

Russian gas can unite Europe – if we allow it

By Seppo Remes

The Russian Federation has the world's largest gas reserves; over 30% of the world's gas. It is also the world's largest gas producer, with roughly 670BCM of annual production. This position is not going to change in the foreseeable future. All decisions concerning these reserves are fully in the hands of the Russian Government.

Russian gas reserves are mainly located in the northern part of Western Siberia (Urengoi, Yamburg and Medvezhie are the biggest fields). Gas has been recovered for decades, mainly in Cenomanian structures, which are "convenient" because they are almost pure methane and easy and cheap to process (basically, just take away the water), because of the small depth of deposits and because of the natural pressure of gas flows. The fields are rather close to each other, which lowers infrastructure costs. There are estimates that fields' overall costs are as low as USD 1/boe (barrel of oil equivalent).

However, things are set to change. Firstly, drilling must gradually go deeper to more difficult Valanginian and Achimov structures, which is roughly 3-4 times more expensive. Secondly, new gigantic fields must be opened to production, which fundamentally increases capital costs in fields and in infrastructure (especially Yamal peninsula, starting with the giant Bovanenkovskoye field). The estimated cost for the Yamal peninsula first and second phase fields is roughly USD 35-40bn between 2009-2020, increasing the production to 300BCM/a (UBS Investment Research estimates). The majority of the cost is the pipeline from Yamal to Vologda. Gazprom can probably finance this fully from its profits. Thirdly, now all these costs must be covered by investors; previously the burden was shared by the Soviet state. Actually, the most difficult problem is how to optimize the opening of the new fields whilst also decreasing volumes from old fields to match the existing trunk pipeline and storage capacity. It is obviously efficient to open new gas storages to pump gas there in low consumption summer time, and thus decrease the need for additional, very expensive trunk pipeline capacity during peak winter consumption. Fears have been expressed within the Russian Government that investments have not been sufficiently large.

Gazprom's perhaps most important asset is its 159,000km trunk pipeline system, with 41,000MW of compressor stations and 65BCM underground storage (almost 15 years' worth of Finland's gas consumption). It has been estimated that the value of these assets alone, calculated as a replacement cost, is around USD 500bn, which is more than twice Gazprom's market cap. (at end of August).

Aside from its pure gas business, Gazprom is a very important financier of the Russian budget; it also makes it possible to keep domestic gas prices at lower levels via profits from gas exports. Gazprom also fulfills some social tasks, such as the like USD 1bn investment program in the gas distribution network to households in smaller towns and villages (domestic prices do not cover the investment costs; sales will be loss-making). The government's control also prevents any price dumping on export markets: all exports are done by Gazprom's daughter company, Gazexport. And one cannot forget the political aspect: it gives the Government the possibility to differentiate prices downwards to customers/countries it considers to be constructive and friendly towards Russia. However, I believe that this "discount policy" to many CIS countries during the last 10-15 years has been a mistake and has

cost Russia so far at least USD 50-100bn. And I at least have not heard one grateful word back from them;— on the contrary, there has been harsh criticism when prices were drawn to market levels. Imagine that during 15 years the Finnish paper and pulp industry had been selling its products, on a government recommendation, with very large discounts to other Finno-Ugrian countries, Estonia and Hungary!

Domestically, the basic dilemma for the gas industry is how to improve its efficiency and keep investments at very high levels. I do not believe that today's situation is optimal. The Gas Reform must introduce real competition to the sector, which first of all means real, fair, non-discriminatory access to trunk pipelines – not only on paper but in real life, with transparent rules adequately monitored. At the same time, tariffs must be at levels enabling Gazprom to maintain the system in good order. The Reform must also guarantee reasonable, profitable price levels on domestic markets. From the viewpoint of financial markets, Gazprom is not ever likely to get properly valued if it continues to be one huge "black box", where the efficiency of different core businesses is impossible to estimate.

Monitoring of fair and non-discriminatory access to pipelines can be arranged in different ways, for example, by setting up a government entity – like the System Operator in the electricity sector. This can also be done via non-governmental organization, where all producers, including Russian oil companies have representation. In both cases, it would be more effective to have a separate business entity, the Gazprom Pipeline Company for example, as a 100% Gazprom subsidiary, but with separate accounts and IFRS books. A more radical option would be to fully spin-off transportation from production and sales. There are clear signs that steps towards opening up Gazprom pipes for other producers are taking place, mainly because of the conflict of interests between Rosneft and Gazprom.

Domestic prices must be gradually drawn up to export net-back price levels (price at border minus transportation cost and export tax). The Russian Government has promised this for 2011. Because of very high international gas and oil prices, it is probable that the implementation of this decision will be delayed and in 2011 the level of domestic prices around Moscow will be only USD 110-120 per 1000m³ (today's net-back price would be around USD 200). Now prices around Moscow are USD 50-60 per 1000m³. Full net-back pricing will take place probably 2013-2014. As a separate note, this is much more than the EU agreed during WTO negotiations with Russia.

