

# ISSUE BRIEF **06.29.20**

## The Future of Russian Gas: A Tale of Two Cities

Anna Mikulska, Ph.D., Nonresident Fellow, Center for Energy Studies

Pawel Jakubowski, Independent Energy Expert

*"It was the best of times, it was the worst of times ..."*

—Charles Dickens

We usually talk about Russian gas exports as if they were homogenous. But while such an assumption would have been quite accurate in the past, the emergence of liquified natural gas (LNG) exports changes the picture. The state-owned giant, Gazprom, while maintaining a monopoly over pipeline exports, has given way to Novatek when it comes to exports of LNG. Novatek, a private company, has been so successful that one could argue that it is now competition for Gazprom—literally, as it is part of the LNG influx to Europe that is competing with Gazprom's piped gas, and symbolically, as LNG has become a key element of Russia's 2035 energy strategy agenda. In this brief, we argue that these changes point to a bifurcation of Russian gas policy—a new strategy where Gazprom and Novatek follow different operating rules, allowing Russia to adjust to a changing natural gas market. In this context, they are not true competitors, though they may at times vie for gas delivery to the same consumer. But while Novatek is set up to behave like a typical competitive market participant, Gazprom's role is more complicated and includes geopolitical as well as domestic considerations. The company's strong position is supported by its continuing monopoly over pipeline exports, ownership of a majority of Russian gas reserves, and ownership of Russia's entire gas supply system (Unified Gas Supply System, or UGSS).

### IS THERE REALLY NO RUSSIA WITHOUT GAZPROM?<sup>1</sup>

Gazprom is a vertically integrated entity. It was extricated in 1988 from Russia's Ministry of the Gas Industry, and since 1992 it has operated as a joint stock entity; the Russian state controls the majority of Gazprom stock. The company's role is expansive, as it includes both domestic gas sales as well as gas exports. Even though Gazprom is a dominant gas provider in the domestic market, it still needs to compete for market share. This is especially difficult as the company must abide by minimum and maximum gas tariffs and serves as a supplier of last resort when payment and/or other issues arise. This arrangement has resulted in Gazprom losing its domestic market share in recent years: in 2016, Gazprom supplied approximately 66% of the Russian market, a 14% drop when compared to 2008. However, a dramatic drop from current levels is rather unlikely, as Gazprom owns the majority of Russian gas reserves as well as the entire Russian system of production, processing, transmission, and storage, known as the United Gas Supply System (UGSS).

Gazprom's total production of gas in 2018 stood at 725 billion cubic meters (bcm), a record high over the previous two decades and second only to total U.S. production that year. Of this amount, the company exported only 245 bcm, which points to the size of Russia's domestic market obligation. However, given



**Changes in Russian natural gas policy point to its bifurcation—a new strategy where Gazprom and Novatek follow different operating rules, allowing Russia to adjust to a changing natural gas market.**

**In 2020, the more flexible contracts meant for Gazprom much lower sales, as low demand made spot prices increasingly competitive. In general, in 2020 Gazprom expects that its sales to Europe will fall by approximately 16% to about 166 bcm, from 199.2 bcm in 2019. To add to the difficult situation, prices will also fall.**

Gazprom's societal obligations, exports—which are priced much higher—constitute a better income opportunity. Even so, most of the company's income is generated from oil reserves, condensate, refined products, electricity, and heating sales. While domestically, Gazprom's societal obligations are a drag on the company's profitability, gas exports—when feasible—have often been treated by Russia as a tool of geopolitical meddling and dominance.

Most recently, this strategy has been put to a test, as natural gas markets have deepened and diversified thanks to an abundance of natural gas, the expansion of LNG trade, and efforts by importing nations to diversify natural gas suppliers. In effect, Gazprom's contracts have been adjusted and become much more flexible, with more affordable and increasingly hub-linked prices.

In 2020, the more flexible contracts meant for Gazprom much lower sales, as low demand made spot prices increasingly competitive. In general, in 2020 Gazprom expects that its sales to Europe will fall by approximately 16% to about 166 bcm, from 199.2 bcm in 2019. To add to the difficult situation, prices will also fall. Alexander Ivannikov, the company's chief financial officer, has said that in Europe this means a drop from approximately \$211 per 1,000 cubic meters in 2019 to \$133 in 2020. This will follow the fall in profits Gazprom experienced from 2018 to 2019, when they dropped from 1.46 trillion rubles in 2018 to 1.2 trillion rubles (approx. \$16.3 billion) in 2019.<sup>2</sup>

