

Russia: Playing Hardball or Bidding Farewell to Europe?

Debunking the Myths of Eurasia's New Geopolitics of Gas

Morena Skalamera

Andreas Goldthau



HARVARD Kennedy School

BELFER CENTER

for Science and International Affairs

DISCUSSION PAPER 2016-03

JUNE 2016



The Geopolitics of Energy Project

Belfer Center for Science and International Affairs

Harvard Kennedy School

79 JFK Street

Cambridge, MA 02138

www.belfercenter.org/geopolitics

Design & Layout by Andrew Facini

Cover photo: Steel pipes originally bound for Russia's cancelled South Stream gas pipeline project are transported at the Mannesmann steel mill in Muelheim, Germany, 04 December 2014. (Roland Weihrauch/picture-alliance/dpa/AP Images)

Copyright 2016, President and Fellows of Harvard College

Printed in the United States of America

Russia: Playing Hardball or Bidding Farewell to Europe?

Debunking the Myths of Eurasia's New Geopolitics of Gas

Morena Skalamera

Andreas Goldthau



HARVARD Kennedy School

BELFER CENTER

for Science and International Affairs

DISCUSSION PAPER 2016-03

JUNE 2016

About the Authors

Morena Skalamera is an Associate with the Geopolitics of Energy Project. She recently completed her Ph.D in Political Science and International Relations at the University of Trieste. Her Ph.D. dissertation dealt with European-Russian energy cooperation and was funded by the International University Institute for European Studies (IUIES) with a grant to carry out research abroad. During her tenure at the Belfer Center, she will be conducting research on a new project: “The Sino-Russian Gas Relationship and China’s disruptive rise in Energy and Geopolitics.” Her areas of expertise and interest include: energy cooperation between the EU and Russia, global energy governance, geopolitical and strategic issues arising from the unequal distribution of global energy resources (in particular, natural gas), the role of technological breakthroughs, the Sino-Russian energy cooperation and the making of the United States’ foreign and security policies.

Andreas Goldthau is an Associate with the Geopolitics of Energy Project and Professor of Public Policy at Central European University. He is also a Fellow with the Global Public Policy Institute. His academic career includes stints with the RAND Corporation and SAIS, Johns Hopkins University, where he also served as an Adjunct Professor in the MSc program in Energy Policy and Climate. Goldthau’s research interests focus on energy security and global governance issues related to oil and gas. His latest research project, supported by the EU’s Marie Curie IOF Program, investigates energy technology innovation and transfer, with a focus on shale gas prospects beyond the U.S.

Table of Contents

Eurasia's new geopolitics of gas	1
Approach, relevance, and data	5
1. Russia's new export strategy	7
1.1 Gazprom will circumvent Ukraine and cling to its status in South East Europe.....	7
1.2 Russia's pivot to Asia stops at China.....	15
2. Drivers of the shift in export strategy	21
2.1 The Ukraine crisis only accelerated what was already in the making	21
2.2 The shift is not driven by domestic pressure on Gazprom.....	24
2.3 Best explanation of the shift: EU regulation	28
3. Prospects of Russia successfully making the shift.....	31
3.1 In Europe.....	31
3.2 In China	33
4. Conclusion	36



Gas pipes bearing the flags of Serbia and Russia lie on the ground near the Serbian village of Sajkas, north of Belgrade, where Serbia ceremonially launched its leg of Russia's South Stream pipeline before the project was cancelled, December 10, 2014.

South Stream's demise deprives south-eastern Europe of an alternative supply of energy to the disruption-prone route through Ukraine, but there was a financial cost too. States along the route with fragile economies were banking on a big payday from construction, shipment fees and cheaper gas.

REUTERS/Marko Djurica



Eurasia's new geopolitics of gas

One of the great questions of energy geopolitics over the last few years has been the nature and extent of Russia's shift in export strategy away from Europe. The year 2014 arguably marked the end of Gazprom's multi-decade business model in Europe. In May 2014, the state-controlled natural gas producer, inked a deal worth USD 400 billion to supply Russian gas to China. In November 2014, through a memorandum of understanding, Gazprom pushed the Altai pipeline to service the Asian markets instead of Europe. Finally, in December 2014, it cancelled plans for South Stream—a pipeline project once viewed as a key to locking down the European market and, that same month, announced Turkish Stream, a pipeline aimed at circumventing the transit country Ukraine, and the expansion of Nord Stream, a Russian–German link, through the Baltic Sea.

All these events have nurtured debates about a wholesale reassessment of Gazprom's future in Europe. Many have speculated about a diminished role for the European market in Gazprom's export portfolio, and in consequence, a significant reevaluation of the EU's overall market outlook. While some observers foresee a complete refashioning of Russia's strategy to gradually transition away from the European market (Stern et al., 2015), or at least a gradual obsolescence of the same (Henderson, 2014), others regard the shift as a temporary attempt by Russia to play hardball with Europe (Milov, 2015). Each of these perspectives rests on some critical assumptions and propositions about the key drivers, timing, and implications of Gazprom's alleged shift to the East. This debate warrants an investigation into the nature and prospects of the new Eurasian geopolitics of gas.

To be sure, there is general consensus about the key factors that will shape the pathway of the EU-Russian gas trade going forward. First, shale gas will not fundamentally alter Europe's supply base in the near future. It may make up for some of the decline in indigenous production, but its impact will be moderate. Second, given sluggish economic growth, Europe's gas demand looks increasingly weak (Boersma et al. 2014; BP 2014; Honoré 2014). Given such a shrunken pie, Russian gas

remains the most competitive incremental source.¹ Against the backdrop of declining indigenous production, Russian gas deliveries to Europe will most likely stay stable at around 33% of the EU's gas imports, despite its energy efficiency measures and a growth in the use of renewables. Experts also agree that a perfect storm of collapsing prices, international sanctions, and currency depreciation will make Russia the biggest loser from the current downturn in oil prices (Critchlow 2015). Lastly, observers concur that Russia will resist spot trading in gas while continuing to favor oil indexation, which means it will delay change and provide the minimum price discount acceptable to its buyers for as long as possible (see (Farrington 2015; Mitrova, Kulagin, and Galkina 2015)).

Little attention, however, has been paid to the causal drivers and the implications of Russia's alleged shift in export strategy away from Europe and toward the East. Our paper redresses this neglect by determining whether Russia has indeed completely refashioned its strategy to gradually transition away from the European market. This question necessitates a thorough investigation of Gazprom's reaction to a set of factors that threaten its position in the European gas market and, in turn, an assessment of key factors driving future European supply structures. This paper aims to do just that; it explores the extent to which this new Russian export strategy is real, and to the extent that it is, it investigates the drivers of the new approach in terms of timing, substance, and the prospects for this new approach to succeed. To this end, this discussion paper relies on a set of background interviews with policy makers, industry representatives, and analysts in Russia and Brussels.

According to Gazprom's official position, its shift in export strategy vis-à-vis Europe is supposed to have two main components: a new business model (entailing commercial pricing of gas and respecting the EU's gas market regulation) and a gradual re-orientation away from Europe to Asian markets.² Although this paper argues that a new approach is indeed

1 From the production cost perspective, Russian gas is the EU'S cheapest option. Yet, where there is lack of competition (i.e. the Baltics and South East Europe), Gazprom has applied arbitrary pricing and other abuses of market power.

2 During the 8th annual European gas conference in January 2015, Gazprom's Deputy CEO Alexander Medvedev explicitly laid out Gazprom's new export strategy; 8th Annual European Gas Conference 2015, 27–29 January, Vienna, Austria. http://www.fief.ru/img/files/EGC8___Conferenceprogramme.pdf

emerging, it holds that characterizations of a complete shift in Gazprom's export model in Europe have simply been off the mark and do not fully explain the character and effectiveness of Moscow's energy diplomacy. We find that the shift in Russian export strategy is real, but is one that is best defined as a "hybrid approach" rather than a revolution. While Gazprom still formally adheres to the principle of oil indexation, it has been *de facto* adapting to the dramatic changes occurring in the European gas market by offering strong price discounts and partial spot indexation for existing contracts. This paper, moreover, corroborates that Gazprom's Eastern Gas Strategy is a first tier priority. Hence, there are genuine elements of a new export strategy, but one that is not complete given that Russia will retain its "hybrid model" in parts of the European market.

While Gazprom's new business model in Europe is seen as becoming less political and more commercially minded (Henderson and Mitrova 2015; Stern, Yafimava, and Pirani 2015), closer scrutiny reveals that Gazprom has neither fully embraced the EU's market pressures, nor does it play by international rules of good governance, except when left with no other choice. The variety of tactics that Gazprom is deploying in South East Europe (SEE) suggests that the Russian monopolist is still resisting the EU's market reforms. We find that this region has become a new key battleground between Gazprom's pipeline plans and EU-sponsored infrastructure aimed at weakening Russia's grip by interconnecting the region. As a consequence, Gazprom's new business model in Europe oscillates between a still political approach in the vulnerable SEE region and more commercially minded one in Northern Europe.

In terms of what is driving the shift, this paper does not consider the geopolitical tumult between Russia and Europe over Ukraine as a primary driver. Further, the paper finds little evidence that Russia's strategic shift is being driven by domestic competitive pressure on Gazprom. Instead, the best explanation for the Russian shift vis-à-vis Europe is the EU's effective use of regulatory instruments to achieve its policy objectives. The pivot to Asia, too, is mainly due to Europe's effective regulation and the economic need to target China, Japan, and South Korea, in light of the EU's reduced demand for gas.

In essence, we maintain that during the current Ukraine crisis, gas conflict between Moscow and the EU has both increased due to Gazprom's intransigence on SEE and its determination to circumvent Ukraine and been alleviated due to Gazprom's gradual adaptation to EU regulation. The outcome is not yet determined, but Russia, though under continued pressure from EU regulation, will continue to be an important European supplier—and likely a better behaved one in the future. Efforts to increase exports to Asia will continue, but will not amount to a challenge to Europe.

Approach, relevance, and data

Analyses of EU-Russian energy relations essentially fall into three camps. On the one hand there are geopolitical analyses as represented by Baran (2007), Cohen (2009), or Klare (2015). These works predominantly focus on international security aspects and treat energy as subject to grand strategy (O’Sullivan 2013). As a consequence, they tend to place little attention on domestic dynamics, such as developments in the Russian domestic gas sector or EU energy market regulation, which influence the operational model of companies active in that market. In another camp, a wealth of economic analyses assess Eurasian energy in terms of supply, demand, and pricing but tend to ignore the security layer pertaining to energy markets (Goldthau 2013; Mitrova 2014; Stern, Yafimava, and Pirani 2015; Westphal and Dickel 2012). Finally, a third set of analyses focuses on the institutional aspects of EU-Russia energy relations (Aalto 2009; Konoplyanik 2012; Locatelli and Boussena 2011). While the institutional dimension is key to grasping basic structures in energy trade and investment, it represents only one aspect in the broader energy conundrum.

