

# Russia's gas export reorientation from West to East: economic and political considerations

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The Russia–China deal in May 2014 opened a new page in Gazprom's efforts to orient its exports to Asia. The political logic behind the new agreement resembles the first Soviet gas export contracts with European states. However, the international gas markets favour Asia's position in general and China's in particular. Moreover, China is now having a leverage on its future liquefied natural gas suppliers. The new context makes Russian negotiating positions weaker and, moreover, Russian gas export to China might not be a subject of Gazprom monopoly any longer.

The Crimean crisis of March 2014 accelerated a mutual avoidance between Russia and Europe in their energy interdependence. In particular, European states declared their wish to decrease Russia's share of natural gas imports. At the same time, a number of voices emerged in Russia itself about a necessary diversification to Asia. This trend of mutual avoidance means a culmination of mutual political distrust, which certainly has a long-term effect on the markets. Import diversification for the EU is still premature as the liquefied natural gas (LNG) imports from the USA have not yet started and the prospects for the shale gas development in the European domestic market remain quite remote. However, the trend towards mutual avoidance has been already occurring for several years, since the Russia–Ukraine gas crises in 2006 and 2009 as well as the liberalization package in the EU.

Furthermore, after almost two decades of negotiations,<sup>1</sup> an agreement between Russia and China on gas trade was concluded in May 2014. The agreement provides a political ground for a long-term orientation of Russian supplies towards the world's fastest growing energy demand state. Many pointed out a difficult task in implementing the project as new pipeline infrastructure must be built to China. Here, it is important to consider a number of political and economic factors in shaping the new gas trade. Noteworthy is the significance that newly emerging projects can not only be assessed in economic terms. In addition to the possible new export revenues, Russia aims at a new political orientation, at the same time, Russia's eastward reorientation became significantly more complex due to the growing competition for Asian markets.

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<sup>1</sup> P Andrew-Speed, *The Long Road to the China-Russian Gas Pipeline Deal: The End of the Beginning*, Commentary, <<http://www.andrewsspeed.com/index.php/permalink/3276.html>> accessed 10 December 2014.

There is an interesting paradox which has been evolving around Russia's gas exports. Russia's energy infrastructure has been historically connected to Europe, but politically there is a mutual wish to pursue a diversification. At the same time, Russia and China politically back interdependence, while economic structures are not there.

In this context, there is an interesting observation which needs to be made. Russia–Europe gas connections have been developed throughout Soviet times. Then, the gas sector was exempted from any market practices even in the Western Europe. Therefore, contractual schemes have been dominated by long-term contracts, import and export monopolies, onward restrictions of resale (destination clauses) and a price indexation to oil. Since the early 20th century, gas market practices started to reshape in Europe and even more in North America. Furthermore, the shale gas revolution in the USA reinforced gas-to-gas competition and provided a new ground for the USA to become a new gas exporter. Development of hubs and trading platforms in Europe and the USA reshaped the logic of the markets from a producer-oriented pricing to a trading-based system.

By contrast to the European and American markets, the Asian market remains with a traditional rigid pattern of long-term contracts and gas-to-oil indexation. This provides a certain opportunity to Russia to avoid the Western gas market developments. This article will attempt to demonstrate that in spite of the more traditional contractual practices in Asia, there is a slow process towards a trading-based gas market, where producers do not hold a control of it. Therefore, Russia's Asian gas trade orientation is also characterized by a very different nature of export regulation. Noteworthy is that the changing political economy of international gas markets also provides a new negotiation leverage to China over prices, which makes the LNG markets even more uncertain in terms of profitability. Moreover, a recent gas demand forecast made by the International Energy Agency demonstrates that Asia will account for 80 per cent of the global demand growth in LNG and hence Oriental markets will play a pivotal role in price formation.

The objective of this article consists to demonstrate various challenges and upcoming opportunities related to the gas exports from Russia to Asia. For instance, an orientation to Asia involves a change in the producer–consumer relations in favour of China. In addition, the Russian regulatory system of export monopoly is being transformed into a less monopolistic structure.

In order to demonstrate these new and interesting trends, the article will outline the historical development of Russian export pipelines to demonstrate significant contextual differences between the previous contexts and the current situation. Then, it will attempt to reveal a transformation in international gas markets illustrating the growing role of Asia in attracting demand and the price. Finally, the analysis will outline recent Russia–China agreements in the context of other Russian export plans to Asia.

