

# **Oxford Energy Comment**

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# Is a Russian Domestic Gas Bubble Emerging?

### By James Henderson

### Introduction

Recent forecasts for gas supply in Russia produced by Novatek and Gazprom highlight the large amount of gas available to meet demand in the next 10 years and also point to contrasting views about which companies' production may be preferred in a potentially oversupplied market place. In light of this potential oversupply situation, it is becoming clear that a number of Non-Gazprom producers (NGPs), including Novatek and some Russian oil companies, are taking the view that the Russian gas market will soon become much more competitive and that access to end consumers will become essential for any company wishing to maximise its gas sales. Rosneft's announcement in February 2012 that it is to form a joint venture with Itera provides a prime example of this trend. However, this suggests the possibility that Gazprom, which is becoming more reliant on production from remote and relatively high cost fields, may soon find itself at a competitive disadvantage and facing the possibility that it may fail to meet its own production targets by some distance. As a stateowned company, it may hope to rely on political support to achieve its objectives and maintain its dominant position in the Russian gas market, but the Russian Administration then faces a potentially awkward consequence of a higher domestic gas price than might otherwise be necessary, as the lower cost gas owned by Non-Gazprom Producers is crowded out to leave room for Gazprom's gas. This comment examines this impending dilemma for the Russian government and suggests that one conclusion is that what is good for Gazprom may no longer be good for Russia.



# Novatek and Gazprom's production forecasts

In December 2011 Novatek held its annual Strategy Day for investors and gave an extensive review of its plans for the decade to 2020. These plans included a doubling of production from the 53 bcm level achieved in 2011 to more than 112 bcm by 2020, with the growth underpinned by the further expansion of existing and new assets in the heartland of West Siberia, the development of the South Tambey field on the Yamal peninsula and the exploitation of new fields on the Gydan peninsula. However, although Novatek's growth trajectory is undeniably impressive, an equally interesting revelation was the overall context within which this increase in output is expected to be achieved. As can be seen in Figure 1, Novatek sees overall Russian gas supply reaching 882 bcm by 2020 (from just under 700 bcm in 2011), implying growth of 2.6 percent per annum. The share of Central Asian imports is seen as remaining flat at 5 percent, but the most interesting conclusions from the graph are that Gazprom output will show only minimal growth, rising from just over 510 bcm to 540 bem during the period, while the output of Novatek and the other Non-Gazprom producers is forecast to rise by over 8 percent per annum, reaching a total of 300 bcm by 2020 and accounting for 34 percent of total Russian gas supply (and up to 36 percent if Central Asian imports are excluded).

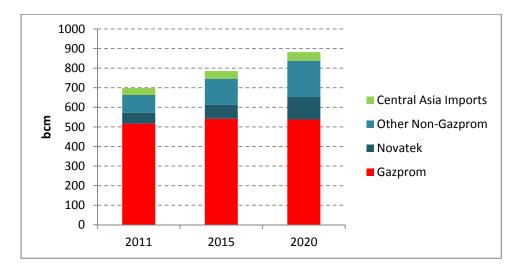


Figure 1: Novatek forecast of Russian gas supply to 2020

Source: Derived from data in Novatek Corporate Strategy Day Presentation, 9<sup>th</sup> December 2011

<sup>&</sup>lt;sup>1</sup> Novatek, Focus on Growth – Corporate Strategy Day Presentation, London, 9<sup>th</sup> December 2011



While this picture of the future of the Russian domestic gas sector is interesting in its own right, demonstrating Novatek's increasing confidence in the future for Non-Gazprom Producers in Russia, it is even more thought-provoking when seen in the light of Gazprom's forecast of its production, shown during its own Investor Day Presentation in February 2012.<sup>2</sup> As Figure 2 shows, Gazprom remains confident in its ability to increase production sharply over the next two decades, with a growth forecast (unchanged from its view in 2011) of 2.8 percent per annum to achieve output of approximately 660 bcm by 2020, and further growth of 1.6 percent per annum thereafter to reach production of approximately 775 bcm by 2030.