This study complements these existing analyses in two ways. First, through a political economy approach, it sheds light on the interaction between political and economic factors in Eurasian energy relations. The objective is to determine more precisely whether, and if so how, when, and to what extent we have observed a reorientation of Russia’s gas export strategy away from Europe. Second, this paper contributes to the often-partisan literature on the EU-Russian gas trade by building on primary data. Unlike most existing studies relying on secondary sources, it offers important insights by focusing on the analysis and perceptions of key figures in Eurasian energy affairs. In short, this paper aims to reflect on and, to the extent possible, answer the following questions: ***Has Russia shifted its long-standing export strategy away from Europe? If so, what is driving the shift? What are the prospects of Russia successfully making this shift? In other words, what can we expect from future Russian behavior in global gas markets?***

To this end, 19 in-depth, semi-structured qualitative research interviews were conducted in Brussels and Moscow, from May to June of 2015. Interviews featured senior level energy experts, gas executives, academics, EU

and Russian officials involved in EU-Russian institutional cooperation, and diplomats from Russia and the EU. While experts were primarily chosen according to their specific position, we also used “snowball” sampling, i.e., personal references from interviewees to identify additional respondents. Public figures—including appointed and elected officials and well-known political observers—are identified by name, except in cases where they asked to remain anonymous. All other respondents, including energy industry insiders, remain anonymous and are identified only by the nature of their expertise.

This paper is divided into three sections. The first section provides an assessment of the character and substance of Gazprom’s shift in export strategy. The second section presents an in-depth investigation of key factors driving Gazprom’s market strategies in the near term. It analyses the implications of the shift in export markets (both in Europe and China) and Gazprom’s reaction to a set of challenges at home. The third section looks at the prospects of Russia successfully making this shift. This section, moreover, explores Russia’s changing priorities and the key factors that will shape the EU-Russia energy pathway moving forward.

1. Russia's new export strategy

Section 1 makes three crucial points. 1) EU-Russia gas trade is evolving toward something new and different. This is evidenced by Gazprom's gradual introduction of spot elements in its gas pricing and by its partial following of the EU's general rules on gas trade. 2) Despite talks of Gazprom's structural shift, with its strategy in South East Europe (SEE), Gazprom is demonstrating that it has not fully embraced Europe's regulatory efforts. 3) There is a real emphasis and desire in Gazprom's export strategy to "go East." However, despite grandiose plans, great political fanfare and the narrative of an emerging strategic alliance between Beijing and Moscow, any benefits of progressively deepening trade integration will be increasingly uneven and in China's favor.

1.1 Gazprom will circumvent Ukraine and cling to its status in South East Europe

The situation in Ukraine has reached a stalemate affecting policymakers in Europe and Moscow and their hard choices on energy diplomacy. Such tensions, in turn, affect the character of commercial relations between Gazprom and its business partners in Germany, Italy, France, and elsewhere. Both sides stress the need for mutually acceptable compromise, but deescalating the crisis has proven very challenging.

For Europe, such tensions culminated in the idea of creating a single collective buyer for Russian natural gas as part of a planned Energy Union (Andersen, Goldthau, and Sitter 2016; Tusk 2014). For Russia, the recent Ukrainian crisis revealed the need to fully circumvent Ukraine en route to European customers and, as we argue, has shown Moscow's ambition to remain a dominant player in South East Europe. In this region, due to disregard for market rules and the lack of competition, Russian gas is perceived as a direct threat to Europe's future energy security.

It is indeed Russia's declared goal to replace Ukrainian transit with Southern and Northern routes. These come in the form of Nord Stream II,

effectively doubling the existing 55-bcm pipeline through the Baltic Sea and the Turkish Stream pipeline, with a 32-bcm planned capacity through the Black Sea replacing South Stream and landing in Greece. Moreover, Gazprom has officially announced that it will deliver gas to the EU's borders and will retreat from the disputed downstream segment.³ Consequently, during the 8th annual European gas conference in January 2015, Gazprom's Deputy CEO Alexander Medvedev explicitly laid out Gazprom's vision: no transit through Ukraine after 2019.⁴ Various observers suggest that this move represents a deep shift in the way the Russian gas giant Gazprom thinks about the European gas market, its main export destination. On the one hand, this is viewed as a new strategy in pipeline diplomacy, which represents a lasting change in export strategy and a return to pipeline politics (Riley 2015). Indeed, Gazprom is pursuing a strategy of diversifying the routes by which it supplies gas to Europe so that less passes through Ukraine. On the other hand, it mirrors a slow but important move toward a firmly trade-oriented strategy for gas exports, characterized by a "commercial partnership" devoid of more overarching political goals or commitments (Stern, Yafimava, and Pirani 2015). Such allegations have received additional traction against the backdrop of Gazprom engaging in its first auction in September of 2015 (Financial Times 2015).

Our interviews confirm that although Gazprom is intent on circumventing Ukraine, it does not want to jeopardize its position as Europe's key gas supplier. This, indeed, highlights the importance of taking a more nuanced view on Gazprom's future in the European market. Our findings reveal that Russia is poised to preserve its market share by serving Europe through new pipeline routes, but it also finds itself constrained by EU regulation in South East Europe, a new key battleground for access to downstream.

To be sure, there remains an element of short-termism in current Russian actions. According to Russian expert on the geopolitics of energy Tatiana Mitrova, *"There is no officially pronounced strategy yet; to some extent you can call it improvisation. It could change and become more structured—for now Gazprom has chosen to shift its export strategy through ad-hoc*

3 See, for example, the "Speech by Alexey Miller at conference "Europe and Eurasia: Towards the New Model of Energy Security" April 13, 2015; <http://www.gazprom.com/press/miller-journal/029076/>

4 8th Annual European Gas Conference 2015, 27–29 January, Vienna, Austria. http://www.fief.ru/img/files/EGC8___Conferenceprogramme.pdf

announcements.” She further alleges that Gazprom’s strategy has not been thoroughly worked out yet, and that even top executives such as Gazprom CEO Aleksei Miller was caught by surprise when Putin announced a new route—Turkish Stream—in Ankara in December 2014.⁵ The ad hoc element related to this new pipeline route may be attributed to the obvious failure of South Stream and the strong pressure Gazprom encountered as a result of it.⁶ Alexander Gabuev summarized the view of the events as seen from Moscow: *“Now the Ukrainians are buying Russian gas through Europe and the Europeans are ready to support them by enhancing their reverse flows options, etc. All this is very politicized.”*⁷ Seconding this, Tatiana Mitrova asks, *“If a foreign investor is prepared to lose \$25 billion on your territory, why you don’t let him do it? The rejection of South Stream was very much politically motivated.”*⁸

Turkish Stream, a pipeline whose future is now clouded due to tense Russian-Turkish relations, was intended to pump Russian gas, via Turkey, into South East Europe while bypassing Ukraine. Whether this pipeline or some other pipeline across Southern Europe, such as the renewed plan for ‘Poseidon’—an interconnector between Greece and Italy—will materialize, is highly uncertain.⁹ All these pipeline routes, however, confirm Russia’s intention and motivation: Ukraine is perceived as an unreliable country, and “is simply unpredictable.”¹⁰ In more extreme views, Kyiv is seen as an instrument of a Western geopolitical ploy against Russia. Seen from Moscow, amidst a widening political gulf between the West and Russia, only support for a complete circumvention of Ukraine has become politically acceptable. Gazprom explicitly endorses this goal. In the words of Sergei Komlev, *“We can no longer use Ukraine as a transit country because Ukraine has become an instrument of the geopolitical game orchestrated directly by the United States.”*¹¹

5 Tatiana Mitrova, Interview by Morena Skalamera, Moscow, Russia, May 30, 2015.

6 Ibid.

7 Gabuev, Interview by Skalamera.

8 Mitrova, Interview by Skalamera.

9 EurActiv, “Gazprom revives ‘Poseidon’ Adriatic link,” February 26, 2016

10 Valery Nesterov, Interview by Morena Skalamera, Moscow, Russia, May 29, 2015.

11 Komlev, Interview by Skalamera.

Some observers have noted that technical and financial challenges will make it difficult for Russia to circumvent Ukraine by 2019. As Mitrova explains, *“Theoretically, it is possible to fully circumvent Ukraine by 2019—but such ambitions rest on a lot of uncertainties. Gazprom needs exemptions from the EU’s Third Party Access (TPA) rule for OPAL, and Turkish Stream, should this pipeline be built. With the current political situation it will be hard to obtain these needed exemptions.”*¹² She also adds that Gazprom aims to successfully renegotiate delivery points and contracts for its old deliveries, a goal that is arguably not helped by “all the pompous announcements” such as that of Turkish Stream.¹³

Certainly, some observers do point to positive aspects of these developments. For instance, Klaus-Dieter Borchard, Director of the Internal Energy Market within the EU’s DG Energy, notes that Russia’s declared intent to deliver gas to the EU border amounts to a “crucial turning point.” He argues, *“It is the first time ever Gazprom is not insisting on building and operating a pipeline. Now they say, ‘We will deliver our gas up to the entry point into the EU and then it’s up to the Europeans to sort it out. If you ask us to become an investor, we will do it—but we are not entering any IGAs (such as with South Stream); the only thing we insist on is this routing.’ This is quite a comprehensive change with Gazprom moving to the role of a normal seller and shipper, which is good.”*¹⁴

Officially, Russia holds Europe (and the United States) responsible for having hindered the realization of South Stream. In addition, Russia also insists that refurbishing the Ukraine transit system would be wasteful considering the latter’s persistent unreliability. Notwithstanding sizeable uncertainties about the feasibility of full circumvention, Russia’s political eagerness to avoid Ukraine has thus far resulted in the EU’s parallel urgency to help it. In the words of a high-level official at DG Energy: *“South East Europe is currently the most vulnerable region, one where Gazprom has repeatedly flexed its gas endowments and is determined to keep a foothold.”*¹⁵

12 Ibid.

13 Ibid.

14 Klaus-Dieter Borchardt, interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.

15 High-level official at EU’s DG Energy (2), Interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.

As an DG Energy's official explained, *"Admittedly, South Stream's rejection by the EU had to do with a 'political perspective,' i.e. helping Ukraine to retain its status of a transit country."* He added, *"Obviously, both sides are playing games."*

Responding to Gazprom's determination to fully circumvent Ukraine by pumping additional gas through SEE, the EU has unveiled a more ambitious action plan to influence the region through the Central and Southeastern Europe Gas Connectivity (CESEC) high-level working group¹⁶ and its so-called "no regrets", smaller, interconnecting pipelines, as opposed to Russia-sponsored big trunk lines.

