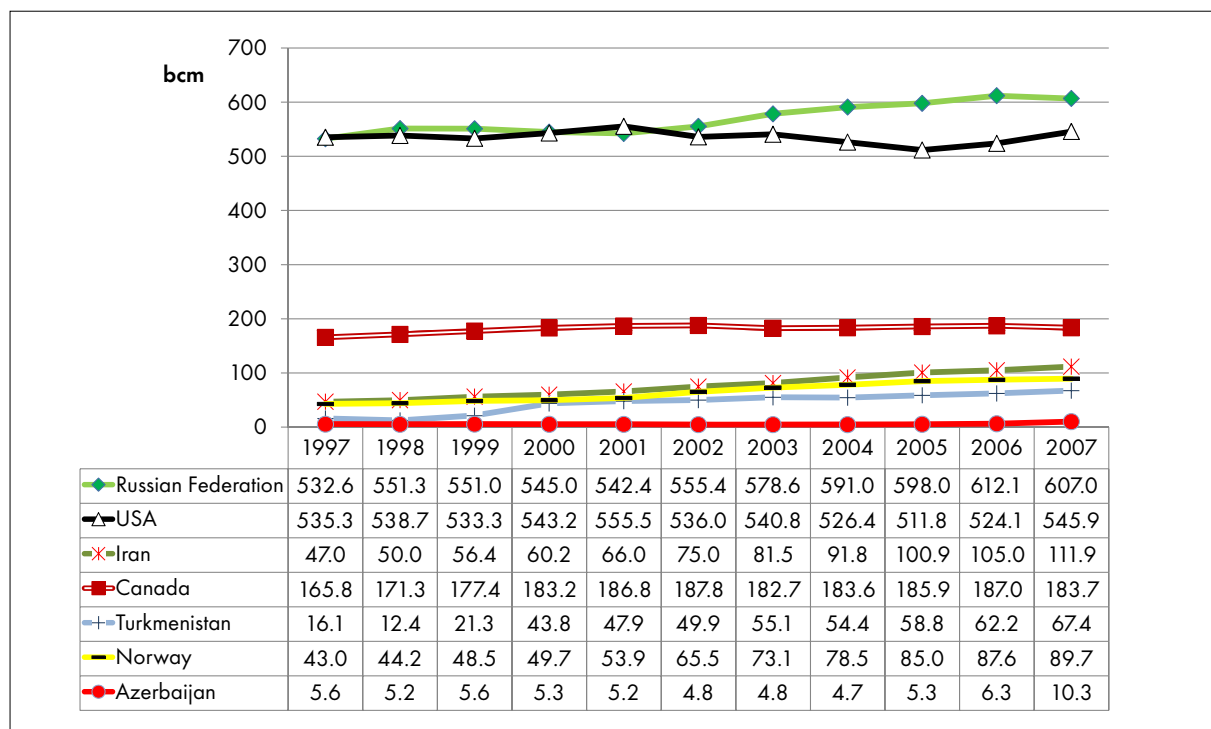
Source: Company data.