Gazprom is also being haunted by Nord Stream 2 (NS2), the pipeline the company has almost completed building; it was to transport gas directly to the EU (i.e., Germany) and avoid a contentious Ukrainian transit.<sup>3</sup> Just before the pipeline's completion, construction came to a halt as the U.S. imposed sanctions on pipeline laying vessels and Allseas, the company that Gazprom contracted to lay the pipeline, backed out of the project. To continue construction, Russia has brought its own pipeline laying vessel, the Akademik Cherskiy, and expects a delay of several months to a year.<sup>4</sup> But even when the pipeline is completed, the future of NS2 is uncertain, as the EU now requires that all

pipelines entering its territory conform to the principle of unbundling separate ownership of gas transmission and the commodity. Given that Gazprom was just denied an exemption from the requirement and has lost two lawsuits in the matter,<sup>5</sup> it may need to consider options for separating the pipeline's ownership, operatorship, and gas ownership. This could mean further delays as well as additional costs for what is already a very expensive project.<sup>6</sup>

Luckily for Gazprom, its other pipeline project—the Turkstream—was completed before the U.S. sanctions took effect. That being said, the pipeline has not performed well in its first months of operation. Sales volumes have been affected by the severe downturn in European gas demand related to two consecutive warm winters and the Covid-19 pandemic, as well as by the wide availability of large volumes of cheap spot LNG cargos. Similarly, “mediocre” describes the performance of the Power of Siberia (PoS) pipeline, another of Gazprom's major projects scheduled for and delivered in 2019. PoS began delivery of Russian gas to China in December 2019, but the gas stopped flowing in the early months of 2020 when China faced lockdowns due to the coronavirus pandemic and the pipeline underwent scheduled maintenance.<sup>7</sup>

Gazprom's activity goes beyond pipeline gas transfers. To increase its presence in the European market, Gazprom has also been involved in mid-stream and down-stream activities in several European companies, including retail LNG and CNG sales. Gazprom has access to underground gas storage (UGS) facilities in Germany and operates 49 CNG filling stations. Until recently, Gazprom Germania was also supplying LNG for a Warsaw public bus fleet.<sup>8</sup>

Gazprom is also Russia's first LNG producer. Since 2009, the company has operated Sakhalin 2, which is a source of LNG supplies to the Asia-Pacific region. It also built and operates an LNG-receiving floating terminal and regasification unit (FSRU), a domestic undertaking that brings Russian gas to the Kaliningrad region, a Russian enclave locked between Poland, Lithuania, and the Baltic Sea.<sup>9</sup>

## THE NEW KID ON THE BLOCK: NOVATEK

Novatek is Russia's largest independent gas producer. The company started in 1994 as Novafininvest, an open joint stock company, and began its commercial production of gas in 1998. It has been active in Russia's domestic market. In 2003, the company started operating under its current name; between 2004 and 2005, it consolidated its interest around natural gas and ended its interest in, among other areas, banking and oil production. Novatek has been a strong domestic producer, but the true breakthrough came in 2013 when the Russian government limited Gazprom's monopoly over gas exports by allowing Novatek and Rosneft to export LNG. Since then, Novatek has become an important LNG player. In 2017 the company began operations of its first LNG train on the Yamal Peninsula (Yamal LNG). The plant reached a total capacity of 16.5 million tons (mt) of production by the end of 2018. The project was completed on time despite the headwinds it met due to U.S. sanctions on Russia following the latter's invasion of Ukraine. Though technology transfer and project financing became more challenging, Novatek was able to ensure both, thanks to a collaboration with European and Chinese partners. This included the expertise of the French company Total, which took 20% of the project's equity. Chinese partners also secured a stake in Yamal LNG; CNPC had a 20% stake and a 9.9% stake in the Silk Road Fund.<sup>10</sup> In addition, CNPC committed itself contractually to buy 3 million tonnes per annum (mtpa) of LNG from the project, while the Silk Road Fund catalyzed lending from a Chinese bank to the tune of \$12 billion.<sup>11</sup> The Yamal LNG project is widely seen as very successful, even exceeding its design capacity of 16.5 mt per annum by 1.9 mt. In February 2020 the company announced that since Yamal LNG began operations in 2017, it had shipped 30 million tons of LNG and loaded 411 cargoes.<sup>12</sup>

Novatek is currently in the process of developing its second LNG project, Arctic LNG-2, and has adopted an ownership

structure similar to Yamal LNG's: Novatek holds a 60% stake, with Total and China's CNPC and CNOPC each holding 10%. This time, a Japanese consortium of Mitsui and Jgmecc also joined the partnership, acquiring a 10% stake. In April 2020, Novatek was reported to be ahead of schedule on construction. According to the plan, the project's first train should open at the end of 2022, with second and third production trains opening in 2024 and 2026 for a total capacity of 19.8 mtpa.<sup>13</sup> Additional projects are also planned. An investment decision on Ob LNG with 5 mt could be made in early 2020, and Arctic LNG 1 and 3 investments could follow in the second half of the year. The company's strategy announced in 2017 was that by 2030, it would have a global reach with about 70 mt of capacity, close to the current production of Qatar, the world's top LNG producer.