A European diplomat explains, *"Now the whole conflict has moved to SEE, where we are not in the driving seat—therefore we stepped in with CESEC. Whatever happens in the market, one thing is certain: interconnectors are much more needed than huge pipelines fed by only one gas supplier."* In light of the still weak market competition in SEE, the EU aims to establish a regional roadmap for infrastructure priorities. The objective is to improve security of gas supplies with each state in this vulnerable region having access to at least three different sources of gas.¹⁷

Stress tests performed in 2014 have demonstrated that SEE (and the Baltics) are the most exposed to potential supply risks. Gas prices in SEE are among the highest in Europe because the region is overwhelmingly dependent on Gazprom. Therefore, the EU's general position is that another big Russian pipeline into SEE (i.e. Turkish Stream) would aggravate such a situation. But it was the geopolitical crisis over Ukraine that pushed the EU to more clearly identify its priorities; the EU is now committed to keeping the existing transit route through Ukraine. Russia can be part of the suppliers for SEE and use the existing infrastructure to service the region. The EU also offers to take the gas at the East Ukrainian border, which would eliminate the risk of reputational losses for Gazprom's in case of unreliable deliveries. As summarized by an EU official at DG Energy, *"[...] it is a bit*

16 In order to accelerate the integration of the gas markets of the region and diversify gas supplies, Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania, Slovakia, Slovenia, and the EU launched a high-level working group in February 2015. http://europa.eu/rapid/press-release_STATEMENT-15-4281_en.htm

17 High-level EU official at DG Energy (2), Interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.

*harsh to tell your main customer, 'From now on you will be collecting gas at the Turkish-Greek border.' Transit via Ukraine could continue, with no risk borne by Russia. [...] We support reforms in Ukraine and the maintenance of current delivery points.'*¹⁸

The EU's stance is straightforward: existing contracts need to be honored. If Russia chooses not to fulfill its contractual obligation via Ukraine, it might become impossible to deliver the currently contracted volumes. In light of this, the EU Commission started to work on stabilizing Ukraine by, among other things, fostering energy reforms and creating an independent regulator, after which, ideally, investment for the refurbishment of the Ukraine route would follow. Moreover, the EU does not support yet another mega-pipeline to Europe (i.e. Turkish Stream, which would mimic the South Stream approach, though scaled down to essentially half of South Stream's initially planned capacity).

Given the region's high import dependency on Russian gas, the stakes are high for Gazprom. It stands to lose both market share and geopolitical influence. In the words of Denis Borisov, a Russian oil and gas analyst, *"South East Europe is a region where both the EU and Russia exert influence. But Russia certainly doesn't want to leave this region."*¹⁹

Here, in turn, lies the crux of the problem with Russia. For Russia, these European efforts are absolutely unacceptable; its intentions to circumvent Ukraine are unambiguous, even at the cost of temporarily delivering less gas to Europe. Given that Gazprom has long-term supply obligations with Europe, the company has to find a solution to honor these contracts without using the Ukrainian route. Most importantly, Gazprom needs an alternative route to reach its South European customers, which still heavily depend on transit through Ukraine.²⁰ In this context, SEE has emerged as a new energy battleground between Russia and Europe.

18 High-level official at EU's DG Energy (1), Interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.

19 Denis Borisov, Interview by Morena Skalamera, Moscow, Russia, June 2, 2015.

20 In fact, Italy and the Balkans are still fully dependent on transit via Ukraine. Italy, for example, is very vulnerable; Gazprom fulfills 30% of Italy's gas imports, fully delivered through Ukraine. If restrictions on OPAL are gone, even Austria can get its gas from Northern Europe, but there is no solution for the SEE region.

Most observers argue that if Russia chooses not to fulfill its contractual obligation via Ukraine, it might become difficult to honor existing contracts. For example, Stern et al. (2015) write that even with two new Black Sea pipelines to Turkey, Gazprom will not be able to meet all of its contractual commitments unless it continues to utilize some part of the Ukrainian system until at least 2020 and probably much longer.²¹ Gazprom sees it differently; notwithstanding the possible blows to Turkish Stream, Russia is not on the ropes in European gas markets for the foreseeable future. Sergei Komlev from Gazprom Export, specifically, was quick to emphasize, *“Gazprom firmly said that even if there were delays with the construction of other pipelines, we are able to wait so to avoid Ukraine’s transit. Maybe this will result in some decrease in supplies to Europe, but given the size of our market share, we can wait.”*²²

Indeed, Moscow’s position seems not to leave the door open for compromise. In order to counter the EU’s energy diplomacy and finalize Ukraine’s disintermediation, Russia has thus far pursued a two-fold strategy. First, it wants to influence the EU’s policies by taking part in the so-called CESEC group, which is currently only open to member states. Second, it is pushing for the Turkish Stream extension both at the EU-Russia Gas Advisory Council and by negotiating with individual SEE countries. Through Turkish Stream, Gazprom is planning to realize multiple strategic goals: honor existing contracts and fully circumvent Ukraine by the end of 2019, when the contract with Ukraine expires.²³ The latter will also help Gazprom to remain dominant in the SEE market and push competitors (the Azeri, the Iraqi, and East Mediterranean Gas) out of the region. Gazprom is acutely aware that these suppliers collectively might have much more gas than Russia; hence, it is determined to block their entry into the European market.

In fact, although Gazprom’s gas diplomacy in Europe is undoubtedly in flux, there remain serious doubts over characterizations of a complete reorientation. Gazprom is by no means retreating from SEE markets.

21 In their view, the cancellation of South Stream has certainly delayed Gazprom’s intention to reduce transit through Ukraine prior to 2020 (Stern, Yafimava and Pirani, 2015, p. 9).

22 Komlev, Interview by Skalamera.

23 Gazprom will have to be able to deliver the same amount of gas through Nord Stream, OPAL, and Turkish Stream.

Instead, a variety of tactics that Gazprom is deploying in South East Europe are geared toward making these countries resist EU market reforms. This includes “positive” measures such as wooing the regional companies’ investment in development and export of gas from the Greek-Turkish border to Europe, prioritizing infrastructure exports in South East Europe, strengthening political cooperation among countries in the region, stimulating development of new gas output and outlets, and sustaining the role of gas for Russia’s rentier political-economic system for the foreseeable future. The main example of these tactics is the Russian-Greek preliminary agreement to jointly build an extension of the Turkish Stream gas pipeline through Greece.²⁴ It also involves “negative” measures in the region, such as discretionary price cuts/hikes, “take-or-pay” obligations, veiled threats of orchestrating a new gas cartel, and threats to arbitrarily switch deliveries between established import dependent European customers and emerging markets in Asia.²⁵ Overall, the classic “divide and rule” tactics seem to prevail, as do discretionary policies against vulnerable customers in SEE.

The deep-seated controversy in the EU-Russia energy relations revolves around infrastructure-related questions. Has Gazprom, as a seller, a sovereign right to choose its preferred routes to ship gas? Can Gazprom impose a routing on Europe that does not fit European priorities? The answers to such questions are not straightforward. Close scrutiny of Gazprom’s behavior in South East Europe, where the gas behemoth has neither fully embraced the EU’s market regime, nor is it playing by international rules of good governance, suggests a new ‘hybrid’ approach rather than a straightforward transformation of its business model. While Gazprom is developing a new business model in some instances, it clings to old practices elsewhere.

24 Bloomberg, “Russia Strengthens Greece Ties with Gas Link Deal to Europe”, June 19, 2015.

25 On the different dimensions to Russia’s energy weapon, see especially Adam N. Stulberg, “Out of Gas? Russia, Ukraine, Europe, and the Changing Geopolitics of Natural Gas,” *Problems of Post-Communism*, Vol. 62, Issue 2, 2015.

1.2 Russia's pivot to Asia stops at China

Much has been said about Russia's imminent Asian Pivot and the country's shift away from Europe (Gabuev 2015; Milov 2015), but while Moscow has strived to carve out a real gas export strategy to the East, we find that Russia's pivot to Asia will be slower and more limited than commonly thought, mostly resulting in a pivot directly to China.

Trade between Russia and China grew rapidly from 2010–2012 and stabilized at around \$90 billion in 2013. Bilateral trade targets for 2020 stand at \$200 billion.²⁶ In 2014, Russia and China clinched a 30-year deal worth USD 400 billion on 38 bcm of Russian gas deliveries to China via the Power of Siberia pipeline, starting in 2018, a deal that Putin called an “epic event” (Bloomberg 2014). The rapidly increasing number of joint ventures in oil and gas equipment, such as drilling rigs, demonstrates striking evidence of the two countries' new closeness.²⁷

Even before the Ukraine crisis, Russian officials had brought forward the idea of a necessary reorientation to the dynamic Asia-Pacific region.²⁸ Asia was seen as an energy export market that could not be ignored. In addition, as a Russian energy scholar notes, “*The development is resources-driven. Resources are moving to the East.*”²⁹ New fields replacing maturing ones are being developed in the Eastern Siberian provinces and there is an economic imperative to bring them to nearby markets. However, as suggested by a Russian energy analyst, Russian leadership has not properly assessed the Asian potential. In fact, until “*the European customers started challenging long-term contracts (in 2009), nobody has actually [assessed] the Asian market—we are basically talking about 15 years of mismanagement and neglect.*”³⁰ Moscow's efforts to animate its “go East” strategy gained impetus in the context of the Ukraine crisis and resulting rounds of U.S.-led Western sanctions. Europe's weakening demand for gas has helped,

26 For a more detailed discussion, see Russian-Chinese Trade and Economic Cooperation in 2013–2014 (pp.13–20) in Russian-Chinese Dialogue: the 2015 Model, RIAC, 18/2015.

