

A large, light blue, stylized flame graphic on the left side of the slide, composed of several curved, overlapping shapes that suggest the movement of fire.

Gazprom on Hybrid Markets of Europe

Sergei Komlev

Head of Contract Structuring and Price Formation Directorate,
Gazprom Export

“Energy: Perspectives and Challenges”
Regional Conference
Novi Sad, March 11, 2016

Deliveries by Major Countries in 2015

Deliveries by Major Exporters

Bcm

	2014	2015	Changes	Changes, %
Gazprom JSC	146.6	158.6	12.0	8.2%
Algeria (incl. LNG)	38.9	36.1	-2.8	-7.2%
Qatar	23.7	28.1	4.4	19.0%
Iran	9.2	8.7	-0.5	-6.0%
Lybia (incl. LNG)	4.8	5.7	0.9	19.2%

Deliveries by Major Indigenous Producers

Bcm

	2014	2015	Changes	Changes, %
Norway*	115.6	125.5	9.9	8.6%
Netherlands	63.1	48.6	-14.2	-23.1%
United Kingdom	41.2	43.9	2,7	6.7%

* Including pipeline and LNG supply of Norway to the European market, but not supply to Asia and America

Source: Bloomberg, IEA, Eurostat, National Statistical Agencies, Estimates by Gazprom Export LLC as of January 2016

