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## *A Conflicting Interdependence: the Gazprom - Europe Relationship*

### **Abstract**

Since its emergence, the relationship between Gazprom and Europe has proved a remarkable resilience that is not usually highlighted. The geopolitical standoffs that Brussels and Moscow have starred in on many occasions have had a limited impact on the volume of shipments. These have maintained a steady upward trend until 2018. Western sanctions have not targeted Gazprom directly and the company has been considerably less affected than others have. Both parties have understood that their mutual dependence compels them to reach understandings despite traditional major disagreements regarding the duration, model or clauses of contracts. Nevertheless, the Russian invasion of Ukraine and, especially, the high gas prices that Europe has had to face this winter, have led to a mutual loss of confidence and a desire to initiate a process of decoupling. Russia begins to look to Asia as an alternative market given the probable loss of European clients, and Europe, in the midst of a crucial debate on its energy security, now considers a need to diversify its gas sources. Both will encounter limitations.

### **Keywords**

Conflict, energy, Europe, gas, Gazprom, Russia.

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## The current situation in the context of mutual dependence

On 3 March 2022, European Energy Commissioner Kadri Simson told the European Parliament's Industry Committee that the invasion of Ukraine had made clear the need not allow any outside actors to have the power to destabilise European markets or influence our energy choices, a clear reference to Russia<sup>1</sup>. The same evening, the International Energy Agency (IEA) published a 10-point roadmap to reduce the EU's dependence on Russian gas<sup>2</sup>. Just a few weeks later, these objectives were reflected in press releases following meetings at the highest level, such as the informal Versailles summit or the European Council of 24-25 March.

Reducing dependence on Russian gas is a recurrent debate on the EU agenda, now accelerated by the invasion of Ukraine. It has been tackled for years with relatively little success: Russian gas imports grew from 141 US billion cubic metres (bcm) (1 billion cubic metres) in 2009 to 199 bcm in 2019, including a peak above 200 bcm in 2018<sup>3</sup>. Then came COVID-19, which has altered and continues to alter supply-demand relations in the energy market, and, in recent months, the Russian invasion of Ukraine, which has highlighted the central role of energy in foreign and security policy and brought the issue back to the centre of EU policy.

Based on 2020 data, Europe consumes 541 bcm of gas, of which 218 bcm is produced domestically<sup>4</sup>. A further 114.8 bcm is imported in the form of liquefied natural gas (LNG), of which 17.2 bcm comes from Russia, and the remaining 211.3 bcm by pipeline. Of the latter, 167.7 bcm originated in Russia<sup>5</sup>. This means that around 34% of the gas consumed in Europe in 2020 (around 185 bcm) originated in the Russian Federation, with 90% of this being pipeline-chartered. The instrument through which Moscow channels its pipeline exports is the state-owned Gazprom, which has held a *de facto* monopoly over gas exports since its incorporation in 1993, when it emerged from the ashes of the former Soviet Ministry for the Gas Industry. Since 2006, it has

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1 European Commission. (2022). Remarks of Kadri Simson as part of the Industry Committee of the European Parliament on the energy situation in Europe. 03/03/2022. Taken from European Commission. [https://ec.europa.eu/commission/presscorner/detail/en/SPEECH\\_22\\_1525](https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_1525)

2 IEA. (2022). A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas. Taken from IEA, International Energy Agency. <https://iea.blob.core.windows.net/assets/1af70a5f-9059-47b4-a2dd-1b479918f3cb/A10-PointPlanToReduceTheEuropeanUnionsRelianceonRussianNaturalGas.pdf>

3 Aslund, A., Fisher, S. (2020). New challenges and dwindling returns for Russia's national champions, Gazprom and Rosneft. Atlantic Council. P. 4. Taken from: <https://www.atlanticcouncil.org/in-depth-research-reports/report/new-challenges-and-dwindling-returns-for-russias-national-champions-gazprom-and-rosneft/>

4 BP. (2022). Statistical Review of World Energy 2021. Taken from BP, British Petroleum. Pp. 36-38. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

5 Ibid., pp. 44-45.

done so under a federal law that protects its position as the only entity entitled to export through the Russian pipeline network. Gazprom, like Rosneft in the oil sector, represents a trend of state control over certain strategic raw materials (resource nationalism or energy nationalism), such as hydrocarbons, which spread globally in the 1990s. It is also observed in other geographies, such as Algeria and, above all, Latin America (Venezuela, Bolivia and Argentina).

This need for Russian gas has traditionally been one of the continent's Achilles' heels. However, a look at Gazprom's figures shows that the dependence is mutual: in 2020, over 90% of the company's total exports, which amounted to some 180 bcm<sup>6</sup>, went to Europe. Moreover, Europe is the only profitable market for Gazprom: in Russia, Gazprom is forced by the government to sell its gas at very low prices (in return, it is guaranteed a monopoly on pipeline exports), and in Asia, shipment volumes are still very low and dividends will take years to compensate for the relatively recent high initial investment. Its presence in the former Soviet republics is also limited, with export volumes barely exceeding 30 bcm in 2020, almost all of which went to Belarus and Ukraine, also located in Europe<sup>7</sup>. In fact, the Centre for Strategic Studies in The Hague points out that Russia's dependence on Europe as a market for its gas is greater than Europe's dependence on Russia as a gas producer<sup>8</sup>. Gazprom, the largest contributor to Russia's public coffers, would be unviable today without its European customers.

The relationship between Gazprom and the European peninsula must be understood within this framework of mutual dependence that has made it one of the great stabilising forces in Eurasian politics in recent decades. It has been a close, relatively stable relationship and, with hindsight, oblivious to the diplomatic ups and downs between Moscow and the West: neither the fall of the Berlin Wall and the subsequent collapse of the Soviet Union, nor the two NATO interventions in the former Yugoslavia put a brake on the continued growth of Gazprom's presence in Europe. Between 1985 and 1995, exports increased from 69.4 bcm to 117.4 bcm, and in the five years up to the turn of the century, they grew to 129 bcm<sup>9</sup>. This has continued to the present day, with occasional episodes of disruption when Russia has sought to take advantage of this mutual dependence and put pressure on Europe in various domains, most notably on issues relating to Ukraine in 2014 and 2015. From these acts, and the delib-

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6 GAZPROM. (2021). Growth at Scale: Gazprom Annual Review 2020. Taken from Gazprom. P. I. <https://www.gazprom.com/f/posts/13/041777/gazprom-annual-report-2020-en.pdf>.

Information Note: Following the Russian invasion of Ukraine, links to documents from Gazprom or other Russian authorities may not be operational.

7 Ibid., p. 125.

8 Van den Beukel, J., Van Geuns, L. (January 2021). Russia's Unsustainable Business Model: Going All In on Oil and Gas. The Hague Centre for Strategic Studies (HCSS). P. 18. Taken from: <https://hcss.nl/wp-content/uploads/2021/01/Russias-Unsustainable-Business-Model.pdf>

9 Stern, J. (n.d.). Natural Gas in Europe – The Importance of Russia. Centrex. P. 13. Taken from: [http://www.centrex.at/en/files/study\\_stern\\_e.pdf](http://www.centrex.at/en/files/study_stern_e.pdf)

erate draining of European reserves in the months leading up to the winter of 2022, as mentioned below, stems the current European distrust of Gazprom. Disruptions by way of blackmail, as they are difficult to bear in any energy relationship, have been a tool of restricted use, limited to situations where Russia understood that vital interests were at stake and with a very limited impact on Europe as a whole. They have not interrupted the upward trend in shipments over the years. Fears that Russia would cut off gas supplies abruptly and on a large scale did not materialise in 2014. As of 1 June 2022, neither have they done so after this year's invasion, although interruptions of supply to individual countries (Poland or Finland) can be observed, illustrating the exceptional nature of the current tensions.