27 See, for instance: «ВТБ Лизинг» наладит производство китайских буровых в России [“VTB Leasing” will establish the production of Chinese drilling rigs in Russia], April, 05, 2013. <http://www.rusenergy.com/ru/read/read.php?id=65692>

28 Sergey Karaganov, interview by Morena Skalamera, Moscow, Russia, August 14, 2013.

29 Skalamera, interview with Valery Kryukov.

30 Skalamera, interview with Alexander Gabuev.

too. These have all led to considerable speculation about a turning point in the EU-Russia gas relations and Russia's parallel shift toward the Asian gas markets (Hill 2014; Stern, Yafimava, and Pirani 2015).

However, Russia's Asian Pivot is fraught with obstacles. First, Russia's venturing into the Chinese energy market comes with a price tag: it provides China the opportunity to gain greater equity stakes in the Russian upstream, something that Russia has resisted thus far. This comes against the backdrop of costly investment needs, given more difficult geology and longer distances to market. As Valery Kryukov, Russian energy scholar, remarked, *"Right now we need capital, which is why we are opening to the Chinese. The Chinese are getting 50% stakes—and maybe even more—in projects of 'non-strategic significance.'"*³¹ To underscore that point, on February 27, 2015, Russian Deputy Prime Minister Arkady Dvorkovich told the Krasnoyarsk Economic Forum, "If there is a request from China for a majority stake in a strategic energy field, we will seriously consider it." He indicated the only exception would be fields on the Arctic continental shelf.³²

Second, Russia is "trapped in path dependence"³³ because of export infrastructure built during the Soviet Union that hardwires Europe into Russia's export portfolio. The Ukraine crisis with its anti-Western narrative finally forced Gazprom to address some of its strategic weaknesses in export strategy caused by undue dependence on Europe. Energy infrastructure emerged as a key issue of Russia's pivot to Asia. In fact, Moscow's Eastern strategy crucially rests on the feasibility, prioritization, and timing of key pipeline projects and LNG facilities. At present, two pipeline routes underpin Russia's export strategy toward Asia: the Power of Siberia pipeline (the "eastern route"), and the so-called "western route" through the Russian Republic of Altai, for which Gazprom and CNPC signed a memorandum of understanding. The western route would supply 30 bcm of gas per year to China, which, if added to the 38 bcm of the Power of Siberia pipeline, would make China the biggest consumer of Russian gas. Moreover, there are four LNG projects on which Russia's alleged pivot to Asia rests:

31 Valery Kryukov, Interview by Morena Skalamera, Moscow, Russia, May 29, 2015.

32 OilPrice.com, Russia Considers Letting Chinese Buy Controlling Stakes In Energy Fields, March 02, 2015.

33 Skalamera, interview with Valery Kryukov.

Sakhalin II and its expansion scheme, Sakhalin I, Yamal LNG, and Vladivostok LNG.

Although all of these projects represent individual infrastructure projects, they are clearly all strategically interlinked. Thus far, Sakhalin II is the only existing LNG plant in Russia. It currently represents about 4.5% of global LNG production capacity and satisfies around 10% of Japan's current LNG demand.³⁴ The Yamal LNG project, a joint venture between Novatek (60%), Total (20%), and CNPC (20%)³⁵ is, on the other hand, moving forward to service China. Amid Western sanctions,³⁶ Yamal LNG had been in talks with Chinese banks to get \$10–\$15 billion in exchange for CNPC's acquisition of an equity stake in the project.³⁷ Sakhalin I and Vladivostok LNG, the other projects aimed at boosting Russia's presence in the Asian energy markets, face difficulties related to lawsuits, arbitration, and capital-related delays due to ExxonMobil's exit from the project.

Quarrels between Rosneft and Gazprom over future monetization of Sakhalin I's exports plague the project. Rosneft, which was recently authorized to export LNG, requested access to the existing gas pipeline to reduce spending in its Sakhalin I liquefaction plant, which was developed in partnership with ExxonMobil. Rosneft claimed, "Gazprom, being an infrastructure monopoly, is obliged to guarantee independent producers access to the transport system."³⁸ Gazprom, in response, rejected the request, as it plans to expand its own LNG plant within the Sakhalin II project.³⁹ In sum, the complicated dynamics pertaining to the two Russian state corporations may prevent an optimal solution.

34 CIS, Sakhalin-2 expects lower LNG production in 2015, April 2, 2015. <http://www.icis.com/resources/news/2015/04/02/9873013/sakhalin-2-expects-lower-lng-production-in-2015/>

35 <http://www.novatek.ru/en/business/yamal/southtambey/>

36 Novatek, the major shareholder in Yamal LNG and co-owned by Gennady Timchenko, an ally of President Vladimir Putin, was placed under U.S. sanctions in 2014, limiting its access to global financing.

37 Sberbank, Gazprombank, Vnesheconombank (VEB), China Development Bank and China Eximbank have signed the base conditions of the Novatek Yamal LNG's project financing. <http://www.reuters.com/article/2015/04/13/russia-novatek-lng-idSUSL5N0X90E320150413>

38 See: "Russian court rejects Rosneft access to Sakhalin II gas pipeline," http://www.enerdata.net/enerdatauk/press-and-publication/energy-news-001/russian-court-rejects-rosneft-access-sakhalin-ii-gas-pipeline_31682.html

39 Rosneft is also seeking access to the giant Power of Siberia gas pipeline, which will be built by Gazprom in Siberia and in the Russian Far East and will deliver up to 61 bcm/year of gas to China, as part of a recent 30-year supply deal. Rosneft currently produces about 40 bcm of gas in East Siberia and aims to inject its output into Gazprom's pipeline system (See (Enerdata 2015).

Problems also loom in the Vladivostok LNG project. In October 2014, the Russian media voiced concerns that this project in the Russian Primorye was in danger of collapsing. In November 2014, after having met with the Chinese partners on the sidelines of the APEC summit in Beijing, Gazprom's CEO Aleksei Miller mentioned the option of feeding the gas into a pipeline rather than into Vladivostok LNG.⁴⁰ This unfolded against the backdrop of suggestions by Gazprom analysts that Vladivostok LNG might appear less attractive given expectations of a coming glut of LNG in the Asian-Pacific region.⁴¹ The move in favor of a third pipeline to China may also be related to difficulties in raising funding for the project as well as procuring the advanced technologies necessary for its completion, given current sanctions imposed on the Russian energy sector (ICIS 2014). Whatever the reasons, the consequences are significant. While the LNG produced at Vladivostok would be primarily targeting Japan and South Korea, the proposed alternative pipeline would limit Russia's expansion into Asia almost strictly to China.

There also seems to be a widening gap between Russian and Chinese preferences on export routes. Publicly, the Altai pipeline is advertised as a sensible choice both in Russia and China. For China, slow but still growing gas demand, uncertainty over some of its existing sources of supply, a desire to create more competition with Central Asian gas, and the one-off nature of the opportunity to negotiate with Russia from a position of exceptional bargaining strength make an Altai deal desirable (Henderson 2014), 12). For Russia, persistently sluggish European gas demand makes the economics of the Altai pipeline look good. As put by Russian gas expert Denis Borisov, *"This gas that is available in West Siberia has nowhere else to go. It might otherwise remain in the ground, so some return is better than no return."*⁴² Moreover, the Altai route would tap Siberian fields that already supply Europe, thereby potentially pitting European customers against

40 Генерального директора ООО «Газпром СПГ Владивосток» Игоря Крутикова отправили на Камчатку. [General Director of LNG Vladivostok Igor Krutikova sent to Kamchatka] <http://primamedia.ru/news/economics/20.03.2015/427413/gendirektora-ooo-gazprom-spg-vladivostok-otpravili-na-kamchatku-i-v-s.html>

41 <http://www.vedomosti.ru/business/articles/2014/10/13/vybor-gazproma>. See also: Проект «Владивосток-СПГ» в Приморье: все ближе к отказу [Primorye's project Vladivostok LNG close to cancellation], primamedia.ru, November 10, 2014. <http://primamedia.ru/news/economics/10.11.2014/399585/proekt-vladivostok-spg-v-primore-vse-blizhe-k-otkazu.html>

42 Denis Borisov, Interview by Morena Skalamera, Moscow, Russia, June 2, 2015.

Chinese ones and strengthening Gazprom's hand against European regulatory and pricing pressures (Skalamera, 2014a).

Yet, Chinese international relations expert Guan Guihai expressed doubt on the feasibility of the gas supplies via the Altai route: *"Because the route is too long, we don't need it at this time, and there are concerns about the local stability of the Xinjiang province."*⁴³ This view is echoed by Chow and Lelyveld (2015), who note that another pipeline from Russia through restive Xinjiang would have limited benefits for China in terms of diversity of supply.

This suggests that despite public fanfare, there are increasing tensions between Russia and China on whether to prioritize the Power of Siberia or Altai route. In fact, Moscow's pressure on Beijing to favor the Altai gas pipeline to China over the Power of Siberia raised doubts about Russia's commitment to the first gas pipeline that it had promised to complete by the end of 2018. China, as reported by Gazprom, launched construction of its part of the Power of Siberia gas pipeline in early June 2015. In Moscow, experts reaffirm the country's commitment to the project. As Komlev stresses, *"Thus far we didn't hear of any limitations on what is considered to be our 'first line investment' that is the Power of Siberia. Both developments of these fields and construction of the pipeline have started. As for Altai, there is no decision on the contract—therefore, no construction."*⁴⁴ However, even if preferences are eventually aligned, timing emerged as another challenge in Russia's Asian Pivot. Vladimir Feigin, Russian energy expert, notes, *"The time scale is becoming very tough. East Siberia is geologically challenging but remains our first priority given that construction is guaranteed by a valid long-term contract."*⁴⁵ Still, the Power of Siberia pipeline is expected to be delayed. As Valery Kryukov notes, *"The geologically harsh Irkutsk region is now getting developed to service China; but the region is still largely underdeveloped. It will be slow and expensive."*⁴⁶

Beijing, on the other hand, is in no rush. China, for its part, is now completing the infrastructure on its side of the border to facilitate the import

43 Guan Guihai, Interview by Morena Skalamera, Boston, MA, February 28, 2015.

44 Komlev, Interview by Skalamera.

45 Vladimir Feigin, Interview by Morena Skalamera, Moscow, Russia, May 29, 2015.

46 Kryukov, Interview by Skalamera.

of the Power of Siberia gas. Meanwhile, while Gazprom has yet to scrap Vladivostok LNG officially, it would like to obtain the Altai construction permits in return for a positive decision on deliveries via the newly proposed third pipeline from Vladivostok⁴⁷ to China. Due to its aspirations to ensure supplies where competition with Central Asia is the strongest, before deciding the question of these additional deliveries to the Northeast of China, Gazprom would prefer to finalize negotiations on gas supplies via the Altai pipeline. However, the fact that China has the upper hand also means that negotiations on Altai are progressing slowly. Most crucially, the Power of Siberia is secured through an existing contract, while for Altai there is only an MoU.