LNG Deliveries to Europe by Country

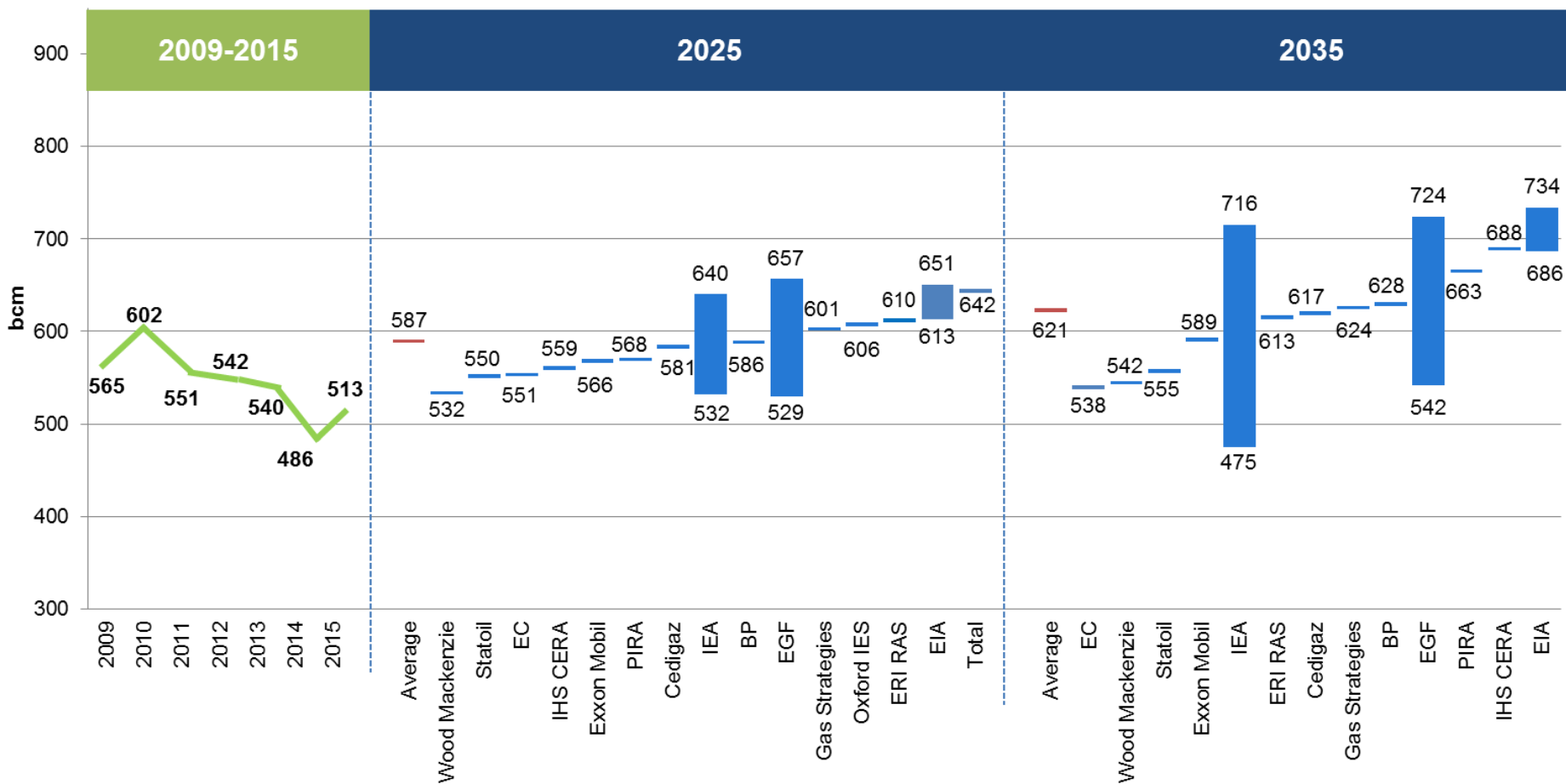
Bcm

	2014	2015	Changes	Changes, %
Qatar	23.7	28.1	4.5	19.0%
Algeria	14.5	12.4	-2.1	-14.3%
Nigeria	6.0	8.0	2.0	33.2%
Norway	2.6	2.9	0.3	10.8%
Trinidad and Tobago	3.6	1.8	-1.8	-49.6%
Peru	1.3	1.5	0.1	-10.6%
Yemen	0.0	0.1	0.1	-
Oman	0.0	0.1	0.1	12.1%
Equatorial Guinea	0.1	0.0	-0.1	-
Total	51.8	54.9	3.1	5.9%

Source: Bloomberg, Estimates by Gazprom Export LLC

Long Term European Natural Gas Consumption

According to consensus forecast for 2025 and 2035, European gas demand could be 15% and 21% higher compared to 2015

