



Gazprom on European Market: Problems and Solutions

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Deliveries To "Far Abroad" by Major Suppliers in 2015

Deliveries by Major Exporters, bcm

	2014	2015	Δ , bcm	Δ, %
Gazprom PJSC	146.6	158.6	12.0	8.2%
Algeria (incl. LNG)	38.9	37.6	-1.3	-3.4%
Qatar	23.7	28.2	4.5	19.1%
Iran	9.2	8.7	-0.5	-6.0%
Lybia (incl. LNG)	6.0	7.8	1.8	29.8%

Deliveries by Major Indigenous Producers, bcm

	2014	2015	Δ , bcm	Δ , %
Norway*	115.1	125.2	10.1	8.8%
Netherlands	63.1	48.9	-14.2	-22.5%
United Kingdom	41.2	44.6	3.4	8.2%

^{*} Including pipeline and LNG deliveries from Norway to the European market, but not LNG to Asia and America Source: Eurostat, IEA, ENTSOG, Bloomberg, PIRA, National Statistical Agencies as of May 2016.



Deliveries to "Far Abroad" by Major Suppliers in Q1 2016

Deliveries by Major Exporters, bcm

	Q1 2015	Q1 2016	Δ , bcm	Δ, %
Gazprom PJSC	34.4	44.4	9.9	28.9%
Algeria (incl. LNG)	7.9	9.4	1.5	19.2%
Qatar	7.6	7.7	0.1	0.6%
Nigeria	2.1	2.5	0.4	16.7%
Iran	2.2	2.2	-0.06	-2.8%

Deliveries by Major Indigenous Producers, bcm

	Q1 2015	Q1 2016	Δ , bcm	Δ , %
Norway*	33.6	34.9	1.3	3.9%
Netherlands	17.6	14.5	-3.1	-17.6%
United Kingdom	11.2	12.2	1.0	8.8%

^{*} Including pipeline and LNG deliveries from Norway to the European market, but not LNG to Asia and America Source: Eurostat, IEA, ENTSOG, Bloomberg, PIRA, National Statistical Agencies as of May 2016.



Growing Share of Gazprom in European Consumption



^{*} Under contracts of Gazprom Exports LLC



Long-Term European Natural Gas Consumption

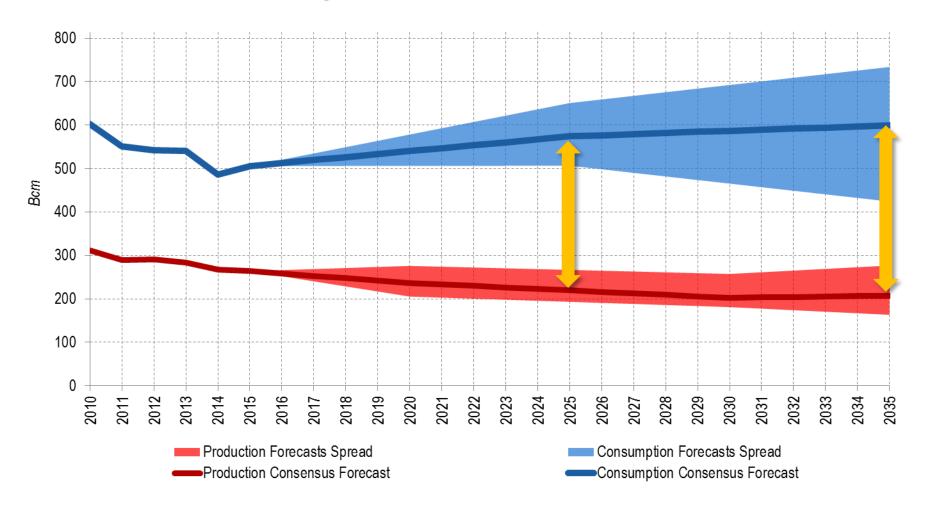
The Newest Scenarios and Forecasts for European Gas Consumption



Definition of European countries slightly differs from one forecast to another. For the purpose of comparison all forecasts and scenarios are restated on compound annual growth rates. Forecasts surveyed for the consensus analysis are updated on a regular basis.



