



**Russia is the world's largest producer of gas, providing 42% of all gas imports to the EU. But will its colossal gas reserves translate into larger export volumes to Europe over the next two decades?**

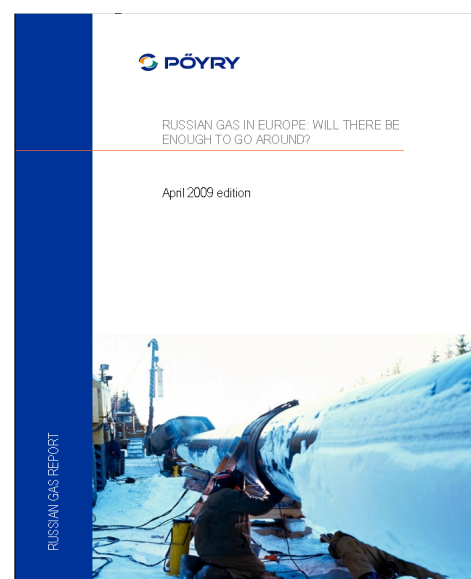
Pöyry Energy Consulting, established experts in European energy markets, have launched a new report focusing on Russian gas production, and examining how much of it will be available to Europe to 2030

This report examines Russia's ability to maintain the level of production needed to meet its domestic demand and export obligations to Europe to 2030. It also examines Russia's energy policy towards key consumer and transit states to determine whether the European market will remain a priority for Gazprom.

**The 'Russian Gas in Europe' report is essential reading for any market participant who wants to understand gas production patterns in Russia, the extent to which Russia will diversify its exports towards the Asia-Pacific region and the routes via which gas will be transported to Europe over the next 20 years.**

### Main themes

- With the depletion of super-giant fields in West Siberia, Russia faces the challenge of launching production on the Yamal peninsula, in East Siberia and the Russian Far East. When European and Russian demand picks up, even relatively short delays in launching the fields could lead to gas shortages and higher gas prices in Europe.
- Russia's ability to transit the gas produced is of paramount importance. This depends on two factors: Russia's relations with transit states and its commitment to building bypass pipelines. The report explores in detail policies behind the efforts to construct new pipelines.
- Russia has traditionally complemented its gas production with imports from energy-rich states of Central Asia. However, the sustainability of this policy is increasingly under question. The report explores Russia's options in continuing to import gas from Turkmenistan, Uzbekistan and Kazakhstan, and conditions under



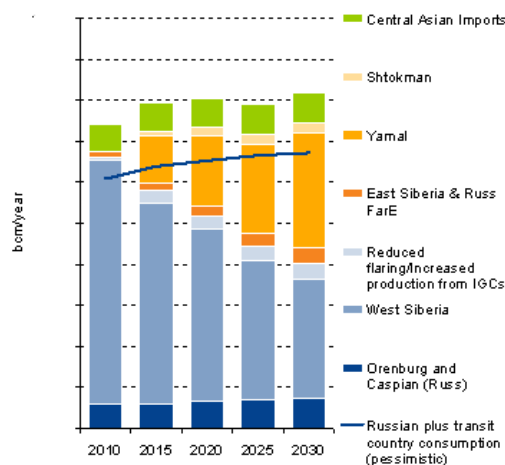
which this is likely to be possible. The report gives detail on pipeline infrastructure that carries Central Asian gas to Russia and onwards to Europe.

## Pöyry scenarios

We propose three scenarios to estimate the volume of gas that will be available to Europe to 2030.

- In the Central Scenario, we lay out what Pöyry considers to be the most likely outcome, based on a complex interplay of political, economic and geological factors.
- In the 'Gazprom Scenario', we examine the monopoly's long-term production plans across Russia, and model output based on those projections. This scenario is constructed to understand Gazprom's production and export goal, and provide a benchmark for comparisons with the other scenarios considered more realistic.
- We also construct a Pessimistic Scenario, which envisages a situation in which a number of key deadlines in launching fields are missed.

The supply demand balance under the Pessimistic scenario



Source: Pöyry Energy Consulting

In addition to estimating the rate of depletion of the major fields in the Nadym-Pur-Taz region and a field-by-field analysis of the growth of output from Yamal, our report examines infrastructural developments in Russia. The likelihood of and timetable for constructing the Russia-advocated pipelines (e.g. Nord Stream, South Stream) vary under each scenario, with implications for the supplies of Russian gas to Europe. Prospects for constructing EU-backed lines from the Caspian, such as Nabucco, are also examined. The development of Russia's foreign and energy policy towards the Asia-Pacific region and the extent to which Gazprom delivers on the promises of the political leadership will have a direct bearing on the volume of Russian gas in Europe. These factors are covered in depth in the report.

Insights on Gazprom's standing in the system, its relative strengths and weaknesses, and the conflicts of interests with the Russian state acquire great relevance at a time of uncertain supplies and stagnating production. All these issues are examined in detail in the report.

## Pöyry modelling

Gas flow and prices are forecast using Pöyry's international gas model, Pegasus. Its main solving module is based in XPressMP, a powerful Linear Programming (LP) package, which finds a least-cost solution to supply gas over a gas year. The solution is subject to a series of constraints, such as pipeline/LNG terminal sizes, interconnector capacities, storage injection/withdrawal restrictions and contractual obligations.

Pegasus allows the development of sophisticated future scenarios. Two key outputs from Pegasus are projections of future prices and gas flows under a variety of constraints (e.g. the construction of new pipelines and 'take or pay' obligations).

For more information on the report, please contact:

**Andrew Morris:** [andrew.morris@poyry.com](mailto:andrew.morris@poyry.com) or  
**+441865 812212**

**Nazrin Mehdiyeva:** [nazrin.mehdiyeva@poyry.com](mailto:nazrin.mehdiyeva@poyry.com) or  
**+441865 812259**

Pöyry Energy (Oxford) Ltd.

King Charles House, Park End St, Oxford OX1 1JD, UK  
+44(0)1865 722660 [consulting.energy.uk@poyry.com](mailto:consulting.energy.uk@poyry.com)

**Pöyry Energy Consulting**