However, during these last decades of increasing estrangement between the West and Russia, the energy link has only grown to reach the highs of 2018. Over the decades, gas has remained an inescapable component of Europe's particular "ostpolitik", if it can be called such. The timing of the arrival of the first Russian gas shipments to Europe provides another illustration of the pragmatism that has dominated the relationship. They went to Austria back in 1968, only months after the Soviet tanks rolled into Prague. However, Russia's 2022 invasion of Ukraine seems to have accelerated Europe's desire to end a marriage in which it is not comfortable. Nikos Tsafos, one of Washington's leading analysts on energy issues, speaks of an inevitable divorce<sup>10</sup>. The other side of interdependence between actors is beginning to emerge, one that generates conflict and instability rather than an incentive to mitigate escalation.

Commissioner Simson's statements and the action points set out by the IEA represent Brussels' dissatisfaction. The proposed courses of action have been greeted with enthusiasm by leading analysts<sup>11</sup>, who see Europe finally deciding to reduce its vulnerability to one of the Kremlin's most potentially effective geopolitical weapons. Others are more sceptical. Days after its publication, Energy Intelligence (a US group) published a document in which the following can be read: "Any move to cut off or severely restrict Russian gas supplies, or to push Russia to turn off the tap, should be considered only with a clear understanding that there is no natural gas alternative for Europe" (own translation)<sup>12</sup>. A similar line is taken by the investment bank Natixis, which in a study on the economic impact of the invasion of Ukraine states that "Russia's natural gas exports to Europe cannot be replaced immediately" (own translation)<sup>13</sup>.

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<sup>10</sup> Tsafos, N. (2022). A Europe-Russia Energy Divorce Begins. Center for Strategic & International Studies (CSIS). 1/3/2022. Taken from: <https://www.csis.org/analysis/europe-russia-energy-divorce-begins>

<sup>11</sup> Gordon, N. (2022). Three Reasons The EU's Shift Away From Russian Gas Could Be Catalytic. Carnegie Endowment for International Peace. 10/3/2022. Taken from: <https://carnegieendowment.org/2022/03/10/three-reasons-eu-s-shift-away-from-russian-gas-could-be-catalytic-pub-86602>

<sup>12</sup> Miller, S. (2022). LNG Can't Replace Russian Gas. Energy Intelligence. 7/3/2022. Taken from: <https://www.energyintel.com/0000017f-637f-d86c-a3ff-6b7fd42b0000>

<sup>13</sup> Natixis. (2022). Ukraine Crisis Impact. 25/2/2022. Taken from Natixis. P. 9. [https://home.cib.natixis.com/api-website-feature/files/download/12209/cross-expertise\\_research\\_ukraine\\_en\\_fevrier\\_2022\\_final\\_draft.pdf](https://home.cib.natixis.com/api-website-feature/files/download/12209/cross-expertise_research_ukraine_en_fevrier_2022_final_draft.pdf)

This scenario is the starting point for this analysis, which, while not intended to settle the feasibility of energy alternatives to Russian gas, seeks to broaden the scope and provide context to the current debate around a likely energy decoupling between Europe and Gazprom.

### The future of Natural Gas: conflicting views

The current situation is not the most appropriate time to analyse the future of natural gas. The world is still far from determining what role it will play both in the energy transition and in a future with decarbonised economies. It is also unclear how fast this metamorphosis will take place in different geographies across the globe. We can group the prevailing views on the future role of gas into two main blocs and, allowing ourselves a simplification, personify them in the positions of the IEA, an agency of the Organisation for Economic Cooperation and Development (OECD), on the one hand, and the Gas Exporting Countries Forum (GECF), under Russian leadership, on the other.

The countries that make up the latter made their vision clear with a joint statement on 22 February, in which they commit to “promote natural gas as an abundant, affordable, clean and reliable energy source and fuel of choice to meet the world’s growing energy needs, and to address climate change” (own translation)<sup>14</sup>. Gas is seen as a fuel with a space in the future energy matrix, given its potential to replace more polluting fuels (oil and coal), and its role as an indispensable complement to renewables in the electricity sector. For its part, the IEA emphasises climate urgencies and the need to reduce the weight of hydrocarbons in future world energy matrices. In May 2021, it published a “Roadmap for the global energy sector”, in which it states that there is no need to approve more hydrocarbon projects in the future<sup>15</sup>.

For the IEA, the GEFC is a lobby with obvious interests in maintaining the privileged position of gas in energy markets. For the GECF, the IEA is an EU think tank with no political responsibilities to make realistic calculations. Neither of them is wrong, and this is likely to be the main “gas debate” in the coming decades, but not the only one.

The COVID-19 pandemic has re-launched a struggle that has been years in the making, the so-called gas-to-gas competition, in which LNG seeks to gain market

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<sup>14</sup> Gas Exporting Countries Forum. (2022). 6th GECF Summit: The Doha Declaration – Natural Gas: Shaping the Energy Future. 22/02/2022. Taken from Gas Exporting Countries Forum (GECF): <https://www.gecf.org/events/6th-gecf-summit-the-doha-declaration--natural-gas-shaping-the-energy-future>

<sup>15</sup> IEA. (2021). Net Zero by 2050: A Roadmap for the Global Energy Sector. Taken from IEA, International Energy Agency. P. 21. [https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9doc-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector\\_CORR.pdf](https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9doc-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf)

share over pipelines. Europe will be where this competition takes place. Other markets, especially in Asia, still have room for growth in the consumption of both goods. This is not the case in Europe: gas demand is forecast to remain stable in the medium term<sup>16</sup>, so an increase in LNG consumption should be to the detriment of pipeline shipments. This struggle has already passed a first milestone on the European continent. In January 2022, European imports of US gas (all LNG) exceeded the quantities imported from Russia via pipelines. This historic overtaking should be understood as temporary, far from being sustainable for long periods of time. It has been possible given the reduction of Russian shipments to the contractually stipulated minimum, and LNG infrastructure is far from being in place to move quantities of gas between the US and Europe similar to the amount Russia charters during “normal” periods.

The third major debate on gas models has been going on longer than the two previous ones. It dates back to the early days of the use of gas as a fuel and, to this day, still generates discord among its most important stakeholders. It deserves its own section.

## Contractual design

### *The Groningen model versus the “Chicago school”.*

The development of the first gas fields in Europe in the 1960s, in Groningen, entailed a considerable investment that private stakeholders were only willing to take on after receiving guarantees from the Dutch government for the purchase of the gas produced during the following years. This quest to secure product placement and pricing in advance resulted in a medium- to long-term contractual model that has guided the development of the European gas market. It has made unmanageable factors, such as volatility in supply and demand, manageable, and has thus provided a cushion of stability for companies to undertake the massive investments required by the gas sector.

In addition, buyers began to introduce the idea of linking the price of gas to the price of oil products, especially fuel oil and diesel, in order to guarantee the competitiveness of gas against other hydrocarbons. When the gas trade relationship with the Soviet Union began years later, this was the model that was exported.

Different dynamics drove the growth of the sector in the United States. There, its development coincided with the expansion of the market ideals of the Chicago School, which advocated an exchange of goods based on supply and demand under which both consumer and seller could optimise their decisions thanks to the flexibility it provided. Long-term contracts, also in the hydrocarbon sector, were seen as a hindrance that distorted the optimal functioning of the market, especially when they

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<sup>16</sup> IEA. (2021). *World Energy Outlook 2021*. Taken from IEA, International Energy Agency. P. 226. <https://iea.blob.core.windows.net/assets/4ed140c1-c3f3-4fd9-acae-789a4e14a23c/WorldEnergyOutlook2021.pdf>

were dependent on the price of other commodities. This resulted in a model dominated by short-term or even “spot” contracts<sup>17</sup>, which allowed for greater competitiveness at the cost of much less close and stable buyer-seller relationships.