Whatever the export route and the timing, according to Alexandev Gabuev, expert on China at the Carnegie Moscow Center, Russia is left with little choice: *“The only option you have today is to build yet another (third) pipeline to China. [The] pivot to Asia turned totally into [a] pivot to China. We are left with China as the only consumer and financier of all these pipelines. We have nowhere else to go—cash flow is needed.”*⁴⁸

In conclusion, two observations can be made: first, as Russia’s alleged pivot to Asia turns into a pivot to China, Russia’s forced overtures are resulting in a flurry of opportunities for China. Second, given that this pivot will happen on China’s terms, it will most likely not be as quick and lucrative as the Russians have hoped for, and Europe will remain a painfully essential market for Russian gas.

47 It will entail the building of a smaller pipeline—an extension of the existing Sakhalin-Khabarovsk-Vladivostok pipeline up to the Chinese border.

48 Alexander Gabuev, interview by Morena Skalamera, Moscow, Russia, June 3, 2015.

2. Drivers of the shift in export strategy

Section 2 makes the following points: 1) While the Ukraine crisis and the resulting Western sanctions on Russia, notably targeting its energy industry, have led observers to conclude that the EU—with support from the U.S.—have pushed Moscow towards China (Lukin 2015), we argue that Russia’s reorientation to the East had indeed been in the works previously, while the Ukraine crisis only expedited it. 2) Some observers stress that Russia’s partial shift eastward is driven by domestic competition and pressure on Gazprom. In that sense, Gazprom’s prominent efforts to expand its gas market share in Asia are seen as connected to an increasingly challenging market position at home. Gazprom, the argument goes, started to look East as a response to Ukrainian geopolitics and an instable domestic “security of demand” situation. 3) Yet to the limiting extent that Gazprom is turning towards the East, we argue that these recent strides are best explained not by geopolitics or domestic market pressure, but by features of EU regulation. The many disagreements between Russia and Europe, in fact, include the EU’s “Third Energy Package,” through which the EU’s aims to pursue a fully functional internal energy market and an antitrust case against Gazprom for market abuse through country-by-country pricing.

2.1 The Ukraine crisis only accelerated what was already in the making

It has been alleged that the Kremlin’s pivot to Asia, and particularly the push for the May 2014 gas supply deal, is a result of Western actions (Luft 2014). In a related development, the EU’s move toward an integrated energy policy in the shape of the Energy Union has been attributed to Moscow’s expansionist policy stance in what it perceives to be its “Near Abroad” (Politico 2015). Yet rather than acting as a “push” factor in its own right, the Ukraine crisis has galvanized pre-existing trends and has accelerated what was already in the making. As the data reveal, the Ukraine crisis and the following sanctions opened a policy window for Moscow and Brussels to push for long-standing plans; this, however, has not brought about radical policy shifts.

For Russia, the Ukraine crisis presented an opportunity to foster market diversification towards China. To be sure, there were rational commercial motives for Russia to adopt an eastward strategy even before the Ukraine crisis. The obvious crisis of Gazprom's business model in the EU transcends controversies generated by the ongoing Ukraine crisis. It rather stems from the fact that the underlying foundations of the old business model have been fundamentally transformed. The EU's so-called Third Energy Package (TEP)—which mandates liberalization of the gas market and the “unbundling” of the production and distribution of gas—was passed in 2009, and therefore predates Western sanctions following Russia's March 2014 annexation of Crimea. As will be argued in more detail below, it is this legislation that best explains the Russian shift in regards to Europe. Still, the imposition of significant Western sanctions made these existing tendencies more explicit and imbued them with an anti-Western rhetoric. As Komlev observes, funding cutbacks have been a driver of Russia's eastward orientation. He explains, *“From the beginning of 2014 there [was] no lending from European banks, [which] accelerated our already existing interest in getting closer to the banks in Asia.”*⁴⁹

The bitter acrimony over Ukraine brought some additional elements to the table. The crisis and subsequent sanction regime poisoned these relations further, making transit through Ukraine an irreconcilable point of contention. Amidst a widening political gulf between the EU and Russia, provoked by the Ukraine crisis, Gazprom became even more unyielding on the Ukraine's transit question and throughout the post-South-Stream-cancellation confrontation, it has ratcheted up the pressure for full circumvention. As for Europe, the geopolitical predicament offered a window of opportunity to foster a securitization agenda that was already in the making (culminating in Donald Tusk's proposal for an Energy Union), and to put teeth in the EU's external energy policy despite resistance in several EU member states. Answering the question of what has changed since the Ukraine crisis, an official of the EU's External Action Service explains, *“[Now], there is coherence in the EU position. [...] National interests are still there, but the Ukraine crisis brought the importance of geopolitics to the fore [...]. The Energy Union paper is the product of that; none of the ideas are new, [...] but the Ukraine crisis highlighted all our weaknesses and built*

49 Sergei Komlev, interview by Morena Skalamera, St. Petersburg, Russia, June 4, 2015.

*the necessary momentum to make these changes happen. [...] This may have dragged on if it wasn't for the Ukraine crisis.”*⁵⁰

In essence, the EU seized the moment to 1) advance an integrated approach to EU external energy policy through the Energy Union, 2) enhance competition in SEE with new infrastructure, such as the Krk LNG terminal (Croatia) and new sources, such as Azerbaijan, and 3) tie Ukraine into a (Western) rule-based market regime. In sum, the EU (with U.S. backing) used the crisis to craft more ambitious energy policies and to take a united stance on Russia. Whereas in the case of the abovementioned troubles (hub pricing and the TEP), Gazprom's reaction was one of reluctant adaptation, the answer to the EU's Energy Union has been, instead, retaliation.

As a result, the Ukraine conflict froze the bilateral dialogue and thus the ability to work on preexistent issues (like the TEP or the EU's anti-trust case against Gazprom) through the Gas Advisory Council and other diplomatic channels. In the words of K.D. Borchardt, Director Internal Energy Market, DG Energy, *“The Ukraine crisis has made the dialogue on energy issues much more difficult. Normal high-level channels are not working properly, which has a negative impact on the business side. The Russian government has its own agenda, Gazprom its own strategy, and Europe has its own goals. There is no proper discussion on what the common future goals should be, which is a problem in itself.”*⁵¹

In short, Russia's seizure of Crimea and support for separatist rebels in eastern Ukraine have not made Russia or the EU fundamentally change course on their energy policies. Rather, the Ukraine crisis and the ensuing sanctions over Russian (energy) companies added fuel to the fire. Whereas economically, the Ukraine crisis has merely accentuated an already existing trend (Gazprom's diversification away from Europe), it provided the impetus for Moscow and Brussels to push for long-standing political goals. It also marked the gradual ideational estrangement from between Russia and Europe. As a result, the Ukraine crisis has dramatically reduced the

50 Official at the EU's External Action Service, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.

51 Borchardt, Interview by Skalamera.

number of channels to discuss such problems, which suggests that there will be more geostrategic implications going forward.

2.2 The shift is not driven by domestic pressure on Gazprom

While Gazprom's reputation abroad is that of an energy behemoth, the company has come under serious pressure domestically. Indeed, Gazprom's position on the Russian market has been rapidly changing since 2013. The most significant changes are that "independent"—i.e. non-state owned—gas producers (IGPs) are now able to sell LNG on foreign markets, and Gazprom-owned pipelines (Yafimava 2015) are gradually rolling out third party access (TPA). Even as early as 2012, IGP Novatek managed to conclude a 10-year contract of 2 bcm of annual gas deliveries to Germany, thereby undermining Gazprom's de facto export monopoly (Belyi and Goldthau 2015). Moreover, despite its quasi monopoly of the trunk gas pipeline system, the company is constrained by an unfavorable taxation rate and regulated prices, whereas IGPs have an opportunity to provide price discounts and sell at a premium.⁵² In addition, and unlike independent corporations, Gazprom has a very important social role as a supplier to socially sensitive groups and regions (Natural Gas Europe 2015).

Gazprom has historically accepted this unfavorable position in the domestic gas market in exchange for its privileged status as the sole exporter of piped gas. However, as noted by Mitrova and Molnar (2015), flat gas demand in the EU and declining demand in the Commonwealth of Independent States (largely due to much lower Ukrainian off-take) resulted in significant decreases in Gazprom's sales abroad. Gazprom has not yet restored its pre-crisis export volumes (162 bcm in 2006 vs. 126 bcm in 2014). Moreover, Gazprom's share in Russian natural gas output has been declining slowly but constantly, and has fallen from almost 95% in the early 2000s to roughly 70% today. Now that Gazprom's growth opportunities in Western markets may be limited, exports may be no longer able to compensate for Gazprom's shrinking market share at home. Against this backdrop, the argument goes, Gazprom's move toward Asia should be also

⁵² See, for instance, Henderson (Henderson 2013).

seen as a hedging exercise vis-à-vis its domestic competition and diminished gas revenues in Europe (Skalamera 2014).

Given that the company's production potential exceeds 600 bcm (Gazprom 2015) and Europe's demand is flat or shrinking, Gazprom may be forced to look closer at growth opportunities at home. Yet, the domestic gas market is segmented, not only geographically, but also under the operational principle of so-called "customer groups." Novatek, and increasingly, the state owned rival Rosneft, take the best customers, such as power stations and industrial customers that make up a steady chunk of consumption and are situated at short distances from production sites. Gazprom, in contrast, covers all residential consumers in remote regions that require higher, long-distance transportation costs.

Some analysts suggest that Gazprom may be on the verge of losing its dominant position both in the domestic market and in external gas trade (Belyi and Goldthau 2015). Others have argued that it may be increasingly complicated for the Russian authorities to protect their interest in maintaining the status quo by distributing rents and settling disputes (Skalamera 2014). This could indeed signal the need for the Russian government's informal divide and rule system to be substituted by an at least somewhat less opaque and more rule-based domestic gas market (Henderson 2015). In sum, in the wake of Gazprom's weakening position both at home and abroad, it has been alleged that Gazprom's shift toward a more competitive behavior in Europe, and geographically, toward China, may be driven by domestic competition and pressure. We find limited evidence of this.