## 1. Historical development of Russian export infrastructures

Once the Russia–China agreement was concluded in May 2014, a number of critics correctly pointed out that the volumes are not sufficient to really replace the gas flows

to Europe.<sup>2</sup> Indeed, 38 bcm of annual gas supply which would start from 2018 represent less than 20 per cent of Russia's current gas exports to Europe.<sup>3</sup> However, one should note that the agreement reflects a long-term political orientation, which could result in the future increase of gas supplies in this direction. Early Soviet export plans to the EU included only marginal supply volumes to Austria, Italy and Germany, while the plan to reach a national production of 120 bcm was a remote perspective.<sup>4</sup> Gas contracts with Germany in 1968 considered 3 bcm of export with a perspective to increase to 5 bcm by 1971. Austria contracted 30 bcm altogether for a long-term supply, which would last two decades. In the meantime, pipeline overcapacity was also constructed in 1970s allowing the Soviet Union to export up to 60 bcm per annum. Infrastructural development marked a long-term orientation of markets, which is not directly related to the economic benefits. Pipeline development did not follow the market logic. A political context in relations between some European states and the Soviet Union contributed to the development of the long distance cross-border pipelines. Gas volumes were about 29 bcm in 1983, increasing to 40 bcm in 1987 and reached 60 bcm only by the end of the 1980s.<sup>5</sup> By the early 2000s, the volumes were already twice bigger.

It would be correct to argue that an international political context can be highly relevant for a pipeline's development. A number of historical observations lead us to avoid deterministic assumptions about unconditional influence of economic (and energy) interdependence on regional cooperation. The opposite way of influence is more evidently visible. Euro-Russian gas pipelines were built during the Cold War *dé-tente*, when the ideological and political divide was less strong than in the 1950s. Infrastructures connecting Siberian gas fields to the European states have also been reinforced by a strong political backing in the context of the *Ostpolitik* of West Germany. Likewise, Italy, and at that time, neutral Austria demonstrated a wish to build closer economic links with the Soviet Union. Interestingly, some of these projects were then criticized for economic inefficiency.<sup>6</sup> Nevertheless, gas flows from Siberia to Europe have been rentable and significant in the past years. The political component did not suppose serious market integration. Indeed, in 1960s and 1970s, the gas share in European total primary energy supplies was minimal. Likewise, oil was considered to be a dominant source of power, while gas has been only a substitute for oil.<sup>7</sup>

Noteworthy is that Nord and South stream pipelines have been proposed already within a very different institutional context. Gas markets in Europe are saturated and the relevance of the long-term contracts with oil indexation started to be questioned.<sup>8</sup> The revision of contracts gained an economic rationale since Europe is in its gas surplus.

<sup>2</sup> Reuters, 22 May 2014.

<sup>3</sup> See Gazprom statistics at <www.gazprom.com>.

<sup>4</sup> P Högselius, *Red Gas: Russia and the Origins of European Energy Dependence* (Palgrave Macmillan 2013) 41–42.

<sup>5</sup> *ibid* 89–134.

<sup>6</sup> B Söderbergh, K Jakobsson and Kjell Aleklett, 'European Energy Security: An Analysis of Future Russian Natural Gas Production and Exports' (2010) 38(12) *Energy Policy* 7827–43.

<sup>7</sup> See D Stickley, *A Framework for Negotiating & Managing Gas Industry Contracts* (Dundee University Press 2007).

<sup>8</sup> J Stern, 'The Transition to Hub-Based Pricing in Continental Europe: A Response to S Komlev of Gazprom Export' Oxford Institute for Energy Studies, comment published in Brussels Energy Club, February 2013.

In addition to that, the EU liberalization<sup>9</sup> and divergences on regulatory issues with Russia accelerated the Russian strategy to diversify exports to Asia. The latter markets of Japan, South Korea and especially China have remained linked to the traditional contractual practice, which seems to be more attractive for the suppliers. On these grounds, Russian companies entered into the LNG business and elaborated on various pipeline proposals to China.