In the 1980s, Margaret Thatcher’s government was attracted by the dynamism generated by this framework and gradually began to replicate it in Europe. The UK’s position as one of the continent’s leading gas producers gave it considerable leverage and, over the years, it has managed to convince Brussels of the benefits of moving to a more liquid model. Today it is the Russians, led by Gazprom, who are the main proponents of the Groningen doctrine after decades of trading with their European neighbour under this umbrella of stability. Brussels is seeking to reduce the ties that this creates for it.

### *Current transition process: first manifestations of Europe’s dissatisfaction with its gas relationship with Russia*

Disagreements between Brussels and Moscow over the most appropriate contractual framework persist to this day. Gazprom says in its 2020 annual report that one of the group’s priorities is to maintain long-term contracts as the basis for its exports<sup>18</sup>. On the contrary, the European Commission proposed in December 2021 to recommend to the Member States not to sign long-term contracts with a duration beyond 2049, demonstrating a change of position that it had already shown in previous years.

Due to the lack of transparency that usually surrounds these contracts, it is difficult to determine the exact point at which this transition to a more flexible market will take place. Estimates differ considerably. Reuters estimates that, in the LNG market, long-term contracts still account for over 70% globally, but around 50% in Europe<sup>19</sup>. For its part, Gazprom reports a similar proportion worldwide, but increases it to 70% on the European continent<sup>20</sup>. In addition, LNG, which accounts for all spot sales, still constitutes a minority share of the total gas market, so that the share of long-term contracts is even higher in the gas sector as a whole. The values in the range allow us to state that, despite the wishes of the European Commission, the reduction of long-

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<sup>17</sup> Spot market, where any asset is bought or sold with immediate delivery (or within a short period of time) and at the current market price.

<sup>18</sup> GAZPROM. (2021). Growth at Scale: Gazprom Annual Review 2020. Taken from Gazprom. P. 123. <https://www.gazprom.com/f/posts/13/041777/gazprom-annual-report-2020-en.pdf>

<sup>19</sup> Rashad, M. (2022). Explainer: Should Europe use more long-term LNG contracts? Reuters. 7/2/2022. Taken from: <https://www.reuters.com/business/energy/should-europe-use-more-long-term-lng-contracts-2022-02-07/>

<sup>20</sup> Komlev, S. (2021). Evolution of Russian Gas Supply to Europe: Contracts and Prices. Ministry of Energy of the Russian Federation (MINERGO). 23/4/2021. P. 6. Taken from MINERGO: <https://minenergo.gov.ru/system/download/14646/158148>

term contracts is still at an embryonic stage. In fact, Gazprom notes that the percentage of sales made under these contracts has grown in recent years<sup>21</sup>.

In addition to this limited transition to spot purchases, the mechanism used by the EU to move towards a more flexible, supply- and demand-driven model for gas has been the reduction of contracts linked to oil derivatives. In 2005, three out of four existing contracts between Member States and Gazprom included such a link. In 2019, that proportion was less than one in four<sup>22</sup>. Now, the EU itself and many of its Member States prefer a link to the price set by different gas indices or hubs. This is another element imported from the US, made possible by the existence of a spot market, small though it still is, which constantly updates gas prices according to supply and demand, similar to stock exchanges. Europe's rationale for changing the link is simple: by not reflecting fundamental gas supply and demand dynamics, contracts linked to the price of oil derivatives prevent European consumers from taking advantage of periods of abundant supply. This problem became particularly apparent after the shale gas revolution during the first decade of the 20<sup>th</sup> century. The development in the US of new drilling techniques (fracking), as well as new extraction technology that allowed gas trapped in sedimentary formations to be extracted, significantly increased US production (from 489 bcm in 2005 to 740 bcm in 2015<sup>23</sup>) and, consequently, global production. US gas prices fell to their lowest level since the 1970s crisis. Europe was not able to take advantage of this injection of supply into the global market and, in the years leading up to 2010, saw natural gas prices rise by almost 50%, reaching values six times higher than those in the US, even though both started from very similar levels in 2008<sup>24</sup>. Moreover, unconventional shale gas extraction remains a process that generates considerable opposition due to its high environmental impact. Explorations were initially carried out in Europe, raising expectations that have never materialised. Nowadays, European governments remain reluctant to bear the environmental cost of using their shale gas reserves and many have banned fracking, including Spain.

On the contrary, in periods such as the current one of growing demand and relative shortage of gas supply, the link to oil derivatives acts as the main regulating element for upward gas price fluctuations. The IEA says that Member States will pay around 27 billion euros more in 2021 than if they had kept the old link model<sup>25</sup>. If the change had already taken place across all contracts, the cost overrun would have been even higher.

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<sup>21</sup> Ibid.

<sup>22</sup> Ibid., p. 8.

<sup>23</sup> BP. (2022). Statistical Review of World Energy 1965-2020. Taken from BP, British Petroleum: <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>

<sup>24</sup> European Parliament. The Shale gas 'revolution' in United States: Global implications, options for the EU. P. 7. Taken from European Parliament: [https://www.europarl.europa.eu/RegData/etudes/briefing\\_note/join/2013/491498/EXPO-AFET\\_SP%282013%29491498\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/briefing_note/join/2013/491498/EXPO-AFET_SP%282013%29491498_EN.pdf)

<sup>25</sup> IEA. (2021). Despite short-term pain, the EU's liberalised gas markets have brought long-term financial gains. 22/10/2021. Taken from IEA, International Energy Agency: <https://www.iea.org/commentaries/despite-short-term-pain-the-eu-s-liberalised-gas-markets-have-brought-long-term-financial-gains>

As noted, the lack of flexibility is the main reason why Europe is seeking to move away from the traditional contractual framework. This, together with the high costs of entry into the sector, has led to market concentration and made it difficult for competitors to enter the market. Companies with a market share, among which Gazprom stands out, have acquired too much weight. As a result, they have an overly strong bargaining position that has allowed them to impose favourable clauses in contracts. It is understood that a more liquid model helps to move towards a “buyer’s” market, with greater bargaining power for buyers, which allows the impact of these clauses to be eliminated or mitigated. Here, too, the EU has made important progress, notably in two areas.

Firstly, in relation to the “take-or-pay” clauses that are very common in Gazprom’s contracts in Europe, which oblige the buyer to pay penalties if its imports do not reach a minimum volume. In the most extreme cases, such as the contract with Ukraine’s Naftogaz, the stipulated minimum volumes exceeded 40 bcm per year. Take-or-pay clauses, while not cancelled, suffered a severe setback with the precedent set by the Arbitration Court of the Stockholm Chamber of Commerce in 2017, which considerably limited their scope. The second significant breakthrough came a year later, when the European Commission vetoed the gas resale ban clauses that Gazprom sought to add to its contracts in Europe to limit competition in the internal market. Both decisions have led to structural modifications of the contractual models.

In conclusion, the Gazprom-Europe relationship today is based on a hybrid contractual model, the result of the combination and updating of the two predominant schools of thought. The revision of the initial Groningen model was the first tangible manifestation of Europe’s dissatisfaction with Gazprom. In the years ahead, it will seek to translate these changes into a reduction in the volumes imported from Russia, an objective for which it is now better positioned following the implementation of these changes. These are summarised in the following points:

- The search for shorter contract durations, which has led to the emergence of a thriving, but still limited, spot market;
- Phasing out of the oil derivative link in favour of a gas spot price link. This is determined by gas indices or hubs, that include the Dutch Title Transfer Facility (TTF), which dominates in Europe;
- Undermining of clauses that the Union has found to be unfair.