Empirical findings suggest that domestic market competition did not trigger a fundamental change for Gazprom and that it is not likely to do so in the future. Soviet-era legacies prevent liberalization pressures from materializing. According to Valery Kryukov, *"Path dependent constraints, such as Soviet-era pipeline routes, predetermine the market. There aren't many pipes (imagine the opposite of the American market). Insufficient infrastructure in a really vast country, compounded by pervasive domestic institutional and regulatory opacity, results in a fragmented market, so [there is] no real competition."*⁵³ Rather than competing with each other, domestic Russian

53 Kryukov, Interview by Skalamera.

companies may have an incentive to find a *modus vivendi*. As noted by Grivach, *“There is a hybrid situation—an oligopoly with regional monopolies. Rosneft, Gazprom, and Novatek divide the market among themselves and try not to interfere in each other’s business—thereby causing anti-market behavior. Real market conditions are only met near Moscow—where there are several big consumers and several options both north and south.”*

The main stakeholder of the Russian gas market is the government, which sets Gazprom’s price through the so-called netback principle. For overarching strategic reasons, the incentive for the government to enact radical change is indeed small. In the words of Aleksei Grivach, a Russian gas analyst, *“For all its flaws, through such a system, the state is achieving its main objectives. Gazprom [is] holding onto its export monopoly, raising the competitiveness of Russian gas in export markets. Domestically, through a centralized company and price controls, the government keeps control over the regions and provides security of supply to socially sensitive groups and potentially explosive regions (such as Chechnya and Dagestan). Finally, it also provides protection to domestic industries.”*⁵⁴ Market-based gas pricing in Russia is therefore unlikely to emerge in the foreseeable future.

In fact, Gazprom’s move toward Asian markets is driven by both geopolitical and commercial goals related to its weakening position in Europe, rather than to domestic imperatives. True, in its quest to lessen dependence on Europe, the Russian government tried to stimulate development of production and export of liquefied natural gas (LNG). The government exempted independent natural gas producers and oil companies from the monopoly on natural gas exports held by Gazprom. Rosneft, the state-controlled oil producer, would be one of the beneficiaries of LNG exemption, further strengthening its preeminence. Gazprom, however, retained its monopoly on piped exports of natural gas, and piped exports to China would reinforce its significance. Present challenges, moreover, may even strengthen Gazprom’s hand in resisting reforms. In the words of Sergei Komlev from Gazprom Export, *“Domestically, you have a regulated market with prices that are considered to be below the equilibrium price because of Gazprom’s ‘social absorber’ function, so in a sense you are forced to have a large company that is compensating for the losses it incurs on the domestic*

54 Aleksei Grivach, Interview by Morena Skalamera, Moscow, Russia, June 2, 2015.

market; otherwise you become just a transportation company...”⁵⁵ Nesterov adds, “It is hard to expect any reform under current geopolitical circumstances. Moreover, it may be too dangerous to break anything if you are facing a weak economy, industrial output contraction, and negative GDP growth.”⁵⁶

These statements are reinforced by the failure of Russian experiments with spot markets, notably the St. Petersburg International Mercantile Exchange (SPIMEX). Launched in October 2014, SPIMEX was supposed to become Europe’s largest natural gas trading post,⁵⁷ but turned out to be a mere “imitation” of hub trading.⁵⁸ SPIMEX’s short-lived experiment has proven that in Russia, incentives for private and medium-sized gas-on-gas competition are still difficult to replicate due to market segmentation, Gazprom’s quasi-monopoly of the truck pipeline network, and the entrenched interests of other energy conglomerates.

Most analysts therefore argue that without major structural reforms (such as real industry unbundling), the domestic pricing system cannot dramatically change.⁵⁹ Despite gradual evolution in domestic competition, which generates pressures to liberalize domestic markets, only dramatic structural reform can catalyze real spot pricing and overcome the adverse incentives that lead Gazprom and the IGPs to market collusion rather than competition.

In sum, empirical evidence suggests that Gazprom’s reaction to a toughening domestic market environment hinges more on Gazprom’s slowly changing fortunes vis-à-vis the Russian government, rather than on real competition with independent corporations.⁶⁰ For reasons related to foreign policy imperatives, historical legacies, social policy agendas, and adverse market incentives, there is little reason to expect radical change in how the company operates domestically. Therefore, domestic competition

55 Komlev, Interview by Skalamera.

56 Nesterov, Interview by Skalamera.

57 RT, Russia starts first-ever gas trading in St. Petersburg, October 24, 2014. <http://rt.com/business/198804-russia-gas-trading-petersburg/>

58 Valery Nesterov, Valery Kryukov, and Aleksei Grivach hold similar opinions. Interviews by Morena Skalamera, Moscow, May 2015.

59 Vladimir Feigin, Valery Kryukov, and Valery Nesterov confirm this proposition. Interviews by Morena Skalamera, Moscow, May 2015.

60 For a detailed discussion of this proposition, see (Henderson 2015) and (Henderson 2013).

and pressure on Gazprom can hardly explain why China, and the broader Asian-Pacific region, became crucial targets of Gazprom's gas export strategy.

2.3 Best explanation of the shift: EU regulation

Gazprom is typically portrayed as Europe's dominant gas supplier and a powerful monopolist (Riley 2012). Indeed, existing long-term contracts hardwire more than 100 bcm of Russian gas supplies into the European import portfolio well into the 2020s. Therefore, there is limited scope for significantly reducing overall EU—and particularly Central European—dependence on Russian gas within the next decade. This has given rise to renewed energy security concerns, particularly in the context of the Ukraine crisis.

These debates typically overlook the important developments that have taken place in the European energy market throughout the past decade. In fact, three consecutive “energy packages” have pushed market integration and have given the European Commission the authority to foster competition and take actions against energy companies abusing market power. This has led to a series of EU-initiated anti-trust investigations and lawsuits on the EU energy market, while long-term contracts saw the end of destination clauses and the traditional oil price indexation came under scrutiny.⁶¹ Aside from an intended push toward hub pricing, the 2009 Third Energy Package (TEP) stipulated TPA, which bans companies from owning both the gas pipelines and the gas molecules that flow through them. Based on TPA provisions, the 63 bcm South Stream project was stopped and eventually cancelled. Moreover, TPA rules prevent Gazprom from fully using the OPAL pipeline, an important onshore connector for Nord Stream gas, thus effectively limiting the usage of the Baltic offshore pipeline.

In short, it was the decades-old business model of European utilities such as Ruhrgas or ENI and foreign suppliers such as Statoil or Gazprom

⁶¹ The push was toward hub pricing and away from oil-indexation and the so-called take-or-pay principle, traditionally enclosed in such contracts.

that came under fundamental pressure. What is more, EU rules gave the Commission a tool to not only regulate internal market affairs, but also to make market access conditional on respecting those rules (Goldthau and Sitter 2015a). This is what gave the EU's soft (market) power a "hard edge" (Goldthau and Sitter 2015b) and for the first time enabled the Commission to target third party actors such as Gazprom. In 2012, the Commission carried out a series of dawn raids against Gazprom related to allegations of abuse of market position and discriminatory pricing, and eventually launched an anti-trust case (currently pending) against the company (European Commission 2012; European Commission 2015).

From the EU point of view, this is certainly not about diversifying away from Russia. As an oil and gas analyst at DG Energy stresses, *"We are building an internal market. If Gazprom offers a competitive price, it is more than welcome to be part of it. The fact that all of this is not discriminatory against Gazprom is demonstrated by its market share, which in 2013 was even increased."* He adds, *"The push is to 'gas to gas pricing,' which is different than saying that Gazprom is getting squeezed out of Europe."*⁶² With its series of regulatory measures, the EU aims to constrain Russia's market power while preserving its salience as a commercial partner. Still, even prior to the Ukraine crisis, Gazprom found itself at a cross-roads. It could have either strengthened commercial competitiveness by embracing EU liberalizing pressures, or clung to the status quo at its own strategic peril.

In public, Russia has strongly opposed the EU's move toward a liberalized market regime. The legal charges against Gazprom were called "unacceptable," while the rules of the 2009 energy package were considered to have been unfairly applied retroactively.⁶³ TPA rules were seen as politicized, unprovoked, and as a confiscatory attack on Gazprom's assets and business model. Mirroring the official position, a Russian observer called the TEP "a political decision" and "an instrument to push Russia around."⁶⁴

62 DG Energy's oil and gas analyst, interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.

63 EurActiv, "Brussels and Moscow prepare for Gazprom fight," April 23, 2015 and *Stratfor Global Intelligence*, "EU Antitrust Charges Open new Front against Gazprom," April 24, 2015. <https://www.stratfor.com/analysis/eu-antitrust-charges-open-new-front-against-gazprom>

64 Skalamera, interview with Aleksei Grivach.

The interviews reveal that Russia is well aware of the practical consequences that the EU's gas market regulation exerts on Gazprom's business model. Realizing that Gazprom could ill afford to shun Europe, its most important export market, in light of domestic market challenges and the limits of Gazprom's pivot to Asia (highlighted above), Gazprom has started to gradually adapt to the EU's regulatory demands. Among other developments, Gazprom started to auction off some of its gas for the winter season of 2015-16, thus testing new pricing and sales models, as requested by the EU. Moreover, although formally adhering to the principle of oil indexation, Russia de facto provides strong price discounts and now links gas pricing to spot-indexation through the retroactive payments model (Mitrova and Molnar 2015).

In light of remaining risks, and against the backdrop of renewed tension over the Ukraine, in February 2015 the Commission announced the establishment of an EU-wide "Energy Union," which builds on Donald Tusk's idea of creating a single collective buyer for natural gas. Gazprom's CEO, Aleksei Miller, warned that establishing an authority to buy gas for all of Europe at a single price would mean many EU countries would pay more, rather than less (The Economist 2015). While the EU's member states have slowly downgraded both the Polish idea to create a single European buyer for Russian gas and the plan for a stronger EU gas regulator (Energy Post 2015; EurActiv 2015), the Commission has resumed a more muscular role in external energy affairs. It is also determined to use regulatory tools to hedge against the negative consequences of Russian dominance in the EU's gas import portfolio.

In sum, Gazprom's behavior demonstrates that its changing business model is due to biting EU regulation and the need to retain a dominant share in the EU's lucrative gas market. Along with the reluctant adoption of EU rules, a move necessary to keep current EU market shares, part of Gazprom's fix consists in disposing of deeper future integration with the EU in favor of a reorientation to China. Still, the EU Commission, the bloc's competition watchdog, has proven its key role in antitrust enforcement. This has made Gazprom—and by proxy Moscow—change course. In short, if Gazprom is a geopolitical tool, then EU regulation has made it a significantly blunter one than it was a decade ago.