Consequently, the current agreement with China stems from the diversification strategy, which existed already for almost two decades. The idea of the gas pipeline to China emerged back in mid 1990s.<sup>10</sup> Similarly to the early gas agreements with European states, a cooperation with China stems from an improving political relations between the two countries. China is the fastest growing economy in the world willing to decrease a share of coal in its total primary energy supply. Gas demand is then supposed to grow significantly. In this context, the development of Eastern Siberian gas increases chances for Russia-China gas trade. However, the initial project in Kovykhta has never gained an expected dimension. The field has been contracted by the Anglo-Russian BP-TNK in 2002 but has been constrained by the export monopoly of Gazprom. Consequently, the Anglo-Russian company left the field to the latter after 2010 and the gas export story has since then been frozen.<sup>11</sup>

In turn, Gazprom launched negotiations on gas pipeline export but by focusing on a more northern region—the Yakutia Republic. For several years, Russia and China negotiated the price as China preferred the Kovykhta scenario, which was located closer to its northern borders. Since the mid-2000s, Russia's Gazprom and China's National Petroleum Company (CNPC) have been negotiating the possibility of a gas pipeline from Siberia to China. Nevertheless, negotiations were stuck due to the price issue. Although details of the previous negotiations remain confidential, it is commonly known that Gazprom had an interest to have an agreement on sustainable volumes and elevated price, which the Chinese counterpart was not yet ready to conclude. This can be particularly difficult in the context of the growing demand for LNG in China.

It was only in early 2011 that China and Russia came to an agreement on the political level, leaving details to be agreed by the gas operators. In general terms, Russia declared to supply up to 60 bcm to China. Success of the pipeline largely depends on the willingness of the gas operators to implement the political agreement.<sup>12</sup>

In the aftermath of negotiations lasting a number of few years, Russia finally agreed to sell the gas on China's terms. In addition, China will contribute to the financing of capital expenses for upstream. In order to favour the project, Russia agreed to exempt the gas fields from royalties and from export revenues. Consequently, China got its price at about \$350 per tcm which is deducted from a calculation based on total value of the agreement,

<sup>9</sup> K Talus, *EU Energy Law and Policy* (OUP 2013).

<sup>10</sup> See also L Eder, P Andrews-Speed and A Kozhubaev, 'Russia's Evolving Energy Policy for its Eastern Regions, and Implications for Oil and Gas Cooperation between Russia and China' (2009) 2(3)JWELB 219–42.

<sup>11</sup> J Henderson, 'Asia as a Potential Major New Outlet for Russian gas' in J Henderson and S Pirani (eds), *The Russian Gas Matrix: How Markets are Driving Change*, Oxford Institute for Energy Studies (OUP 2014).

<sup>12</sup> Xinhua, March 2011.

while the price itself remains confidential. It could be noted that the price level is significantly lower than Russia's initial objective of \$390–410 per tcm.<sup>13</sup> Experts point out that upstream investment costs combined with the pipeline construction costs will account to 70 billion USD.<sup>14</sup> Certainly, a worsening political context surrounding the Crimean crisis, especially western sanctions against Russian hydrocarbon companies,<sup>15</sup> contributed to the conclusion of the agreement.

In terms of prices, the Russia–China agreement would be much less advantageous than previous Soviet export agreements with Western European states. Early agreements with Germany and Austria took into account the Dutch–German border price, which was then, in 1968, about \$15 per tcm.<sup>16</sup> The agreement with China supposes a price significantly lower than the LNG import price in Japan, which was, by the time of concluding the agreement, about \$550 per tcm, significantly more than what China and Russia have now agreed. The price would still be similar to the Russian export price to the EU, however, this comparison does not take into account new capital expenses necessary for the upstream development (at least \$80 per tcm), costs for laying the 4000 km pipelines, new compressor stations and other related capital costs.<sup>17</sup> By contrast, all infrastructures to export gas to Europe have been already amortized. In addition to this, the profit logic of Russian companies is certainly different from the command economy of the previous Soviet era.

An explanation of this disadvantageous price agreement can be found in the changing structures of the international gas markets. This structure also affected Asian markets in spite of the absence of transition towards newer contractual models of competitive markets. Therefore, part of the analysis should be dedicated to the international gas markets transformations which also impacted on Asian markets.