Added to this transformation of gas business models are the aforementioned discrepancies in the role gas can play in the energy transition, as well as the growth of the LNG sector, which threatens Gazprom’s position in Europe. This dynamic context inevitably alters the energy strategies of both sides. We elaborate on them below with the aim of providing an interpretative framework for Europe’s initial reactions to Russia’s invasion of Ukraine.

## The Russian vector

Russia holds around a quarter of the world's gas reserves. It is the world's second-largest producer after the United States and the leading gas power in Eurasia. As such, its government seeks to preserve the prominent role of gas vis-à-vis other energy sources and even increase production<sup>26</sup>. Gazprom, as it has done for the past few decades, will act as the main implementing arm of the Russian government in terms of its production, domestic consumption and export goals.

### *Gazprom and the Kremlin: protection, at what price?*

Historically, Gazprom and its predecessor ministry have exploited almost all of Russia's gas reserves. However, in recent years, independent competitors, particularly Novatek, have increased their production volumes to the detriment of Gazprom. Rosneft (oil company) also has significant gas reserves. Thus, Gazprom has gone from producing almost 90% of Russian gas in 2000<sup>27</sup> to producing 68% in 2020, equivalent to around 455 bcm<sup>28</sup>. This loss of share can be explained by a variety of reasons, not least the Kremlin's quest for further liberalisation of the domestic market. The gas market in Russia functions artificially, with a very high degree of intervention: while independent producers, such as Novatek, are allowed to market gas at whatever price they wish, a low sale price is imposed on Gazprom, which generates massive losses for it, in order to ensure access to this basic commodity for the most vulnerable members of the population and access to cheap electricity for large Russian industries. In recent years, the government has initiated a policy of gradually increasing the price at which it allows Gazprom to sell. In the last five years, it has risen by 8.8%<sup>29</sup>. Now, the recent invasion of Ukraine and subsequent sanctions, which are likely to result in a loss of purchasing power for Russia's middle and lower classes, could lead the government to pause this gradual rise indefinitely.

For Gazprom's future, maintaining this gradual increase is crucial for two reasons: firstly, because the company has been forced to move its productive lungs to more expensive fields, given the progressive depletion of the Western Siberian reserves that had served as the company's core production. These fields are mostly located in the Arctic region, along the entire continental shelf of the Russian

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26 Mitrova, T., Yermakov, V. (2019). Russia's Energy Strategy-2035: Struggling to Remain Relevant. Institut Français des Relations Internationales (IFRI). Pp. 14-32. Taken from: <https://www.ifri.org/en/publications/etudes-de-lifri/russieneireports/russias-energy-strategy-2035-struggling-remain>

27 Ibid., p. 32.

28 GAZPROM. (2021). Growth at Scale: Gazprom Annual Review 2020. P. 96. Taken from Gazprom: <https://www.gazprom.com/f/posts/13/041777/gazprom-annual-report-2020-en.pdf>

29 Ibid., p. 64.

North Sea, from the Barents Sea to the Chukotka Sea. Because of their remoteness, they pose severe logistical and cost problems for the companies, exacerbated by the low temperatures and freezing waters almost all year round, which add to the technological difficulties of hydrocarbon extraction. Part of this increase in production costs would be mitigated by an increase in the prices at which it is allowed to sell. Secondly, because it would reduce the gap with the price at which other independent companies sell, and, by extension, could lead to a reduction in the number of customers in the loss-making Russian market. In this case, Gazprom could also release stock that it can place in foreign markets, where it does make a profit.

Today, Gazprom and the Kremlin have identified a need to review basic elements of their special relationship. The aforementioned domestic price is one of them, but there are other potential scenarios that would not be so beneficial for the company. The Kremlin is currently facing a difficult dilemma following the application of another state giant, Rosneft, to export gas to Europe through pipelines, and the oil company's new strategy to increase its presence in gas markets<sup>30</sup>. There is potential for conflict with Gazprom, especially if the two companies are unable to reach an agreement on the price of Rosneft's hypothetical exports and the fee that Rosneft will have to pay Gazprom for the use of its pipelines. The Energy Ministry's position remains to prevent competition between Russian companies abroad<sup>31</sup>, so it is nevertheless difficult to imagine a resolution of the issue on terms that would be severely detrimental to Gazprom. However, the mere fact that this issue is being considered at the governmental level already represents a substantial alteration in Russian policy over the past six decades.

The geopolitical decisions that the Kremlin imposes on Gazprom's external action are less likely to change. The relationship between the two is possibly one of the most representative of so-called "gas diplomacy" in the world, and is one of the most obvious examples of the fact that the energy sector does not follow purely financial logic. Governments exert a high degree of influence over it. In the case of Gazprom, its design of pipelines to Europe has been heavily influenced by Moscow's desire to reduce its dependence on Ukraine as a transit country to Europe, another of the workhorses that have marked the Kremlin's gas relationship with the European continent. Only the expansion of this national interest explains the construction in recent decades of the BlueStream, NordStream, TurkStream and Nord Stream 2, which have left Gazprom with 60% more shipping capacity than

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30 Dmitrieva, A. and Elliott, S. (2021). Rosneft bets on gas in energy transition, pushes for right to export to Europe: report. S&P Global, 13/12/2021. Taken from: <https://www.spglobal.com/commodity-insights/es/market-insights/latest-news/natural-gas/121321-rosneft-bets-on-gas-in-energy-transition-pushes-for-right-to-export-to-europe-report>

31 Sharushkina, N. and Sokolov, V. (2022). Russian Energy Minister Shulginov Outlines Gas Stance. Energy Intelligence. 22/2/2022. Taken from: <https://www.energyintel.com/0000017f-1d0f-df96-a1ff-bf6f490e0000>

it currently charters to Europe<sup>32</sup>. Unnecessary and damaging in commercial terms, given the pressure Gazprom's investment muscle has come under in recent decades, but with high geopolitical value. The organisation of the 2014 Sochi Olympic Games also entailed an investment by Gazprom of over 1.5 billion euros, with a dubious financial return<sup>33</sup>. Gazprom is also forced to apply significant discounts to countries that have a strategic partnership with Moscow. In countries like Armenia and Belarus, their profit margins are greatly reduced by having to conform to the Kremlin's regional agenda.

However, these efforts, both domestically and abroad, are rewarded in many ways, most notably by the preservation of the pipeline export monopoly, but not only this. Russia has made the maintenance of Gazprom's primacy in Europe a matter of national interest, which ensures the firm's political and diplomatic backing at the highest level. This is reflected in the National Energy Strategy for 2035. Gazprom has also benefited from significant tax breaks in its shift to more expensive production fields, which have allowed it to establish itself in these new regions. Nor can the record exports achieved in 2017 and 2018 be understood without the backing of the Kremlin's monetary policy. The devaluation of the rouble, the currency with which Gazprom covers a large percentage of its fixed costs, in the years following the annexation of Crimea created a favourable scenario, strengthening the company's and other Russian energy companies' competitiveness abroad.

The Kremlin has the ability to act as Gazprom's "bodyguard" in various domains, but only does so when the company's interests coincide with its own. When they diverge, it imposes the company's agenda. It is a clearly hierarchical relationship that has made Gazprom one of Russia's most valuable foreign policy assets.

