EAST OR WEST:

WHERE WILL RUSSIA SEND ITS GAS?

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INTRODUCTION

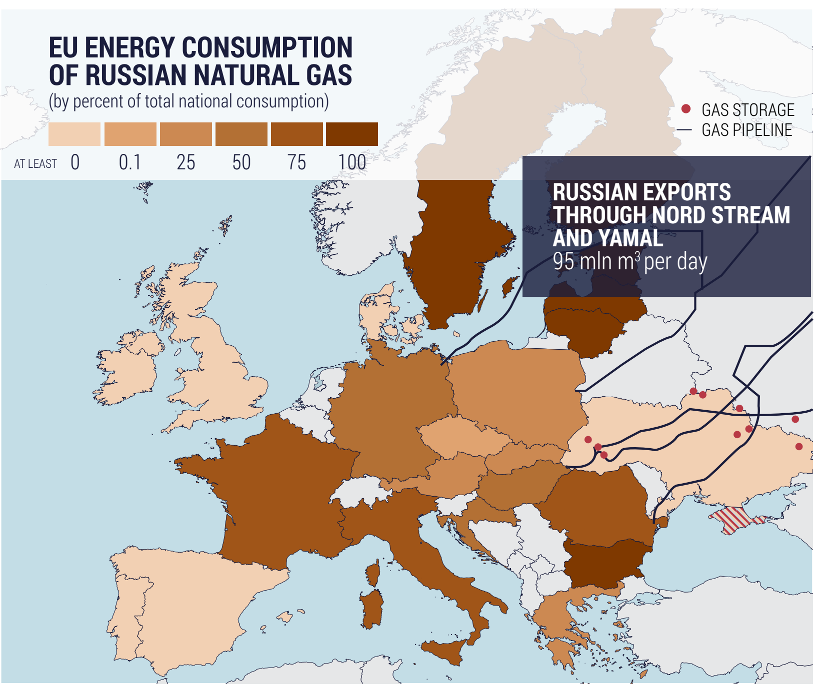
Russia's natural gas policy is at a watershed moment. It still sells most of its gas to Europe, but a slump in demand and accelerated European Union diversification efforts in the wake of Russia's annexation of Crimea have pushed Moscow to accelerate its quest for market access in the East. Demand there is strong, but Russia does not have the infrastructure to expand rapidly.

In this report, Wikistrat explores Russia's energy policy, its trajectory and the factors shaping it.

EUROPE:
SAFE BUT SHRINKING

Almost 90 percent of Russia's natural gas exports in 2014 went to Europe via pipeline, with Germany, Turkey, Italy, Belarus and Ukraine being the largest buyers. The relationship is one of interdependency, with Russia accounting for a third of the gas consumed in Europe, and Russia depending on oil and gas revenue for 52 percent of its national budget. For some countries, including Finland and former Eastern Bloc nations in the Baltics and Southeastern Europe, Russia is the largest or even the only supplier.

However, despite Moscow's good relations with some EU member states, Russian gas has lost its appeal in light of the various cutoffs that have taken place in recent years, as well as the Kremlin's propensity for using gas dependency as a political weapon. As a result, Europe has seen a significant political push for diversification, culminating in the appointment of a European Commissioner in charge of the Energy Union: an as-of-yet fuzzy (albeit determined) project to ensure energy security for all 28 member states.



58% OF GAS CONSUMED IN UKRAINE IS IMPORTED FROM RUSSIA

66% OF RUSSIAN GAS EXPORTED TO THE EU TRANSITS UKRAINE

58% OF GERMANY'S GAS CONSUMPTION IS IMPORTED FROM RUSSIA

Source: Gas Infrastructure Europe, Reuters Industry Data

> "The stable functioning of Gazprom's export business is critical to the functioning of the entire Russian socioeconomic system. The Russian economy is already in deep trouble. It could collapse altogether in the case of additional trade restrictions that would hurt Russia at least as much as, if not more than, the EU. The Kremlin's oft-alleged economic 'weapon' is really a scarecrow used by pro-Russian (business) representatives lobbying for a softer Western reaction to Russian aggression."
>
> **Dr. Andreas Umland**
> Wikistrat Senior Analyst
> Institute for Euro-Atlantic Cooperation, Kiev

