

“There is and can be no *beginning* to any event, for one event always flows uninterruptedly from another” – Tolstoy (War and Peace)

The development of the Russian domestic gas market: historical perspective, current developments and strategy for the future

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The European gas market has been in a process of liberalization for the last decade. To European policy makers, Russia is mostly viewed as an exporter of natural gas. However, the Russian domestic gas market has also seen several developments in recent years. This paper will provide an overview of the most important developments and regulatory changes on the domestic Russian gas market. The overview reveals the development of the market starting from the 1900s but with a particular emphasis on the period 2000-2017. The paper concludes with a section about the expected future developments on the domestic gas market in Russia.

The Russian gas market before 2000

The gas industry of Russia has existed for over 100 years. The Soviet Union had started searching for deposits of natural gas in 1920s in southern regions which eventually led to the discovery of the first large gas deposit in Kyrdymo-Elshan (Abyishev et al. 2015, p.359). In 1933 the first state-owned entity – Glavgas – emerged in order to manage the entire gas industry, separately from the oil industry. Glavgas, and Russia’s newly emerging gas industry slowly increased in importance within the Russian energy industry with total production increasing to 2.3 billion m³ by 1939 (Abyishev et al., p.357). 90% of the total production of natural gas was produced in Russia’s territory in the Caucasus (current day’s Azerbaijan). Compared to the total energy balance of the Russian state, natural gas still accounted only for about 2% (Abyishev et al., p.357). Many interesting developments, such as large investments in transmission pipelines and distribution grids happened during the following period. However we limit our analysis to the period which is mostly interesting with regards to the current developments on the Russian domestic gas market. In that regard, the 1990s were very important because of the collapse of the Soviet Union (USSR) and the period following it with new country borders and political regimes.

After the collapse of the USSR, large parts of the prior internal energy system of Russia became external as divisions of the USSR became separated as independent countries. As a consequence, the Russian government had to reconsider the entire natural gas industry including regulatory provisions, management, infrastructural facilities and pricing for the domestic market. During that period, total natural gas production in Russia decreased from 643 billion m³ in 1991 to 590 billion m³ in 1999 (Korshak, 2017). There are three important reasons for this large decline in production volumes. Most importantly, because of the fall of the USSR, the country lost access to large natural gas deposits and facilities in regions which now became independent countries including Azerbaijan, Turkmenistan and Ukraine. Secondly, a large part of the transregional delivery of natural gas now became an export activity. This is because natural gas that before 1991 was exported through the USSR’s borders now fell under the responsibility of independent states. Finally, the collapse of the USSR and the economic crisis that followed had a serious impact on the purchasing power of the population. This naturally led to a decline in demand for natural by both households and industry.

As a result of the new situation within Russia, the system needed to be upgraded with new regulatory impulses. To reform the gas industry, a centralized structure and management culture was desired. This meant that only minimal reorganization of the sectorial management structures was

required as the gas industry before 1991 already involved a high level of centralized planning. In 1992, a Presidential Decree was signed that stated that the unified gas supply system is an exclusively federal property which is owned and managed by the state (Gasforum, 2006). To that extent, the management of the gas supply system was transferred to state enterprises. This led to the establishment of RAO "Gazprom", a partly privatized company which was 40% state-owned in 1993 (Laletina, 2011). The company obtained not only the monopoly right to conduct export activity, but also privileges to pursue its own politics in the domestic gas industry. De facto Gazprom was responsible for principle elements of governmental policy concerning pricing and taxation. The special role of Gazprom is strengthened legally through the Federal Act "On Natural Monopolies" in 1995 and the Government Decree "On ensuring access for independent organizations to the gas transportation system of the open joint-stock company Gazprom." The Federal Act is a fundamental regulatory document that states that pipeline gas transmission is a natural monopoly activity. The Government Decree determines that access to the gas transmission system to supply Russian consumers can only be provided to organizations when there is free capacity and technical possibility, both of which are defined practically by Gazprom.