### *Russia's unique "Pivot to Asia"*

Simon Blakey, former Chief of Staff to the Head of the IEA, said in 2020 that the future of Russian gas was likely to be in Asia<sup>34</sup>. Diversifying markets must be the natural strategic choice for Russia, particularly in light of Europe's willingness to exploit alternatives to its gas. Currently, Russia's 185 bcm annual exports to Europe account

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32 Aslund, A. and Fisher, S. (2020). New challenges and dwindling returns for Russia's national champions, Gazprom and Rosneft. Atlantic Council. P. 5. Taken from: <https://www.atlanticcouncil.org/in-depth-research-reports/report/new-challenges-and-dwindling-returns-for-russias-national-champions-gazprom-and-rosneft/>

33 Long, M. (2009). Gazprom splashes billions on Russia's Olympic dream. Sports Pro. 7/4/2009. Taken from: [https://www.sportspromedia.com/news/gazprom\\_splashes\\_billions\\_on\\_russias\\_olympic\\_dream/](https://www.sportspromedia.com/news/gazprom_splashes_billions_on_russias_olympic_dream/)

34 Blakey, S. and Gustafson, T. (2020). The Bridge: Natural Gas in a Redivided Europe. Davis Center for Russian and Eurasian Studies. 17/6/2020. Taken from: <https://www.youtube.com/watch?v=Tj8fdIn39VA>

for over 75% of its total gas exports<sup>35</sup>. As mentioned above, in the case of Gazprom, the percentage is even higher. These percentages, together with the fact that Gazprom makes hardly any profit in other markets, confirm the current mutual dependency that this paper has been arguing.

The energy transition in Europe, although it has not yet resulted in a considerable reduction in Russian gas imports, creates an uncertain environment to which the company cannot entrust its future. This coincides with the development of Asian markets, which will result in an increase in their energy and electricity needs. The Asian continent not only offers a more reliable long-term outlet for Russian gas, but also allows Moscow to gain influence in what is expected to be the main arena for great power struggles in the second half of the 21<sup>st</sup> century. XXI. Here, the interests of the Kremlin and Gazprom converge. For this reason, the company has been pursuing a stronger foothold in Asia for years. Like the United States, it has embarked on its own “Pivot to Asia”, which is still at an early stage.

Together with maintaining the predominant position in Europe, this shift is the other major pillar on which the National Energy Strategy for 2035 is built. The current volume of shipments is low, just over 25 bcm in 2020, and the potential increase in shipments faces several major barriers, especially in the case of Gazprom. The first of these obstacles is the current dominance of LNG in Russian shipments to Asia, with Gazprom taking a back seat to Novatek, the main Russian LNG exporter. The location of Asia’s main consumption centres on the Pacific and Indian coasts (Japan, Korea, India and China’s major cities), geographically distant from the continent’s most important gas reserves, paints a picture more likely to favour offshore LNG rather than the construction of extensive and costly on-shore pipelines. Nor do the numerous scenarios of conflict and instability on the continent (North Korea, Afghanistan, Kashmir, Iraq and sanctioned Iran), which could threaten the security and viability of these networks, contribute to this task. In 2020, Asia-Pacific received 70% of global LNG shipments. This percentage is expected to grow to 80% by 2050<sup>36</sup>. Here, Gazprom is not only at a disadvantage vis-à-vis Novatek, but Russia as a whole is relegated to second place to two world powers, Qatar and Australia. Between them, they shipped over 50% of the LNG imported by Asia-Pacific in 2020<sup>37</sup>.

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35 BP. (2022). *Statistical Review of World Energy 2021*. Pp. 42-45. Taken from BP, British Petroleum: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

36 gas exporting countries forum. (November 2021). *Global Gas Outlook 2050*. Synopsis. P. 16. Taken from Gas Exporting Countries Forum (GECF): [https://www.gecf.org/\\_resources/files/pages/gecf-global-gas-outlook-2050/gecf-gas-outlook-2021.pdf](https://www.gecf.org/_resources/files/pages/gecf-global-gas-outlook-2050/gecf-gas-outlook-2021.pdf)

37 BP. (2022). *Statistical Review of World Energy 2021*. P. 44. Taken from BP, British Petroleum: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

The development of an LNG infrastructure (liquefaction plants or LNG trains, storage tanks and LNG carriers) that will allow it to compete with these two powers and the United States will take years and substantial investment. The study, design, construction and commissioning of a liquefaction plant takes at least four to five years. A few more are needed to bring it up to full capacity. Currently, Russia's maximum liquefaction capacity is just over 24 bcm per year, while the US' liquefaction capacity exceeds 100 bcm, Qatar's 105 bcm, and Australia's 120 bcm<sup>38</sup>. Russia is also far behind in terms of LNG storage capacity (682,000 m<sup>3</sup>, compared to over 2.34 million m<sup>3</sup> in Qatar, 2.78 million m<sup>3</sup> in Australia and 3.5 million m<sup>3</sup> in the US), and it will take several decades for it to catch up with its competitors. However, mention should be made of Russia's ambitious policy in this respect, with five additional plants approved (currently two), which will add another 30 bcm to its production capacity<sup>39</sup>; significant in percentage terms, as it will double current volumes, but will keep Russian LNG production with a relatively small market share compared to its competitors.

The second obstacle comes from the strong competition posed by Central Asian autocracies, particularly Turkmenistan, in the design of the already scarce pipelines to consumption centres in the Pacific. China has historically prioritised the construction of pipelines from these countries. Thus, in 2020, over three quarters of China's pipeline imports came from Central Asian countries. Around 60% of the total came from Turkmenistan. Other regional powers, such as Japan, India or South Korea, hardly import by pipeline. In Asia, Gazprom has only one operational pipeline: the Power of Siberia, which opened in December 2019 and connects to China.

It is in this context of such high hurdles that the Kremlin's protection is of unparalleled value to Gazprom. Putin has placed the company in a privileged position in his Asia strategy and has seen to it that it benefits from his strategic partnership with Xi Jinping. The invasion of Ukraine and the European response have accelerated this process. During his visit to Beijing in February 2022, he signed agreements that will improve interconnections with China and increase the prospects for volumes transported through the Power of Siberia pipeline to 48 bcm per year by 2026<sup>40</sup>. It will connect the Sakhalin field to the existing infrastructure. The contract has a duration of 30 years, which is difficult to match in relations with European partners, and is linked to the price of oil derivatives. Evidence that both China and Russia continue to favour a traditional contractual model, even though many analysts insist that Gazprom would benefit more from gas hub contracts: gas hub prices have reached record highs

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38 International Group of Liquefied Natural Gas Importers (GIIGNL). (2021). Annual Report 2021. P. 40. Taken from GIIGNL: [https://giignl.org/wp-content/uploads/2021/11/GIIGNL\\_Annual\\_Report\\_November2021.pdf](https://giignl.org/wp-content/uploads/2021/11/GIIGNL_Annual_Report_November2021.pdf) Conversion rate: 1 MT = 1.4 bcm.

39 International Gas Union (IGU). (2021). World LNG Report 2021. 3/6/2021. P. 110. Taken from IGU: <https://www.igu.org/resources/world-lng-report-2021/>

40 Aizhu, C. (2022). Russia, China agree 30-year gas deal via new pipeline, to settle in euros. Reuters. 4/2/2022. Taken from: <https://www.reuters.com/world/asia-pacific/exclusive-russia-china-agree-30-year-gas-deal-using-new-pipeline-source-2022-02-04/>

in recent months, with no prospect of drastic changes in the short to medium term. Gazprom's choice of contractual model demonstrates the priority it gives to long-term revenue stability over short-term financial gains. In parallel, and perhaps of greater significance, came Gazprom's announcement on 28 February of an agreement with the Mongolian government to move forward to the design phase of the Altai pipeline, also known as Power of Siberia 2. This will be the second overland route for Russian gas to China, and could increase shipments by a further 50 bcm per year when completed, expected in 2030<sup>41</sup>.