THIRD ENERGY PACKAGE

Whatever comes of the Energy Union, Europe's Third Energy Package (TEP), adopted in 2009, is starting to have an impact. It aims to ensure the independence of transport system operators from the control of particular producers; "third-party" access to electricity and gas distribution networks and storage; regulators' autonomy; and adequate social protection without distortion of competitiveness. Although it was slow to be implemented, the legislation is now the best protection EU member states have against Gazprom's monopolistic tendencies. Its strength was felt in the South Stream negotiations, eventually leading to Russia's cancellation of the project. More such outcomes are to be expected, along with anti-monopoly judicial proceedings of the kind launched in April against Gazprom by the European Commission.

This shows that the EU will not backtrack on its free-market values in exchange for cheap natural gas. Third-party access and unbundling are now prerequisites for any new pipeline project, as well as for every new contract for existing infrastructure that is to be signed after the expiration of existing ones.

MARKET FORCES

Regulatory action comes at a time when weak economic growth, excess supply and increased competition have conspired to drive down energy prices. Even if not for EU legislation, Russia would have had to adapt.

One consequence is that Gazprom and other traditionally dominant energy suppliers are losing their monopoly power and must compete in EU markets, in Asia and perhaps even at home in Russia. Eventually, it will be in Russia's interest to reopen its energy sector to outside investment to attract capital, gain access to Western technology and avoid market barriers like EU anti-monopoly regulations.

Global competition for liquefied natural gas (LNG) in particular is eroding the monopoly power of Gazprom, forcing it to compete with LNG imports from North America eager to serve EU markets.

Oil indexation – Gazprom's preferred pricing method, as it links the price of gas to the price of oil – has taken a hit, helped by the global petroleum price slump. In May 2014, Gazprom made the first step from oil indexation to spot-price valued contracts in a deal with Italy's Eni. In September this year, it went further. Gazprom launched its first-ever natural gas auction for European buyers, selling 1 bcm of the 3.24 bcm offered to 15 traders which are to deliver it to Germany this winter. Gazprom called the deal successful and acknowledged that the goal was to test a new sales mechanism on the European market.

All the signs then point to a very strict enforcement of legislation, which Gazprom will need to comply with if it is to maintain its European market share.

But European market share will not amount to much. The International Energy Agency projects a mere 0.1 percent annual increase in European gas demand until 2040. Natural gas production in non-OECD Eastern Europe and Eurasia, on the other hand, is expected to grow 0.9 percent per year, meaning that Gazprom's preferred segment of the European market – the one most exposed to Russian pressure – will become more saturated from domestic production and thus less vulnerable to Gazprom's strategy. The whole gamut of pipelines and interconnectors proposed under the Energy Union's umbrella will have the same effect.

> "Russia's leverage can be reduced by EU access to LNG suppliers from North America, by pipeline routes through Turkey that avoid Russian bottlenecks, or by new investment in developing EU gas supplies in the North Sea or in the onshore shales."
>
> **Gary Hunt**
> Wikistrat Senior Analyst
> President and Managing Director, TCLABZ

ASIA: PROMISING BUT UNCERTAIN

Unlike Europe, China is still growing and expected to see a 4.7 percent annual increase in gas demand up to 2040, making it the more attractive market for any producer of large natural gas volumes. But its economy has also started to slow in recent years, making such long-term forecasts a bit dubious.