Gap between Consumption and Indigenous Production in Europe is Growing



Natural gas European demand and production gap is calculated as the difference between the demand consensus forecast and the production consensus forecast. Definition of European countries slightly differs from one forecast to another. For the purpose of comparison all forecasts and scenarios are restated on compound annual growth rates..



LNG Deliveries to "Far Abroad" Europe in 2015

LNG Deliveries to Europe by Country

	2014	2015	Δ , bcm	Δ, %
Qatar	23.7	28.2	4.5	19.1%
Algeria	14.5	13.1	-1.4	-9.4%
Nigeria	6.0	7.8	1.8	29.8%
Norway	2.6	2.9	0.3	14.1%
Trinidad and Tobago	3.6	1.8	-1.8	-50.4%
Peru	1.3	1.3	0.0	-4.1%
Yemen	0.0	0.1	0.1	-
Oman	0.1	0.1	0.0	12.1%
Equatorial Guinea	0.1	0.0	-0.1	-100.0%
TOTAL	51.8	55.3	3.5	6.7%

Source: Bloomberg



LNG Deliveries to "Far Abroad" Europe in Q1 2016

LNG Deliveries to Europe by Country

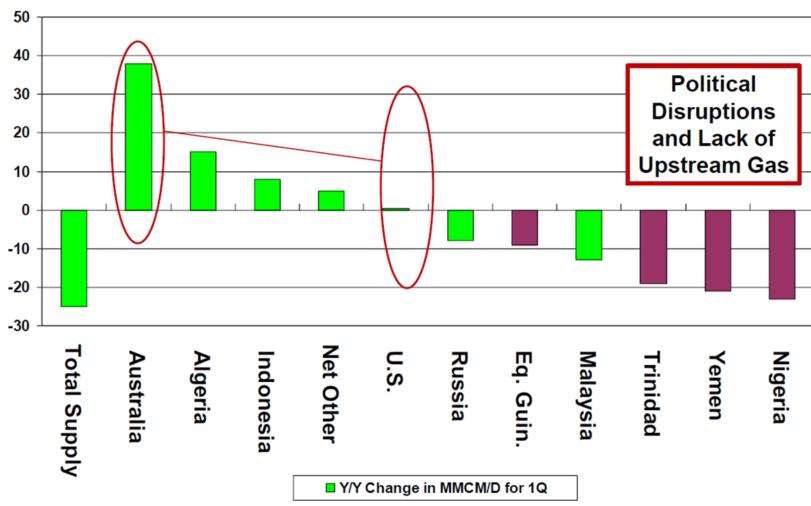
	Q1 2015	Q1 2016	Δ , bcm	Δ, %
Qatar	7.6	7.7	0.1	0.6%
Algeria	2.6	4.2	1.6	57.6%
Nigeria	2.1	2.5	0.4	16.7%
Norway	1.0	0.7	-0.3	-22.9%
Trinidad and Tobago	0.6	0.6	0.01	3.0%
Peru	0.5	0.3	-0.2	-48.4%
USA	0.0	0.1	0.1	-
Yemen	0.1	0.0	-0.1	-100.0%
Oman	0.1	0.0	-0.1	-100.0%
TOTAL	14.7	16.1	1.4	9.5%

Source: Bloomberg



Too Much Attention on Australian and U.S., Not Enough Attention on Supply Disruptions