In the 1990s, wholesale natural gas prices for industrial consumers, householders and distribution organizations (discounted) are determined by the government through the issuing of tariffs. These tariffs were indexed on state gas prices and then corrected based on the price index on industrial production. During this time, gas pricing had a negative effect on industrial development in the country, as the wholesale gas prices for industry in the domestic market corresponded to those in Europe¹. This was caused by the fact the before 1998, gas prices had been increasing on the domestic market (inflation). In the period 1996-1999, the government tried to increase the payment for gas in money equivalent instead of paying in other ways like barter or securities, which was custom in some regions. To do that, the government decided to provide a 15-40% discount if the natural gas paid in time and in rubles (Gasforum, 2006). At that time, the government also decided to distinguish between gas prices for industrial and household consumption. Wholesale prices for industrial consumers and households were differentiated into six price zones, depending on the distance from the extraction sites taking into account costs for extraction and transportation. Retail prices were regulated by regional authorities based on an average economically justified price based on the needs of different types of households on a 'cost-plus' basis.

During this period, the taxation system was restructured to strengthen the further development and growth of the gas industry. The government used state money for major investments to explore and develop national gas deposits and cross-country pipelines. Higher taxes on 'old' deposits were used to smooth the investments in 'new' deposits. The specification of all these new restructuring processes was completed with the very important implementation of the 'On Gas Supply' Federal Act in 1999. This act established the major principles of governmental regulation of the gas sector. The Unified Gas Supply System is defined as the entire property of Gazprom and relates to all its main activities including gas production, transportation, storage and supply of natural gas. With regards to pricing, the Act allows for a transition from gas tariffs for transportation services to government-regulated prices for end consumers.

To sum up: the development of the Russian domestic gas industry between 1990 and 2000 was a consequence of the collapse of the Soviet Union and led to a new regulatory system in which the gas industry was managed by a 40% state-owned company, Gazprom.

¹ The prices of gas exports at that time were \$60-\$100 per thousand m³ and taking into account gas transportation costs, wholesale gas prices for industry in the domestic market corresponded to those in Europe.

A new chapter in the Russian domestic gas market: 2000-2017

From 2000 onwards, there were some important changes in the management of the entire gas industry in Russia. The 1990s were characterized by the Russian government's decision to help Gazprom to maximize its control over the gas sector in Russia, including industries, independent firms, services and information flows. In the beginning of the 21st century, the government stopped to play a passive role. Until May 2001, the government, holding a 38.4% share of Gazprom, allowed the CEO to manage the company (Reznik, 2001). However, in May 2001, the Russian government refused to extend the contract with the board of directors. This indicated its intention to bring the gas industry stronger under the control of the state authorities. This decision was influenced by two important drivers. One of the reasons was the desire to make the financial management of the company more transparent, after a series of corruption scandals. Another important reason was the growth of worldwide demand for natural gas which made the gas industry a strategic priority for the government.

Following the recovery from the country's collapse in the early 1990s, the export of natural gas (another other natural resources) had become an important source of income for both Gazprom and the state (Aune et. al, 2015). Because of the increasing value of natural gas on foreign markets, the efficiency of internal gas production in Russia had to be increased. To realize that, the domestic market, and particularly the pricing was restructured during 2000-2005 to increase efficiency and help attract foreign investment flows.

The 2000 Governmental Decree "On the state regulation of gas prices and tariffs for transportation services on the territory of the Russian Federation" and the 2001 "On the procedure for establishing special allowances for tariffs for gas transportation by gas distribution organizations for financing gasification programs" were adopted for both transmission and distribution pricing with the difference that the methodical pricing rules for distribution activity were more understandable. The first Decree stipulates state regulation with regards to tariffs for gas transportation services through cross-country gas pipelines for independent organizations, tariffs for gas transportation services via gas pipelines owned by independent gas transmission organizations and tariffs for gas transportation services through gas distribution networks (Gasforum, 2007). However, there is an absence of methodological documents concerning the state regulation of tariffs for gas transportation services through cross-country gas pipelines for independent organizations.