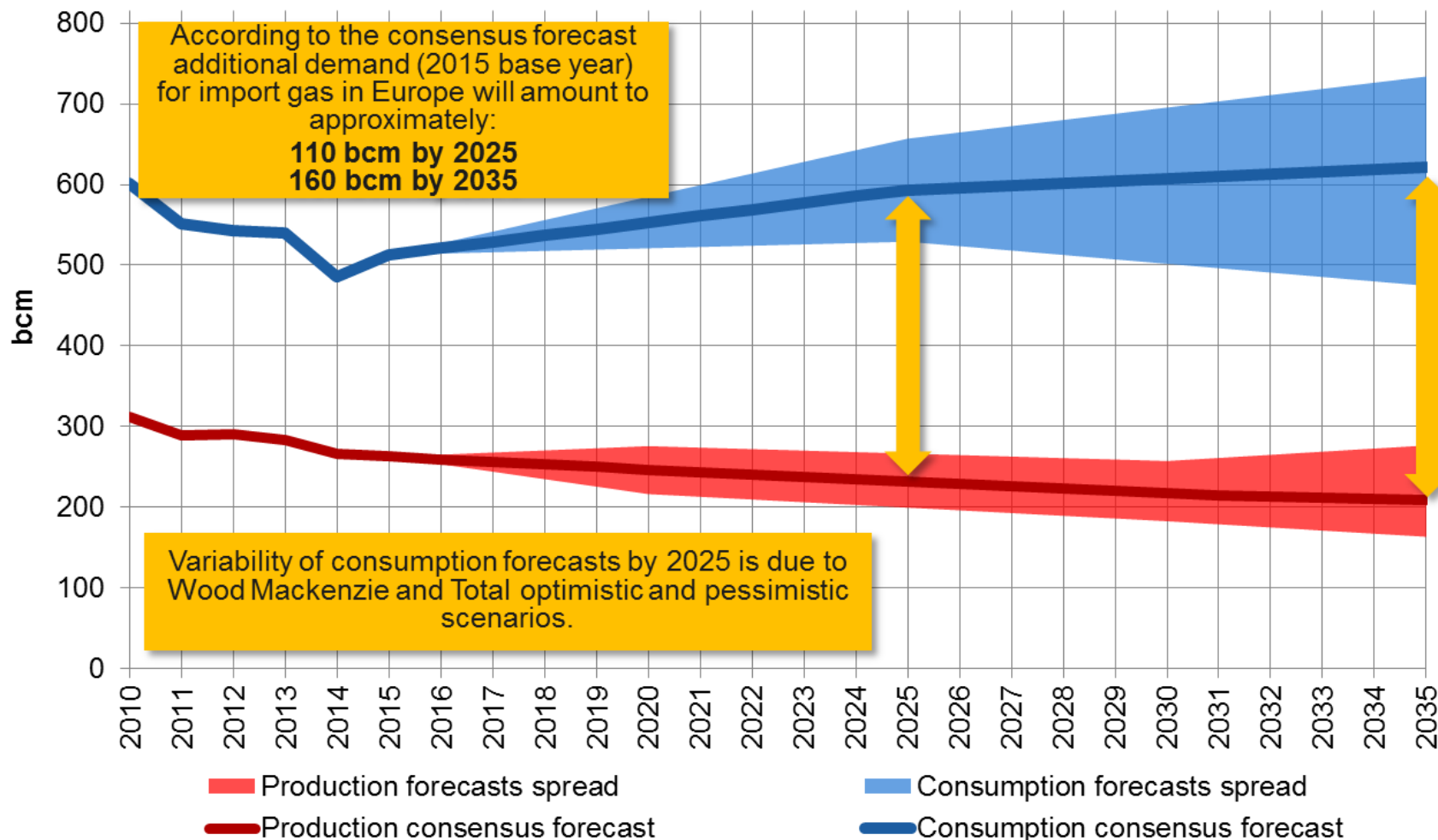


Updated: January 2016

Source: Gazprom Export

Natural Gas European Demand and Production Gap

Due to the falling indigenous production European demand for additional gas imports may be **110 bcm by 2025** and **160 bcm by 2035**