## 2. The place of Asian gas markets in the fast growing international gas markets

There is a need to highlight that the current gas supply agreement with China occurs in a context of the gas market internationalization. The situation of early Soviet export projects was very different. Gas markets evolved from cross-border supply chains as existed in the mid-20th century into complex international markets. Internationalization of gas markets occurred for two main reasons: the shale gas revolution in the USA on one hand and the boost in Asian gas demand on the other.<sup>18</sup> Consequently, US multinational oil companies started to go abroad also in search of additional revenues and especially

<sup>13</sup> Reuters, 21 May 2014.

<sup>14</sup> A detailed calculation was provided by M Krutikhin, RusEnergy Consult. See, M Krutikhin, 'Arithmetic, an Enemy of Gazprom' *Natural Gas Europe*, 11 June 2014, <<http://www.naturalgaseurope.com/china-russia-gas-deal-arithmetic>> accessed 10 December 2014.

<sup>15</sup> A Belyi, 'Russian Oil and Gas in the New International Context' *Oil, Gas, and Energy Law Intelligence*, 23 September 2014, <<http://www.ogel.org/journal-advance-publication-article.asp?key=453>> accessed 10 December 2014.

<sup>16</sup> Högselius (n 4).

<sup>17</sup> P Saunders, 'The Not So Mighty Russia-China Gas Deal' *National Interest* (Washington, 23 May 2014).

<sup>18</sup> P Stevens, 'The "Shale Gas Revolution": Developments and Changes' *Chatham House Expert Opinion*, August 2012 <<http://www.chathamhouse.org/publications/papers/view/185311>> accessed 10 December 2014.



demonstrating an interest towards the Asia-Pacific region. Internationalization of gas markets accelerated with the US shale gas revolution. Indeed, shale gas development practically covered the national demand, and therefore a number of LNG supplies became unnecessary for the USA. Hence, LNG volumes have been redirected from the USA to the rest of the world. In addition, the USA might become an LNG exporter itself. Then, an internationalization of gas markets also demonstrates the growing importance of the Asia-Pacific region for competing with Europe in getting gas supplies. Interestingly, an internationalization of markets did not result in the convergence of various regional gas prices (ie between the USA and Europe and between the USA and Asia). Even in the USA itself, local hubs can have a significant price difference with the largest Henry Hub, especially during the summer period, when the gas demand declines.<sup>19</sup>

Although there is no strong price interrelation, an international LNG market started to evolve. In the context of Asian market growth, gas suppliers and traders started orienting the gas flows towards the region. The trend was also accelerated because LNG markets became increasingly more competitive with a decline in liquefaction, gasification and transportation costs.<sup>20</sup> LNG markets have progressively involved large multinational oil and gas companies, such as ExxonMobil, Total and Royal Dutch Shell since the early 2000s.<sup>21</sup>

Development of the LNG trade also impacted on the European gas markets, where liquidity of supply volumes significantly increased since the early 2000s. In figures, the share of LNG in Europe increased almost 20 per cent by 2010. In this context, the EU gas market has evolved into a more competitive market design. Gas hubs in Europe have evolved since early 2000s.<sup>22</sup> Hubs represent a variety of market mechanisms, starting from balancing hubs (where volumes are traded) to stock exchanges. The most liquid gas markets are in the UK and the Netherlands, both states having a certain level of domestic reserves; strong market institutions beyond the energy sector while both countries proceeded to a deep restructuring of their vertically integrated monopolies. In other countries, hubs are much less liquid in spite of restructuring.<sup>23</sup>

The issue for Russia's main gas exporter Gazprom, arises if the competition with LNG imports becomes a structural trend.<sup>24</sup> In this case, Russian exports might need to adapt to the new market realities at least in European markets. Somehow, hub pricing would signify a transition to a hub-based price, where producers (including Gazprom) would

<sup>19</sup> Conclusion based on the analysis of price dynamics on Marcellus hub in West Virginia, where significant price difference exists with the Henry Hub, see Platts November 2013.

<sup>20</sup> S Dorigonia, C Grazianob and F Pontonic, 'Can LNG Increase Competitiveness in the Natural Gas Market?' (2010) 38(12) Energy Policy 7653–664.

<sup>21</sup> On market convergence, cf K Miyazaki and M Limam, 'Will LNG Exports from North America / East Africa Drive Global Price Integration?' 2013 <[http://www.gastechology.org/Training/Documents/LNG17-proceedings/3-6-Kyoichi\\_Miyazaki.pdf](http://www.gastechology.org/Training/Documents/LNG17-proceedings/3-6-Kyoichi_Miyazaki.pdf)> accessed 10 December 2014.