In addition to large LNG projects, Novatek also engages in other endeavors that can help the company's LNG business along the way. This, for example, includes construction of transshipment hubs near Murmansk and on the Kamchatka peninsula (with Japan's Mitsui and JBIC) to replace the ship-to-ship transshipment currently performed in Norwegian waters, where it partners with the Norwegian firm Tschudi. In Europe—on the basis of a 20-year agreement with the Belgian firm, Fluxys—Novatek has a dedicated LNG transshipment tank (180,000 cubic meter capacity) in the Zeebrugge LNG terminal, built specifically to fit Yamal LNG's needs of 8 million tons of LNG per year.<sup>14</sup> Both companies have also signed an agreement to cooperate in developing small-scale LNG in Europe.<sup>15</sup> Novatek hopes to pursue similar goals in collaboration with German LNG bunker supplier Nauticor as part of the development of small-scale LNG in the Baltic Sea.<sup>16</sup>

While Novatek has been an extremely successful private company, its success cannot be completely divorced from the Russian state. The company has clearly benefited from the Russian government's investment in its success. This includes exempting Novatek from export duties and taxes on mining and property, and reducing the company's income tax rate

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from 20% to 13.5%.<sup>17</sup> In addition, the Russian government undertook the buildup of Arctic infrastructure as part of its “Pivot to Asia” along the Northern Sea route. The initiative hopes to develop the Arctic as a trade route to and from China, and includes expansive infrastructure in the port of Sabetta, which is critical for the Arctic LNG project.<sup>18</sup> Russia has also been very active in maintaining and building up its icebreaker fleet to assist Novatek (and others on the Arctic route) with Asian trade opportunities year-round rather than only in the summer.<sup>19</sup>

### GAZPROM, NOVATEK, AND RUSSIA'S ENERGY STRATEGY

In April 2020, President Vladimir Putin approved Russia's Energy Strategy to 2035 (ES-2035). The document was first submitted in 2015 but its approval was constantly postponed. The approved version was last updated in October 2019. It comes as no surprise that the basic assumption of the strategy is Russia's continued position as world's largest exporter of fossil fuels. From the perspective of this document, the strategy points to two important elements. First, it sees LNG as the growth engine of Russian natural gas, contributing to 70% of Russian gas export growth, and reaching between 46 and 65 mtpa by 2024 and between 80 and 140 mtpa by 2035. Since Novatek is currently at the center of all major Russian LNG projects, this points to the importance that the state assigns to the company's activities. Second, Gazprom remains central to Russia's natural gas sector, as the strategy upholds the company's pipeline export monopoly and mentions nothing about any potential unbundling. This underscores Gazprom's dominant position not only as a gas producer but also as an owner of Russia's entire transmission network and storage (UGSS). This is in the face of issues that NS2 currently experiences with regard to the EU law that requires unbundling, i.e., “separating energy supply and generation from operation of transmission network.”<sup>20</sup>

### WHAT DOES THIS MEAN FOR OUR CONSIDERATION OF THE GAZPROM-NOVATEK RELATIONSHIP?

To begin, it must be noted that Russia's energy strategy was approved during the Covid-19 pandemic, which by literally all accounts is likely to alter the path of global economic development, at least in the short term. Meanwhile, the strategy was last updated in October 2019, long before the world became aware of Covid-19's expansive reach. Under these circumstances, it seems that a document that Russia had waited since 2015 to approve could have waited another several months as the state made adjustments in light of significant changes not only in Russia but also in the world's economic conditions. One can thus wonder how seriously Russia treats this strategy in terms of prescriptiveness.

Second, the strategy indicates a very clear distinction in the natural gas market, between Novatek as a leader in LNG development and Gazprom continuing as Russia's dominant producer, preserving its domestic role by maintaining ownership of UGSS. This distinction could be seen early on, as the Russian state was happy to support Novatek's LNG ventures but unwilling to offer similar support to Gazprom's Arctic LNG project at Shtokman.<sup>21</sup> At the same time, the Russian state was ready to underwrite Gazprom's Power of Siberia, a \$55 bn pipeline project, and even exempted the project from mineral extraction and property taxes. Russia even has plans for Power of Siberia 2 (PoS2).

There is a definite division of labor between Gazprom and Novatek in Russia's energy strategy. Novatek is the nimbler, more “hip” company that is formally unrelated to the Russian state. A private actor, Novatek also inspires more trust among other international companies. As a result, Novatek has a growing number of collaborations in Europe, and possibly beyond going forward. This contrasts with Gazprom's domestic obligations, obvious state backing, and inability to avoid the distrust that many companies (and governments) have for the Russian state.

