



PLEXOS

BY ENERGY EXEMPLAR

Energy and Geopolitical Perspectives

Dr Christos Papadopoulos

Regional Director Europe

Energy Exemplar

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Energy Markets & Geopolitical Perspectives

We leave in a time period of **“Global Tectonic Changes in ALL fronts”** moving towards a **“New Era”**.

So, a strong and sometimes violent, **TRANSITION** is taking place.

- ✓ Global Politics are in a turmoil with **Multiple** and **Major Geopolitical Competitions** extending and unavoidably affecting Global Energy Markets too.



Energy Markets & Geopolitical Perspectives

The Global Energy Market is in a state of flux too. This is due to a strong **Cross-Competition** between different energy sources that is stemming on the one hand, from the need to address **Climate Change** through **Green Measures** and the adoption of **New Clean & Sustainable Energy Technologies** and on the other hand, from the parallel tectonic changes that are taking place in the whole Scientific field and in particular, in the **New Digital Information/Communication Technologies** front.

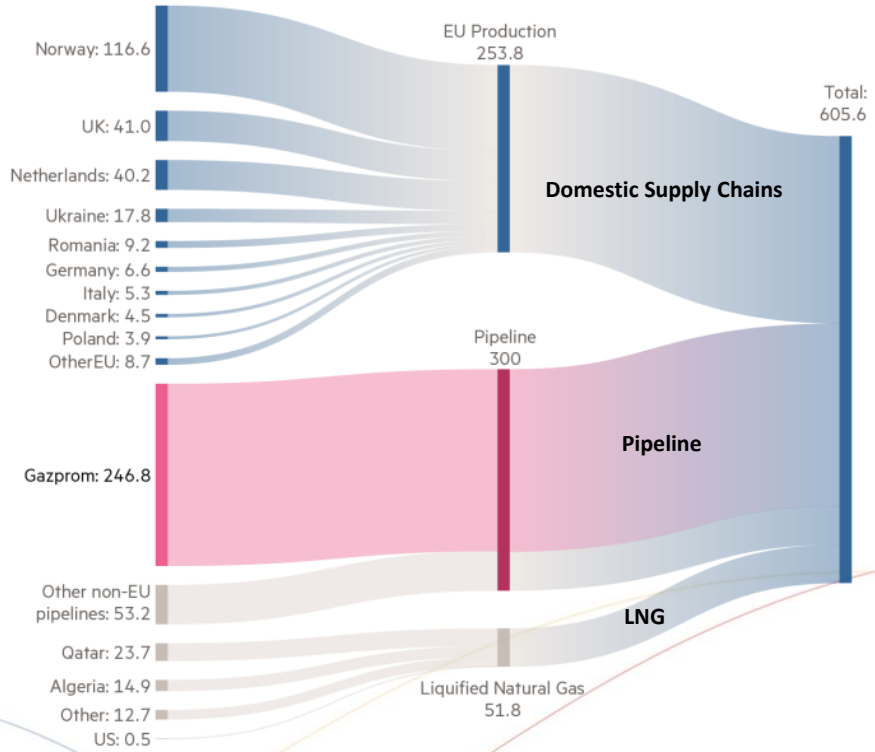


European Natural Gas Supply Mix



Europe's appetite for gas depends on Gazprom

Sources of European gas, 2016 (billion cubic metres)