<sup>22</sup> A Konoplyanik, *How Market Hubs and Traded Gas in European Gas Market Dynamics will Influence European Gas Prices and Pricing*. Presentation at the European Gas Markets Summit. February 2011.

<sup>23</sup> See for details: P Heather, *Continental European Gas Hubs: Are they Fit for the Purpose?*, Oxford Institute for Energy Studies, NG 63, <<http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/06/NG-63.pdf>> accessed 10 December 2014.

<sup>24</sup> T Mitrova, 'Issues and Challenges in the EU-Russia Energy Relationship' *Natural Gas Europe*, (9 July 2012), <<http://www.naturalgaseurope.com/eu-russia-energy-relation-tatiana-mitrovalast>> accessed on 12 December 2014.

have a lesser impact. The hub-based price is increasingly taken into account and might even substitute the oil indexation.<sup>25</sup>

In Asian markets, oil price indexation largely remains and in the aftermath of the Fukushima accident in Japan, prices have been rather high. Orientation to Asian markets would signify for Russia an alternative to the uncertain and stagnating European markets. In Asia, three countries, namely China, Japan and South Korea, occupy the largest share in the global LNG markets since there is no large pipeline network. The East Asian states also represent the fastest growing energy markets and, moreover, they are the closely located to Russia. Japan is by far the front runner for the LNG imports, which initially started during the mid-1970s.<sup>26</sup>

In this context, China considers its long-term integration into global LNG markets.<sup>27</sup> China has accelerated its LNG imports with an appropriate LNG infrastructure on its south-eastern coast. China's market has been especially interesting for the Australian, Canadian and Malaysian LNG exporters. A higher level of competition could create a positive effect on Shanghai LNG pricing.<sup>28</sup> However, China would consider limiting a dependency on LNG supplies from Australia mostly for strategic reasons. China's political class sees Australia as the closest ally for the USA in the region and therefore would attempt to avoid full reliance on it. Moreover, China sees a number of geopolitical issues related to the sea transport in south-east Asia due to political problems. Consequently, building a pipeline network with Russia represents a certain alternative to the LNG supplies. For similar purposes, China has also forged for an east-west gas pipeline from Turkmenistan in order to ship gas from the Central Asian state. Two weeks before the gas deal with Russia, China concluded an agreement to import up to 60 bcm of natural gas from Turkmenistan. Hence, Beijing clearly demonstrates that Russian supplies do not represent any crucial volume. However, the pipeline agreements increase a pressure on the future LNG suppliers to the region. For example, following the Russia–China strategic gas deal, Australian Woodside LNG declared that its \$40 bln project of LNG exports was designated for Japan rather than to China.<sup>29</sup> This all demonstrates a growing competition for both supplies as well as markets in the region and a more difficult position for suppliers (either Australian or Russian in this case) in attempting to gain the market.

At the same time, many would note that there is growing competition between Europe and Asia for gas supplies. Attracting LNG imports became one of the main priorities for the European states, where an under-capacity for LNG supplies has been rather significant, especially during the year 2013. This challenges new LNG terminal projects.

In addition, the attractiveness of Asian markets also signifies a higher level of competition with other emerging suppliers. Trinidad & Tobago, Qatar, Nigeria are already well

<sup>25</sup> Stern (n 10); see also a recent agreement between Gazprom and Italian ENI on the gas pricing *Financial Times*, 23 May 2014.

<sup>26</sup> See for background P-L Lam, 'The Growth of Japan's LNG Industry: Lessons for China and Hong Kong' (2000) 28 *Energy Policy* 327–33.

<sup>27</sup> Henderson (n 13).

<sup>28</sup> C Manuhutu and A Owen, 'Gas-to-Gas Competition in Shanghai' (2010) 38 *Energy Policy* 2101–06.

<sup>29</sup> Press release 25 May 2014, <www.smh.com.au> accessed 20 November 2014.

established suppliers. In addition, emerging producers include Mozambique (developed by Italian ENI), Canada and the USA. China could reinforce its bargaining power, though the pipeline-to-LNG competition should reinforce the price position. However, this creates long-term difficulties for Russian LNG export projects.

