# Russie.Nei.Reports No.18

# Gazprom in Europe: a Business Doomed to Fail?



**Aurélie Bros** 

July 2014



Ifri is a research center and a forum for debate on major international political and economic issues. Headed by Thierry de Montbrial since its founding in 1979, Ifri is a non-governmental and a non-profit organization.

As an independent think tank, Ifri sets its own research agenda, publishing its findings regularly for a global audience.

With offices in Paris and Brussels, Ifri stands out as one of the rare French think tanks to have positioned itself at the very heart of European debate.

Using an interdisciplinary approach, Ifri brings together political and economic decision-makers, researchers and internationally renowned experts to animate its debates and research activities.

The opinions expressed in this article are the authors' alone and do not reflect the official views of their institutions.

# Russia/NIS Center © All rights reserved – Ifri – Paris, 2014 ISBN: 978-2-36567-293-1

**IFRI** 

27 RUE DE LA PROCESSION 75740 PARIS CEDEX 15 – FRANCE

TEL.: 33 (0)1 40 61 60 00 FAX: 33 (0)1 40 61 60 60 E-MAIL: accueil@ifri.org

**IFRI-Bruxelles** 

RUE MARIE-THERESE, 21 1000 BRUXELLES

TEL.: 32(2) 238 51 10 FAX: 32 (2) 238 51 15 E-MAIL: info.eurifri@ifri.org

WEBSITE: www.ifri.org

## **Author**



Aurélie Bros is doing a Joint PhD in Geopolitics (Paris 1 Panthéon-Sorbonne University and Russian Academy of Sciences). She studied in Paris 1 Panthéon-Sorbonne University (Master 2 in International Relations) and in ENS Ulm / Paris 1 Panthéon-Sorbonne University (Master 2 in Geopolitics). She was a Visiting Fellow at the Energy Research Institute of the Russian Academy of Sciences in Moscow. She also followed the Blue Book Program of the European Commission (DG Energy, Unit Internal Market).

#### **Publications**

- "EU-Russia: Towards a Common Energy Market in 2050?" Yearbook of the Observatoire franco-russe, April 2014.
- "Energy relations between Russia and the EU. Is the liberalization of the energy market a chance or a threat for Gazprom?" *Revue d'études comparatives Est-Ouest*, co-written with Y. Richard, March 2011.

#### Contact

E-mail: brosaurelie@gmail.com

## **Contents**

EXECUTIVE SUMMARY
INTRODUCTION4
NATURAL GAS CONSUMPTION IN EUROPE: EVOLUTION AND TRENDS 6
From high demand to disenchantment6
European perceptions of the evolution of Russian gas exports over time8
OPPORTUNITIES OPENED UP BY LIBERALIZATION11
Greater penetration of downstream activities11
Becoming more active on the hubs14
Benefits of liberalization from a European perspective14
MAJOR CHANGES IN MARKET DYNAMICS AND NEED FOR ADAPTATION 18
"The EC as ring master"18
New relationships with traditional counterparts19
Lack of medium and long-term visibility21
Respecting New Paradigms of European Energy Policy23
REGULATORY CHALLENGES26
Securing transport26
Securing contracts29
Conclusion 33

## **Executive Summary**

The construction of what is nowadays called European energy policy is an ongoing process that officially started with the creation of the European Coal and Steel Community in 1951, and has not yet been entirely finalized. It took several decades to move from a Community composed of six countries to a policy – not fully fledged – intended to strengthen as much as possible cohesion between 28 EU member states in the energy sector.

The European gas sector has been progressively liberalized since the 1990s. The leitmotivs of European energy policy have been and continue to be the opening-up of national gas markets, the enhancement of both competition and transparency, and the struggle against monopolies. The Third Energy Package creates, among others, the concept of European network codes, applied throughout Europe. The European Union (EU) has also developed a European energy policy based on three pillars: security of supply, environment, and competitiveness.

The history of Gazprom, a long-standing economic partner of Europe, is a series of constant adaptations – with varying degrees of success—to both European market conditions and dialogue with all parties involved in the gas business across the continent. The Russian company thrived during the 1990s and 2000s in an environment where the main characteristics inherited from the 1970s and the 1980s were retained (i.e. long-term contracts with prices indexed to substitute energy prices—primarily oil—and destination clauses in a context of low competition) while any new opportunity, generally offered by the liberalization and opening-up of national gas markets, was constantly sized up.

The company has encountered some difficulties; adaptation is not always that easy. Consequently, some Gazprom officials regularly ask whether European energy policy is a policy intended to challenge Russia and Gazprom. Adaptation is challenging as it brings into question the former business model. Furthermore, some of these challenges are specific to Gazprom; other competitors are not affected or at least less affected by them. There is little chance that the new European gas model will be adapted to Gazprom, but recognizing a few specificities and resolving structural problems seem to be necessary to facilitate cooperation both at the economic and the political level. The major difficulty is that all this occurs at a time when the wider EU-Russia energy dialogue is highly fraught due to severe tensions between the EU and the Russian Federation.



## Introduction

The prospects for future development of the EU-Russia gas relationship are not good, given two gas crises involving Russia and Ukraine in 2006 and 2009, rough contracts renegotiations in recent years, and the current situation in Ukraine. The latter crisis has once again kindled fears that Europe is more and more dependent on external sources of gas supply while European gas production is slowly depleting. More hard times seem to be on the way with the announcement of the results of the European Commission (EC) investigation into Gazprom<sup>1</sup> and coming negotiations over the South Stream project. Contracts signed with several EU member states (MSs) need to be renegotiated in order to comply with EU energy laws.

The more the EU commits to the construction of a single European gas market, the more Gazprom seems to be in a position of weakness. However, judging from 2013 gas sales to Europe, this situation should not be exaggerated. Gazprom has reclaimed its position as the leading gas supplier in Europe.<sup>2</sup> At the same time, this prompts the company to ask whether implementation of the internal energy market is in direct and systematic opposition to Gazprom's interests, and might pose risks to the operations of the company in the European market. This view is repeatedly put forward by some of Gazprom's representatives.<sup>3</sup> This leads one to believe that the new architecture of the European gas market could destroy the whole gas industry.

Currently, the exacerbation of tensions between the EU and Gazprom has led to black-and-white analyses. Most commentators opt for an ideological approach, which leads to the development of policies involving imagined rather than rational issues. Consequently, it is difficult to get to grips with Gazprom activities on the European

4

<sup>&</sup>lt;sup>1</sup> The infringement procedure was launched on 4 September 2012 under article 102 of the Treaty on the Functioning of the European Union (TFEU). See A. Riley, "Comission v. Gazprom: The antitrust clash of the decade?", *CEPS Policy Brief*, 2012, <www.ceps.eu/book/commission-v-gazprom-antitrust-clash-decade>.

<sup>2</sup> Th Brog. "Putting a prior of the commission of the commission of the decade."

<sup>&</sup>lt;sup>2</sup> Th. Bros, "Putting a price on gas or Putin's gas price?" *SG Cross Asset Research/Commodities*, 19 March 2014.

<sup>&</sup>lt;sup>3</sup> Speech by Gazprom's Alexey Miller at the European Business Congress in Portorož on 31 May 2012.

energy market, while several crucial questions are never—or not sufficiently—asked. What are the commercial and logistical reasons behind the Gazprom and European behavior? How strong is the interdependence and what are the interactions? Does the liberalization of the European energy market offer any real opportunities to Gazprom? What are the reasons behind Gazprom's inability to use these opportunities?