MMCM/D Change Y/Y in 1Q Exports

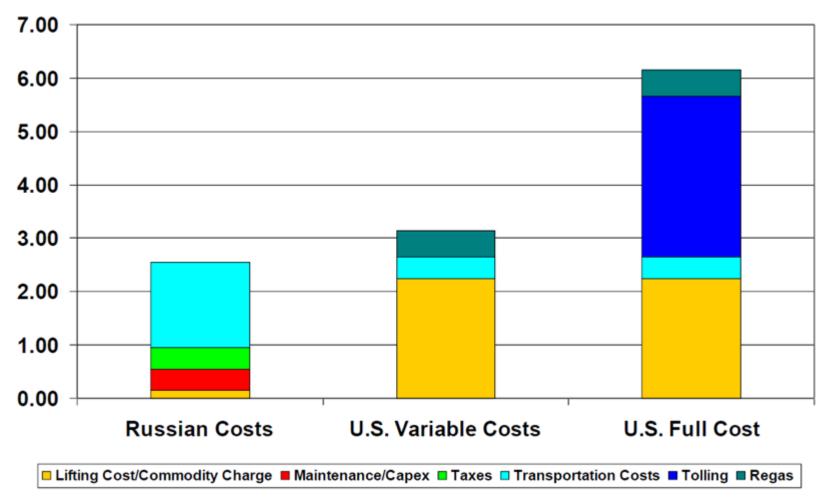


Source: PIRA



Gazprom Sees No Serious Threat from US LNG to European Pipeline Gas

\$/MMBtu, assumes 115% of Henry Hub at current prices

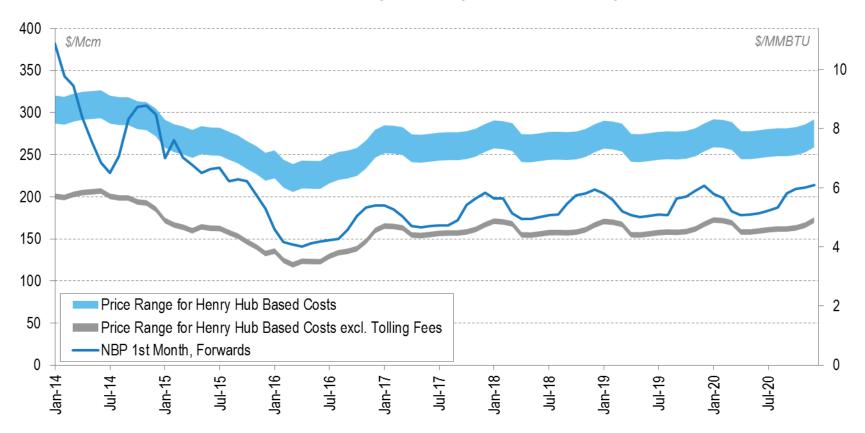


Source: PIRA



US Benchmark Prices are Poised to Rise Within a Year, Meaning Export Costs to Europe Will Also Gain

Estimated Costs* of US LNG Deliveries to Europe in comparison with European Traded Forwards**



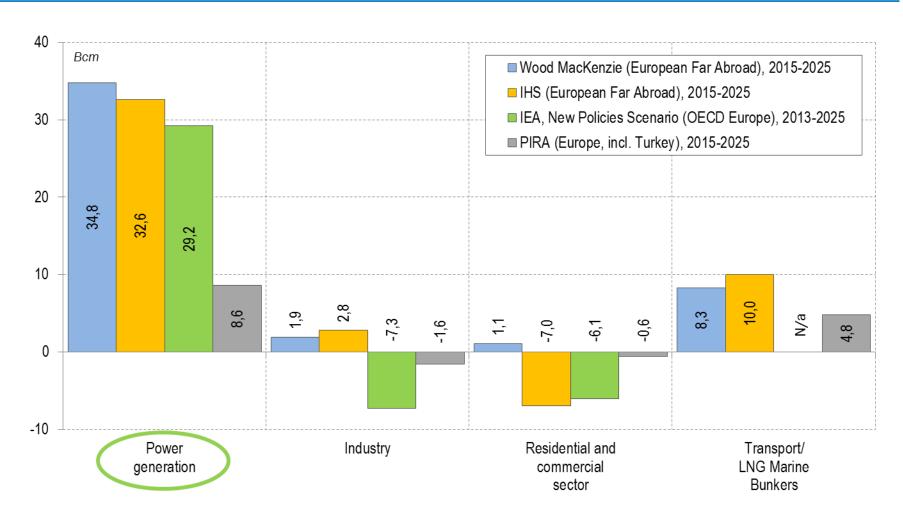
^{*} Based on Henry Hub Forward Curve, P = HH * 115% + X, where X – costs of liquefaction, shipping, regasification

Source: Bloomberg, Wood McKenzie

^{**} NBP Forward Curve



Demand Growth Potential in Power Generation Sector?