In this context, Russia enters into tough competition for its LNG exports, where a competition for supplies leads to a loose of control over pricing. A new market paradigm affects the future LNG export plans and already demonstrates that Russia is changing its market practices compared to the ones previously existing in exports to Europe.

### 3. Russia's LNG exports: new paradigm

The development of Asian markets significantly challenged even the domestic regulatory structure of Russian exports, from rigid monopoly to a gradual de-monopolization. Since 2006, all export of natural gas and even of LNG have been subject to full monopoly by either Gazprom or its daughter companies.<sup>30</sup> Gazprom used its status as an export monopoly and subsequently imposed itself on the large-scale production and sharing agreements of gas exploration in Sakhalin (operated by Shell) and Kovykhta (formerly operated by TNK-BP). The export monopoly allowed Gazprom to gain control over large-scale upstream gas production and sharing agreements concluded with international majors.

In early 2013, Russia considered liberalizing LNG exports in order to stimulate the sea transport of gas to Asia. By the end of 2013, LNG exports were demonopolized and hence provided at least three companies with new export opportunities. It has been previously mentioned that Russia's Gazprom is unlikely to be the only gas producer in the country, although the company has been having a legal monopoly over exports. The levels of non-Gazprom production have grown in recent years and these have increased pressure over Gazprom's export monopoly. Growth in Asian markets produced a shift in Russian domestic regulation since two large gas producers, Rosneft and Novatek, succeeded in partially removing the export monopoly.<sup>31</sup>

Interestingly, Rosneft's leadership represents the most conservative wings in the country's political establishment. Nevertheless, in relations with Gazprom, Rosneft has used anti-monopoly argumentation and even used the Federal Anti-Monopoly Service of Russia to gain access to the pipeline networks. Hence, there is a transformation of the gas market practices even in Russia. As Russia's growing national oil company, when Rosneft's management uses anti-monopoly rhetoric regarding gas monopoly Gazprom for export issues, it does not mean that Rosneft would have similar understanding of the competition to the one of the DG for Competition of the Commission of the European Union. However, the use of anti-monopoly practices of competition in the energy sectors becomes a transnational norm, regardless of the degree of competition in the sector.

<sup>30</sup> A Belyi, 'Institutional Trends in Russia's Oil and Gas Sectors'(2013) 6(3) *Journal of World Energy Law and Business* 163–78.

<sup>31</sup> *Ria Business*, 2 December 2013, <<http://en.ria.ru/business/20131202/185208315/Law-Ending-Gazproms-Gas-Export-Monopoly-Enters-Into-Force.html>>.



**Table 1.** Russia's LNG export terminals, existing and projected

Operator	Name	Location	Capacity, mn t	year	Total cost, \$ bn	Co-investors
Gazprom	Sakhalin-2 (operating since 2010)	Sakhalin Island	10	2010		Shell, Mitsui, Mitsubishi
Gazprom	Sakhalin-2 expansion	Sakhalin Island	5	2017	7	Shell, Mitsui, Mitsubishi
Gazprom	Vladivostok	Primorsk Region, Perevoznaya Bay	15	(now postponed)		
Rosneft'	Sakhalin	Sakhalin Island, Ilyinskoye and Taranay villages	5	2019	15	Exxon Mobil
Novatek	Yamal LNG	Yamal Peninsula, Sabetta village	16,5	2016	20	Total, CNPC

Source: Companies compilation.

The following Table 1 demonstrates the LNG projects initiated since the export monopolization. It demonstrates that Gazprom keeps control over existing LNG export capacities, which were still developed by Sakhalin Energy, an international consortium, which includes Royal Dutch Shell. In the aftermath of the Fukushima accident, Sakhalin's exports to Japan increased to 8 mln tons, while there were still absent in 2008.<sup>32</sup> In this context, Rosneft proposed an alternative LNG terminal in Sakhalin with another consortium including the American ExxonMobil. The Rosneft plan is to expand exports to Japan and also to South Korea. However, Rosneft is still in a legal dispute with Gazprom over the access to the pipelines in Sakhalin, which still belong to Gazprom.