European Gas Supply

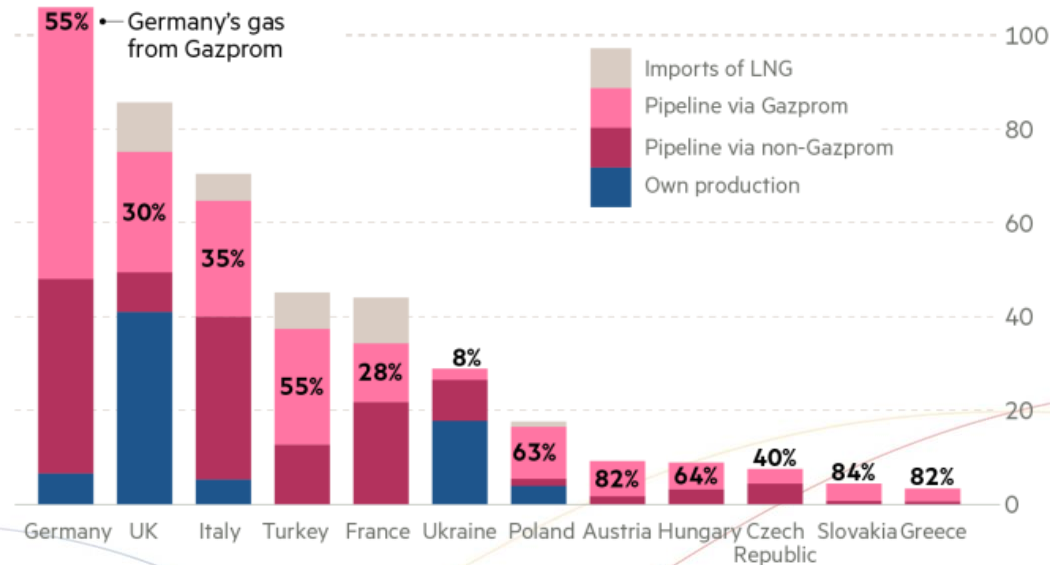
European Gas Demand

Graphic by Alan Smith. Sources: BP Statistical Review of Energy 2017, Gazprom, national statistics © FT

Global Natural Gas Supply Chains to Europe – Pipeline Imports

Sources of gas by country

Billion cubic metres, 2016



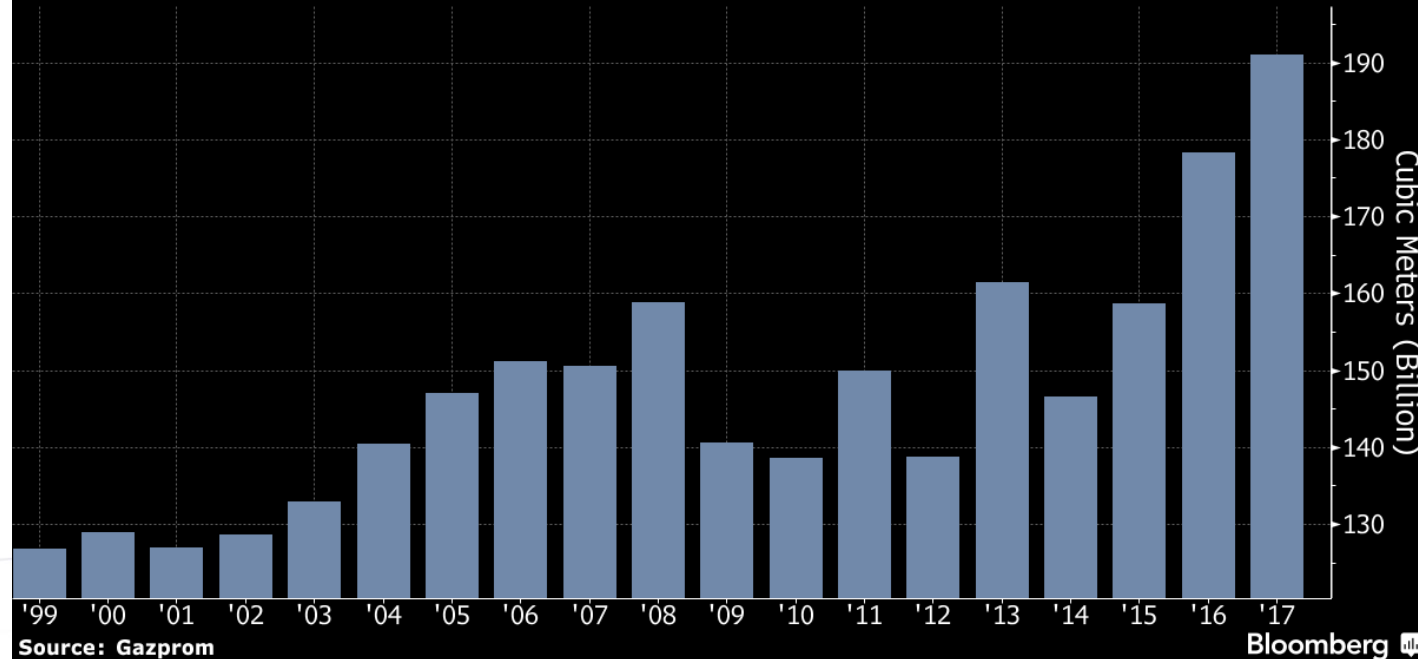
Sources: BP Statistical Review of Energy 2017, Gazprom, national statistics
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Global Natural Gas Supply Chains to Europe – Pipeline Imports