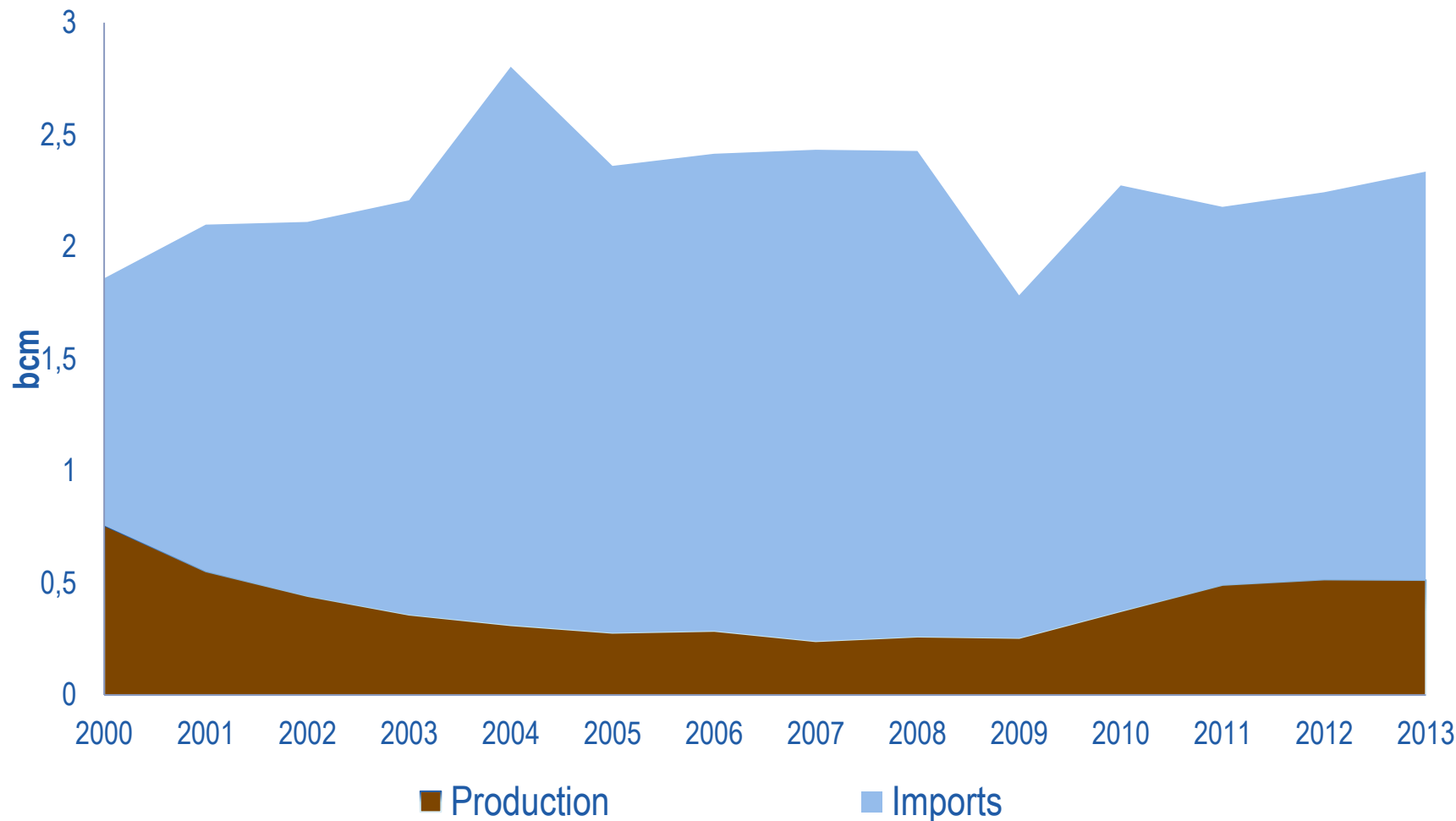


Source: Gazprom Export

Updated: January 2016

Supply from Russia Covers Import Requirements of Serbia

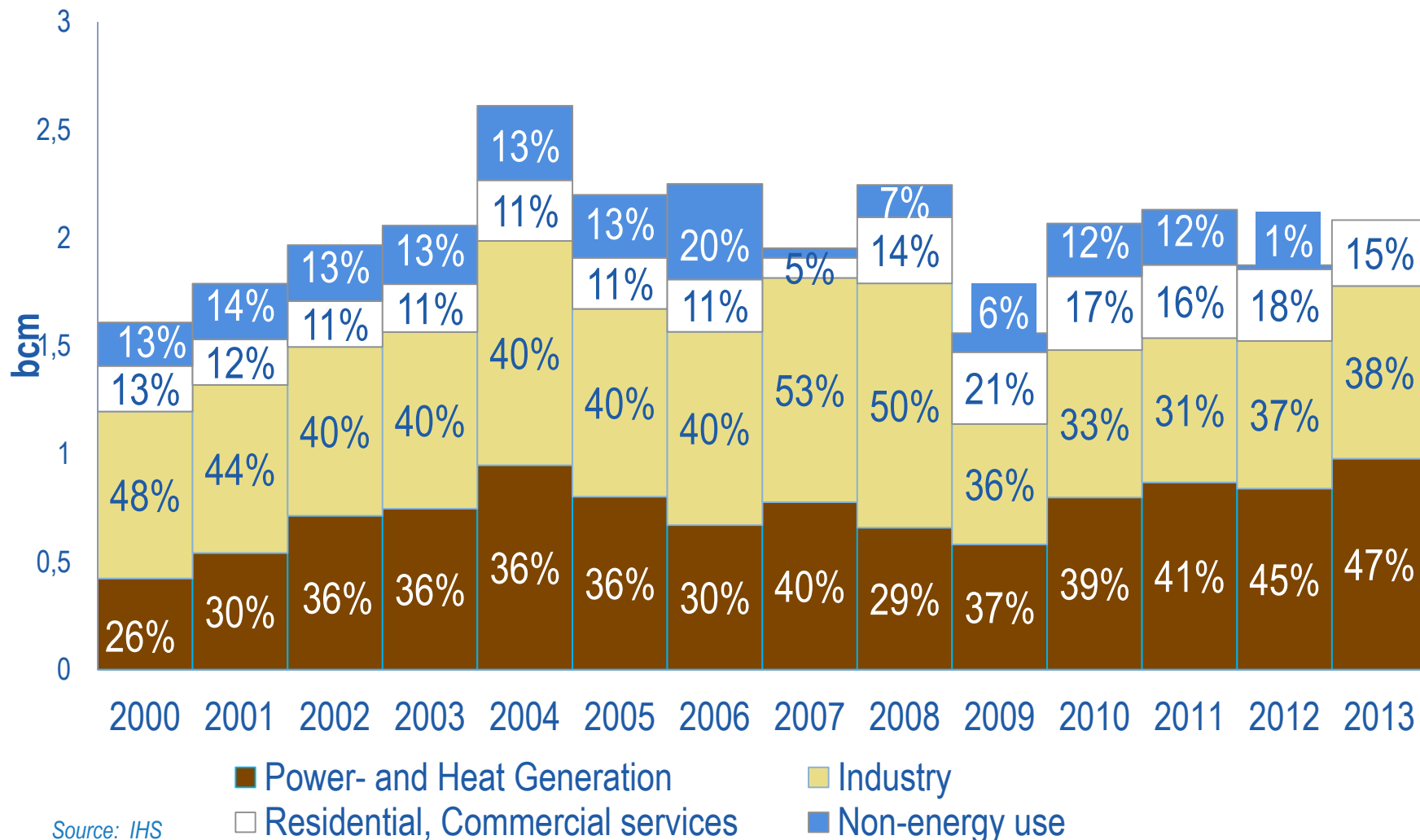
Natural Gas Balance