Reviewing these regulatory implementations reveals that the non-discriminatory principle is lacking in some acts. Additionally, tax levy on the extraction of mineral resource in 2001 and the abolishment of the excise tax on gas sales in 2004 underline the priority position of 'old deposits' controlled by Gazprom. In 2004, the Federal Antimonopoly Service (FAS) was founded to attain control and supervisory authority over the access to the market of services of natural monopolies. Gazprom itself determines the requirements for the connection of objects (deposits and gas processing plants) of independent gas producers to pipeline transport of Gazprom and agrees on the technical conditions for such facilities. However, Gazprom's agreement on the technical conditions for connection is necessary but not sufficient for obtaining access to pipeline transport.

Besides the limited accessibility of independent players to the domestic market there are other services which are not regulated at all. For example, there is no legislation on gas storage in Russia. The storage capacities are held by Gazprom only, and storage services are not included into in the state regulation on 'natural monopolies activity'. As there is a lack of storage capacity in Russia even for Gazprom, proven by the practice of gas storage in pipelines, the responsible ministry or the government should enhance more efficient regulation for fostering new investments in gas storage facilities.

In 2003, the Ministry of Economic Development raised a question about the liberalization of the domestic gas market through structural changes in the sphere of natural gas production and transportation. The resources of independent producers were also regarded to be included into the total natural gas balance of the state. In 2003, the share of non-Gazprom companies was 5-10% from the total extracted gas in Russia with the absence of free access to the national transmission pipeline system. However, the question was withdrawn with reference to the low level of relevant materials on the issue. The dialogues about reforming the domestic gas market returned in 2014-2015 with a quite remarkable success- the foundation of a gas exchange.

The gas exchange appeared in 2014 providing a buy-and-sell mechanism for small-scale volumes of natural gas. Unfortunately, Gazprom does not have a strategy to develop the trade on the exchange, which allows selling gas at market prices and thereby facilitates competition with the independent companies. Despite the overstocking of its own production capacity, Gazprom plans to increase gas purchases from independent producers from 15 to 27 bcm (Fadeeva & Serov, 2015). After all, if the volume of exchange trades grows, then this price, which is likely to be lower than the current regulated prices, will become a new benchmark for the regulator.

There are no other important reforms in the gas industry. Most of the new decrees are adopted on the concern of price regulations and tariffs. However, it is not easy to avoid the fact that gas production from independent companies is growing in Russia. In 2016, gas production from Rosneft increased by 7% to 67.1 bcm (Rosneft, 2017). The second company – Novatek – has seen production growth slow down by 2.7% to 66.1 bcm (Peschinskyi 2017). But taking into consideration the upcoming Yamal LNG Plant launch, Novatek has hedged itself from production volume losses. The observers link the increase of Novatek and Rosneft supply with their enticement of large industrial consumers on their natural gas. Growing influence of independent producers and demand stagnation on the internal market shows that structural reforms are required.

The struggle between Gazprom and independent companies is still continuing. Using its monopolistic position and some functions of the responsible Ministry, Gazprom has announced an increase in transmission tariffs by 3.9% for 2017 (Podobedova 2017). In the last year (2016), the Federal Antimonopoly Service denied the indexation by 2%, keeping it according to 2015 level. However this year it supports Gazprom's decision. To clearly understand the share of independent companies on the domestic market, it is good to clarify that these companies provide gas deliveries in a couple of regions only: Chelyabinsk and Kostroma regions are historically maintained by Novatek; Sverdlosk region is under Rosneft supply. All other regions are supplied by Gazprom only. Consequently, Gazprom, with the support of governmental services, individually controls the gas industry as a state and makes decisions for its own benefit as a commercial company.

The future

In the end of 2015 the Federal Antimonopoly Service suggested further discussion on reform, most notably concerning the further splitting of Gazprom. It is good to mention that this reform is not a breaking new concept for the energy industry. Russian oil companies have already separated production from processing and sales. If this reform would be adopted, it would mean that a competitive and transparent market would be created for independent gas companies, still depending on Gazprom-regulated transport tariffs. The reform has been discussed for several months in the Energy Ministry and the Commission on fuel and energy for several months. The head of the FAS concluded that the start of the reform of Gazprom can only be given by the president of the country, as the company does not see the benefits for itself of the proposal. In the beginning of 2017 the "Energy Strategy of Russia by 2030" was sent to the government. In the report it was noted that the current structure of the gas market will

remain in place until at least 2020. Besides the issue related to the monopoly of the pipeline transport system, another discussion took place around the export activities. The strategic report states that "it is supposed to maintain a single channel for the export network gas with the possibility of delivering gas from independent producers through it." In this way, Gazprom has the authority to issue quotas on exports.