Although the constitution of the single EU energy market is still underway and liberalization has not been fully achieved, it is worth taking a closer look at Gazprom's activities in Europe. The first part of this paper gives a brief overview of European gas consumption over the last two decades, while analyzing the evolution of Gazprom's sales in Europe. The second part discusses the main positive effects of liberalization on the company - a sign that the company does, in fact, easily adapt. The third part looks in more detail at some structural changes arising from the constitution of a European energy policy and affecting Gazprom. All these changes are mainly the result of the redefinition of some broad principles and paradigms that are actually structuring relations among actors within the EU, but also between EU member states and/or the EU and third countries. The fourth part lays out major challenges that Gazprom faces both today and in the near future. The emphasis is on the Russian perspective in order to underline the company's major preoccupations.

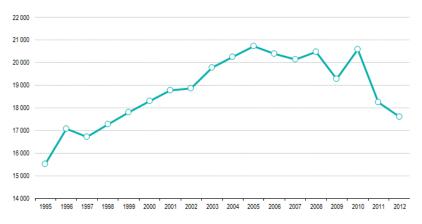


# Natural Gas Consumption in Europe: Evolution and Trends

#### From high demand to disenchantment

From the 1990s until 2006, Europe underwent almost uninterrupted growth in gas consumption. It is possible then to observe a slight slowdown before a real breakdown, from 2008 to 2009, mainly due to the economic and financial crisis, followed by a slight recovery in the first six months of 2013 due to cold weather. According to the latest estimates from Eurogas, gas consumption in the EU-28 reached 462 bcm in 2013.<sup>4</sup>

Figure 1. Gross inland consumption of natural gas in EU-27 in thousand terajoules (gross calorific value)



Provisional data for 2012 (¹) Due to confidential data, Bulgaria is not included in the EU-27 aggregate for reference years 2011 and 2012. Source data: nrg\_103m, nrg\_124m, nrg\_134m

Source: Eurostat, 2012.

Nevertheless, these figures should be treated with caution, because this growth in gas consumption over the period preceding

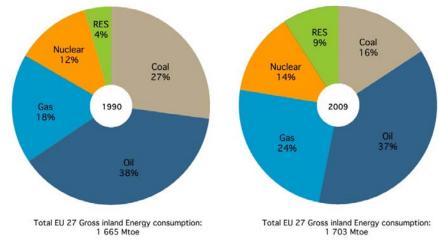
 $<sup>^{\</sup>rm 4}$  "Drop in 2013 EU gas demand emphasizes need for swift change," Eurogas press release, 18 March 2014,

<sup>&</sup>lt;www.eurogas.org/uploads/media/Eurogas\_Press\_Release\_-</p>

\_Drop\_in\_2013\_EU\_gas\_demand\_emphasises\_need\_for\_swift\_change.pdf>.

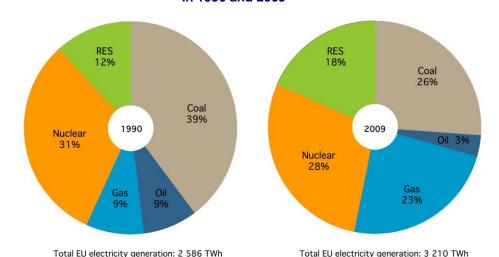
the crisis is not a result of a dramatic growth in global EU-28 energy consumption, but rather the product of a "substitution effect." Natural gas has primarily replaced oil products and coal in sectors such as generation and heating. Such demand for natural gas in Europe is essentially due to its relative environmental friendliness and its high economic efficiency, while it is also more competitive than European coal. Natural gas has also started to contribute increasingly to electricity generation in the EU; in 2009, natural gas consumption was just below the amount of nuclear power and coal used in the generation sector. However, differences between EU member states should always be borne in mind.

Figure 2. EU gross inland energy consumption by fuel in 1990 and 2009



Source: DG ENER database, 2010.

Figure 3. Electricity generation in the EU by type of fuel in 1990 and 2009



Source: DG ENER database, 2010.

The economic and financial crisis not only slowed down EU economic growth, but also severely affected energy consumption by generating a decrease in energy demand. This resulted in a decrease in sales for Gazprom and serious complications for European energy companies, while that the so-called "US shale-gas revolution" had a knock-on effect in Europe. The latter pushed down US gas prices and led to an increase in consumption of cheap US coal in Europe, displacing expensive gas. Gazprom Export, accustomed to selling natural gas on a long-term basis (i.e. up to 20 years) with natural-gas prices closely tied to oil prices, faced an unexpected new source of competition, especially in power generation. According to Christof Rühl, BP vice-president, generating power in Europe in 2012-2013 was 45% cheaper with coal than with natural gas.<sup>5</sup> It should be noted that the current situation calls into question the European environmental and climate goals (i.e. the EU's 20-20-20 goals<sup>6</sup>) as well as the relevance of European energy policy based on the three pillars (i.e. security of supply, environment and competitiveness). Officially, one must not take precedence over the two others.

# European perceptions of the evolution of Russian gas exports over time

Gazprom Export has increased its sales on European wholesale markets from 1990 until today, with the exception of the years 2009 and 2012.<sup>7</sup>

Figure 4. Russian gas supplies to Europe from 1973 to 2013 in bcm (outside former Soviet Union countries)

Year	1973	1975	1980	1985	1990	1995	2000	2005	2010	2011	2012	2013
Tota	6.8	19.3	54.8	69.4	110.0	117.4	130.3	154.3	138.6	150.0	138.8	161.5

Source: OAO Gazprom.

However, the EU also increased its gas imports from different regions of the world over the same period. Currently, the total of all gas

<sup>7</sup> Gazprom Export.

<sup>&</sup>lt;sup>5</sup> G. Gotev, "Norway Overtakes Russia as EU's Biggest Gas Supplier", *EurActiv*, 25 June 2013, <a href="https://www.euractiv.com/energy/norway-overtakes-russia-biggest-news-528854">www.euractiv.com/energy/norway-overtakes-russia-biggest-news-528854</a>.

<sup>&</sup>lt;sup>6</sup> 20% reduction in EU greenhouse gas emissions from 1990 levels, 20% renewables, and 20% improvement in energy efficiency, to be achieved by 2020 by changing both energy infrastructure and consumer behavior.

imports is well above the level of Russian gas imports only. Gazprom's dominance as well as European dependence on Gazprom's exports should not, therefore, be overestimated. However, even if European gas demand is not booming, Gazprom's exports will continue to grow in coming years due to the progressive depletion of European fields.

Norvey

Algeria

Qatar

Nigeria

13.0%

13.0%

13.8%

11.0%

11.0%

13.0%

13.8%

11.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.8%

11.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0%

13.0

Figure 5. Percentage of extra-EU-27 natural gas imports by country of origin

Source: Eurostat, 2013

The analysis of the growth in Russian gas consumption in Europe should be divided into two main periods: the 1990s and the 2000s. The 1990s were characterized by fairly good political relations between the EU and Russia – in a context where the West was largely influenced by Fukuyama's theory (i.e. that Western liberal democracy could be the endpoint of humanity's sociocultural evolution and also the final form of human government). Oil prices were also relatively low. Furthermore, most gas supplies were provided by EU MSs or Norway, a member of the European Economic Area (EEA).

On the other hand, the growth of Russian gas in the European energy balance during the 2000s was more worrying as relations between the EU and Russia cooled during this period for various

<sup>&</sup>lt;sup>8</sup> F. Fukuyama, The End of History and the Last Man, N-Y, Free Press, 1992.

reasons, such as the gas crises. This period also coincided with the accession of post-socialist European countries to the EU – countries with complex relations with Moscow, unlike those of most Western European countries (e.g. Germany, France and Italy). In addition, the production of traditional European suppliers (e.g. the Netherlands and the UK) began to decline, while oil prices progressively increased. At the same time, gas imports from non-EU and EEA MSs increased—including Russian imports. Due to recent events in Ukraine and Crimea, one can expect that European mistrust regarding both Russia and Gazprom is not likely to ease.

<sup>&</sup>lt;sup>9</sup> P.-H. Dasseler, *Gazprom, l'idéalisme européen à l'épreuve du réalisme russe*, Paris, Institut Royal Supérieur de Défense, 2009.