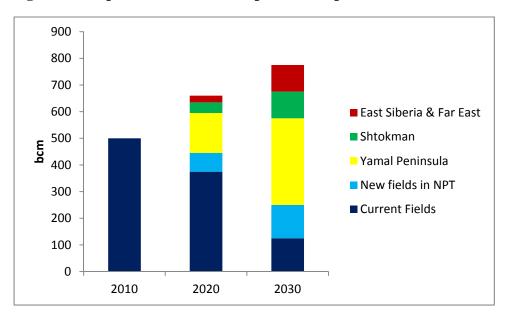


Figure 2: Gazprom's forecast of its production profile to 2030

Source: Gazprom Investor Day !4th February 2012

The difference between the two forecasts is stark, and begs numerous questions about the future of the Russian gas sector over the next decade, but in essence demonstrates the potential for a domestic gas bubble to develop by 2020. The key questions are therefore whether either forecast can be correct, what could be the drivers of each potential outcome and how are the players reacting to the possibility of increased competition in domestic Russian gas supply. The answers to these questions will determine whether Gazprom might miss its production forecast by up to 120 bcm by 2020 and see its dominance of the Russian gas market dramatically reduced, or whether a similar amount of Non-Gazprom gas might be

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<sup>&</sup>lt;sup>2</sup> Gazprom presentation at Investor Day, "Size Does Matter", 14<sup>th</sup> February 2012, London



crowded out of the market by the rapid growth of the of the state-controlled gas company's new field developments.

As regards the Novatek forecast, analysis of the potential gas output from a broad range of Non-Gazprom Producers (NGPs) in Russia suggests that the target of 300 bcm of production by 2020 is achievable, but would clearly be a stretch. Novatek's own plans are based on the exploitation of existing assets, but also on the development of an LNG project in the Arctic region and the successful opening up of a new gas province on the Gydan peninsula. The company's history to date suggests that these goals should be achievable, but the remoteness of the locations of the latter two projects means that it will not be without difficulty. Having said that, the company has generally managed to meet its output targets to date, and so its production goal of 112.5 bcm by 2020 should be given some credibility.

The other key players in the NGP equation are the Russian Oil Companies (ROCs), many of whom have been waiting for many years to exploit their gas reserves and are now beginning to implement concrete plans to do so. LUKOIL has been selling gas to Gazprom from its Nakhodkinskove field in West Siberia since 2003<sup>3</sup> but has plans to expand production both from neighbouring fields, and from its Caspian assets in southern Russia and is targeting domestic production of up to 40 bcm by 2020. Rosneft has also been harbouring plans for expansion of its gas business since its IPO<sup>4</sup> in 2006, with a particular focus on the development of its Kharampur field. This and other related assets could see production reach 55 bcm or more by the end of the decade, if the company can secure a market for its gas.<sup>5</sup> With this in mind it has recently formed a joint venture with Itera, an independent gas company with long experience of marketing gas in Russia, in the expectation that this will potentially allow it to find new customers for its potential gas output. 6 TNK-BP is another example of a ROC with significant gas reserves that have been stranded for the past decade by a lack of market access, with Rospan, the deep gas condensate field in Nadym Pur Taz, a specific asset that could produce up to 16 bcma if brought to its full production potential. GazpromNeft, Slavneft and a number of other ROCs can also increase their production significantly, either from specific gas assets or from reducing the flaring of associated gas

 $<sup>^3</sup>$  LUKOIL signed a sales agreement with Gazprom in October 2003, LUKOIL Annual Report 2003, p.21  $^4$  IPO – Initial Public Offering

<sup>&</sup>lt;sup>5</sup> Rosneft Gas Strategy as explained at <a href="http://www.rosneft.com/Upstream/GasStrategy/">http://www.rosneft.com/Upstream/GasStrategy/</a>, accessed March 16<sup>th</sup> 2012

<sup>&</sup>lt;sup>6</sup> Bloomberg, 28<sup>th</sup> February 2012, "Rosneft to form venture with Itera, acquire gas assets", Moscow



(where estimates of waste range as high as 40 bcma), but clearly would need appropriate access to both the high pressure pipeline network and to end consumers in order to achieve this.

Summing the total potential production from NGPs such as Novatek, Itera and the ROCs, as well as from other regional producers, the equity interests of international energy players in Russian gas assets and from small independent gas producers located around Russia, it is possible to demonstrate the potential for total NGP output to reach up to 375 bcm by 2020 and over 400 bcm by 2025 (as shown in Figure 3). While it is extremely unlikely that this total will be achieved in reality, the potential figure is high enough to give credibility to the Novatek forecast of 300 bcm by 2020 and to suggest that Non-Gazprom Production could indeed more than double from the level seen in 2011.