Russian Champion

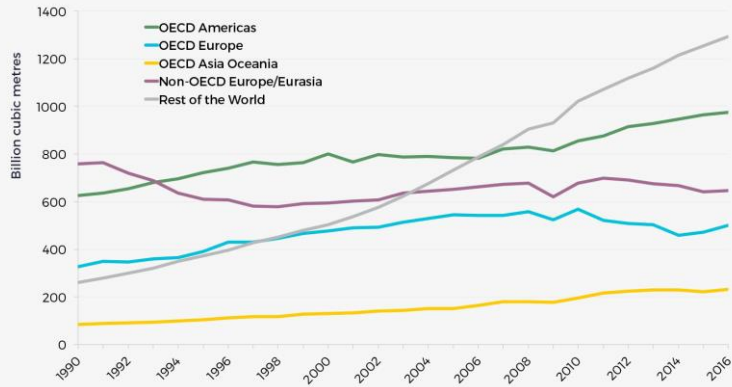
Gazprom hits new record highs in natural gas exports to Europe

■ Pipeline exports outside former Soviet Union (most of EU, Turkey)

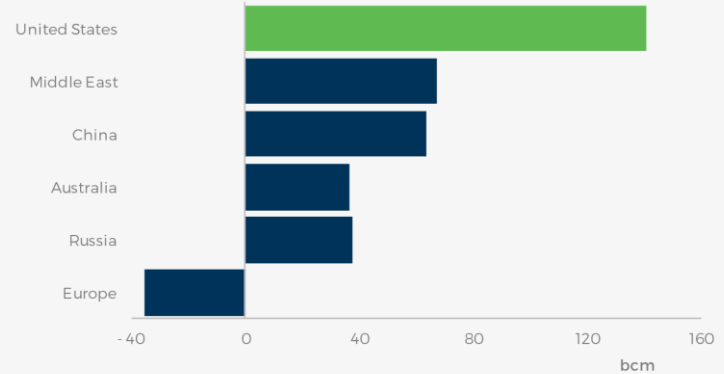


European & Global Gas Demand and Production

World natural gas demand by selected regions
Gas Information 2017



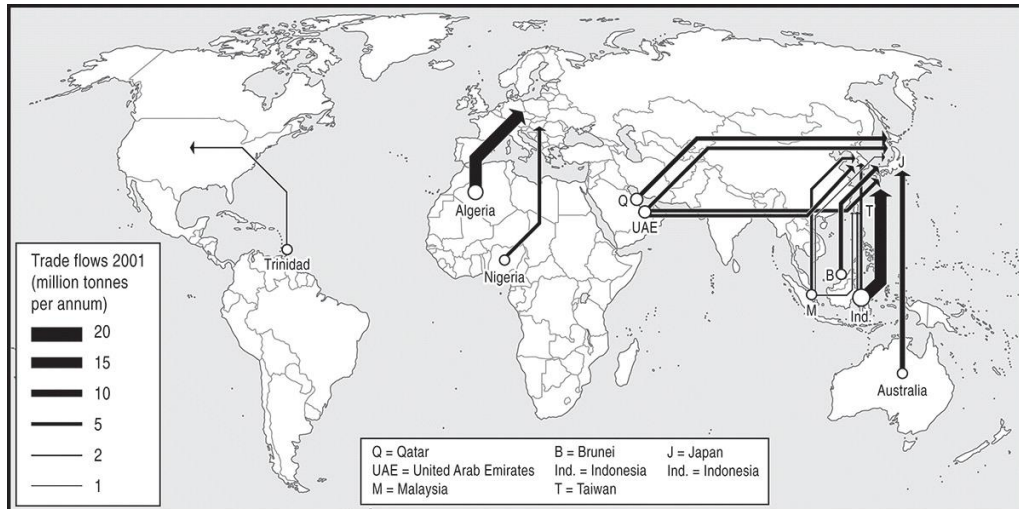
Global gas production growth, 2016-2022
Gas 2017