These prospects for deployment in China would not be possible without the prospect of a steep growth in China's energy demand curve. Over the past five years, China's gas consumption has increased from 197 bcm in 2015<sup>42</sup> to 331 bcm in 2020. Forbes estimates that it will continue to grow at around 5.5% year-on-year until 2030 and could exceed 650 bcm by 2050<sup>43</sup>. For China, it is not enough to maintain current volumes and entry routes. Russia and Gazprom, for all their limitations, have been able to position themselves as part of the solution to Beijing's growing gas demands. Novatek will also play a key role in this growing relationship, although its line of action in Asia is not as limited to China as that of Gazprom. The nature of its exports (LNG) opens up other markets. In addition, the group's strategic priorities remain, for the time being, the consolidation and enhancement of its portfolio of assets and reserves in Russia<sup>44</sup>. Novatek understands the process for foreign expansion as a subsequent phase of its business development. It is not as urgent as Gazprom, partly because it is not burdened by losses on the Russian domestic market.

Russia's Eurasian status and vast territory enable Gazprom to play an important role in the pipeline architecture of two of the world's three largest economies: the European Union and China. Nevertheless, it will not be until at least 2030 that Asia will achieve a significant weight in the company's export matrix. Only at that point will it be possible to judge the degree of success of its diversification strategy. Until then, it will remain dependent on its exports to Europe to generate profits; however, much Sergei Lavrov claims that Russia has alternative markets for its gas if Europe stops buying it<sup>45</sup>. In the short and medium term, there are none: Central Asia is a

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41 GAZPROM. (2022). Алексей Миллер: проект “Союз Восток” перешел в стадию проектирования. 28/2/2022. Taken from: <https://telegra.ph/Gazprom-Mongolia-02-28>

42 BP. (2022). Statistical Review of World Energy 1965-2020. Taken from BP, British Petroleum: <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>

43 Huang, M. (2021). The Future Of China's Gas Demand. Forbes. 22/9/2021. Taken from: <https://www.forbes.com/sites/woodmackenzie/2021/09/22/the-future-of-chinas-gas-demand/>

44 Novatek. (2021). PAO Novatek Annual Report 2020. 2/3/2021. P. 2. Taken from Novatek: [https://www.novatek.ru/common/upload/doc/NOVATEK\\_AR\\_2020\\_EN.pdf](https://www.novatek.ru/common/upload/doc/NOVATEK_AR_2020_EN.pdf)

45 TASS. (2022). Never again will we rely on the West: Lavrov says Russia will solve its economic issues. 10/3/2022. Taken from TASS, Russian News Agency: [https://tass.com/politics/1420031?utm\\_source=google.com&utm\\_medium=organic&utm\\_campaign=google.com&utm\\_referrer=google.com](https://tass.com/politics/1420031?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com)

relatively small and self-sufficient market, and China still does not cover even a fifth of the volumes Gazprom exports to Europe. The other economic powers in the region have hardly any pipeline network from abroad, and Russia is still far from having the necessary infrastructure to become an LNG power. Natixis rightly points out that Russia's ability to diversify its gas exports to Asia is very limited in the short term<sup>46</sup>. The situation is different with oil, where the room for manoeuvre is greater.

## European energy context

The whole energy context in Europe is marked by the quest to reduce CO<sub>2</sub> emissions to reach climate neutrality by 2050. On the other hand, in the particular case of gas, it is particularly important to reinforce energy security in order to avoid shocks such as those of this winter. This reinforcement is being developed through various lines of action, mainly in relation to storage capacities and internal interconnections, and is complemented by the quest to reduce dependence on Russia. These and other targets will be particularly difficult to achieve in the context of Europe's declining domestic production, which was just over 215 bcm in 2020 from over 300 bcm in 2010<sup>47</sup>.

## Gas in Europe's energy transition

On this issue, the European Commission has maintained an ambiguous rhetoric. It acknowledged as much in March 2022, when he pointed out that he still needed "further reflection on how to address the role of [natural] gas in the decarbonisation of the Union's economy"<sup>48</sup>. On the one hand, it remains firmly committed to the global leadership it has acquired on the path to emission reductions. On the other hand, the reality and the lack of development of potential alternative technologies have pushed it in recent months to recognise that economic activities in the natural gas sector can "facilitate the transition to a sustainable energy system"<sup>49</sup>. However, it added, "for a limited period of time", without specifying the duration. This recognition has also prompted it, after months of discussions, to award natural gas the "transition energy"

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46 NATIXIS. (2022). Ukraine Crisis Impact. 25/2/2022. P. 21. Taken from NATIXIS: [https://home.cib.natixis.com/api-website-feature/files/download/12209/cross-expertise\\_research\\_ukraine\\_en\\_fevrier\\_2022\\_final\\_draft.pdf](https://home.cib.natixis.com/api-website-feature/files/download/12209/cross-expertise_research_ukraine_en_fevrier_2022_final_draft.pdf)

47 BP. (2022). Statistical Review of World Energy 2021. P. 36. Taken from BP, British Petroleum: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

48 European Commission. (2022). Commission Delegated Regulation (EU) ... / ... of 09/03/2022. P. 1. Taken from European Commission: [https://eur-lex.europa.eu/resource.html?uri=cellar:8cee7f13-a162-11ec-83e1-01aa75ed71a1.0018.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:8cee7f13-a162-11ec-83e1-01aa75ed71a1.0018.02/DOC_1&format=PDF)

49 Ibid., p. 2.

label in its green taxonomy. Thus, it seems to tilt the debate between pragmatism and environmentalist convictions in favour of the former.

Also the trends in gas consumption, which has hardly decreased in recent years and has remained stable in the range of between 540 and 560 bcm, and the exponential growth in EU emission allowance prices (EU Emissions Trading System), which incentivises the transition from coal to gas, support the thesis that gas will maintain a key role in the European energy transition.

It is not the purpose of this paper to assess the viability, or lack thereof, of alternatives to natural gas, such as renewables, nuclear or other less polluting gases like hydrogen or biomethane. Only the scale of the technological advances needed for these sources to supply a substantial fraction of the natural gas on the market is apparent. This is pointed out by the European Commission itself, when it states that “technologically and economically viable low-carbon alternatives may not yet be available on a sufficient scale to meet energy demand on a continuous and reliable basis”<sup>50</sup>. Three years earlier, the Commission itself also admitted that “decarbonisation policies will not be sufficient to counteract declining domestic production”<sup>51</sup>, and concluded in the same document that gas imports are likely to continue to increase.

Gas is therefore the fuel of choice for the energy transition, including for Europe, albeit by default. The EU has therefore started work on reducing the carbon footprint of its production process, with the aim of making the natural gas of the future “greener” than today. The Commission has proposed that emissions generated in the production of gas that is eventually sold on the European market should be measured and reported, with a view to a hypothetical revision of emission requirements for hydrocarbon imports. The EU commitment will thus influence the production processes of all those who want to place their products on the European market, including Russia, which is already working in this direction. This is another example of the sector’s shift towards a “buyer’s” market, as it will be the buyer who demands a low carbon footprint, and the seller who must adapt to these requirements if it wants to sell.

### *Strengthening energy security: storage and interconnections*

In parallel, the Member States and the European Commission are considering various measures to strengthen security of supply and avoid a repetition of the very high prices that we have seen in the first months of 2022. The focus of action has been on these measures, possibly overshadowing those directly related to the search for alternative sources of gas.

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<sup>50</sup> Ibid., p. 10.