Figure 3: Russian Gas Supply Outlook



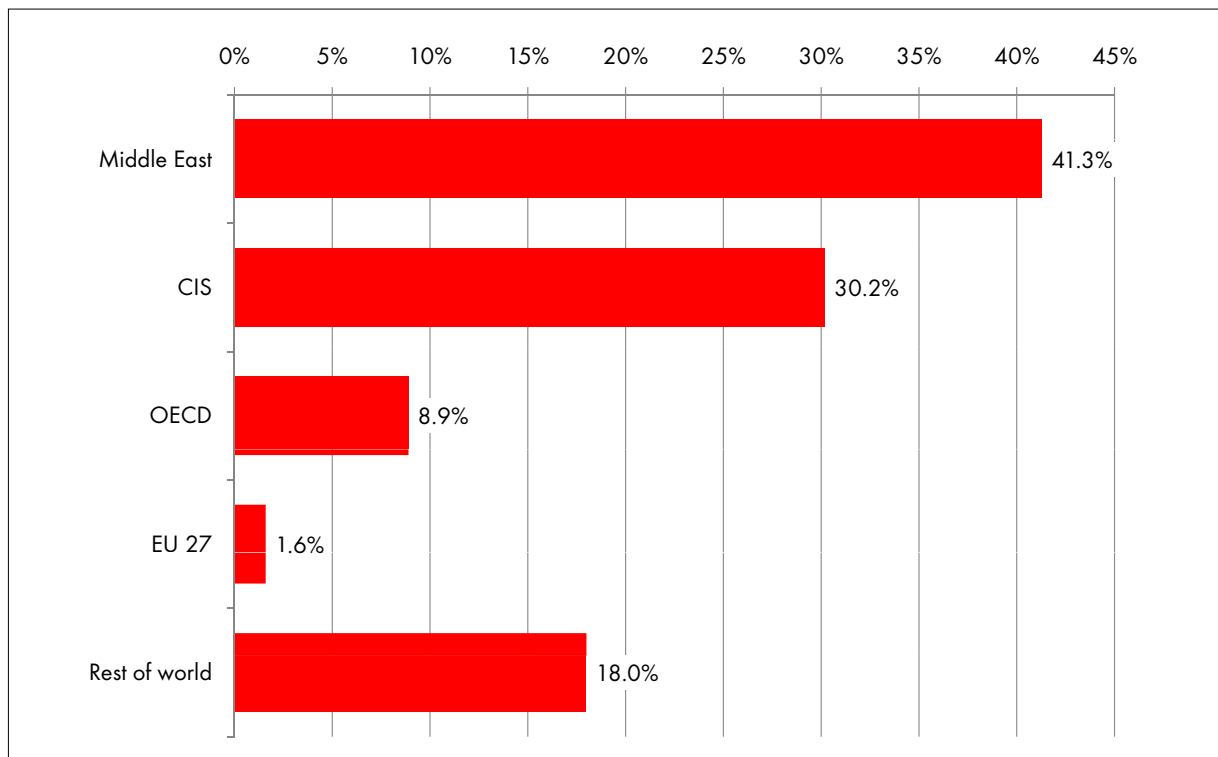
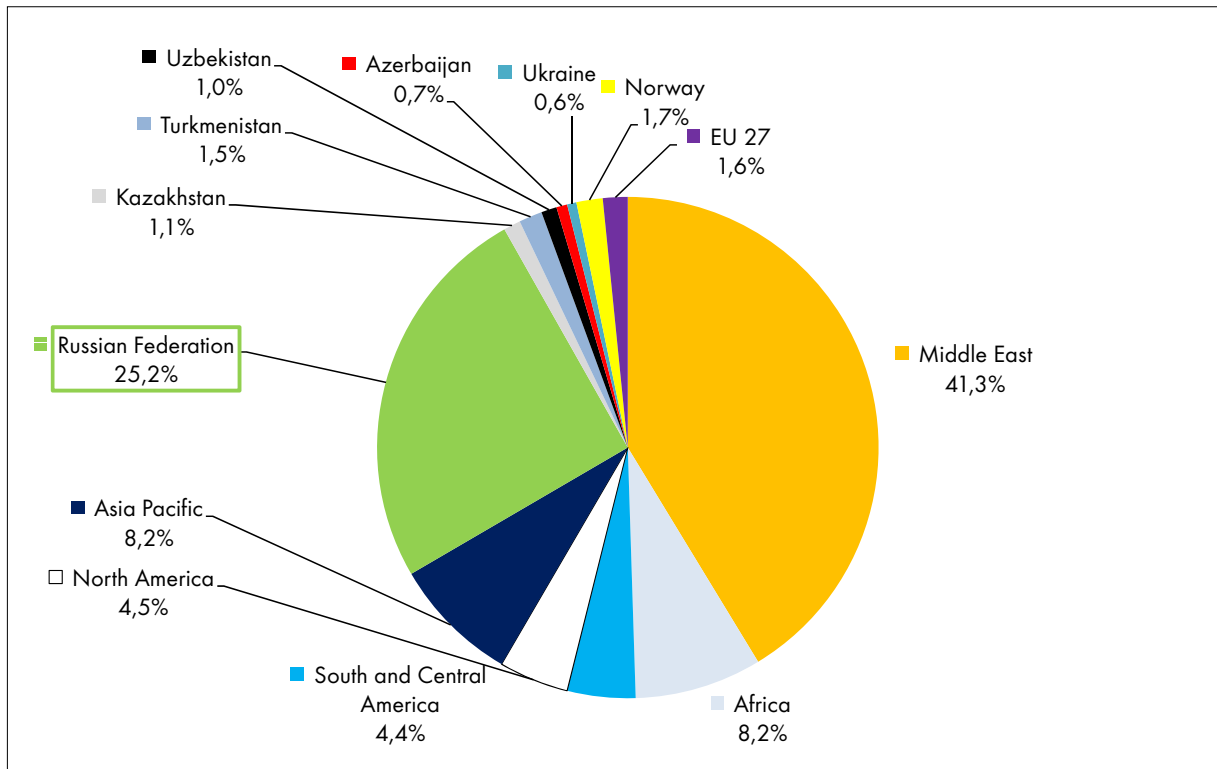
Source: IEA estimates, in „Optimising Russian natural Gas, IEA, Paris, 2006, p.34