Source: IHS

Power Generation and Industry are the Major Consumers of Natural Gas in Serbia

Natural Gas Consumption by Sectors

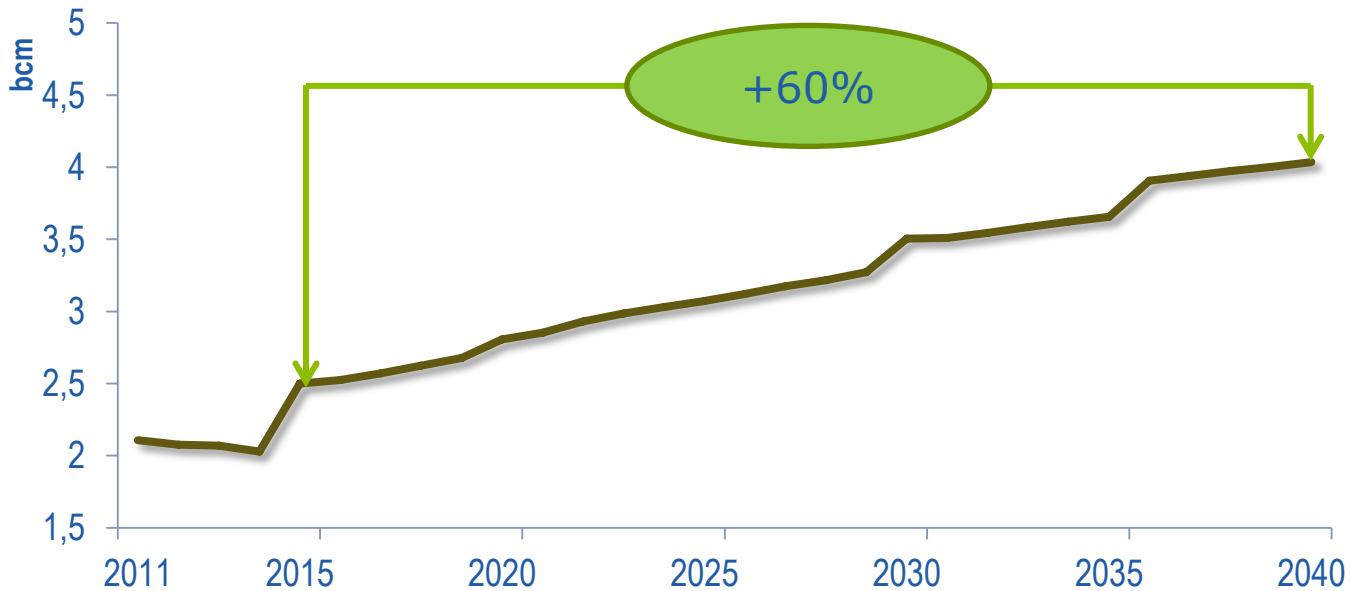


Source: IHS

IHS Projects Growth in Demand for Natural Gas in Serbia