<sup>&</sup>lt;sup>10</sup> For example, Gazprom announced on 1 April 2014 that it was ending the tariff reduction granted to Ukraine according to the agreement signed on 18 December 2013. Prices increased from \$268.5/1000cm to \$385.5/1000cm.



# Opportunities Opened Up by Liberalization

#### Greater penetration of downstream activities

For the past 20-25 years, Gazprom has penetrated European downstream activities—a consequence of market liberalization in Europe. <sup>11</sup> This has resulted in a multiplication of activities along the gas chain, a benefit not enjoyed by EU energy companies in Russia.

First of all, Gazprom has gained a foothold in European gas markets thanks to acquiring assets and creating subsidiaries that allow the company to gain as much access as possible to end-consumers—a strategy followed by almost all energy companies active on the European market, and at the international level. Gazprom is no exception. By doing so, the company is progressively achieving a major objective: deeper penetration of European downstream activities. Thanks to its principal subsidiaries, Gazprom is now active in distribution, transport, storage and marketing activities, as shown in Figure 6. The company is active in the upstream, midstream and downstream sectors.

<sup>&</sup>lt;sup>11</sup> Liberalization had been conceptualized during the 1980s, but the signature of the Single European Act (SEA) in 1986 established a legal and political framework enabling its implementation.

**OAO GAZPROM** oscow (RUS) 100% 49.98% 100% WINGAS TRANSPORT WINGAS GmbH & Co. KG 000 Gazprom export GmbH & Co. KG ow (RUS) Kassel (D) Kassel (D) 100% **GAZPROM** Wintershall Erdgas Han-Wintershall Erdgas Germania GmbH delshaus GmbH & Co. KG Handelshaus Zug AG Berlin (D) Berlin (D) Zug (CH) 100% 100% **ZMB GmbH** ZMB (Schweiz) AG Berlin (D) Zurich (CH) 19.39% 100% **Gazprom Marketing &** OAO NOVATEK **Trading Ltd** Tarko-Sale, Moscow (RUS) 50% VNG-Verbundnetz G.P.D. Gas Project Devel-Gas AG opment Central Asia AG Leipzig (D) Zug (CH) 66.67% ZMB Gasspeicher Holding GmbH Vienna (A)

Figure 6. Main subsidiaries of Gazprom Germania in Europe

Source: Gazprom Germania, Company Brochure 2013.

Second, the company and its subsidiaries have been enabled to sell gas to dedicated customers in the wholesale market—the traditional branch of the gas trade in which Gazprom was engaged. Due to the Third Energy Package, 12 companies operating in the European market have been granted access to transmission

.

in July 2009 and entered into force in September 2009 (Directive No 2009/73/EC, Regulation (EC) No 713/2009 and Regulation (EC) No 715/2009 for the gas sector). The Third Energy Package can be summarized into the following measures: unbundling of networks (reinforcement of separation between network operators and competitive activities), independence and powers of national regulators (acceleration of the transfer to national regulators of regulatory powers traditionally held by governments), functioning of retail markets and consumer protection, Network Codes (defining the way in which gas will reach customers and how trading will be done), long-term planning of the development of trans-European energy networks, and creation of the Agency for the Cooperation of Energy Regulators (ACER) and of the European Network of Transmission System Operators for Gas (ENTSO-G) (community institutions playing a coordination role at the European level regarding the establishment of network codes, integration of renewable energies, etc).

infrastructure, therefore opening up new gas markets for Gazprom (e.g. the UK, the Netherlands).

Third, the liberalization has also enabled a greater penetration of the gas value chain. The combination of a liquid wholesale market and transmission networks accessible to third parties enables suppliers to enter both retail markets and gas distribution. This is what Gazprom does by selling gas to retail consumers and offering distribution services. For example, Gazprom Marketing and Trading (GM&T) finalized the acquisition of TruRead in 2010, a company dealing with smart meters. It should be noted that there is no ownership unbundling <sup>13</sup> obligation for distribution networks.

Fourth, the argument is also put forward that Gazprom and its subsidiaries can also deliver gas to energy-intensive industries for which gas is the main input. This mainly involves chemicals and electricity production. For several years now, the share of natural gas in the EU electricity mix has significantly increased (as mentioned above), creating potential opportunities for the company—a point made by EU institutions and some EU MSs. In addition, market liberalization in the electricity sector has enabled gas producers to enter into power production based on gas (e.g. in 2011 Gazprom acquired Evancom, a German company active in the retail electricity market). Nonetheless, in recent years, the dramatic reduction in gas consumption in Europe added to greater consumption of coal has created new uncertainties and challenges for the Russian company.

Fifth and last, liberalization makes possible the trading of gas through the development of regional and national trading hubs. It is possible to place gas on the market outside the long-term contract framework, should the need arise. Thanks to its subsidiaries, Gazprom has entered the trading sector (e.g. creation of Gazprom Marketing and Trading in 1999). According to Gazprom Export, sales of gas to end-consumers in France, through Gazprom Marketing & Trading France, and in the UK through GM&T, amounted to about 1.6 bcm in 2009. After the signature of a contract with ENI in 2006, Gazprom Export delivered about 3 bcm in 2010 to end-consumers on the Italian market.

By moving downstream into distribution and trading, etc, Gazprom has seized the growth opportunity represented by the liberalization of European energy markets, and acquired fairly solid experience in trading activities.

-

<sup>&</sup>lt;sup>13</sup> Splitting transport from other activities.

#### Becoming more active on the hubs

Until 2005, most continental European buyers had stepped forward to re-sign full oil-indexed long-term contracts with Gazprom. However, the energy conditions of recent years have altered the situation. Europe is progressively moving toward spot indexation and away from oil-indexation. According to the International Gas Union, approximately 58% of the gas sold in Europe in 2010 was under an oil-linked formula. A slight decrease of the ratio, to about 52%, was observed in 2012. Owing to the present situation, it is possible that oil-indexation could continue to progressively reduce in Europe as a result of a succession of renegotiations and arbitrations.

Currently, lower gas prices in the United States and price fluctuations at the National Balancing Point (NBP) are mainly putting pressure on European buyers (i.e. gas prices are regularly under oillinked prices), who are trying to renegotiate contracts and include spot indexation in the price in order to provide some respite. Theoretically, spot prices are set as a result of the supply and demand equilibrium, but have certain inherent risks such as price distortions, which arise for different reasons. This may happen when one supplier gains increasing market power. For example Norway, one of the main suppliers to the UK, exerts significant influence on the NBP. This affects the prices, since any production reduction may have an impact on prices. Even today, the EU downstream is dominated by large incumbent companies that are also the buyers. Therefore, price distortions can also occur if a wholesale buyer that controls a large volume of gas through long-term contracts acquires an overly significant influence.

Gazprom is seeking to become a major player in the trading sector by improving its position on hubs, especially in northern Europe, where markets are more mature. Thanks to trading activities, Gazprom can optimize its portfolio by balancing short-term (spot markets) and long-term sales, while benefiting from hedging instruments. This is facilitated by the connection of underground gas storages to major European hubs and the use of major infrastructures such as the Interconnector pipeline, which allow the company to take advantage of arbitrage opportunities.

If the spot indexation model is going to prevail in Europe, becoming more active on the hubs will remain a key issue in the liberalization process. This is Gazprom's principal challenge.

# Benefits of liberalization from a European perspective

From a European perspective, Gazprom benefited and continues to benefit directly and indirectly from liberalization and the integration of gas markets. There are numerous examples, and these are often used in the arguments adopted by the EC, MSs and other European stakeholders.