<sup>51</sup> European Commission. (2017). Energy Union: Commission takes steps to extend common EU gas rules to import pipelines. 8/11/2017. Taken from European Commission: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_17\\_4401](https://ec.europa.eu/commission/presscorner/detail/en/IP_17_4401)

Firstly, there is the need to create strategic reserves, as has been the case with oil since the 1970s, which would oblige the Member States to maintain a minimum level of storage. Currently, it is the Member States that manage their own reserves and many of them do not impose minimum quantities. They only commit their suppliers to a minimum year-round supply, which, as demonstrated in the first months of 2022, may not be sufficient to guarantee consumption at an affordable price, particularly in winter. The increased liquidity of the oil market led to the emergence of these reserves, but the gas market has always been considered sufficiently stable to ensure adequate supplies on an ongoing basis. There was no need to invest in a reserve, because there was always going to be supply. This year's situation has shown that going into the winter with unfilled stocks can come at a significant cost. This has been another point of contention with Gazprom and the main trigger for the current crisis between Brussels and the company, which the EU accuses of deliberately keeping reserves empty: at the beginning of the winter, Gazprom-operated reserves were 16% full, while the average for other operators was over 40%<sup>52</sup>.

Control over strategic assets like storage reserves is, after exports, the second vector through which Gazprom coordinates its presence in Europe. Following dissatisfaction with Gazprom's adherence to contractual minimums without filling them, these reserves have been identified by the Commission as critical infrastructure for the first time<sup>53</sup>. This new label will oblige Member States to consider risks associated with ownership, both for future and current stocks. It allows for a new legal framework that, in principle, empowers Member States to force Gazprom to hand over the management of its reserves, reducing the leverage of what the Commission considers a hostile player, and strengthening the continent's energy security. This control over storage facilities is also behind the German government's decision to temporarily put Gazprom's subsidiary in the country under its control.

A further step has been taken with the provisional agreement between the Commission, Council and Parliament, which would require Member States to ensure that their stocks are at least 90% full on 1 October each year in order to be prepared for possible supply disruptions during the winter months. However, this can be a double-edged sword. The Belgian think-tank Bruegel poses the following scenario: if European companies are forced to store gas in summer and autumn to start the winter in a better position, what would happen if Gazprom (or another producer) suddenly decided to start pumping more gas into Europe in, say, November? The market would be flooded with supply and prices would fall, to Europe's benefit. However, it would leave all the companies that had helped the EU prepare for the winter with massive losses, as they would have been forced to fill their stocks at higher prices than they then have in winter. Companies are clearly not willing to take such risks, especially in

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<sup>52</sup> European Commission. (2022). REPowerEU: Joint European Action for more affordable, secure and sustainable energy. 8/3/2022. P. 5. Taken from European Commission: [https://eur-lex.europa.eu/resource.html?uri=cellar:71767319-9foa-11ec-83e1-01aa75ed71a1.0001.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:71767319-9foa-11ec-83e1-01aa75ed71a1.0001.02/DOC_1&format=PDF)

<sup>53</sup> Ibid., p. 4.

the current scenario of high prices. Filling reserves now, at these prices, would make little or no business sense. Therefore, and despite the EU working towards further market liberalisation, unprecedented political backing would be needed here to ensure that companies would be able to offer their gas at least at cost price in the future. Potentially, this would lead to a situation where commitments made to companies would force them to pay for gas at a higher price than the market price. This is to point out that stock holding obligations can sometimes become a burden, but it is the price that must be paid for the creation of a strategic reserve to help prevent situations such as the one that occurred this winter.

On the other hand, the crisis in Ukraine has revived another recurrent debate on the European energy agenda: that of interconnections between Member States, fundamentally in terms of gas and electricity. The first State of the Energy Union report in 2015 highlights the lack of interconnections as one of the main reasons behind inadequate market integration and price divergences between Member States<sup>54</sup>. Six years later, in 2021, the emphasis is on the improvements of recent years, particularly in Eastern Europe, and their positive effect on security of supply in the European Union<sup>55</sup>. Spain is particularly interested in the development of this axis, as connections with the rest of Europe are minimal. Only the VIP Pyrenees pipeline, with a capacity of around 7 bcm per year, connects Spain. The invasion of Ukraine seems to have awakened the interest of the Spanish and Portuguese governments in the construction of a second trans-Pyrenean gas pipeline, the MidCat, whose financial profitability had led to the project being rejected on several occasions.

Along these lines, and in order to take advantage of a hypothetical improvement in intra-European connections, in 2017, the Commission launched the proposal to sign solidarity agreements. These agreements are signed bilaterally between two Member States in order to ensure adequate gas supplies in case of external supply disruptions. The Commission describes them as “an historic step in building EU resilience to gas supply disruptions”<sup>56</sup>. Germany is leading the way in signing these agreements, having already signed them with Denmark and Austria, and is examining them with Italy and Poland.

The three lines of action proposed so far (storage, internal connections and solidarity agreements) focus on strengthening European energy security. While they are the main focus of EU action, the EU is beginning in parallel to seek a significant re-

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54 European Commission. (2015). State of the Energy Union 2015. 18/11/2015. P. 10. Taken from European Commission: [https://eur-lex.europa.eu/resource.html?uri=cellar:ebdf266c-8eab-11e5-983e-01aa75ed71a1.0008.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:ebdf266c-8eab-11e5-983e-01aa75ed71a1.0008.02/DOC_1&format=PDF)

55 European Commission. (2021). State of the Energy Union 2021 - Contributing to the European Green Deal and the Union's recovery. 26/10/2021. P. 14. Taken from European Commission: [https://energy.ec.europa.eu/system/files/2021-10/state\\_of\\_the\\_energy\\_union\\_report\\_2021.pdf](https://energy.ec.europa.eu/system/files/2021-10/state_of_the_energy_union_report_2021.pdf)

56 European Commission. (n.d.). Secure Gas Supplies. Taken from European Commission: [https://energy.ec.europa.eu/topics/energy-security/secure-gas-supplies\\_en#solidarity-arrangements](https://energy.ec.europa.eu/topics/energy-security/secure-gas-supplies_en#solidarity-arrangements)

duction in its dependence on Russian gas. The major breakthrough in this regard has come with the signing of an agreement with the United States for the joint purchase of an additional 15 bcm of LNG during 2022 and the coming years, which strengthens the position of LNG in the European import matrix. Qatar will also increase its shipments. For these volumes to grow and replace a significant share of imports from Russia, Europe must increase its LNG import capacities, with the construction of new regasification terminals. Some have already been announced.

Work has also been underway for years on strengthening external connections and developing alternative pipelines to the Russian ones, mainly on two: the Baltic pipeline, which will connect Norway to Poland via Denmark, with a capacity of 10 bcm and a planned entry into operation in October 2022; and the EastMed, which would connect the eastern Mediterranean fields with the Hellenic peninsula and Italy, and with a maximum capacity of another 10 bcm. A financial feasibility study is currently pending. In addition, in January 2022, the extension of the MedGaz, which connects Spain with Algeria, came into force.

All these initial lines of action have been reinforced with the publication on 18 May 2022 of a Commission proposal to its Member States to reduce dependence on Russian gas by 2027. If translated into concrete measures, the Commission's plans will alter the regional and global architecture for gas shipments to Europe, with the geopolitical consequences that this entails. If well managed, it can contribute to regional détente, as shown by the fact that Isaac Herzog's visit to Ankara, with energy cooperation at its core, was the first visit by a senior Israeli leader to Turkey since 2008. If not properly managed, it can exacerbate diplomatic tensions, such as those Algeria is currently experiencing with Morocco and Spain.