Gazprom proposed an alternative pipeline project in Vladivostok, which is geographically located in the same Far Eastern direction as Sakhalin. Nevertheless, the Vladivostok LNG terminal does not have a resource base and therefore an additional pipeline capacity is needed to bring gas from Eastern Siberia.<sup>33</sup> Since the new gas pipeline agreement with China, the pipeline to Vladivostok becomes an additional burden to Gazprom. Noteworthy is that the LNG project is also important for Gazprom for reputational reasons: to keep its role in the fast growing market.<sup>34</sup> For the same reasons, Gazprom agreed to purchase parts of the Yamal's LNG to trade in Asia. Nevertheless, some experts note that Gazprom will have difficulties in providing a resource base for the LNG terminal in Vladivostok.<sup>35</sup>

<sup>32</sup> cf for Russia–Japan gas deals, Bloomberg, 13 June 2013 <<http://www.bloomberg.com/news/2013-06-12/russia-s-lng-rush-gives-japan-strongest-bargaining-chip.html>>.

<sup>33</sup> T Mitrova, 'Russian LNG: The Long Road to Export, Institut Francais des Relations Internationales' December 2013, No 16, <[www.ifri.org/downloads/ifrimitrovalngengnov2013.pdf](http://www.ifri.org/downloads/ifrimitrovalngengnov2013.pdf)>.

<sup>34</sup> *ibid.*

<sup>35</sup> Henderson (n 13).

Last but not least, the largest LNG terminal project is set by Novatek on the Yamal Peninsula, on the Arctic seas. The Yamal LNG aims to export gas to China. CNPC is one of the participants in the project alongside the French Total. The project has a significant capital cost and a high-discount rate. Moreover, the future of the project increasingly depends on western sanctions on Novatek imposed since 2014. In this context, China becomes the crucial partner allowing to provide further loans to the project.

An important observation needs to be drawn. The Russian regulatory landscape has been transformed and China, by supporting both the pipeline agreement with Gazprom and the LNG project with Novatek, contributes to inter-company competition between Russian exporters. Likewise, a growing controversy between Russia's state owned companies Gazprom and Rosneft demonstrates that the world's largest producer does not speak with a single voice when it comes to Asia, while the exports are still monopolized in Europe. In the longer term perspective, we can assume Rosneft to be further involved in pipeline gas supplies to China.

Russia's attempts to increase exports to Asia are challenged by an increasing number of LNG supplies from North America, Qatar and Australia. An analysis of economic benefits still shows that some Russian LNG projects are competitive in price. Nevertheless, further evolution of the internationalization of natural gas markets makes it difficult to predict.

#### 4. Conclusion

In conclusion, we can observe that even if Russia succeeds in conducting a successful diversification, price control is not anymore on the producer's side. This observation provides an interesting assumption that price control passed to the consumers and traders in spite of the deep differences in market structures between Asia and Europe.

The Russia–China agreement aims at a long-term increase of volumes from Russia to China, which has somehow a similar political logic to the early Soviet contracts with West European states. However, this increase, if it happens, occurs in a different power relation between producers and consumers. In terms of supplies and prices, markets are significantly different from the previous stages of gas infrastructure development. China is certainly the big winner in the project and gains a certain negotiating power for future LNG supplies to the south-east coast. This logic enters into a structural trend, where fast growing China's markets get a political leverage on the gas price.

Russia has already demonopolized LNG exports, foresees a certain competition for the pipeline gas to China in future, partly introduced a liberal fiscal regime by exempting upstream projects from royalties. All this demonstrates that Russia needs to play a different game compared to the practices of gas export, which dominated with Soviet exports. For these reasons, Russia's export structure to Asia is already very different from that of the European direction, where a Soviet inherited export monopoly is still in place.

Consequently, one can say that Russia's exports to Asia do not undermine a trend towards a new international gas trade where trading schemes and consumers outweigh consumers. New LNG suppliers from Australia, Canada and the USA provide a significant challenge for Russian exporters. In addition, the recent oil price decline might also

affect a profitability of the new LNG projects. In the meantime, gas production costs have grown in Russia itself, which impacts on its international competitiveness.

Implications for Europe are also significant. European consumers enter into a tougher competition with Asia for LNG supplies. Hence, their attempts to import non-Russian gas will be somehow challenged by the price dynamics in Asia. This actually means that the security of supply for the Europeans is increasingly located in the development of the Asian markets rather than in their relations with Russia. In conclusion, we are observing a deep transformation of the international gas markets, which affect both Europe and Russia, especially in their attempts of mutual avoidance.