First, from a European perspective, the implementation of the Third Energy Package provides some more predictability by establishing long-term forward-looking investment plans, which are regularly updated. For example, the strengthening of the Regional Initiatives (RIs)<sup>14</sup>—albeit marginal—accelerates progress in integrating the European gas market by introducing collaboration at the regional level, whereby each region has set its own priorities, tackling barriers to competition, and involving all relevant stakeholders.<sup>15</sup> This would allow Gazprom to gain better understanding of each region and easily meet the demand. Furthermore, the Ten-Year Network Development Plan (TYNDP)<sup>16</sup> provides signals for potential investment in European infrastructure.

Second, liberalization does not threaten the existence of long-term contracts, as they reinforce European security of supply. For this reason, their importance has been acknowledged on several occasions by the EC, but these contracts have to be in line with the Third Energy Package without hindering compliance with competition laws. In other words, they cannot foreclose markets. <sup>17</sup>

Third, liberalization makes it possible to trade gas freely, flexibly and efficiently through the development of regional and national trading hubs—an option that is open to Gazprom and its subsidiaries.

Underground gas storage (UGS) is useful for meeting demand during cold snaps, such as that of February 2012. Given that trade in hubs can lead to a tricky situation if demand and supply are too volatile and result in high price volatility, it is necessary to use gas storage services—another option open to Gazprom and its subsidiaries. This is the only way to smooth price and demand volatility over time. The Third Energy Package requires the legal and functional unbundling of gas storage facilities, and operators must provide third-party access (TPA). <sup>18</sup> Market players can thus enter into

<sup>&</sup>lt;sup>14</sup> Set up in 2006, the RIs made it possible to work on European challenges (i.e. interconnection issues, interoperability, transparency, hubs, etc) while discussing issues of regional interest.

issues of regional interest.

15 Achieving a well-functioning EU market requires a step-by-step approach, aiming at breaking down the main barriers and acknowledging regional differences across the territory of the Union in order to strengthen cooperation between MSs and finally achieve common objectives.

<sup>&</sup>lt;sup>16</sup> The TYNDP has to provide a clear view of the pan-European gas infrastructure and thus the signals for potential investments in infrastructures.

<sup>17</sup> Recital 42 of the Directive No. 2009/73/EC.

<sup>&</sup>lt;sup>18</sup> UGS can involve either negotiated third-party access (nTPA) or regulated TPA (rTPA).

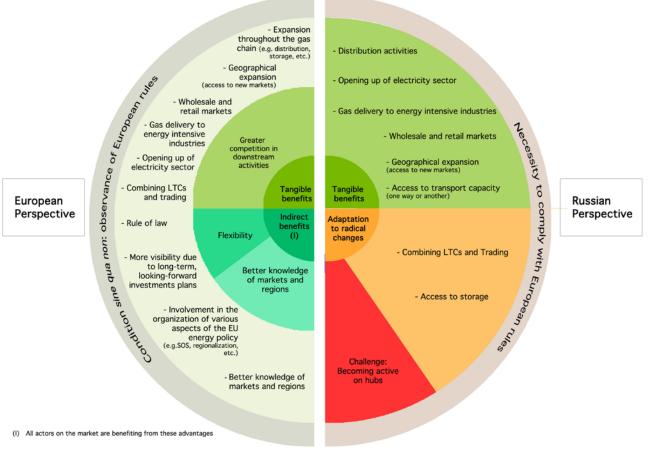
the gas storage business and use gas storage belonging to other companies, <sup>19</sup> Gazprom included. It should be reiterated that Gazprom's storage capacities increased over the last decade and reached approximately 2.5 bcm in 2010. New projects will be implemented in the coming years. For example, Gazprom announced in February 2012 its intention to double its storage capacity in Europe, thereby achieving 5 bcm by 2015. Another example is the asset-swap agreement signed with the German BASF, whereby Gazprom took over 100% of the former jointly operated natural gas trading and storage business.

This does not prevent the company from facing numerous uncertainties and problems of wide scope. The benefits of the liberalization process can be analyzed in two different ways—from a Russian perspective and from a European one (see Figure 7).

\_

<sup>&</sup>lt;sup>19</sup> Article 33 of the Directive No. 2009/73/EC.

Figure 7. Benefits of the liberalization: European perspective vs. Russian perspective



Source: Aurélie Bros, 2014.

# Major Changes in Market Dynamics and Need for Adaptation

## "The EC as ring master"20

Since the signing of the Single European Act, European institutions, especially the Commission, have played an increasingly important role in the energy agenda. Europe has moved progressively from a more or less common vision to what may be regarded as a common energy policy, in which the opening-up of markets was, and remains today, a leitmotiv.<sup>21</sup> Progressive Europeanization of the energy policy has gone hand in hand with relative "control" of bilateral relations (i.e. between one MS and one third country) by the EC. This does not mean that the EC can in one way or another interfere in bilateral relations. Nonetheless, for legal reasons, it is possible for the EC to require European governments to provide information on intergovernmental agreements (IGAs) in order to ensure that they are in line with European legislation.

EU MSs are bound by EU internal-market legislation (e.g. Third Energy Package) and cannot maintain or contract agreements on specific projects contradicting European legislation.<sup>22</sup> As EU law

Quoted in Energy Law, Vol. 1, The Internal Energy Market, The Third Energy Liberalization Package, edited by Ch. Jones, Claeys & Casteels, 2010.

<sup>&</sup>lt;sup>21</sup> D. Buchan, Expanding the European dimension in energy policy: the Commission's latest initiatives, Oxford, Oxford Institute for Energy Studies, 2011, <a href="https://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/10/SP\_23.pdf">www.oxfordenergy.org/wpcms/wp-content/uploads/2011/10/SP\_23.pdf</a>; R. Dickel, K. Westphal, EU-Russia Gas Relations, How to manage new uncertainties and imbalances, Berlin, Stiftung Wissenschaft und Politik, 2012 <a href="http://www.swp-berlin.org/fileadmin/contents/products/comments/2012C12">http://www.swp-berlin.org/fileadmin/contents/products/comments/2012C12</a> Dickel wep.pdf</a>.

berlin.org/fileadmin/contents/products/comments/2012C12\_Dickel\_wep.pdf>.

<sup>22</sup> According to the decision of the European Parliament and of the Council setting up an information exchange mechanism with regard to intergovernmental agreements between Member States and third countries in the field of energy, around 60 IGAs may exist in the gas sector between MS and third countries. This information exchange should "facilitate coordination at Union level to ensure security of supply, the proper operation and functioning of the Union internal energy market and create legal certainty for investment decisions". IGAs are legally binding and the EU considers that they can have a significant impact on the functioning of the internal market. Decision No 994/2012/EU of 25 October 2012 establishing an information exchange mechanism with regard to intergovernmental agreements between Member States and third countries in the field of energy, <a href="http://eur-page-12">http://eur-page-12</a>

prevails over national laws, MSs and European companies have to bring IGAs and contracts into line with EU law. For example, this leads to renegotiations of IGAs, such as in September 2010, when Russia and Poland reopened negotiations on deliveries of gas and management of the Yamal pipeline, <sup>23</sup> which crosses Belarus and then Poland. Bringing contracts into conformity with EU law is also required. Over the last few years, contracts have been renegotiated in order to remove restrictive clauses not in line with EU law, such as destination clauses. In this case, one can ask whether the infringement procedure launched by the EC in September 2012 (see introduction, footnote 1) has put an end to renegotiations by mutual agreement between companies, leading to lengthy and possibly expensive legal proceedings.

For some years now, both public opinion and the European media have tended to criticize or disapprove of projects with an overly bilateral nature. For example, negotiations on the Nord Stream caused guite an uproar among Europeans in 2005 and the following years. Even if the pipeline was defined as a project of common interest in 2006, the deepening of German-Russian relations, including personal relationships between high representatives, have been sharply criticized more than once (e.g. Polish Foreign Minister Radosław Sikorski at the time drew attention to the Molotov-Ribbentrop Pact). There was a time when Russian officials could count on the power of some major MSs (traditionally, France, Germany and Italy). It would be a mistake to conclude that this remains the case today. The EC is playing an increasing role in the energy sector. Furthermore, European leaders no longer have the authority or influence over certain negotiations (e.g. defining projects of common interest).