Figure 4: Worldwide Natural Gas Production 1997–2007 (bn cubic meters)



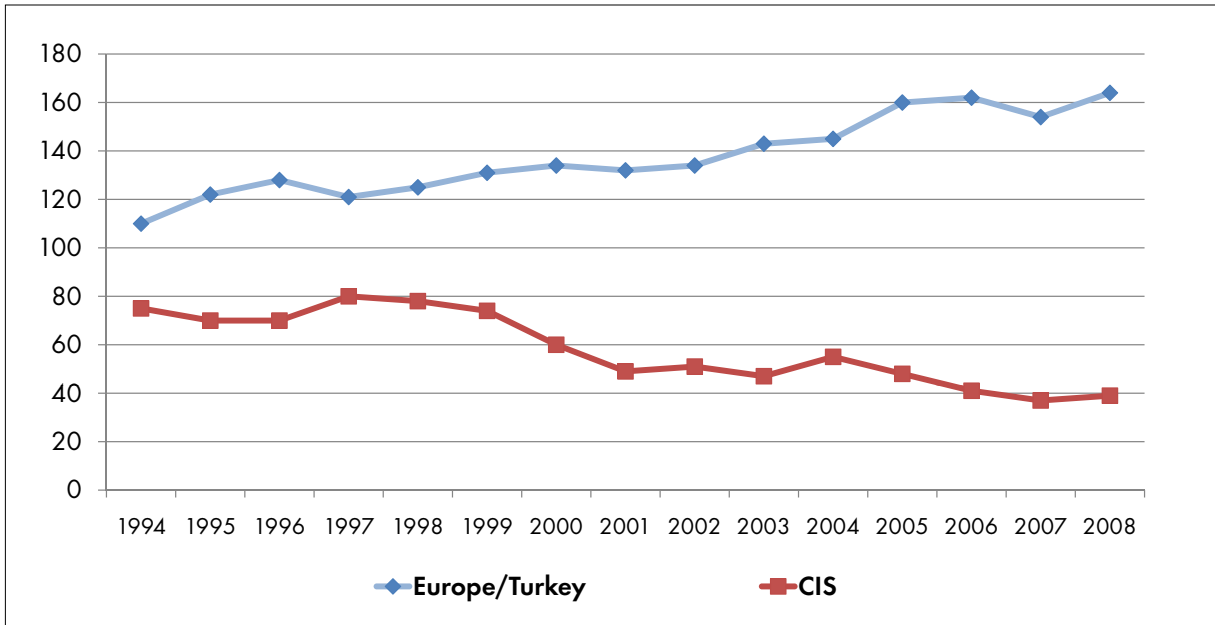
Source: BP Statistical Review of World Energy June 2008, <http://www.bp.com/statisticalreview>