## Elusive sanctions

The energy link with Russia has led Europe to oppose broad sanctions packages that include the hydrocarbon sector, with particular emphasis on gas. Firstly, this has led to disagreements between the Member States, with different degrees of exposure, and therefore different margins for action, which have hindered the development of a common foreign and security policy. It has also meant a weakening of the transatlantic axis with the US, Europe's main ally, under pressure to keep Gazprom and other energy companies out of its successive sanctions packages. Washington understands that the need to consider the interests of its European partners detracts from the effectiveness of its containment strategy towards Russia. Gazprom is currently on the list of entities sanctioned by the United States<sup>57</sup>, but it has only been banned from accessing US funding, without affecting its commercial activities.

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<sup>57</sup> US Department of the Treasury. (2022). U.S. Treasury Announces Unprecedented & Expansive Sanctions Against Russia, Imposing Swift and Severe Economic Costs. 24/2/2022. Taken from US Department of the Treasury: <https://home.treasury.gov/news/press-releases/jyo6o8>

This is not to say that the sanctions have not had an impact on the company. Firstly, the 2022 sanctions deprive the Russian economy as a whole of access to “hard currency” financing, meaning the euro and the dollar, with the ensuing liquidity crisis. However, directly with regard to gas, this year’s sanctions have accentuated the practices of previous packages. This could change in the coming months, but, unlike in other sectors, the aim is not to impose direct and global sanctions, but rather to limit the financing and technology acquisition capacity of Russian energy companies, reducing their room for manoeuvre, particularly with regard to the development of new fields. It is common for the limitation of funding to occur only for certain types of projects (e.g. those related to Arctic field development), giving the details of sanctions design a strong strategic aspect.

The exception to this rule was the US extra-territorial sanctions on Nord Stream 2 (i.e., extendable to foreign companies participating in the project), which were removed after two years (2019-2021) in order to seek better relations with Germany. During that brief period, there was a mass exodus of European companies from the project, and the developer, Nord Stream 2 AG, eventually went bankrupt following the new US package, which again sanctioned it, and the cancellation of the project’s approval. Novatek and Alexei Miller, CEO of Gazprom, are also directly sanctioned by the US.

Another important element to measure the intensity of a sanctions package towards the Russian gas sector is GazpromBank, the bank through which transactions with Gazprom are handled. On this occasion, it has been one of the few large Russian banks to have circumvented them and, in fact, has also been excluded from the SWIFT mechanism’s disconnection. It currently ensures the viability of transactions between Gazprom and Europe.

Despite its special status with regard to sanctions, Gazprom will be affected not only by the impact on the Russian economy in general, but also by the exodus of Western companies from Russia, particularly by the exit of Shell, with whom it shared several projects. Also, the exit of key technology partners for the development of Arctic LNG fields will undermine Russian production prospects.

Sanctions are one of the most tangible manifestations of geopolitical tensions. The fact that Gazprom has been treated more favourably than other Russian companies is evidence of at least some degree of resilience in the relationship when faced with diplomatic back-and-forth. This is often overlooked.

## In conclusion

Gazprom is one of the most valuable assets of Russia’s external expansion. Directly controlled by the state, it is the world’s largest gas producer and the main supplier to Europe, the world’s second-largest market after the United States. Its privileged position on the European continent, supported by a government monopoly on pipeline

exports, compensates for losses at home, where it sells at artificially low prices. Europe is the only market that brings it significant profits, accounting for nearly 90% of its exports, which amounted to over 30% of the gas consumed on the European continent. These figures are evidence of a mutual dependence that has contributed to an upward trend in shipments over the past decades, even during periods of estrangement between Europe and Russia: between 2009 and 2019, shipments increased from 141 bcm to 199 bcm despite Russian interventions in Georgia (2008) and Ukraine (2014). To date, and with various exceptions, the energy link has served predominantly as an incentive for greater understanding with Russia.

In addition to the aforementioned increase, commercial relations between the two players have undergone a profound evolution in recent years in terms of the contractual model that covers them. The European Union has been the driving force behind these changes, which are based on a reduction in the duration of contracts, a reduction in the number of contracts with the price linked to oil derivatives, and an undermining of abusive clauses. This strengthens the position of the buyer (EU), which gains more flexibility, and creates a more liquid market which, on the other hand, also results in greater exposure to relatively tight supply situations such as the current one. This paper describes the contemporary contractual model as a “hybrid model” in which contracts with traditional elements (long duration or prices linked to oil derivatives) and a growing spot market coexist. The consolidation of Liquefied Natural Gas (LNG) as an increasingly large-scale alternative to pipeline transport has particularly contributed to the latter point.

On the other hand, the relative stability in Gazprom-Europe relations noted throughout the paper is not intended to convey the image of an idyllic relationship. It has been far from that. Gazprom has made occasional supply cuts to European countries and plays a central role in Russia’s so-called “gas diplomacy”. It maintains a close relationship with the Kremlin that currently depends on the Kremlin’s monopoly over Russian pipeline gas exports. In return, the company has been pushed to undertake projects and investments that are unnecessary in financial and logistical terms, but serve Russia’s geopolitical agenda. These include the vast network of pipelines to Europe, and sales at very low prices in countries aligned with Moscow and especially in Russia itself. These constraints are currently under review and their evolution will shape the company’s next decade. So will the process of tilting towards more expensive production fields in the Arctic and the search for a larger foothold in Asia. For these issues, government support will be crucial, although the nature of both transitions imposes significant obstacles, particularly with regard to placing gas in Asia, a continent more inclined towards LNG where Gazprom is relegated to second place in favour of Novatek, and Russia itself is still far from the market shares held by Qatar, Australia and the United States.

For its part, Europe has singled out Gazprom for the high prices it has faced in recent months. A direct relationship is established between these and the minimum filling level of the company’s stocks in Europe during the previous months. This has led to a reflection, possibly more marked by apparent urgency than calm, on energy security on the continent. The initial priority was issues directly related to the latter,

particularly storage and internal interconnections, which pushed diversification towards alternative gas sources into the background. After the invasion of Ukraine, the two courses of action seem to converge and a misleading equation is made between energy security and diversification of sources. While progress must be made on both, it should not be forgotten that these are two distinct issues.

This quest for greater diversification, like that pursued by Russia, faces significant limitations in terms of its scope and, above all, its timeframe. The main constraint here is the lack of infrastructure and technology needed to exploit alternative routes on a larger scale. The existence of contracts that will remain in place for the next few years should also be considered. It is also worth adding the current energy transition process being promoted by the EU, with an ambiguous discourse towards hydrocarbons despite having finally accepted gas as a transition energy due to its capacity to replace more polluting fuels such as coal or oil, and its role as an indispensable complement to renewables in the electricity sector.

Sanctions are another element that marks the relationship. While these have affected the Russian energy sector less than other sectors of the economy, the blocking of access to technology and financing is a significant burden for Russian energy companies, with a particular impact on the development of Arctic fields. Moreover, the imposition of these sanctions has been the main reason why Russia has begun to demand gas payments in roubles and to stop shipments to countries that do not respect the established channels, which nevertheless end up receiving Russian gas through other Member States.

The current situation is extremely volatile, making any future prediction a chimera with little chance of success. What does seem clear is that there will at least be a limited separation between the two players. This is evidenced by the fact that Europe has already started to increase its commitment to LNG. The increase of LNG in Europe's energy mix will have global consequences and could exacerbate the competition between Europe and Asia to attract it, straining the market and generating punctuated upward price spirals. In any case, tilting such a massive sector with so much influence on the rest of the economy will entail high risks and most likely will not prevent Russia from remaining decisive for Europe's energy security, and Europe from remaining decisive for Russia's energy model both internally and externally.

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