#### New relationships with traditional counterparts

Before the collapse of the USSR and the launch of the liberalization policy, national gas buyers benefiting from monopoly status were the exclusive counterparts of Gazprom. Over time, stakeholders in the gas sector developed a stable commercial framework and economic environment in which financing new projects could be carried out in a fairly smooth and fruitful way, and with an equitable sharing of risks.<sup>24</sup> This time is now at an end and some structural problems have

lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32012D0994>.

<sup>&</sup>lt;sup>23</sup> In this very specific case, the European Commission assisted Poland without taking over negotiation.

<sup>&</sup>lt;sup>24</sup> It prevented, however, the development of competition and had the effect of portioning Europe into national markets.

emerged. All of these problems mainly relate to security of demand (SoD)<sup>25</sup> and risk management.

One fact too often forgotten or underestimated is the change in the strategies of European companies, which were traditional Russian gas purchasers and Gazprom's key partners. The implementation of the EU energy policy and in particular the application of the Third Energy Package led to restructuring of these enterprises (e.g. enforcement of unbundling provisions), as well as the reshaping of European energy companies' strategies. All of these changes are affecting Gazprom in various ways by jeopardizing the stability of the commercial framework – from a Russian perspective. Here are two examples.

First, gas-to-gas competition is becoming an increasing driver of price in Europe. In return, the pricing of traditional long-term oil-related contracts is not competitive enough. Since these companies no longer have a captive customer base, they cannot transfer procurement costs to these consumers as in the past. This led to renegotiations of contracts with different companies in 2012 (e.g. agreements were signed with the German E.ON and RWE, the Italian ENI, the Slovakian SPP, the Polish PGNiG, etc).

Second, new strategies put in place by European companies—even if fully legitimate—may represent a threat to Gazprom because they do not offer a clear view of future demand. The EU energy Roadmap 2050<sup>26</sup> draws up some scenarios in which gas consumption decreases significantly. For European Transmission System Operators (TSOs), this would mean a potential decrease in gas flows through the network and thus introduce uncertainties regarding the future of their activities. Some European TSOs are actively engaging in the development of biogas (e.g. in France, Belgium and Germany). From a Russian point of view, this leaves some questions open. How quickly will this develop and to what extent? What share will biogas have in the energy mix? And so on. As time passes, long-term visibility is decreasing. From a Russian perspective, this is a matter of genuine concern.

\_

<sup>&</sup>lt;sup>25</sup> SoD can be defined as involving the need to make exploration and development profitable, i.e. making sure that customers will purchase gas and agree to buy it at a price that allows a return on investments; see Th. Bros, *After the US Shale Gas Revolution*, Paris, Editions Technip, 2012.

The Commission on 15 December 2011 published the Roadmap (i.e. going beyond the 2020 goals to achieve a low-carbon economy in Europe), <a href="https://www.roadmap2050.eu/attachments/files/Volume1\_fullreport\_PressPack.pdf">www.roadmap2050.eu/attachments/files/Volume1\_fullreport\_PressPack.pdf</a>>.

#### Lack of medium and long-term visibility

Although the development of green energies in Europe is hardly being driven to keep Gazprom out, it appears that it is a major issue for the Russian company; for example, projects involving renewable energy often receive political and sometimes financial support from the EU MSs in the form of subsidies. It seems as if gas "has become an unattractive fuel source for Europe". 27 The EU energy Roadmap 2050 strengthens this impression, since gas has an even less important role to play in the European energy mix.28 Gas consumption increased from 1990 to 2009, making up about 24% of EU energy consumption and about 23% of the electricity generated in 2009.29 According to the Roadmap 2050, gas would account for between 22% and 25% of the EU energy mix by 2030 and between 19% and 26% in 2050.30 In Europe, gas is increasingly regarded as "transition energy"—that is to say, a means toward the decarbonization of the European economy. The question is: What is the future of gas in Europe after 2040/2050?

The concept of diversification is gaining steadily in importance as indigenous gas production in the EU is decreasing. As the EU is increasingly becoming reliant on primary energy imports to satisfy its demand, diversification is no longer limited to that of sources, supplies and routes. <sup>31</sup> It includes, notably, the development of green energies, but also better optimization of indigenous reserves, both conventional and unconventional. <sup>32</sup> The more the concept of dependence gains attention, the more that of diversification takes on greater importance, i.e. the EU does not wish to increase its dependence on any one supplier, especially Russia in the aftermath of the Crimean crisis. It will also continue to become more difficult for the Russian company to assess European demand at a time when the company faces increasing competition from Novatek and Rosneft in the Russian market, but also in the area of LNG exports, which was liberalized in 2013.

This over-focus on dependence sometimes leads to contradiction and a doublespeak that affect Russo-European relations. On the one hand, the EC struggles to strengthen the

<sup>30</sup> Roadmap 2050, op. cit. [26].

<sup>&</sup>lt;sup>27</sup> T. Mitrova, Regulation: The Final Nail, 2013.

<sup>&</sup>lt;sup>28</sup> As reported by Tatiana Mitrova, "gas is mentioned only a couple of times, and in the final version only one page is dedicated to it", *op. cit.* [27].

<sup>&</sup>lt;sup>29</sup> Eurostat, 2011.

<sup>&</sup>lt;sup>31</sup> J.-A. Vinois, *EU Energy Law, The Security of Energy Supply in the European Union, Volume VI,* Deventer, Claeys & Casteels, 2012.

<sup>&</sup>lt;sup>32</sup> At the time of writing the Union has not legislated on the development of unconventional gas.

partnership by introducing a broad range of initiatives to improve relations in the energy area (e.g. the *Roadmap: EU-Russia Energy Cooperation until 2050*<sup>33</sup>). On the other hand, some European institutions openly state that lowering dependency on Russian supplies is necessary, especially in Eastern Europe where supplies are less diversified. For example, in 2012 the European Parliament published a resolution indicating that "diversification should mean new non-Russian sources of oil, gas, and electricity for those Member States which are overly dependent on this single supplier". <sup>34</sup>

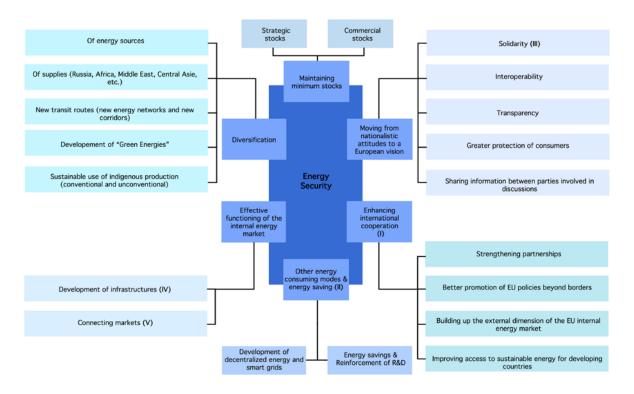
\_

<sup>&</sup>lt;sup>33</sup> Roadmap: EU-Russia Energy Cooperation until 2050, March 2013, <a href="http://ec.europa.eu/energy/international/russia/doc/2013\_03\_eu\_russia\_roadmap\_2">http://ec.europa.eu/energy/international/russia/doc/2013\_03\_eu\_russia\_roadmap\_2</a> 050\_signed.pdf>.

<sup>050</sup>\_signed.pdf>.

34 European Parliament resolution of 12 June 2012 on "Engaging in Energy Policy Cooperation with Partners Beyond our Borders: A Strategic Approach to Secure Sustainable and Competitive Supply", <a href="https://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2012-0238&format=XML&language=EN">www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2012-0238&format=XML&language=EN>.