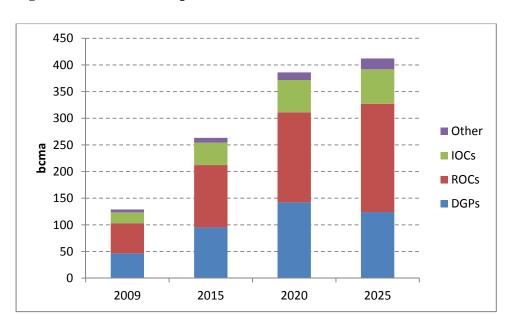


Figure 3: Potential NGP production to 2025

Source: Author's estimates derived from Company Data

The credibility of Gazprom's forecast of an alternative scenario largely concerns the speed of the production decline at its existing fields and the timing of the production growth at its new assets, rather than the actual size and capacity of the specific assets themselves. Gazprom's forecast suggests a production decline from its existing assets of approximately 3 percent per annum to 2020, accelerating to around 10 percent per annum thereafter. Although the initial decline rate is less rapid than that experienced over the past decade at Gazprom's older super-



giant fields, which have seen output fall at an average of around 7 percent per annum, <sup>7</sup> the development of newer fields such as Zapolyarnoye as well as smaller satellite fields (for example South Russkoye) in the Nadym Pur Taz region has helped to slow the overall decline rate for existing production, providing justification for Gazprom's estimate for output from its current asset base. The company also has plans to exploit new assets in West Siberia, in particular the deeper reservoirs below existing fields, which have significant production potential. The major contribution to Gazprom's future output will, however, come from its fields on the Yamal peninsula, starting with the Bovanenkovskoye field in June 2012. Total production from this field alone could reach as much as 140 bcm, while neighbouring fields such as Kharasaveye and Kruzenshtern could take Gazprom's total production from the area to 250 bcma. Meanwhile, the development of the Shtokman field remains under discussion, but its 3.8 tcm of reserves<sup>8</sup> are planned to produce up to 70 bcma over 3 phases if and when a final investment decision is taken. Gazprom's production forecast also includes a significant amount of output from Eastern Russia, and although this is a separate region with a different set of competitive pressures compared to Western Russia it is nevertheless important to acknowledge that Gazprom does own 4 tcm of East Siberian and Far East gas reserves that have the ultimate potential to produce up to 70-100 bcma if fully exploited. However, this production would not impact on any gas bubble in Western Russia, as the regions are not connected by pipeline infrastructure and in any case output by 2020 is likely to be minimal.

In conclusion, the production estimates of Novatek and Gazprom are both credible in as much as the assets appear to exist with the potential production capacity to meet the scenarios described. The implication of this conclusion, therefore, is that there is more than sufficient gas in Russia to meet domestic and export demand, creating the potential environment for a gas bubble. One potential solution, which has recently been hinted at by Vladimir Putin, is that Gazprom's gas export monopoly could be broken in order to allow multiple producers to sell gas internationally. However, as the concept of full competition between Russian producers in export markets is unlikely to be politically or commercially acceptable to Russia in the short-term, the ending of Gazprom's export monopoly is not likely to mean the end of a

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<sup>&</sup>lt;sup>7</sup> Production at the Urengoy, Yamburg and Medvezhye fields totalled 180bcm in 2010 according to Gazprom's 2011 Bond Prospectus, compared with combined production of 385bcm from the three fields in 2000 (source: Wood Mackenzie Consultants).

<sup>&</sup>lt;sup>8</sup> Reserves data accessed from Gazprom web site at http://www.gazprom.com/about/production/projects/deposits/shp/

<sup>&</sup>lt;sup>9</sup> Interfax Russia Oil & Gas Report, 6 Oct 2012, "Putin: Russia might liberalise gas exports in future", Moscow



single export channel from Russia, which would be the key to releasing a domestic gas bubble. An alternative scenario could be the creation of an export gas pool, into which producers could bid their gas, with the allocation process and the control of export contracts still remaining with Gazprom. This would allow more producers to benefit from export margins while also controlling the level of export sales, thus allowing domestic consumers to continue to benefit from an emerging oversupply of gas in Russia.