SIBERIAN GAS PIPELINES

Source: Gazprom

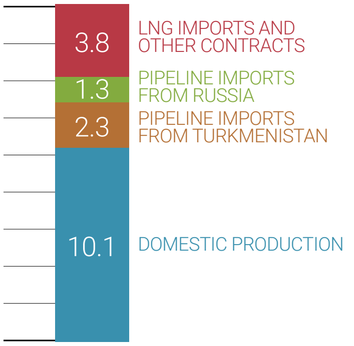
Russia is already seizing the opportunity and upping its output from the Eastern Siberian fields of Chayanda and Kovykta to feed the Power of Siberia line into Northeast China. Additionally, Moscow is promoting the Altai route, which would deliver gas to Western China from existing fields in Western Siberia (see map). But Russia faces competition in Asia from Australia, North America and Qatar to meet LNG demand in an Asian market slowing down.

New pipeline and infrastructure construction costs from Russia to China are a major factor, and China drives a hard bargain. Both pipeline proposals had been in talks for a decade before an agreement was reached in 2014, at a time when Russia's policy toward Ukraine had made it economically vulnerable and Moscow was desperate for a win in finding an alternative to the European market. The exact gas price remains a commercial secret, but Russian officials deemed it "close to" \$350 per thousand cubic meters, below the \$380 average price for Europe at the time.

Infrastructure to China is also expensive. The Altai pipeline is estimated to cost between \$11 billion and \$14 billion for a 30 bcm/year capacity, while the Power of Siberia pipeline, at 38 bcm/year, will cost \$55 billion for the Russian section alone.

Construction has begun on the second pipeline, but is not yet guaranteed for Altai. The route favors Russia, as it would tap into its largely developed Western Siberian fields now supplying Europe. But China would need to build a new domestic pipeline to feed the gas brought in to Xinjiang Province thousands of kilometers east to its main gas demand centers.

> "The probability of the Altai pipeline being built is very low, given China's needs in the East and saturation of the West-East transit pipeline with Central Asian gas."
>
> **Marcin Kaczmarski**
> Wikistrat Senior Analyst
> Assistant Professor, University of Warsaw



CHINA'S NATURAL GAS SUPPLY, 2040

China's projected natural gas supply mix in trillion cubic feet by 2040 *(Source: EIA)*

LNG:
A THIRD WAY?

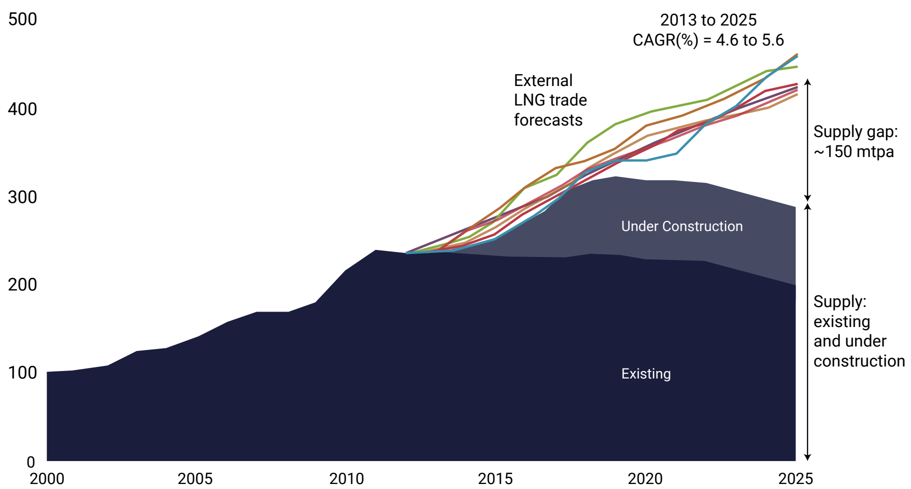
Another option for Russia is liquefied natural gas (LNG), where demand is projected to soon outpace supply (see chart). The Energy Ministry is planning to increase Russia's global LNG levels from its current 4.5 percent share to 15 percent by 2035. But this does not mean smooth sailing for Russia either:

- » Compressing and regasification will always make LNG more expensive than sending gas through a pipeline.
- » LNG export projects are already more advanced in Africa, Australia and North America.