Figure 8: What does EU energy security involve at the beginning of the 21<sup>st</sup> century?



- (I) External dimension of the EU energy policy
- (II) Genuine decarbonisation of the European energy mix
- (III) Based on Article 222 of the TFUE (Solidarity Clause)
- (IV) Enhancing flexibility / Ensuring that economic investments take place / securing supply partners that ensure gas flowing to Europe, etc.
- (V) Regional Cooperation / Coordinated response in case of crisis / Functioning wholesale market, etc.

Source: Aurélie Bros, 2014.

## Respecting New Paradigms of European Energy Policy

One of the theoretical purposes of this liberalization process is to make the internal market more transparent and fairer. Whatever their nationality, companies should have an interest in being as transparent as possible and not only for legal reasons.<sup>35</sup> This entails better access to information on physical status, efficient allocation of

 $^{35}$  However, a few EU energy companies do not provide all the information needed.

resources, and the abandonment of practices such as insider trading and market manipulation<sup>36</sup> (e.g. Directive 2009/73/EC calls on infrastructure operators to publish tariffs of gas transmission, balancing, LNG facilities, etc; once published, there is no question of renegotiating them, or of obtaining any price exemption or hypothetical discount<sup>37</sup>). Besides facilitating business, transparency should also facilitate dialogue between all parties involved (i.e. institutions, agencies, associations, etc).

Along with many energy companies active on EU territory, Gazprom is trying to improve and/or maintain a good company image, as this is vital for the health of its business. 38 Furthermore, many stakeholders indirectly involved in the energy dialogue (e.g. NGOs, journalists, lobby groups, etc) hold pivotal influence over public opinion and are gaining even greater audience share. They can work against and even obstruct companies. Any company that does not wish to be out of favor has to develop a marketing strategy that promotes better relations between all relevant stakeholders. Even if Gazprom is sponsoring football teams, the UEFA Champions League and the Sochi Olympic Games, it has still guite a poor reputation in Europe; the Greenpeace banner unfurled at the FC Basel stadium in October 2013 is just one illustration. Gazprom is using a variety of tools to represent and defend its interests: energy associations active at national or European level (e.g. in Germany, Gazprom Germania GmbH is a member of the German Association of Energy and Water Industries called BDEW<sup>39</sup>): opinion and information exchanges with various stakeholders and agencies; lobbying (e.g. Gazprom uses the service of the lobby group G+ Europe), etc. The company also opened a representative office in Brussels in 2013. Having a clean and positive image is likely to facilitate discussions at both the economic and political level.

There has been an increase in the number of stakeholders and entities in the energy sector. Gazprom has to consider this development seriously; it is only one company among so many others. It is not a member of any organization (the Energy Community, European Environment Agency, etc), which works to its disadvantage. As regards ongoing negotiations on the Gas Target Model (GTM) and Network Codes (NCs), it is important to highlight that Gazprom is solely involved in negotiations over NCs, as

<sup>&</sup>lt;sup>36</sup> Energy Law, Vol. 1, The internal energy market, The Third Energy Liberalization Package, ed. by Ch. Jones, Claevs & Casteels, 2010.

Article 13 of the Regulation (EC) No. 715/2009.

Many incidents have tarnished the image of companies active in the energy sector in the eyes of the European public (e.g. gas crises, pollution and contamination). This increases the "not in my back yard" (NIMBY) syndrome and also deepens mistrust of the companies themselves.

Der Bundesverband der Energie- und Wasserwirtschaft e. V. (BDEW).

negotiations over GTM involve European gas regulators, following consultation with stakeholders. The Gas Advisory Council (GAC)<sup>40</sup> is currently the only relevant organization where Gazprom can try to defend its interests. The bilateral-nature of this dialogue allows Gazprom to assess specific problems that it alone faces.<sup>41</sup> However, the cooling of relations between the EU and Russia, due to recent events in Ukraine, could affect the future of the dialogue.

.

<sup>&</sup>lt;sup>40</sup> The GAC, established in 2011, is part of the EU-Russia Energy Dialogue. GAC brings together experts from Russian and European academic research organizations and representatives of Russian and EU gas companies (DG ENER, 2013).

<sup>2013). &</sup>lt;sup>41</sup> During the Third GAC, participants stressed how important it is to preserve the bilateral nature of the dialogue. Conclusions of the 6<sup>th</sup> EU-Russia Gas Advisory Council, Vienna, 29 January 2013,

<sup>&</sup>lt;a href="http://ec.europa.eu/energy/international/russia/dialogue/doc/20130129\_gac\_conclusions.pdf">http://ec.europa.eu/energy/international/russia/dialogue/doc/20130129\_gac\_conclusions.pdf</a>.



## **Regulatory Challenges**

#### Securing transport

Any gas supplier has to contract transport capacity in order to fulfill its supply obligations. Previously, Gazprom used to sign long-term supply contracts (LTSCs) separately from long-term transportation contracts (LTTCs). 42 This did not cause major problems, given that networks were mainly built with a view to supplying particular consumers located in geographically defined areas, and third-party access (TPA) was not on the agenda. Gas was traded at national borders (the system was also called the point-to-point system 43)—a model that will progressively change in coming years due to the establishment of the Entry-Exit System (EES). 44 The gradual modification of the basic rules of the gas business is, however, deeply affecting the way that transport is secured, due to substantial changes resulting from the implementation of the hub-to-hub system.

The transition from a point-to-point system to an entry-exit system could expose Gazprom to the risk of a lack of capacity to transport gas. Three hypotheses may be proposed. In the first case, the company cannot book transport capacity equal to its supply obligation—a quantity problem. In the second case, it cannot book transport capacity for the duration needed—a duration problem. The worst-case scenario is, of course, the combination of both problems.

<sup>&</sup>lt;sup>42</sup> K. Yafimava, *The Transit Dimension of the EU Energy Security: Russian Gas across Ukraine, Belarus and Moldova*, The Oxford Institute for Energy Studies, 2011.
<sup>43</sup> i.e. transporting gas to the delivery point located as stated in the contract. Delivery points are located at the border.

<sup>&</sup>lt;sup>44</sup> The EES can be defined as enabling the splitting of reservation capacity into entry capacity and exit capacity and booking them separately. This allows the transport of gas through zones instead of along a contractual path, as before. This means that a shipper has the right to inject a specific volume of gas into the grid at any entry point and withdraw a specific volume of gas from the grid at any exit point. Gas can be brought into the system at cross-border entry points (e.g. pipelines or LNG terminals) or at an entry point from domestic production, and it can be extracted at cross-border exits or at exit points to distribution networks. See *Study on Entry-Exit Regimes in Gas, Part A: Implementation of Entry-Exit Systems*, KEMA; European Commission; in collaboration with COWI Belgium, Belgium, 2013,

<sup>&</sup>lt;a href="http://ec.europa.eu/energy/gas\_electricity/studies/doc/gas/201307-entry-exit-regimes-in-gas-parta.pdf">http://ec.europa.eu/energy/gas\_electricity/studies/doc/gas/201307-entry-exit-regimes-in-gas-parta.pdf</a>.

Such a shortage could occur at different interconnection points (IPs). This could become a serious problem for Gazprom, which would be unable to fulfill its supply obligations.

Each year, Gazprom needs to transport huge volumes of gas. This makes it more imperative than ever to secure sufficient capacity at cross-border IPs to fulfill contractual supply obligations within the EU, but also in Energy Community countries. 45 Gazprom is in a fairly uncomfortable situation in comparison with other gas suppliers (e.g. Norway, the Netherlands, UK and Algeria), since gas passes through many countries before reaching EU buyers (mostly through Ukraine or Belarus, the two main corridors). 46 In addition to posing financial problems, any failure to fulfill its contractual obligations would deeply damage the reputation of the company and seriously call into question its reputation as a reliable supplier.