A further complicating factor in discussing a gas bubble is the outlook for demand, both domestically and in export markets. The recent World Energy Outlook published by the IEA suggests that overall demand for Russian gas will be in the range 690-815 bcm by 2020, <sup>10</sup> well below the Novatek estimate for demand implied by its estimate of Russian supply by the same date. As a result lower than expected demand may be another factor that could contribute to a Russian gas bubble by 2020, serving to emphasize the likelihood of increasing competition between Russian domestic producers to find customers for their gas.

## A more competitive domestic gas market is emerging

To date the main mechanism that has reduced the possible impact of an over-supply scenario in Russia has been Gazprom's control of the process of selecting which gas will be used to meet demand on an annual basis. Essentially Gazprom has been the controlling body at the centre of a gas matrix that has matched demand from Europe, the CIS and Russia with supply from Gazprom and 3<sup>rd</sup> party producers in Russia and imports from Central Asia. As the owner of Russia's high pressure pipeline network (the UGSS) and the dominant gas producer, with a particular responsibility for ensuring that the needs of all domestic and export consumers of Russian gas are met, Gazprom has historically managed the process through the regular establishment of the "Gas Balance" in consultation with the Russian Administration (Henderson, 2010). This annual process involves an allocation of gas from different supply sources to meet anticipated demand on a one and three year view, and has essentially allowed Gazprom, which retains all the relevant information about pipeline capacity and consumer requests for gas, to manage the process of picking the supply it chooses to meet demand. As a result many companies who have wanted to exploit their gas assets have found themselves

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 $<sup>^{10}</sup>$  IEA World Energy Outlook 2011, p.587



excluded from the market place or given delayed access to the trunk pipeline system. <sup>11</sup> Under this allocation mechanism it has been clear that a gas bubble would be almost impossible, other than in theoretical terms, as Gazprom has been managing the process and deciding at which points it has wanted to prioritise its own gas and in consequence controlling when 3<sup>rd</sup> party gas could be allowed into the market.

Although this system of annual allocation still occurs, a number of factors suggest that it is gradually starting to break down, and that a more competitive market place is emerging. An initial driver of this change was the decision of the Russian Administration in 2007 that the sale of any new gas should no longer be at the regulated gas price. As a result, the volume of gas which Gazprom was required to sell at the regulated price was established at just over 300 bcma (the level seen in 2007), with individual customer amounts fixed at that point. From then on, if any customer has wanted to buy a quantity of gas above the level it purchased at regulated prices in 2007 then it has had to pay a free market price, either to Gazprom or to a 3<sup>rd</sup> party supplier. Evidence that this "new" demand has grown since 2007 is provided by the reports that in 2011 Gazprom sold as much as 24 bcm at a market-based, rather than regulated, price. There has therefore been a growing volume of gas that is theoretically available for competition, which is gradually reducing the influence of the "Gas Balance" process.

An additional factor has been that as the regulated price has increased, so the differential between that regulated price and the market price has fallen, with interesting implications for the overall domestic gas market. In 2007–08, when the Gas Exchange run by Mezhregiongaz was operating to allow a market place for 5 bcm of Gazprom gas plus 5 bcm of 3<sup>rd</sup> party gas, the negotiated prices indicated that industrial consumers and power companies were prepared to pay a premium of approximately 30-40 percent over the regulated price of \$53/mcm prevailing at the time. Since then the regulated price has almost doubled to just under \$100/mcm, following an average annual increase of approximately 20 percent in rouble terms and 17 percent in US dollar terms. Over the same period, however, the differential between the price at which some NGPs have been prepared to sell their gas relative to the regulated price has shrunk dramatically. Figure 4 shows Novatek's average sales price in the period

2014, Moscow))

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<sup>&</sup>lt;sup>11</sup> For example in 2010 Rosneft was told that it could increase gas production, but only from 2014 (Interfax Russia and CIS Oil and Gas Weekly, 16 3 2010, Rosneft may receive greater access to Gazprom's pipeline in



2007–11 compared to the average Gazprom sales price in the same period, and demonstrates that the premium which Novatek has been able to charge has fallen from 16 percent in 2007 to 0.3 percent in 2011.