Both pipeline access and price increases provide an incentive to other gas producers. It is important to use the gas produced by oil companies more efficiently (typically, most oil fields also have gas and vice versa). And it is important to get new gas companies into business to focus on small and medium sized fields where the gigantic Gazprom is not at its best.

Gazprom is a huge company with a market cap of over USD 200bn (at end of August, and at highest over USD 300bn). It is *the* Russian gas company, but it is also a big oil company, the biggest Russian electricity company and a lot of more (which is not core business and should be gradually divested). It is too big a company to be adequately and transparently valued by the markets. I am convinced that it would be better both for Gazprom and the government, as well as other Gazprom shareholders, to

have a deeper understanding of each of its businesses. In some cases it could mean a quite clear separation of the businesses with IPOs and/or partial sales; and in some cases perhaps the separation of businesses into separate legal entities could be enough (for example Gazprom trunk pipelines). I am convinced that the target of USD 1,000bn market cap for the whole group is only achievable with these actions

Aside from the above discussed domestic gas industry issues, there are extremely important international aspects. Gazprom receives some 70% of its income from exports, where it has monopoly rights. Gas prices on regional European markets are market driven. Gazprom is just a price taker; marginal prices are determined by more expensive Norwegian and North-Sea production. The half-hidden logic behind the Energy Charter is to create competition between different Russian gas producers on EU markets. However useful dreaming might be, we won't see this happen: Russia will in future continue to control, or at a minimum, coordinate its gas exports to prevent any potential dumping and consequently, the massive loss of tax revenues to the government. At the same time, I don't deem it impossible to have a system, where export quotas (physically or financially) are distributed in proportion to each gas producers' share in overall Russian gas production, but at the same time, sales would be channeled via one organization, be it the Gazprom structure or some to-be-created structure.

The basic dilemma between Europe and Russia is the nature of supply contracts: are they long-term contracts or not? This is a question of price, but also, more importantly, the question of security of supply and the question of the financial cost of enabling new pipeline investments. In all these aspects I have never understood the EU "hostility" to long-term contracts. Let me explain: Firstly, spot prices can only be an efficient price setter in the short term. Secondly, they are quite easy to manipulate (this is a very oligopolistic business). Thirdly, and most importantly, Europe will inevitably run into a gas deficit because it is either impossible or too expensive to finance tens of billions of new pipeline investments without any long-term take-or-pay supply contracts. In fact, Gazprom (and other producers) could just sit and wait until prices are extremely high because of the worsening deficits, and earn wind-fall profits when prices inevitably sky-rocket. And to dictate whatever price for any new additional gas supply. Fourthly, in this case we would be in a deficit situation for years, because investments take a minimum of 4-5 years to take effect.

Surely the best model would be the combination of long-term and spot markets, where the latter plays a role of keeping swing producers in business and cutting unnecessary over-investments, thus keeping also gas prices at lower levels. This needs effective regulation and

regulators (public and self-regulative structures), large enough storage capacities inside the EU (for all producers, including Gazprom) to react effectively into demand changes and also certain political guarantees that long-term contract terms are also valid after 20-30 years. Increased storage capacity for Russian gas would also greatly improve the supply certainty and would thus be one of the policy focuses.

Another issue often discussed is the security of supply for Russian gas deliveries. Technically, economically and politically, the more different pipeline routes, independent from each other, from Russia to EU there are, the better the security. Clearly, both North Stream and South Stream will improve the supply security; any risk management professional can confirm this. I also don't know any laws of chemistry or physics – or politics - that require that every pipeline in Europe should go via one certain country. Surely, at the same time, environmental procedures and requirements must be followed –not because of political populism, but for the environment.

The more we have pipelines going from Russia to EU, and the more we have Russian gas storage in the EU, the better. It is also good if Russian Gazprom is involved in the distribution businesses in Europe: this just makes the integration more valuable for the company. Also, politically the effect is the same. Both markets should be open for foreign investments: inside Russia for EU companies, especially in gas production, but also in gas processing, trading and distribution; inside Europe for Russian companies in production, trading and especially in storage and distribution. If parties want to put upper limits or restrictions on foreign ownership, it would be a reasonable compromise. Foreign ownership of trunk pipelines and certain strategic gas fields is a very sensitive issue for Russians. At the same time, Russian ownership of certain trunk pipelines in Europe is at least as sensitive issue for Europeans. Gradually, the trust and good track records would push away negative presumptions and full liberalization of ownership could be put on the table. Russian gas can become one of the most important single elements of unifying Europe, and of integrating Russia and the rest of the Europe. But this is only possible if we put aside biased presumption of Russia as "the bad guy", being guilty before she has even done anything.

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