Unbundling also drives Gazprom into a corner. It gradually erodes Gazprom's control over transport as it presses the company to reconsider its structure—an outcome of European policy to break down vertically integrated companies. Gazprom has acquired numerous assets in joint ventures active in the transport sector over time. 47 The loss of rights varies depending on the unbundling option, which is selected by the country. In the case of the Independent System Operator (ISO)<sup>48</sup> or Independent Transmission Operator (ITO),<sup>49</sup> Gazprom will lose partial control over the assets. In the case of ownership unbundling, it will lose control over transport.<sup>50</sup> At a time when risks are growing, the prospect of losing rights over transport activities is reinforcing fears. The matter has been raised repeatedly in recent years in various European countries. For example, the reopening of negotiations on deliveries of gas and management of the Yamal pipeline in September 2010 led to the establishment of GazSystem as an ISO on the Yamal pipeline; and, in Lithuania, the government is seeking to buy, at a market price, Gazprom and E.ON's stakes (38.9% and 37.1% respectively) in Amber Grid, the

\_

<sup>&</sup>lt;sup>45</sup> The Energy Community members are: Albania, Bosnia and Herzegovina, Kosovo, Moldova, the Republic of Macedonia, Serbia and Ukraine.

 <sup>&</sup>lt;sup>46</sup> This corresponds to a total operational transit capacity of around 175 bcm/y, including an operational transit capacity of around 175 bcm/y in Ukraine (Naftogaz).
 <sup>47</sup> Here are some examples: Wingas (50% less 1 share), South Stream Greece S.A.

<sup>&</sup>quot;Here are some examples: Wingas (50% less 1 share), South Stream Greece S.A. (50%), South Stream Austria GmbH (50%), Overgas Inc. (0.49% Gazprom and 49.51% Gazprom export), EuRoPol Gaz S.A. (48%), etc.

<sup>&</sup>lt;sup>48</sup> The company retains ownership of transmission networks, but it has to transfer operation and control of the day-to-day business to an independent system operator. <sup>49</sup> ITO is also called legal unbundling. The company retains ownership of transmission networks, but subsidiaries operating under another brand name, and fully independent and autonomous, manage the network. In this case, investments are decided by the parent company and the regulatory authority.

T. Mitrova, Regulation: The Final Nail, 2013.

national gas distributor.<sup>51</sup> Currently, the Russian company is concentrating its efforts in order to get out of the deadlock.

In addition, Article 11 of the Gas Directive states that the regulatory authority should notify the Commission if "a transmission system owner or a transmission system operator" is acquired by "a person or persons from a third country". On the Russian side, this means even more control over transport activities. This reinforces misunderstanding between market players, resulting in tensions and even grievances.

The last problem detected regarding transport concerns the TPA and consequently the investment in new infrastructure. According to Article 32 of the Gas Regulation, "Member States shall ensure the implementation of a system of TPA to the transmission and distribution system" and "transmission system operators shall [...] have access to the network of other transmission system operators." As regards new infrastructure, exemptions are possible under request for major gas infrastructure such as interconnectors (Article 36 of the Gas Directive). For this to happen, certain conditions have to be met; for example, investment must enhance competition (Article 36, 1a), or the infrastructure must be owned by a natural or legal person which is separate, at least in terms of its legal form, from the system operators in whose systems that infrastructure will be built (Article 36, 1c), or must improve European energy security by diversifying gas supplies (e.g. the Nord Stream gas pipeline got a TPA exemption).

From a Russian perspective, the stacking of possible lack of capacity and TPA, added to transit risks through Ukraine, considerably increases transport risks. Gazprom could find itself in a situation where supply obligations will be threatened by the duration and volume of transport contracts, leading to an unmanageable mismatch. The alternative emerging on the horizon is simple. Either Gazprom continues to use the former transport infrastructure, with all the safety risks that this entails (i.e. transit risks, but also lack of transport capacity), or it builds new infrastructure to try to partially evade the problem—a principal objective of the Nord Stream and South Stream pipelines. Aside from being fairly expensive, such projects would not resolve the problem if no exemption from TPA was granted, which could happen with the South Stream project. Assuming that the pipeline does not have to fulfill the TPA obligation for various reasons, the problem appears when the pipeline reaches European territory, because Europeans view the rules of the Third Energy Package as applying immediately on European territory. The quarrel over the OPAL<sup>52</sup> and NEL<sup>53</sup> gas pipelines, beginning in 2012,

<sup>&</sup>lt;sup>51</sup> Reuters, 2013

<sup>&</sup>lt;sup>52</sup> The OPAL pipeline has an annual maximal capacity of 35 bcm and runs southward to the German-Czech border, i.e. from Greifswald to Olbernhau (close to the Czech

revealed this problem. The western part of the Nord Stream pipeline included two transmission pipelines in Germany, OPAL and NEL. The Nord Stream pipeline has an annual maximal capacity of 55bcm, which corresponds to the combined capacity of OPAL and NEL. Gazprom did not manage to obtain the entire capacity of the OPAL pipeline (i.e. obligation to provide TPA).<sup>54</sup>

The problem is likely to be encountered in the future. There is nothing to indicate that Gazprom will be granted an exemption for each of its new projects. (e.g. Nord Stream 3 and 4).

#### Securing contracts

Given all the significant changes in the gas sector, another problem stems from contracts. The move from a point-to-point to an entry-exit system is a great concern for Gazprom. This new way of doing business will affect existing contracts, particularly if only hub-to-hub will exist in the not-too-distant future. In this case, both LTSCs and LTTCs should be renegotiated in order to bring them into line with the new system and clarify a number of uncertainties. This means that the current structure of contracts should be changed, which would expose Gazprom to various legal risks and possible arbitration procedures. This point was emphasized by Russian experts during the Gas Advisory Council (GAC) summit in April 2012. 55 At that time, the GAC's progress reports on activities suggested that Russia was advancing strong arguments for "simultaneous coexistence of virtual hubs and EU internal delivery points of LTGEC".

Another thorny issue is the adoption of the "sunset clause". It requires holders of transport capacity on one side of an interconnection to group it with the transport capacity of the transportation network neighbor. It obliges buyers to make their best

border) and connects the Nord Stream to the STEGAL and JAGAL pipelines, connected to Yamal-Europe.

29

connected to Yamal-Europe.

53 The NEL pipeline has an annual maximal capacity of 20 bcm, runs westward toward the border with the Netherlands, i.e. from Greifswald to Achim, and is connected to the Rehden-Hamburg gas pipeline. It allows deliveries to the United Kingdom.

<sup>&</sup>lt;sup>54</sup> The German regulator gave Gazprom 50% of capacity; the 50% remaining should have been sold on PRISMA in March 2014. The European Commission should have validated the decision in March 2014. However, due to the current situation in Ukraine, it has been necessary to postpone the decision. Currently, the problem is not resolved.

not resolved.
<sup>55</sup> Presentation realized by Walter Boltz and Andrey Konoplyanik during the Gas Advisory Council, 25 April 2013, *Progress report on activities & material results achieved between 2<sup>nd</sup> and 3<sup>rd</sup> GAC meetings,* 

<sup>&</sup>lt;www.konoplyanik.ru/speeches/120425-GAC-6\_Boltz\_Konoplyanik.pdf>.

efforts to stop buying gas at border flanges.<sup>56</sup> In the original version, this was to be achieved within five years after the Capacity Allocation Mechanisms Network Code came into force. This meant renegotiating long-term contracts. The issue was heavily discussed during the comitology process<sup>57</sup>. It was established that shippers "should aim to reach an agreement on the bundling of capacity contracts via contractual agreements [...] at the earliest opportunity".<sup>58</sup> Even if the deadline disappears, this might be a tricky situation for Gazprom, which would have to transport gas from the border flange to a market hub – an issue that was not included in previous contracts. This would also add transport cost, depending on the outcomes of the renegotiations with counterparts. This clause has been amended into a "Best Efforts" clause<sup>59</sup>.