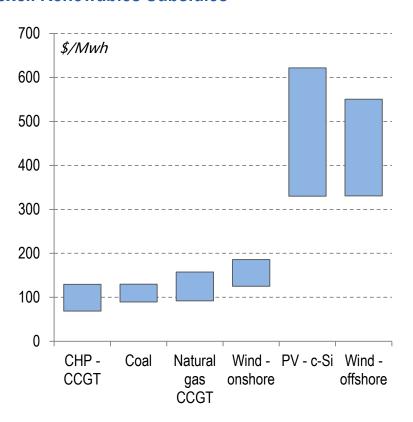


Source: IEA, IHS, PIRA, Wood MacKenzie

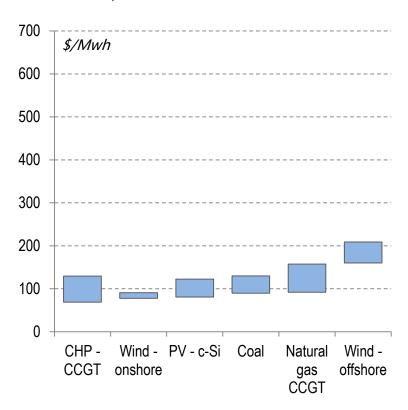


Competitiveness of Natural Gas in Power Generation

Range of Levelised Costs for Power Generation, excl. Renewables Subsidies



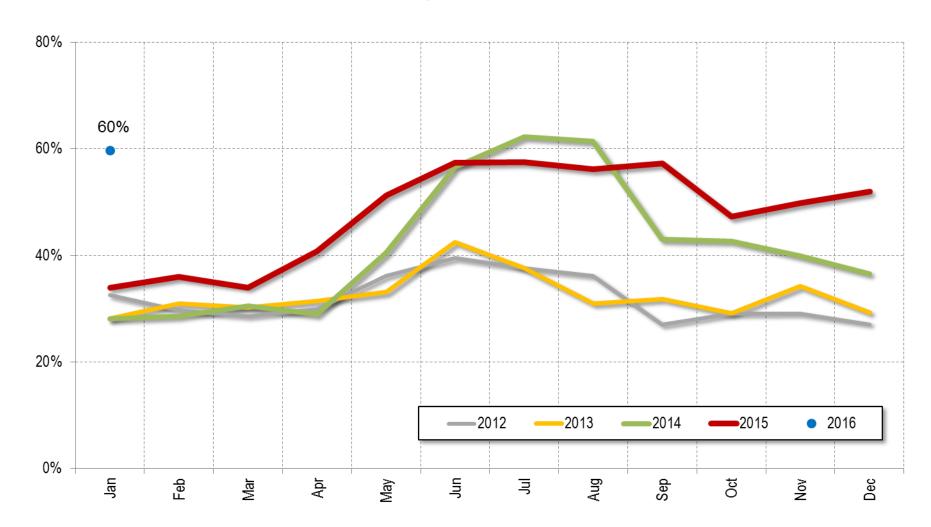
Range of Levelised Costs for Power Generation, incl. Renewables Subsidies



Source: BNEF



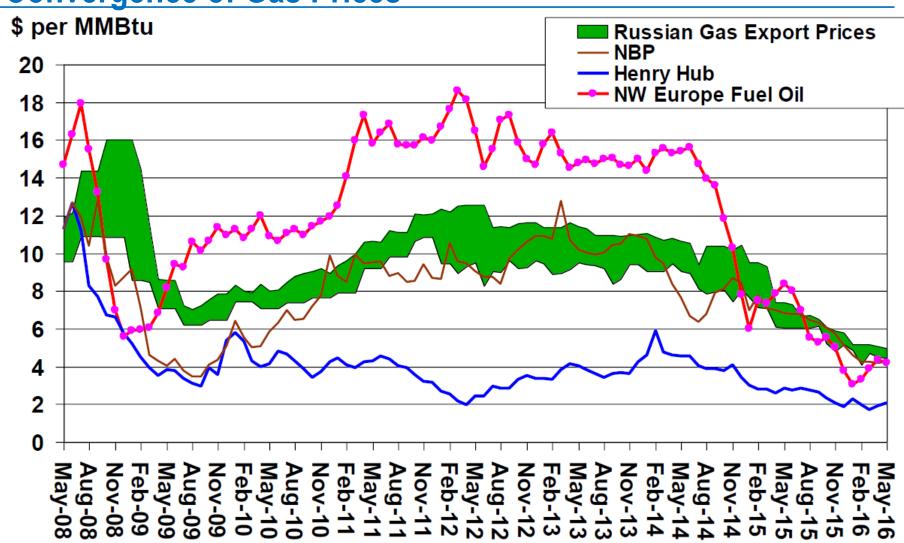
Share of Gas in Power Generation from Fossil Fuels in the UK, 2012-2016