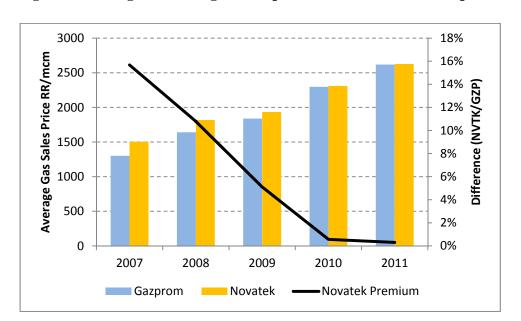


Figure 4: Average domestic gas sales prices for Novatek and Gazprom (2007-2011)

Source: Financial reports of Novatek and Gazprom

This shift in the relative pricing of regulated and non-regulated gas sales would appear to suggest three main conclusions. Firstly, that the regulated price is at least approaching a level which consumers regard as a commercial price and at which they can negotiate for extra gas supply. In other words they are no longer prepared to pay a significant premium for extra gas on the implicit understanding that the regulated price is no longer uneconomic for producers, and are able to access gas at a competitive price close to the regulated level. Secondly, the regulated price has now reached a level at which suppliers also understand that they can make a reasonable return from gas sales. Gazprom announced that in 2009 it had made its first profits from domestic market sales, and although the breakeven price for its new remote gas fields on the Yamal peninsula remains 30-50 percent higher than the current regulated price, the average cost of the company's production portfolio, including its low-cost Soviet-era inheritance, now appears to be below the price at which Gazprom is forced to sell most of its gas in Russia. For NGPs such as Novatek, though, the current price is clearly high enough to allow the generation of significant returns, as shown in Figure 5. Novatek's average profit margin has averaged 32 percent in 2011 (fluctuating on a seasonal basis) thanks both to its



low cost base and to the significant liquids production and sales that are generated from its gas condensate output, and it can clearly therefore make significant returns at the current regulated gas price.

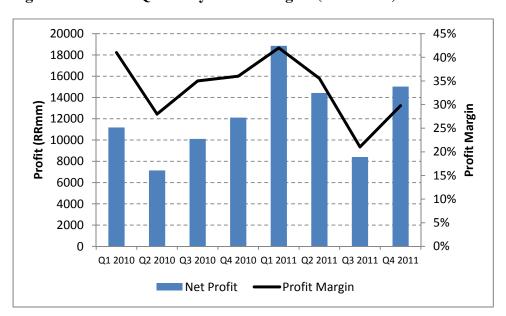


Figure 5: Novatek Quarterly Profit Margins (2010-2011)

Source: Novatek IFRS Financial Statements

The third conclusion that is suggested by the reduced premium of unregulated over regulated gas prices is that the Russian domestic gas market is becoming more competitive. Given the amounts of gas that are available from Gazprom and NGPs discussed above, and also given the fact that all producers can now make money from domestic gas sales, this is perhaps not a surprising conclusion. However, it is nevertheless a dramatic change from the situation prevalent only two or three years ago when Gazprom's dominance of production, sales and marketing of gas in Russia was undisputed. Confirmation of this change can be seen in the emerging marketing strategies of the NGPs with a particular focus on gaining access to end consumers.

## Marketing to end consumers is becoming a priority

Novatek, as the largest gas producer and marketer after Gazprom, has been actively marketing its gas to end-consumers since its privatisation in 2005, but the change in the mix of its sales portfolio in the period 2006 to 2012 is indicative of an increasingly consumer-led strategy. In 2006 Novatek sold 56 percent of its gas production to traders at the well-head,



with the remainder of its gas being directed to the power generation sector (29 percent), industrial companies (10 percent) and regional distribution companies (5 percent). Six years later the company announced that sales to traders had been halved to 27 percent, with the expectation that this figure would be reduced to only 16 percent by 2020, emphasizing that Novatek's strategy is now more actively directed towards direct sales to consumers in order to ensure that it creates a market for its growing gas output. Further evidence for this strategy was provided in December 2011 when the company purchased Gazprom Mezhregiongas Chelyabinsk, a regional gas distributor, from Gazprom with the specific goal "to increase market penetration in key natural gas consuming regions within the domestic market." 13