Global LNG Supply Chains to Europe – LNG Flows

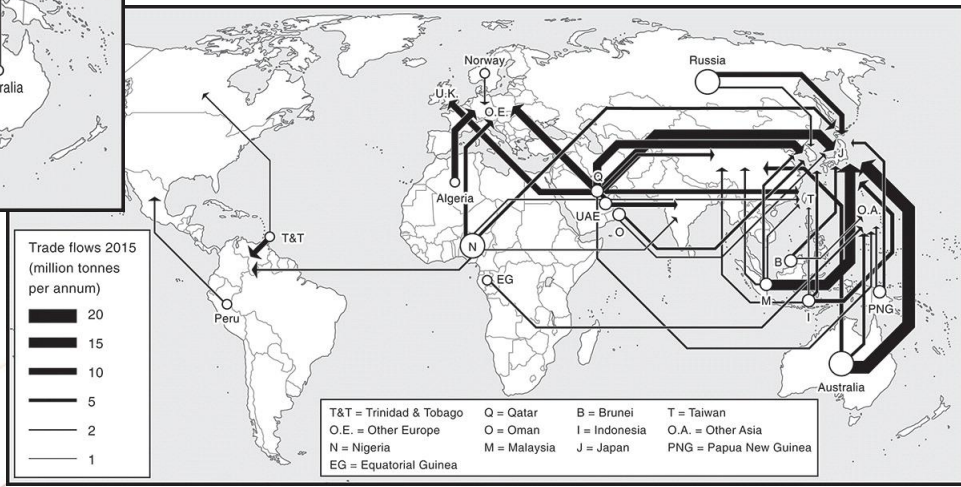


Worldwide LNG Trade, 2001



Gavin Bridge & Michael Bradshaw (2017) *Making a Global Gas Market: Territoriality and Production Networks in Liquefied Natural Gas*, *Economic Geography*, 93:3, 215-240, DOI: 10.1080/00130095.2017.1283212

Worldwide LNG Trade, 2016



Exports of Domestically-Produced LNG Delivered (Cumulative starting from February 2016 through November 2017)