Source: Department of Energy & Climate Change of the UK



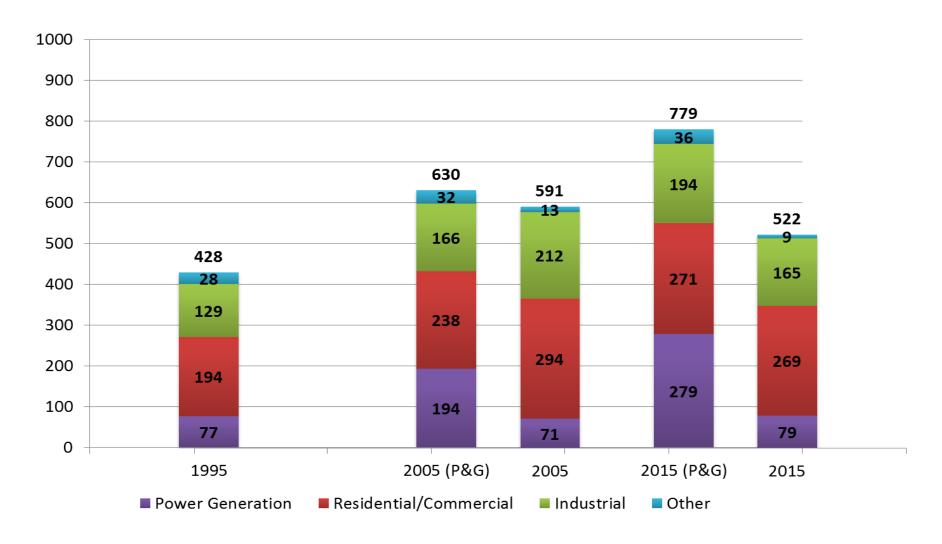
Convergence of Gas Prices



Source: PIRA



Overblown Gas Demand Expectations in Europe in the Past Resulted in Market Overcontraction



Source: Purvin and Gerts 1998 Forecast for 2015, Gazprom Export calculations



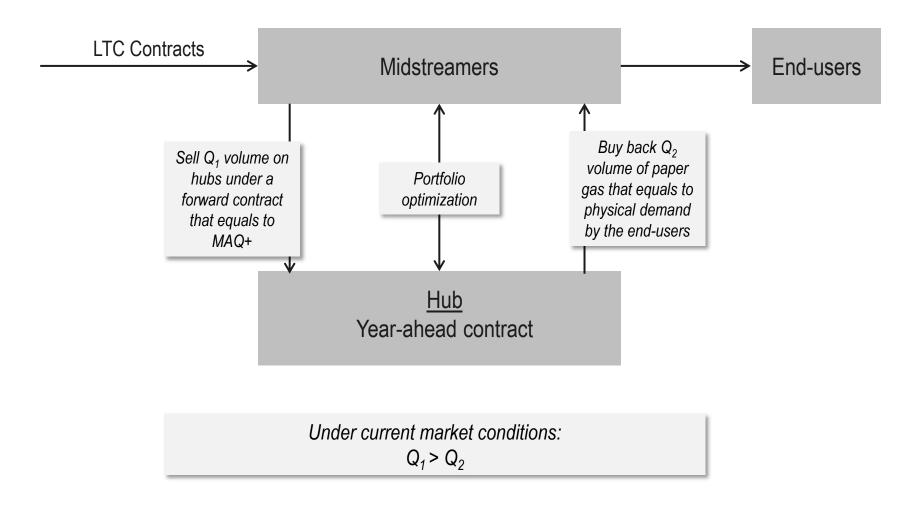
Delta between Contracted Supply and Demand for the Last Seven Years was on Average 88 bcm which Equals to 18% of Demand*



^{*}Demand Includes import contracts and indigenous production Source: Cedigaz, Gazprom Export LLC Database



There is Need to Rebalance Market by Eliminating Paper and Physical Gas Disconnect



Source: Gazprom Export