In an increasingly deep and liquid natural gas market, Gazprom's position is highly problematic. But Russia seems unwilling to compromise, particularly since—despite strong headwinds in Europe—it is keeping Gazprom as the sole owner of UGSS. Novatek, on the other hand, can be a partner to other market players like any other private company. Also, the company's ability to deliver projects on or even before schedule and the efficiency of its operations encourage a trust and willingness, if not a desire, to collaborate. However, it cannot be overlooked that the Russian government is very much invested in Novatek's success. In the current environment, Novatek's current structure matches Russia's needs but, as Yukos learned, a private company can be transformed into a state-owned one in Russia relatively quickly.<sup>22</sup> As a partner to a Russian company, on the other hand, Shell has learned from its involvement in the Sakhalin-2 LNG project that a majority stake in the project can be reduced by a decision from the top, allowing a Russian entity to take over.<sup>23</sup>

It is true that under the current scenario, Gazprom and Novatek may at some point compete for customers, which could result in a cannibalization of Russia's gas profits. In fact, during the Covid-19 pandemic, low-priced LNG cargos (including Novatek's) have pushed a sizable amount of Gazprom's piped gas out of the market.<sup>24</sup> But this would have happened anyway, even if Novatek did not own any of those LNG volumes. Russia's energy strategy indicates that it recognizes that some of the market traditionally held by Gazprom may be taken over, permanently or at times, by LNG suppliers. And hence, it is to Russia's benefit that this LNG comes from Russia.

Looking beyond Russia's interest in European gas market, it is quite clear that Russia has a keen interest in becoming part of the Asian supply chain. Both Gazprom and Novatek are increasingly geared toward collaborating with and delivering to China. The direction is well justified, given that the European gas market is unlikely to grow in a significant manner and has diversified and become more liquid. This situation introduces increasing volumes of non-Russian gas, particularly at times when spot

gas can compete on price. In contrast, the Asian gas market is set to grow significantly for the next several decades, which justifies investments in costly infrastructure such as pipelines and Arctic LNG terminals, ports, and routes. The new Russian infrastructure to supply the Asian market should be considered a long-term investment. Russia is also trying to establish more price arbitrage for its gas by pushing for projects such as the Power of Siberia 2 pipeline that, if built, could deliver Russian gas to China from gas fields that are currently a supply source for Europe only.<sup>25</sup>

In Europe, Novatek should be considered as more of a complementary—rather than competitive—entity to Gazprom that serves to maintain Russia's share of gas in the European market. Novatek's position as a newcomer from the “Russian team” completes its adaptive process within a more liquid and competitive gas market in the EU, where LNG has an increasingly significant role. The current pandemic shows without a doubt that LNG infrastructure can provide access to supplies that are cheaper than Russian gas, not only for the EU but also for major non-EU gas importers such as Turkey.<sup>26</sup>

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### WHAT ABOUT THE IMPACT OF THE COVID-19 PANDEMIC?

It is still hard to make any predictions about the impact of the coronavirus on any economy, let alone on the global scale. Hence, a high level of uncertainty exists when it comes to short-term demand for energy, including oil and gas, with the prices of both dropping to record lows. For now, we see even large and established oil and gas companies aggressively slashing their capital expenditures. New projects are being delayed, if not entirely cancelled.<sup>27</sup> Novatek has also announced 20% cuts to 2020 investments, but these are not supposed to affect its LNG business or global expansion. This decision corresponds with Russia's Energy Strategy 2035—and makes one wonder whether the Russian state will continue to support Novatek as it weathers the post-Covid-19 downturn and potentially

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grows into a serious international LNG competitor afterward. All of this comes at a time when U.S., Australian, and/or even Qatari LNG projects face delays and cancellations. It is unlikely that Novatek would be able to commit to high levels of investment were it not aware of the Russian state's high level of commitment toward LNG expansion. The same support allows Gazprom to look into the next set of very expensive pipeline projects that would bring Russian gas to China via Mongolia (PoS2). Of course, we still do not know how much economic hardship Covid-19 will impose on the Russian state itself and what state resources will be available to support Russian gas ventures. Low demand and low oil and gas prices will seriously impact Russia's budget, of which approximately 50% has previously come from oil- and gas-related income. At the same time, the government will need to attend to more societal and economic needs as it tries to revitalize the post-Covid-19 economy.

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## AUTHORS

**Anna Mikulska, Ph.D.**, is a nonresident fellow for the [Center for Energy Studies](#) at the Baker Institute for Public Policy and a senior fellow at the Kleinman Center for Energy Policy and the Foreign Policy Research Institute.

**Pawel Jakubowski**, is an energy expert and former CEO of Polskie LNG S.A. in Poland. He is also a former board member of the European Network of Transmission System Operators for Gas (ENTSOG).

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