However, Novatek's strategy is now being matched by at least two Russian Oil Companies, Rosneft and TNK-BP, who have also decided to increase their access to gas consumers. Rosneft, which has discussed a potential gas growth strategy since its IPO in 2006 but which has been constantly thwarted by a lack of access to the trunk pipeline system, announced in February 2012 that it plans to form a joint venture (JV) with independent gas company ITERA.14 Both companies will contribute gas assets to the JV, but the primary goal for Rosneft is to use the venture as a tool for monetising its hitherto stranded gas assets by using ITERA's historical strength in the sphere of gas marketing, where it has established a competitive advantage in a select number of Russian regions (in particular Sverdlovsk). As described by ITERA Chairman Igor Makarov, the JV is expected to "become the flagship of the Russia independent gas producer market." TNK-BP has also been adopting an increasingly competitive gas marketing plan, using a combined strategy of co-operation with Gazprom as well as its own independent marketing operation. A joint venture with Gazprom subsidiary Mezhregiongaz was formed in 2008 with the goal of marketing the output of TNK-BP's Rospan field, 15 but TNK-BP has also been negotiating directly with end-users and has concluded contracts with power companies such as TGK-9 and with industrial concerns such as EuroCement (Henderson, 2010, p. 153). In February 2012 TNK-BP revealed that it was in negotiation with more than 20 consumers for long-term contracts to supply gas from the Rospan field, in anticipation of production from the field rising from the current 3-4 bcma

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<sup>&</sup>lt;sup>12</sup> Novatek Strategy Day presentation, 23<sup>rd</sup> April 2007, p.29

<sup>&</sup>lt;sup>13</sup> Novatek press release, 1<sup>st</sup> Dec 2011, "Novatek acquires regional gas distributor", Moscow

<sup>&</sup>lt;sup>14</sup> Rosneft press release, 28<sup>th</sup> Feb 2012, "Rosneft and ITERA Group sign strategic co-operation agreement", Moscow

<sup>&</sup>lt;sup>15</sup> Interfax Russia and CIS Oil & Gas Report, "9<sup>th</sup> April 2008, "TNK-BP, Mezhregiongaz create JV to sell gas from Rospan", Moscow



to as much as 16 bcma within the next five years. Furthermore the company is also developing a gas programme in the Orenburg region, initially based around the increased utilisation of associated gas but ultimately aiming to sell 3-5 bcma of gas to domestic industrial users from gas fields in the region.

At the other end of the scale a number of smaller gas players have also been making plans to market their gas output in a more competitive market. For example JKX, an exploration and production company with assets based in a number of east European countries as well as Russia, announced in March 2012 the signing of a gas contract for the sale of production from its Koshekhablskoye field in the Krasnodar region of southern Russia to a local trading company called Kubangazifikatzya. <sup>16</sup> Small companies such as JKX cannot afford their own marketing operations, and historically have been bound to sell their output to Gazprom as a result, but an increasing number of trading companies have now emerged to act as intermediaries between producers such as JKX and end-consumers, consolidating small amounts of production from individual producers into large enough packages to satisfy power companies and industrial concerns. Volga Gas, a small gas producer in the Samara region, is another company to have adopted this strategy, selling its output to a trader at the wellhead and allowing this secondary company to take responsibility for marketing its gas into regional industrial consumers.<sup>17</sup> Although a sale to traders inevitably results in some loss of margin, the mere existence of these traders demonstrates not only that Gazprom's control of the domestic market is gradually being eroded but also that small producers are now able to create greater flexibility in their choice of buyer rather than having to sell to a monopoly player at a heavily discounted price.

#### **Conclusions**

The gas supply outlooks provided by Novatek and Gazprom in late 2011 and early 2012, suggest that there is an abundance of gas in Russia ready to be produced by a wide range of companies. An analysis of the gas available to Non-Gazprom producers suggests that they could produce up to 300 bcm by 2020, while Gazprom could itself increase production to over 650 bcm on the same timescale. However, most estimates of the demand for Russian gas suggest that this will produce a surplus of supply. Indeed, using the recent forecasts produced

<sup>&</sup>lt;sup>16</sup> JKX press release, 1<sup>st</sup> March 2012, "JKX announces Russian gas sales contract", London

 $<sup>^{17}</sup>$  Data from author's interview with Mikhail Ivanov, CEO Volga Gas, Feb 29 2010



by the IEA (adjusted for the different calorific value of Russian gas)<sup>18</sup> the base case outlook for demand for Russian gas (from domestic and export markets) in 2020 is 750 bcm<sup>19</sup>, approximately 200 bcm lower than the potential total for combined Gazprom and NGP production in the same year. Although the IEA forecast is relatively conservative, it clearly demonstrates the potential for a gas bubble in Russia.