Figure 5: Distribution of World Natural Gas Reserves (Proven Reserves, End of Year 2007)



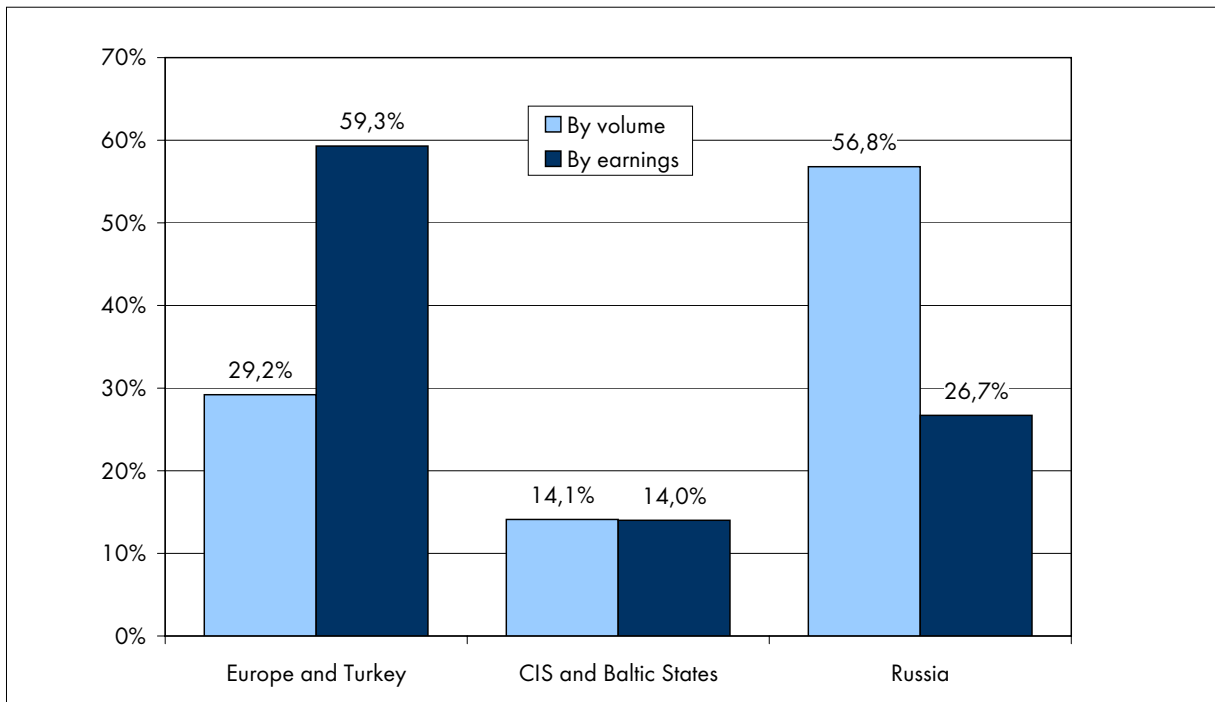
Source: BP Statistical Review of World Energy June 2008, <http://www.bp.com/statisticalreview>

**Figure 6: Russia's Natural Gas Exports 1994 – 2008 (Excluding Transit of Gas from Central Asia) (in cubic meters)**



Note: data for 2008 are estimated on the basis of data for January - November  
 Source: Russian Federal Service for Statistics, <http://www.gks.ru/dbscripts/Cbsd/DBInet.cgi>

**Figure 7: Gazprom's Sales by World Regions (Share in Total, First 3 Quarters of 2008)**



Source: Gazprom company data

## About the Russian Analytical Digest

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

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](http://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 German Association for East European Studies (DGO). The Digest draws on contributions to the German-language Russlandanalysen ([www.laender-analysen.de/russland](http://www.laender-analysen.de/russland)), the CSS analytical network on Russia and Eurasia ([www.res.ethz.ch](http://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.

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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](mailto:fsopr@uni-bremen.de) • Internet: [www.res.ethz.ch/analysis/rad](http://www.res.ethz.ch/analysis/rad)