An additional problem arises from the gap that will arise in future between LTTCs and LTSCs. As noted in Katja Yafimava's study, 60 there is no correlation between the expiry date for LTTCs and that for LTSCs. In the former case, renewal is to take place between 2015 and 2025; in the latter, between 2025 and 2035. How can Gazprom bridge the gap and how can it secure sufficient transport capacity once LTTCs have expired? Once again, there is a serious risk of being unable to fulfill supply obligations.

Gazprom also dreads contract renegotiations, as many European companies are asking to renegotiate long-term contracts due to the changes in the energy sector over the past few years. All the contract renegotiations that have already taken place have been accompanied by price renegotiations. This happened recently with RWE, E.ON, etc. In a large number of cases, companies desire to include more and more spot indexation in the price in order to provide some respite. Since the 2008 economic crisis, the difference between oil-indexed and spot-priced gas has worsened, the latter becoming cheaper. Europeans increasingly seem to be keen to deviate from oil-indexed LTCs. <sup>61</sup> This change in pricing principles is threatening the survival of some long-term contracts.

<sup>&</sup>lt;sup>56</sup> Regulatory Commission of Energy, 2011.

<sup>&</sup>lt;sup>57</sup> Comitology refers to the process by which European legislatures (European Parliament and Council of the EU) delegate the implementation of precise measures to the executive, that is to say the European Commission (based on the Article 290 of the TFEU).

<sup>&</sup>lt;sup>58</sup> ICIS, 2013.

<sup>&</sup>lt;sup>59</sup> Conclusion of the 6<sup>th</sup> EU-Russia GAC, 2013.

<sup>&</sup>lt;a href="http://ec.europa.eu/energy/international/russia/dialogue/doc/20130129\_gac\_conclusions.pdf">http://ec.europa.eu/energy/international/russia/dialogue/doc/20130129\_gac\_conclusions.pdf</a>

<sup>&</sup>lt;sup>60</sup> K. Yafimava, *The EU Third Package for Gas and the Gas Target Model: major contentious issues inside and outside the EU,* The Oxford Institute for Energy Studies, 2013, <www.oxfordenergy.org/wpcms/wp-content/uploads/2013/04/NG-75.pdf>.

<sup>&</sup>lt;sup>61</sup> This refers to the ongoing debate on gas pricing and the future of oil indexation.

Negotiations over the Network Codes (NCs) are ongoing and may last over several years, given that the target of 2014 will not be met. 62 It should not be forgotten that the NCs will have an impact on the structure of contracts, and thus on renegotiations. One of the risks is that the renegotiation of contracts coincides with the final commitment decision of the infringement procedure launched by the EC on 4<sup>th</sup> September 2012. In this case, it could have a negative impact not only on EU-Gazprom relations but also on EU-Russia relations. This is because it will reinforce in Russia the notion that the EC, and more generally European institutions, are hostile to Russia, and that various actions are being undertaken to weaken the competitive position of Gazprom on the European market.

While Europe has sought to open up gas markets and move progressively toward an even more sophisticated market organization with gas-to-gas competition, Gazprom entered into downstream activities while maintaining the business system established during the Cold War (i.e. long-term contracts with prices indexed to substitute energy prices with take-or-pay clauses). This served to make exploration and development profitable, while also enabling security of supply (SoS). However, the recent developments have put in place a hybrid system that combines elements inherited from the old system and ones that are characteristic of market liberalization (e.g. development of spot markets). The more Europe moved toward a hybrid system, the more Gazprom tended to move in the same direction - proof of interaction between Europe and Russia. This partly explains why Gazprom is operating in a wide range of areas and using a combination of all the various options that the market is offering.

So long as spot prices were higher than gas prices in long-term oil-indexed contracts, this hybrid system was manageable for both Europeans and Russians. Gas sold on a long-term basis ensured European SoS and supplied the secondary market. Nevertheless, difficulties arising after spot prices came down made this hybrid system even less bearable. If Gazprom seems to be reluctant about major changes, this is because the gradual move toward gas-to-gas competition has a major impact on the way in which it assesses its own security of demand. This means that the overhaul of the European downstream sector has substantial

٠

<sup>&</sup>lt;sup>62</sup> The creation of a competitive and single European gas market should be achieved in 2014. However, the European Commission reported in an official communication, published on 15 November 2012, that, despite significant improvements, the EU "is not on the track to meet this deadline" (European Commission, 2012). See communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Making the internal energy market*, 15 November 2012, <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0663:FIN:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0663:FIN:EN:PDF</a>.

consequences for the upstream sector. Fixing a fair price that does not stop upstream investments and lets demand grow is becoming an increasingly complex and highly sensitive issue. High prices should not destroy the demand, but excessively low prices combined with a lack of visibility are not an incentive to make upstream investments.



### **Conclusion**

The process of establishing a Europe-wide gas market began slowly, but has in recent years accelerated rapidly. The Third Energy Package had speeded up the process, but it can be seen as a bombshell that affects all players active on the European market, regardless of nationality. In just a few decades, Europe has entered a transition phase and is gradually moving from a regulated system with state monopolies to a fairly open market with access for additional new suppliers. As in any change process, the transition may be painful and complicated for stakeholders accustomed to doing business in a stable commercial framework and economic environment under which financing new projects could be carried out in a fairly smooth and fruitful way, without strong competition.

It is often suggested that Gazprom is unable to adapt to changes occurring in Europe: too big, too rigidly structured, too lazy or simply not competitive enough. Such an assessment masks a considerable part of the current state of affairs. The Russian company seized opportunities offered by the new architecture of the EU gas market, by moving down the gas value chain and participating in downstream activities. However, the problems have also multiplied. As nobody can actually measure the level of risk, tensions surrounding prices and access to infrastructures are escalating. There are two possible interpretations of the current situation. The first is that Gazprom shows no willingness to respect democratically adopted EU law and is not playing the game, while benefiting in many ways from markets opening up. The second interpretation involves analyzing the structural difficulties of the company; instead of thinking that Gazprom is pursuing a categorical "no policy", it is necessary to look into the way in which it has assessed its security of demand, and how it will manage it in the future. Fundamental changes to basic rules of the gas business generate strong pressure on the company, and it needs time in order to adapt. Indeed, European energy companies also need time to adapt. Relations between the EU and Gazprom are not easy. The recent cooling of relations will affect the energy dialogue, and questions arise about, for example, the future of the Roadmap 2050 signed by the EU and Russia in 2013, as well as the GAC.

Aside from problems inherent in the construction of the EU gas market, since the mid-2000s Gazprom has had to deal with additional difficulties. For example, the global financial crisis and the ensuing recession have put gas in direct competition with coal.

Additionally, the US shale-gas revolution has redirected coal to Europe. Even if the Fukushima effect (referred to above) may continue for some years, in the long term Europe will be able to purchase LNG at competitive prices. <sup>63</sup>

Gazprom is a "heavyweight" but its predominance both in Europe and Russia has been challenged. The company is massively investing to remain a cornerstone of European gas supplies. With the development of independent gas producers in Russia wishing to export gas, it is important for Gazprom to maintain or increase gas sales in Europe so as to remain the supplier of choice. This success depends also on external factors on which Gazprom has no or only limited control, such as developments in the Asian market. Since Gazprom's strategy in Europe is clearly to at least maintain or to increase its sales, its main challenge is to find the best way to rebalance the distribution of risks and to ensure appropriate security of demand.

.

<sup>&</sup>lt;sup>63</sup> Prognoz razvitiya energetiki mira i Rossii do 2040 goda [Forecast for the Evolution of Energy Development in Russia and the World by 2040], INEI RAN [The Energy Research Institute of the Russian Academy of Sciences], <a href="https://www.eriras.ru/eng">www.eriras.ru/eng</a>>.