Further analyzing the "Energy Strategy of Russia by 2030", we find three important directions for the development of the gas industry: the achievement of the optimal balance of interest between consumers and producers, the establishment of equal conditions for all gas producers and the formation of a common gas market of the Euro-Asian Economic Union. The following activities are included in the "strategy": field development of hydrocarbons on the Arctic continental shelf and northern territories, expansion of the Unified Gas Supply System to the east, strengthening internal gas pipeline integration, the development of high-tech gas processing industry, gas chemistry and gas-based production of synthetic liquid fuel.

With regards to pricing, a phased transition from regulated wholesale gas prices to a market-based pricing mechanism is envisioned (with the exception of certain consumer groups). State regulation will cover the gas transportation sector along the main pipelines and for the provision of gas storage services in underground storage facilities to be used by independent gas producers. The methodology for determining the tariffs will become more transparent and for the validity of settlements, uniform approaches will be applied for all gas suppliers to improve the efficiency of the gas transportation system.

Gazprom's published strategy does not include clarified goals for the future, although some provisions are similar to the "Energy Strategy of Russia". For example with regards to gas extraction, the Yamal Peninsula, as well as the water areas of the northern seas are defined as strategic priority regions for long-term gas production. Other large areas of gas production in the long term will be in Eastern Siberia and the Far East. There will be gas production centers in the Krasnoyarsk Territory, the Irkutsk Region, the Republic of Sakha (Yakutia), the Sakhalin Region and the Kamchatka Territory. The 'Eastern Gas Program' states that along with the establishment of gas production centers and a unified gas transportation system, gas processing plants, including capacities for the production of helium and liquefied natural gas, will be developed synchronously. The transport system is widening with new projects: "Bovanenkovo - Ukhta-2" and "Ukhta - Torzhok-2" are important for the internal market, "Nord Stream-2", "The Power of Siberia" and "Turkish stream" - for the external market. The main objective of Gazprom's marketing strategy in the domestic market is to ensure uninterrupted gas supply to the country with increased profitability of sales. In accordance with the decisions of the Government of the Russian Federation, in the medium term, domestic gas prices will be phased towards an equal yield level of supplies between the external and internal markets.

Corporate strategies of non-Gazprom companies are looking more outspoken. In 2016 Rosneft became the largest independent natural gas producer in Russia. Nowadays it produces gas through 30 subsidiaries and joint ventures in Western and Eastern Siberia, Central Russia and the Far East. Until 2020, the company aims to achieve a 20% share on the domestic market, increasing gas extraction to 100 bcm (Prokopenko 2015). Moreover, Rosneft considers the niche of gas engine fuels as highly attractive market for the future. Another independent natural gas producer – Novatek – in its 'Strategy' will focus on increasing its competitive position through optimization and expansion of existing and the formation of new channels for the sale of products, including access to the international LNG market. Therefore, the company has determined for itself the type of industry to develop and has taken under control the distribution in the regions, where it has production facilities.

Regarding the gas exchange, it was assumed that Gazprom and independent producers would trade gas on the exchange on parity terms. Last year the volume of gas trading on the exchange doubled

from 7.7 bcm of gas in 2015 to 16.8 bcm in 2016 (Rodionov 2017). However, in the end of 2016, the share of Gazprom on the exchange reached 99% what makes it hard to call the exchange a real competitive market. The current platform is a form of concluding transactions between Gazprom and its subsidiaries at non-regulated prices. Rosneft and Novatek are still trading through direct contracts and do not retain natural gas for sale through the exchange. One of the reasons for the absence of interest from independent companies is that they are new players on the domestic gas market and participate in high-risk projects, where long-term contracts are prioritized. The launch of trades should lead to the appearance of a price indicator that market participants could use after liberalizing gas prices for 2018. To date, the exchange has not become such an indicator.

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