Over the long term, additional pressure could also come from Iranian natural gas (either by pipeline or LNG), though little is clear at this time. The only presently known destination for Iranian gas is its own insatiable domestic market. Within years, its gigantic South Pars field should be ready to export additional volumes, with only their market of choice to be determined.

> "The challenge is not just that LNG projects are more advanced elsewhere (setting up a LNG plant is not that problematic), but that transporting Russian gas through a pipeline is cheaper and therefore easier to sell than LNG, which will cost more or less the same as that of Africa, Australia and North America. In other words, as soon as LNG is used, Russia loses (all or most of, depending on the case) the price advantage it currently has."
>
> **Lorenzo Nannetti**
> Wikistrat Contributing Analyst
> Manager at Eni's Petrochemicals

GLOBAL LNG SUPPLY (MTPA)



Sources:
Supply: BG Group interpretation of Wood Mackenzie data (Q4 2013); as of Q4 2013, Yamal LNG not included in "under construction"

Trade: various research house views; 2014: Wood Mackenzie, PFC Energy, IHS CERA, Poten & Partners, FACTS Global Energy; 2013: PIRA, Gas Strategies

A clue to Russia's strategy should also come from the direction Iran's natural gas talks will take once sanctions are lifted. The prospects are not likely to be the same for Iranian and Russian gas. Russia has the upper hand for now, since legal obstacles have so far prevented Iran from opening talks for gas exports.

STRATEGIC TAKEAWAYS

» Russia is not going to make a clear-cut choice between East and West, because it can't. Moscow must hold onto its European market share and is ultimately willing to comply with legislation – but it won't do so without putting up a fight.

» The Asian market and LNG projects give Gazprom breathing space in the event that Europe's demand is not strong enough or it sets too many obstacles; however, competition in terms of LNG is fierce, and prices may fall substantially if supply increases or demand softens.

» Russia will maintain reduced production of natural gas as long as demand is low.

» The future size of Russia's European market share – as well as the likely destination of Russian gas – will become apparent once a definitive deal is reached on one (or several) pipeline routes:

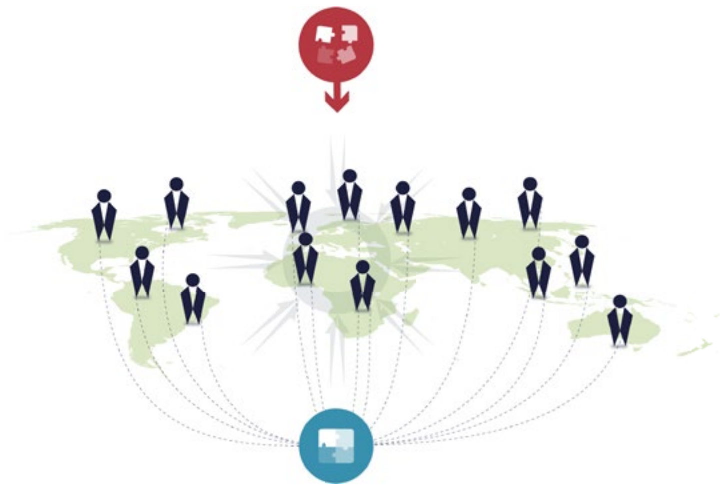
- Nord Stream II (bypassing Ukraine to deliver gas directly to Germany)
- A resurrected Turkish Stream (which was cancelled in December)
- Maintaining the Ukrainian route (the cheaper but politically troublesome option)

» Europe's push for diversification will open the door for LNG imports. Western Europe already imports large volumes. Additional facilities in Eastern Europe, such as in Lithuania's Klaipeda, are bound to open new, albeit small markets. In time, as interconnectors are built, markets could grow – especially if Europe is willing to pay slightly more for LNG than it does now for gas that is transmitted by pipeline.

» The requirement of third-party access, along with the interconnectors to be built in Europe, will give companies that want to invest in upstream activity affordable access to large markets.

» Predictable EU legislation will create a more fair business environment and do away with monopolistic practices.

» EU funding could be available for some natural gas infrastructure projects.



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