3. Prospects of Russia successfully making the shift

The final section explores what might be the prospects of Russia successfully making this shift in export strategy in Europe and of its turn in focus away from Europe to the Chinese market.

3.1 In Europe

Flat gas demand in Europe plays a key role in Gazprom's export strategy for the EU market. If current EU demand resembled, say, the period of extensive growth reflected in the 2000s ("the Golden Age of Gas"), then Gazprom would have most likely adjusted pricing, placing a bet on overall expansion of its gas share in the EU's energy balance. Consequently, it would have dropped prices to prevent LNG from taking over significant market share. Yet in the face of stagnating EU market, Gazprom is opting to maintain oil-indexation to privilege price maximization, together with gradual concessions (i.e. reactive adjustments to its pricing methodology and contract structures). Nonetheless, it seems that Gazprom is now recognizing that its "hybrid pricing," even in Continental Europe, may be only a stage in the transition to full market-based pricing (Stern and Rogers 2014).

Still, for Gazprom, oil indexation remains a viable pricing method both for gas suppliers and consumers, despite the steep drop in oil prices that has called it into question in recent months. As one observer notes, "[The] readjustment process can be very long-term."⁶⁵ Indeed, Gazprom is a long way from full compliance with the EU's TEP rules. Instead, it seeks to make its gas business strategy somewhat more agreeable to Europe, its most lucrative customer. Gazprom's contention now is that hybrid pricing constitutes the appropriate model for European gas markets, but with a caveat that a distinction should be made between immature and mature hybrid pricing systems. For example, Gazprom's Sergei Komlev suggests that with the exception of the UK, other European hubs are often not liquid enough

⁶⁵ Skalamera, Interview with Denis Borisov.

to offer the same levels of supply security as do long-term contracts (Far-
rington 2015). For the Commission, too, a hybrid pricing model seems the
way forward. In the words of an EU official, “Whatever happens, there will
be a long period with hybrid hub pricing.”⁶⁶

A recent OIES analysis illustrates that Gazprom has embarked on a tran-
sition pathway which may eventually lead to a full market-based pricing
model in Europe in the future (Stern and Rogers 2014). EU regulation
and a determined European Commission have been instrumental in this
context.

Full market-based pricing would certainly have drawbacks. If Gazprom
finally chooses (or is forced) to move completely to spot-based pricing, its
30% market share in total European gas consumption (which includes far
higher levels in certain countries, especially in central and eastern Europe)
would enable the company to manipulate prices through higher or lower
supply volumes (Mitrova, Kulagin, and Galkina 2015), 7). As an EU oil and
gas analyst explains, gas producers *“could control gas prices through volume
management instead of retail price. You withdraw or reduce the amount of
gas at the border to push the retail price up. [...] If we remain stuck with three
to four suppliers, they can collude to control hub prices. The corridors are
highly diverse; two of them are de facto monopolies. [...] Such anti-market
behavior is, of course, difficult to prove.”*⁶⁷

The EU seems to be aware of such risks. As one DG Energy’s senior official
emphasized, *“Of course a transparent market situation can also lead to cer-
tain drawbacks, such as the risk of external manipulation by the dominant
market participant. We are trying to arrange our supply portfolio so that
we can avoid that to the extent that it is possible—we can’t fully eliminate
the risk, but certain things can be done to reduce such risk.”*⁶⁸ One way of
hedging against such a threat is the EU’s strategy to promote diversifica-
tion of routes, sources, and energy companies. As the number of suppliers
increases, producer collusion becomes very technically difficult.⁶⁹ A high-
level DG Energy official elaborated, *“Any new source, technically, has a*

66 Skalamera, Interview with Maciej Ciszewski, Brussels, Belgium, May 20, 2015.

67 EU oil and gas analyst, interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.

68 DG Energy senior official, interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.

69 EU oil and gas analyst, interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.

death date. We are fostering the development of non-‘path dependent,’ i.e. LNG supplies instead of piped gas. That’s what stands behind the LNG strategy. In a way, Russia is undermining its own position in this configuration by insisting on new pipelines.”⁷⁰

However, as argued by Mitrova and Molnar (2015), while Gazprom formally preserves preference for traditional business practices in Europe, in practice it is adapting to the dramatic changes occurring in its most important export market. In turn, while Gazprom was previously actively fighting the inexorable move to hub-based pricing and the EU’s TEP, most recently any such dispute has been mitigated by individual commercial concessions to Gazprom’s major buyers. In this context, EU representatives have also hinted that current dynamics may alter state-company relations. In fact, the style and the pace at which Gazprom is adapting to this new situation puts it somewhat at odds with the Russian government. According to a high level EU official, *“While in the past Gazprom and the government represented one solid block, this no longer seems to be the case. The Russian Energy Ministry is urging Gazprom to be even more flexible with its pricing policy, given that Russia needs to sell its excess volumes in Europe.”⁷¹*

In sum, the success of Gazprom’s export shift in Europe will depend on its capacity to successfully adapt to the contours of a new, still delineating interconnected European gas market. If it plays its cards well, it will undoubtedly remain Europe’s key gas supplier in the foreseeable future. However, in light of the limited scale of the Asian pivot and given that Russia’s energy grip on Europe is weakening, playing hardball will not pay off.

3.2 In China

Gazprom’s mounting challenges in traditional Western markets made partnership with China painfully essential and expedited Gazprom’s already existing pivot to Asia. Despite commercial troubles in Europe, though, the role of the Asian-Pacific market remains thin, and in the medium term, largely symbolic for Gazprom’s export portfolio. The only contract that

70 DG Energy high-level official, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.

71 DG Energy high-level EU official, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015

was actually signed—for the Power of Siberia pipeline—will not provide much relief to Russia before 2024 (Mitrova and Molnar 2015). Construction will take at least five years, and an additional five years are necessary to bring the pipeline to its full capacity of 38 bcm/year. Therefore, Eastern gas exports are not likely to make up for the reduction in exports to Europe before 2024.

In other words, despite the rhetoric surrounding the role of China and the broader Asian-Pacific region in Russia's gas export strategy, market share in that region will remain low until Moscow finalizes the construction of its various new and expensive pipeline projects. In the face of regulatory and pricing pressures in Europe, the strengthening of Russia's gas relations with China supports Gazprom's goal of showing Europe that it has alternatives. This explains Russia's preference for the Altai route, which would tap Siberian fields that already supply Europe (Skalamera 2014). However, there is little evidence of a risk of competition between Europe and China at least until the 2030, at the earliest, even if European gas demand grows in excess of what is currently foreseen. As argued by Dickel et al. (2014), all else being equal, increased imports of Russian pipeline gas would result in lower Chinese LNG imports, these being available for other markets, including Europe.

As a result, even as Gazprom strives to carve out a strong commercial position in China, this strategy does not, at the moment, seem to pose a threat to Europe. Europe still holds a favorable position, in part because of the expanding infrastructural links connecting Russia to Europe. Obviously, if Russia builds the necessary infrastructure to realize its pivot to Asia and there is gas demand on the other side, then it might gain an upper hand, but this would take years. It rests on the ability of Russian companies to bear higher costs and harsh conditions to develop Eastern Siberian fields and to subsequently build the entire infrastructure necessary to reach the Asian markets. Even after the construction of the Power of Siberia—the first of the new Gazprom projects—it will be supplied by different fields than the ones that service Europe. If Altai is built, then the “swing supplier” threat becomes somewhat more credible. Moreover, Chinese demand for Russian gas might even be reduced in the foreseeable future due to a

faltering Chinese economy.⁷² At the time of the flagship deal for the Power of Siberia, crude oil was trading above \$100 a barrel, but has since plunged to \$30. In this period growth in the Chinese economy has also slowed sharply, with its currency falling and its stock market now in turmoil.

In sum, even if the Power of Siberia (38 bcm), Altai (30 bcm), Sakhalin's II third train extension (10.8 million tons of LNG and the country's only producer of liquefied natural gas),⁷³ and Yamal LNG (16.5 million tons)⁷⁴ are all constructed, these exports will fall far short of matching Europe's volumes (146.6 bcm in 2014),⁷⁵ and most importantly, its prices.

⁷² See, for example, The New York Times, *Friendship Between Putin and Xi Becomes Strained as Economies Falter*, September 3, 2015.

⁷³ <http://www.gazprom.com/about/production/projects/lng/sakhalin2/>

⁷⁴ http://www.novatek.ru/en/business/yamal-lng/yamal_infrastructure/

⁷⁵ <http://www.gazpromexport.ru/en/statistics/>

4. Conclusion

Russia's energy diplomacy is constrained by a series of interdependent and overlapping developments: numerous conflicts and imbalances in Russia's domestic gas market regarding independent corporations' access to pipelines and storage, historical legacies preventing rapid change, a persistent gas oligopoly in place, and Gazprom's social-policy agenda.

Given such a peculiar position at home, with domestic demand expected to remain relatively flat, exports remain the key to Gazprom's growth. Even prior to the Ukraine crisis, the ample challenges that Gazprom faced in Europe, in addition to gas oversupply at home, have strongly pushed it to "look East." Yet, amid realization that Asia, or, more precisely, China, will not solve the country's current energy headaches, Gazprom has also worked to make its gas business strategy somewhat more amenable to its most reliable and lucrative customer, Europe. In that respect, our findings demonstrate that the EU has effectively used its regulatory instruments to moderate Gazprom's behavior in the EU gas market. Yet, despite talks of a shift in Gazprom's European strategy, with its intentions in South East Europe, Gazprom is demonstrating that it has not fully embraced Europe's regulatory efforts. In turn, the way in which Russia's shift in exports strategy vis-à-vis the EU evolves will hinge on important aspects of its approach to SEE. It will depend on Russia's willingness and ability to make new commitments to EU rules while simultaneously reducing its presence in this region. Therefore, our findings suggest a more nuanced view of an evolving—rather than transformed—Gazprom business model in Europe.

In addition, rather than acting as a "push" factor in its own right, the strategic predicament that engulfed the two sides after Moscow's annexation of Crimea simply galvanized Gazprom's preexistent re-orientation towards Asia. However, contemporary debate overlooks the fact that when it comes to the capability and effectiveness of the Asia Pivot, Moscow's bark is often greater than its bite. In 2014, more than 70% of Russia's crude exports and almost 90% of Russia's natural gas exports went to Europe.⁷⁶ Therefore, the EU's regulatory challenges and sluggish gas demand in Europe, which have

⁷⁶ EIA estimates based on BP Statistical Review of World Energy 2015; https://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf

prompted Gazprom to look to the East, do not necessarily mean an inevitable and gradual end of EU-Russian gas ties. Even with stagnating demand in Europe, possible U.S. and other LNG exports on the way, the Southern Corridor's TAP and TANAP—the two pipelines that will supply Caspian gas to Europe—under construction, and a more interconnected and liquid EU gas market, Russian gas still is and will remain highly desirable. There are simply no viable substantive alternatives capable of replacing the EU's sizable gas imports from Russia and matching its prices.