Historically, the resolution of this potential oversupply situation would have been managed by Gazprom, as it has essentially dominated the gas matrix that involves supply from Russia (from Gazprom and 3<sup>rd</sup> party producers) and Central Asia to meet demand from Europe, the CIS and domestic consumers in Russia. By using its ability to allocate space both in the Gas Balance and in the trunk pipeline system, Gazprom would have been likely to prioritise gas from its core fields, with the result that Independent gas plus imports from Central Asia would have been crowded out. However, a number of factors appear to suggest that the answer may not be so simple in a domestic market that is gradually moving towards liberalisation. Firstly, the increased focus on marketing and access to end-consumers by a number of Non-Gazprom producers as well as the emergence of an active gas trading community would suggest that a much greater level of competition is anticipated as the Russian gas market evolves over the next decade. Indeed, the fact that in 2011 the average gas price for sales by a company such as Novatek, which is set by market forces and not the Federal Tariff Service, was virtually the same as the regulated price, having traded at a significant premium historically, suggests that increased competitive forces are already at work.

Secondly, in an increasingly competitive market supply from low cost producers would naturally have an advantage and would be most likely to satisfy consumer demand. In the case of Russia this would naturally lead to a preference for gas produced by NGPs with supply located in the existing core area of West Siberia rather than for supply from Gazprom's new high cost fields. This would particularly be the case for NGPs such as Novatek, whose economic cost of gas is reduced by the additional production and sale of associated liquids. Figure 6 shows the breakeven price in Moscow for a currently producing dry gas field in the Nadym Pur Taz region of West Siberia, a new wet gas field such as TNK-

<sup>&</sup>lt;sup>18</sup> Russian gas, as reported in Russian data, has a different calorific value than the figures for gas that are reported by the IEA. As a result it is necessary to multiply all IEA figures by 1.017 to allow for comparison with Russian data

<sup>&</sup>lt;sup>19</sup> IEA World Energy Outlook 2011, p.585



BP's Rospan and the Bovanenkovskoye field on the Yamal peninsula, which is due to come onstream in July 2012. It is clear that in a domestic oversupply scenario Gazprom's increasing reliance on new remote and high cost fields will put the company at a competitive disadvantage.

This does not of course mean that Gazprom's production profile will necessarily follow the rather flat profile outlined by Novatek rather than its own more optimistic forecast. Gazprom is a state-owned company with a dominant position in the market place and has an enormous impact on the Russian economy both in terms of its contribution to GDP and the trade balance. It is unlikely to be completely abandoned to the forces of competition without any aid from its majority owner, the State, and furthermore the vested interests of a large number of political and commercial individuals and organisations would also no doubt play a key role in supporting the company. However, it is interesting to note that in 2009, when gas demand in all the demand centres of Russia's gas matrix fell in the aftermath of the economic crisis, it was Gazprom who acted as the swing producer rather than other Russian producers. Gazprom's output fell by 16 percent, or almost 90 bcm, in that year while 3<sup>rd</sup> party gas production in Russia actually increased by 5 percent, suggesting at least some political pressure to encourage continued growth in non-Gazprom production. It is unclear how Gazprom would be encouraged to manage the supply side of its gas matrix, and indeed if it would be allowed to remain in control at all, if a more fundamental long-term oversupply situation was to occur as described above, but it is clearly not without precedent to suggest that the Russian Administration might again insist that space should be made available for the country's most competitive gas.