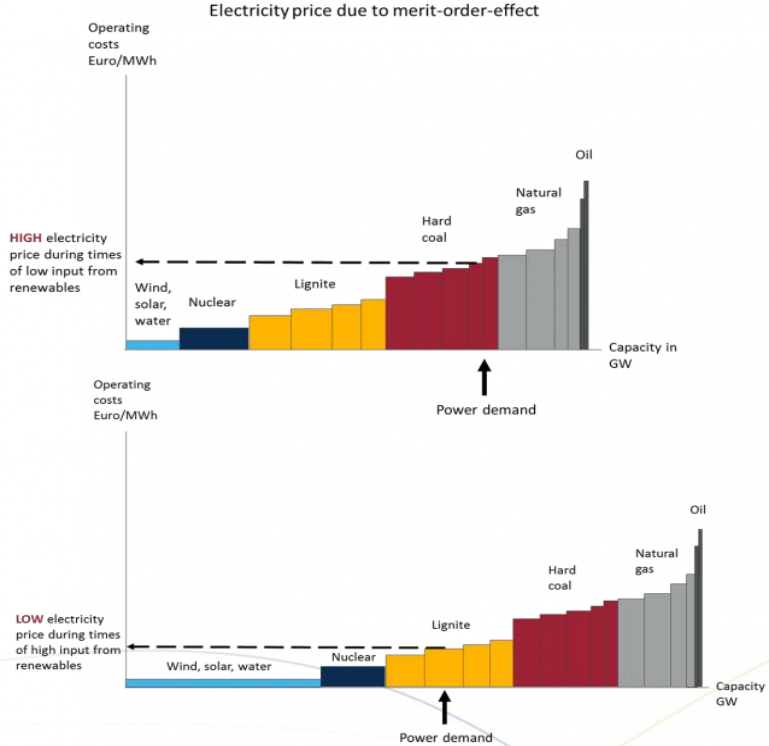


Region	Volume Exported (Bcf)	Percentage Receipts of Total Volume Exported (%)	Number of Countries Per Receiving Region
East Asia and Pacific	279.4	34.6%	5
Europe and Central Asia	109.7	13.6%	9
Latin America and the Caribbean	287.6	35.6%	6
Middle East and North Africa	93.5	11.6%	4
South Asia	37.6	4.7%	2
Sub-Saharan Africa	0.0	0.0%	0
Total LNG Exports	807.9	100.0%	26

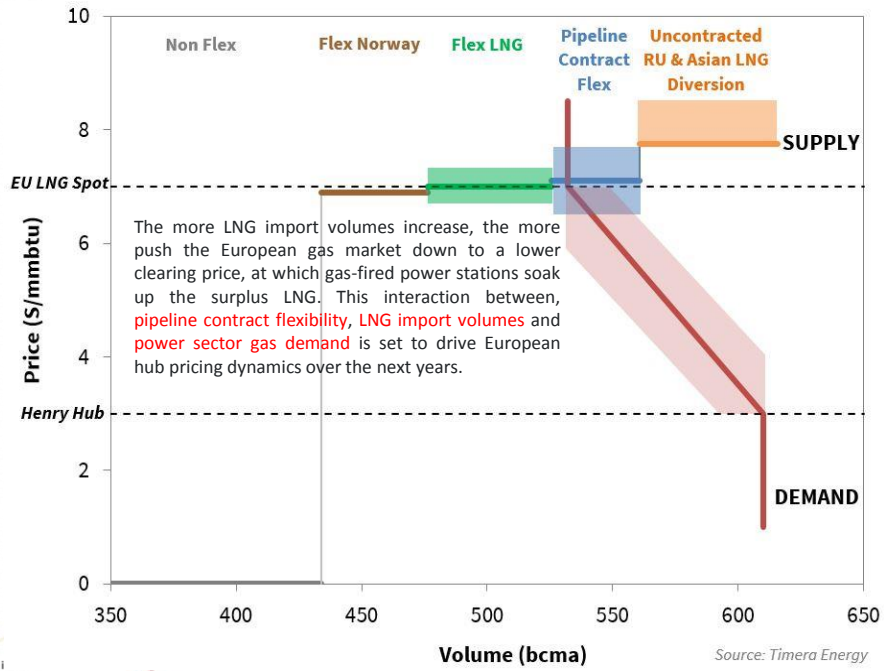
“Snapshot” of European Power and Gas Markets Supply Stacks – Updating the MT European Gas Supply Merit Order



Power Market Supply stack



Gas Market Supply stack



The more LNG import volumes increase, the more push the European gas market down to a lower clearing price, at which gas-fired power stations soak up the surplus LNG. This interaction between, pipeline contract flexibility, LNG import volumes and power sector gas demand is set to drive European hub pricing dynamics over the next years.

After 2008 crisis and the great recession, a loss in GDP worth 5 trillion dollars and a loss in the global stock market worth 30 trillion dollars!!!

There is not a never ending world of growth and prosperity

Most importantly, all this happened completely out of the blue...or not?

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AND



Black swan is basically a very rare bird you see probably once which shatters your inherent belief that all swans are white. In terms of the market, black swan concept reflects the ideas of unpredictability and unknowability of extreme events

The Dragon King refers to an event which is huge in size or impact like a king, and also born of a unique origin like a dragon.

In case of dragon kings, the mechanism is basically a gradual maturation towards instability, represented by the bubble the end point of which is usually the crash.



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Thank you for your
time and the
opportunity

For More Information, please do not hesitate to contact me:

Dr Christos Papadopoulos

Regional Director Europe & Africa

Energy Exemplar Europe

E-mail: christos.papadopoulos@energyexemplar.com

www.energyexemplar.com