In sum, this discussion paper does not call for a rejection *per se* of the old EU-Russia gas business model, but it emphasizes the need for a new type of relationship. Bilateral relations have drastically deteriorated, provoking stagnation in energy cooperation. Yet the EU-Russian energy relationship is not over. There are multiple pathways of change. While Russia's growing assertiveness and political and ideational estrangement from Europe is worrisome, it is worth remembering that the EU-Russia gas relationship has encountered crises in the past and has found ways to persist and evolve. We believe it will again.

List of interviewees

- Aleksei Grivach, Interview by Morena Skalamera, Moscow, Russia, June 2, 2015.
- Alexander Gabuev, interview by Morena Skalamera, Moscow, Russia, June 3, 2015.
- Denis Borisov, Interview by Morena Skalamera, Moscow, Russia, June 2, 2015.
- EU official, Interview by Morena Skalamera, Brussels, Belgium, May 19, 2015.
- EU diplomat Interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.
- EU's oil and gas analyst, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.
- DG Energy's high-level official, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.
- Guan Guihai, interview by Morena Skalamera, Boston, MA, February 28, 2015.
- High-level official at DG Energy (1), interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.
- High-level official at DG Energy (2), interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.
- Klaus-Dieter Borchardt, interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.
- Maciej Ciszewski , interview by Morena Skalamera, Brussels, Belgium, May 20, 2015.
- Official at the EU's External Action Service, Interview by Morena Skalamera, Brussels, Belgium, May 21, 2015.
- Sergey Karaganov, interview by Morena Skalamera, Moscow, Russia, August 14, 2013.

- Tatiana Mitrova, interview by Morena Skalamera, Moscow, Russia, May 30, 2015.
- Valery Nesterov, Interview by Morena Skalamera, Moscow, Russia, May 29, 2015.
- Valery Kryukov, Interview by Morena Skalamera, Moscow, Russia, May 29, 2015.
- Vladimir Feigin, interview by Morena Skalamera, Moscow, Russia, May 29, 2015.
- Sergei Komlev, interview by Morena Skalamera, St. Petersburg, Russia, June 4, 2015.

Literature

Aalto, Pami. 2009. European perspectives for managing dependence. In *Russian Energy Power and Foreign Relations: Implications for Conflict and Cooperation*, edited by R. Perovic, R. W. Orttung and A. Wenger. London: Routledge, 157-180.

Andersen, Svein, Andreas Goldthau, and Nick Sitter, eds. 2016. *Energy Union: Europe's New Liberal Mercantilism?* Basingstoke: Palgrave Macmillan.

Baran, Zeyno. 2007. EU Energy Security: Time to End Russian Leverage. *The Washington Quarterly* 30 (4):131-144.

Belyi, Andrei, and Andreas Goldthau. 2015. Between a rock and a hard place: International market dynamics, domestic politics and Gazprom's strategy. *EUI Working Paper* RSCAS 2015/22.

Bloomberg. 2014. Russia, China Sign \$400B Gas Deal After Decade of Talks. May 21.

- Boersma, Tim, Tatiana Mitrova, Geert Greving, and Anna Galkina. 2014. Business As Usual. European Gas Market Functioning in Times of Turmoil and Increasing Import Dependence, Washington DC: Brookings. Policy Brief 14-05
- BP. 2014. Energy Outlook 2035 London
- Chow, Ed, and Michael Lelyveld. 2015. Russia–China Gas Deal and Redeal. *CSIS Commentary*, May 11.
- Cohen, Ariel. 2009. Russia: The Flawed Energy Superpower. In *Energy Security Challenges for the 21st Century*, edited by G. Luft and A. Korin: Greenwood Publishing Group, 91-108.
- Critchlow, Andrew. 2015. Russia will be biggest loser from oil price fall, warns IEA. *The Telegraph*, 10 February.
- Dickel, Ralf, Elham Hassanzadeh, James Henderson, Anouk Honoré, Laura El-Katiri, Simon Pirani, Howard Rogers, Jonathan Stern, and Katja Yafimava. 2014. Reducing European Dependence on Russian Gas: distinguishing natural gas security from geopolitics. *Oxford Institute for Energy Studies Paper NG 92*.
- Enerdata. 2015. Russian court rejects Rosneft access to Sakhalin II gas pipeline. 20 February.
- Energy Post. 2015. Ex–Polish Prime Minister Tusk reclaims Energy Union agenda. March 20.
- EurActiv. 2015 Member states reassert sovereignty over energy mix ahead of EU summit. March 17.
- European Commission. 2012. Press release: Antitrust: Commission opens proceedings against Gazprom. 04 September.

- European Commission. 2015. Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets. 22 April 2015.
- Farrington, Stella. 2015. Oil collapse fails to dent zeal for hub-based gas pricing. *Energy Risk*, 14 April.
- Financial Times. 2015. Gazprom bows to Brussels by holding first European gas auction. September 7.
- Gabuev, Alexander. 2015. A “Soft Alliance”? Russia–China Relations after the Ukraine Crisis, London: European Council on Foreign Relations.126
- Gazprom. 2015. Press Release, Gazprom adds over 800 billion cubic meters of gas in 2014 through geological exploration activities May 19.
- Goldthau, Andreas. 2013. *The politics of natural gas development in the European Union*. Cambridge, MA / Houston, TX: Harvard Belfer Center / Rice University’s Baker Institute.
- Goldthau, Andreas, and Nick Sitter. 2015a. *A Liberal Actor in a Realist World. The European Union Regulatory State and the Global Political Economy of Energy*. Oxford: Oxford University Press.
- Goldthau, Andreas, and Nick Sitter. 2015b. Soft power with a hard edge: EU policy tools and energy security. *Review of International Political Economy* 22 (5):941-965.
- Henderson, James. 2013. Evolution in the Russian Gas Market – The Competition for Customers: Oxford Institute for Energy Studies.OIES Report NG 73
- Henderson, James. 2014. The Commercial and Political Logic for the Altai Pipeline. *Oxford Energy Comment*, December.

- Henderson, James. 2015. Competition for Customers in the Evolving Russian Gas Market. *Europe-Asia Studies* 67 (3):345-369.
- Henderson, James, and Tatiana Mitrova. 2015. The Political and Commercial Dynamics of Russia's Gas Export Strategy: Oxford Institute for Energy Studies. OIES Report NG 102
- Hill, Fiona. 2014. Putin's Turkish and Indian Gambits, Washington, DC: Brookings Institution
- Honoré, Anouk. 2014. The Outlook of Natural Gas demand in Europe, Oxford: Oxford Institute for Energy Studies. NG 87
- ICIS. 2014. Gazprom could scrap Vladivostok LNG for pipeline. 15 October.
- Klare, Michael. 2015. Hard Power, Soft Power, and Energy Power - The New Foreign Policy Tool. *Foreign Affairs* March (Snapshot).
- Konoplyanik, Andrey. 2012. Russian gas at European energy market: Why adaptation is inevitable *Energy Strategy Reviews* 1 (1):42-56.
- Locatelli, Catherine, and Sadek Boussena. 2011. Gas market developments and their effect on relations between Russia and the EU. *OPEC Energy Review* March.
- Luft, Gal. 2014. Russia's Big Bear Hug on China. *The American Interest*, November 20.
- Lukin, Alexander. 2015. Russia, China and the Emerging Greater Eurasia: The Asan Forum
- Milov, Vladimir. 2015. Russia's New Energy Alliances: Mythology versus Reality. *IFRI Russie Nei Visions* 86 (July).

Mitrova, Tatiana. 2014. *The Geopolitics of Russian Natural Gas*. Cambridge, MA: Harvard University's Belfer Center and Rice University's Baker Institute Center for Energy Studies.

Mitrova, Tatiana, Vyacheslav Kulagin, and Anna Galkina. 2015. The transformation of Russia's gas export policy in Europe. *Proceedings of the Institution of Civil Engineers - Energy* 168 (1):30-40.

Mitrova, Tatiana, and Gergely Molnar. 2015. The Russian Gas Market: Entering a New Era. *CEDIGAZ Report* April.

Natural Gas Europe. 2015. Russian Gas: Europe or China? , June 4.

O'Sullivan, Meghan. 2013. The Entanglement of Energy, Grand Strategy, and International Security. In *Wiley Handbook of Global Energy Policy*, edited by A. Goldthau. London: Wiley Blackwell.

Politico. 2015. Putin triggers EU energy rethink. June 25.

Riley, Alan. 2012. Commission v. Gazprom: The antitrust clash of the decade? *CEPS Policy Brief* 31 October (285).

Riley, Alan. 2015. Gazprom's Dwindling Clout. *New York Times*, February 11.

Skalamera, Morena. 2014. Booming Synergies in Sino-Russian Natural Gas Partnership: 2014 as the Propitious Year. *Belfer Center for Science and International Affairs White Paper* (May).

Stern, Jonathan, and Howard Rogers. 2014. The Dynamics of a Liberalised European Gas Market. Key determinants of hub prices, and roles and risks of major players Oxford Institute for Energy Studies. OIES Paper NG 94

Stern, Jonathan, Katja Yafimava, and Simon Pirani. 2015. Does the cancellation of South Stream signal a fundamental reorientation of Russian gas export policy? *Oxford Energy Comment* January.

The Economist. 2015. A twist in the pipeline. April 14.

Tusk, Donald. 2014. A united Europe can end Russia's energy stranglehold.
Financial Times, 21 April.

Westphal, Kirsten , and Ralf Dickel. 2012. EU-Russia gas relations – How
to manage new uncertainties and unbalances *SWP Comment*.

Yafimava, Katja. 2015. Evolution of gas pipeline regulation in Russia:
Oxford Institute for Energy Studies.OIES Paper NG 95



The Geopolitics of Energy Project

Environment and Natural Resources Program

Belfer Center for Science and International Affairs

Harvard Kennedy School

79 JFK Street

Cambridge, MA 02138

www.belfercenter.org/geopolitics

Copyright 2016, President and Fellows of Harvard College

Printed in the United States of America