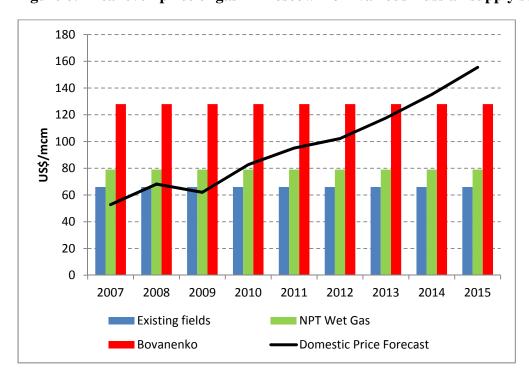


Figure 6: Breakeven price of gas in Moscow from various Russian supply sources

Source: Author's estimates

Furthermore, the domestic price forecast in Figure 6 highlights another issue that may also have increasing political relevance, namely the appropriate level for the domestic gas price. At present the nominal target of export netback parity is still in place, with the implication that at current oil prices a domestic gas price of approximately \$250/mcm would be reached at some point between 2015 and 2020. Having said that, the debate about whether domestic prices need to reach this level so rapidly, if at all, was begun in the run-up to the parliamentary elections of December 2011, and Figure 6 would suggest that an appropriate level could perhaps be found at well below netback parity. Gazprom's expensive Bovenkovskoye field is estimated to break even at around \$130/mcm, 20 while gas from existing fields in West Siberia and new wet gas developments (which are largely owned by NGPs) would make significant profits at below \$100/mcm. However, the discovery of the appropriate price level would only be possible in a competitive market in which consumers had a broad choice of alternative suppliers, and where those suppliers had access to the consumers via a fully accessible trunk pipeline system with a transparent regulatory system.

<sup>&</sup>lt;sup>20</sup> Author's estimate based on data from Wood Mackenzie's CAT database as well as data from Gazprom's Databook for 2011

<sup>&</sup>lt;sup>21</sup> Author's estimate based on company data and Wood Mackenzie's CAT database



The Russian Administration is committed to a liberalisation process for the Russian gas market, although the 2015 timescale for full implementation would still appear to be somewhat fluid. Nevertheless a number of Non-Gazprom Producers appear to be designing their strategies in anticipation of a market in which access to consumers, who will have the ability to purchase their gas from the lowest cost supplier, will be a necessity if any company's gas assets are to be fully monetised. This author has previously argued (Henderson, 2011) that in such a scenario the domestic gas price in Russia could very likely find an equilibrium price at well below export netback parity, given the large amounts of potential supply that could make reasonable returns even at prices not much higher than the level set in 2012. However, the other conclusion from this outcome is that Gazprom is likely to find itself at a competitive disadvantage and acting as the swing producer, therefore becoming the company most likely to miss its production targets in an oversupplied market. Given the billions of dollars that have been spent on the development of the Bovenkovskoye field this is unlikely to be an acceptable outcome, and a compromise solution will almost certainly be found. Nevertheless it does highlight a political dilemma that the new Russian Administration will face over the next five to ten years: continued support for its state-owned gas company as it implements its aggressive growth plans is likely to mean a higher gas price in Russia than would be needed if market forces were allowed to determine the outcome. Indeed, this has become a real issue in March 2012 as Gazprom has requested a 26 percent increase in the regulated gas price to be introduced in October 2012, in addition to the planned 15 percent increase in July. 22 The reaction both from consumers and from politicians to this request has been rather negative, with Economy Minister Elvira Nabiullina stating "we, as a matter of principle, do not support an additional increase in tariffs for natural monopolies on top of what had already been expected."23 As a result it would appear to increasingly be the case that the phrase "What is good for Gazprom is good for Russia", which became the company's unofficial motto in the early 2000s, <sup>24</sup> would no longer appear to hold true and it would seem that a number of third party actors in the Russian gas sector are betting that the Russian Administration will soon reach the same conclusion.

<sup>&</sup>lt;sup>22</sup> Bloomberg, 22 March 2012, "Gazprom bid for price hikles faces resistance", Moscow

<sup>23</sup> Ihic

<sup>&</sup>lt;sup>24</sup> Trenin, D., Washington Quarterly, Spring 2007, "Russia redefines itself and its relations with the West", Washington



# **Bibliography**

Henderson, J. (2011). *Domestic Gas Prices in Russia - Towards Export Netback Parity?* Oxford: Oxford Institute for Energy Studies.

Henderson, J. (2010). *Non-Gazprom Gas Producers in Russia*. Oxford: Oxford Institute for Energy Studies.