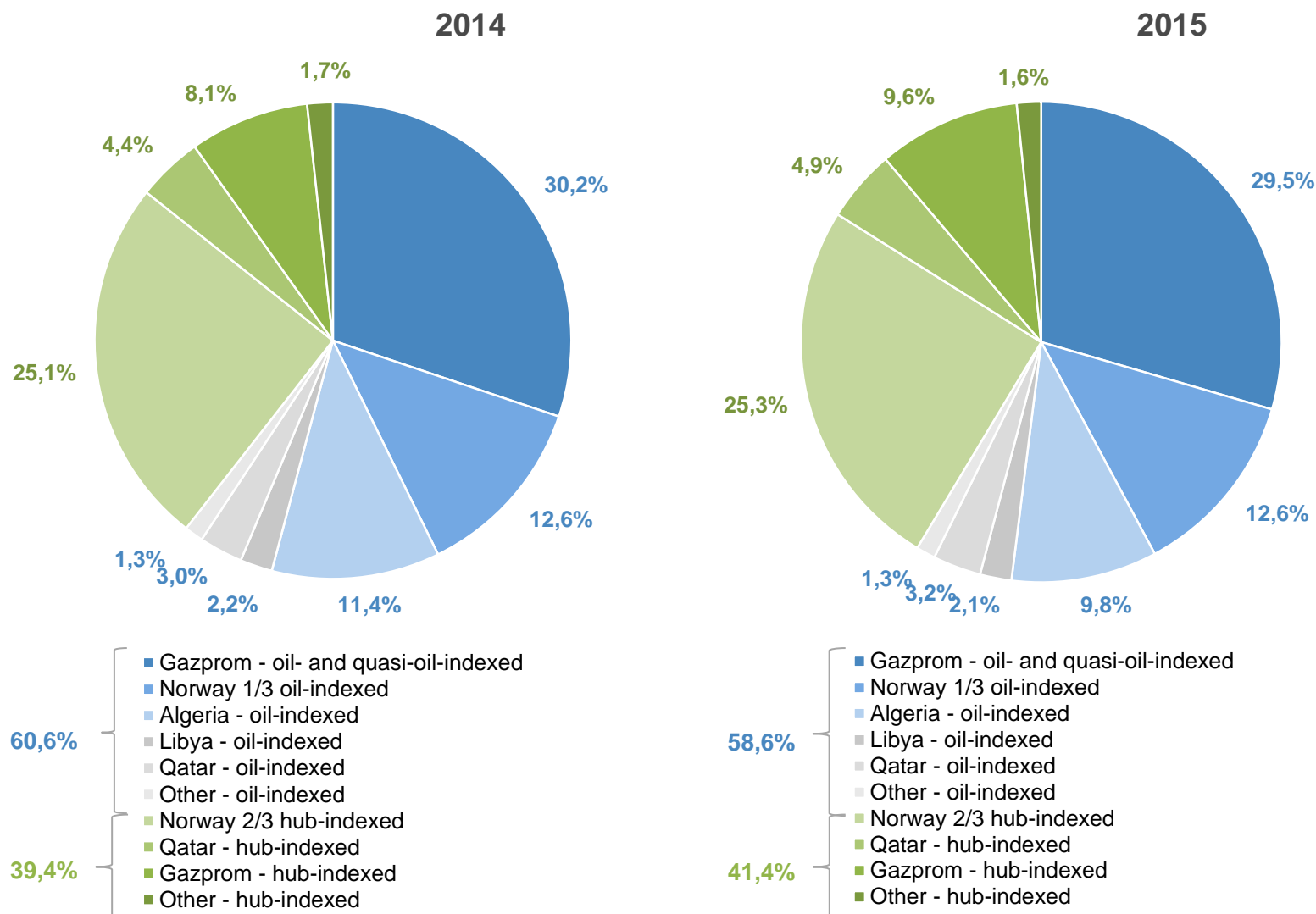


Source: IEA



Source: IHS

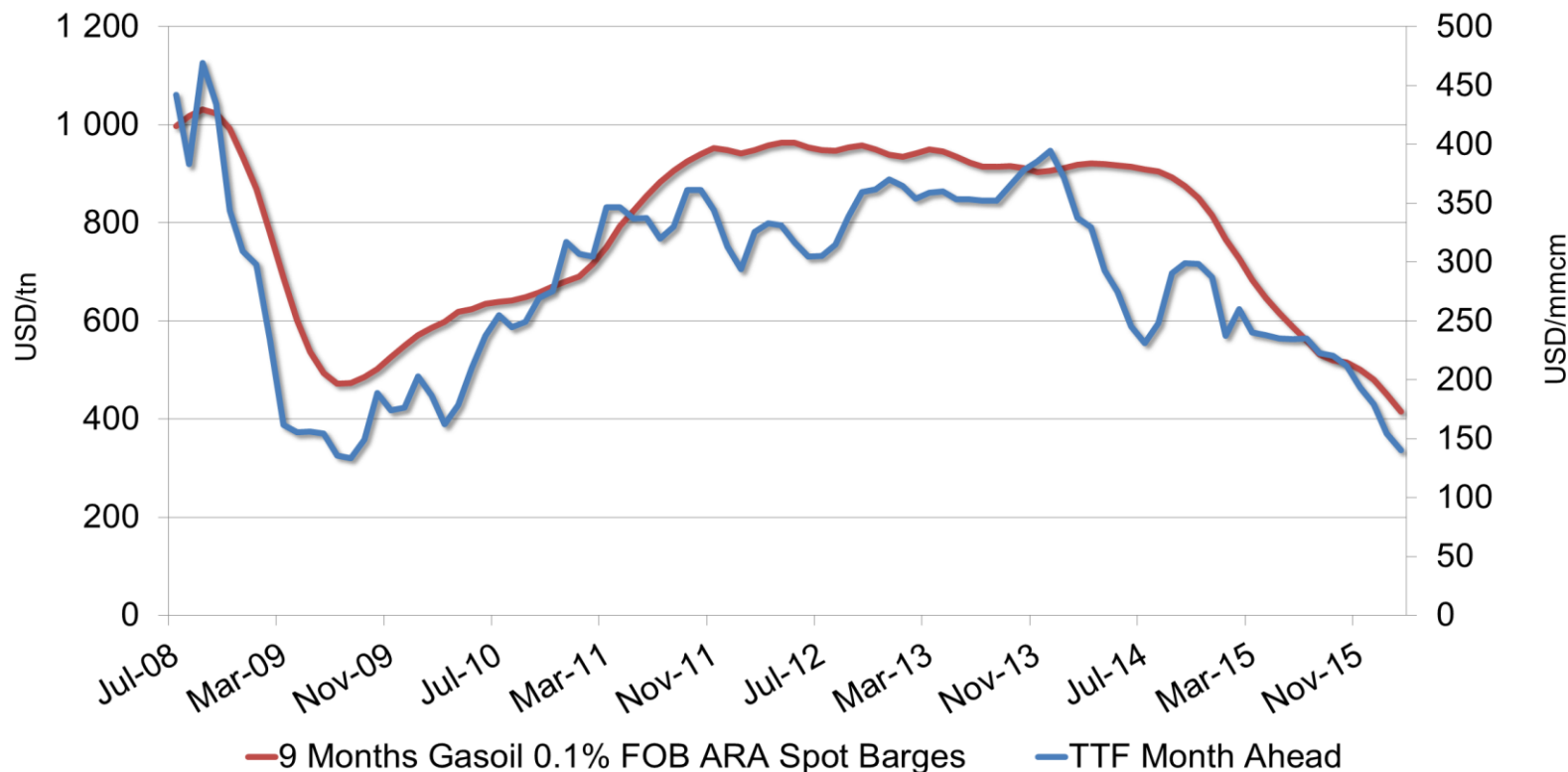
Gas-on-Substitute Competition versus Gas-On-Gas Competition in the European 'Far Abroad', 2015



Source: IEA, «Gazprom export» LLC assessment

Tight Correlation between European Gas-oil and TTF Prices

Evolution of 9 months moving average gasoil and TTF Month Ahead prices, 2008-2016



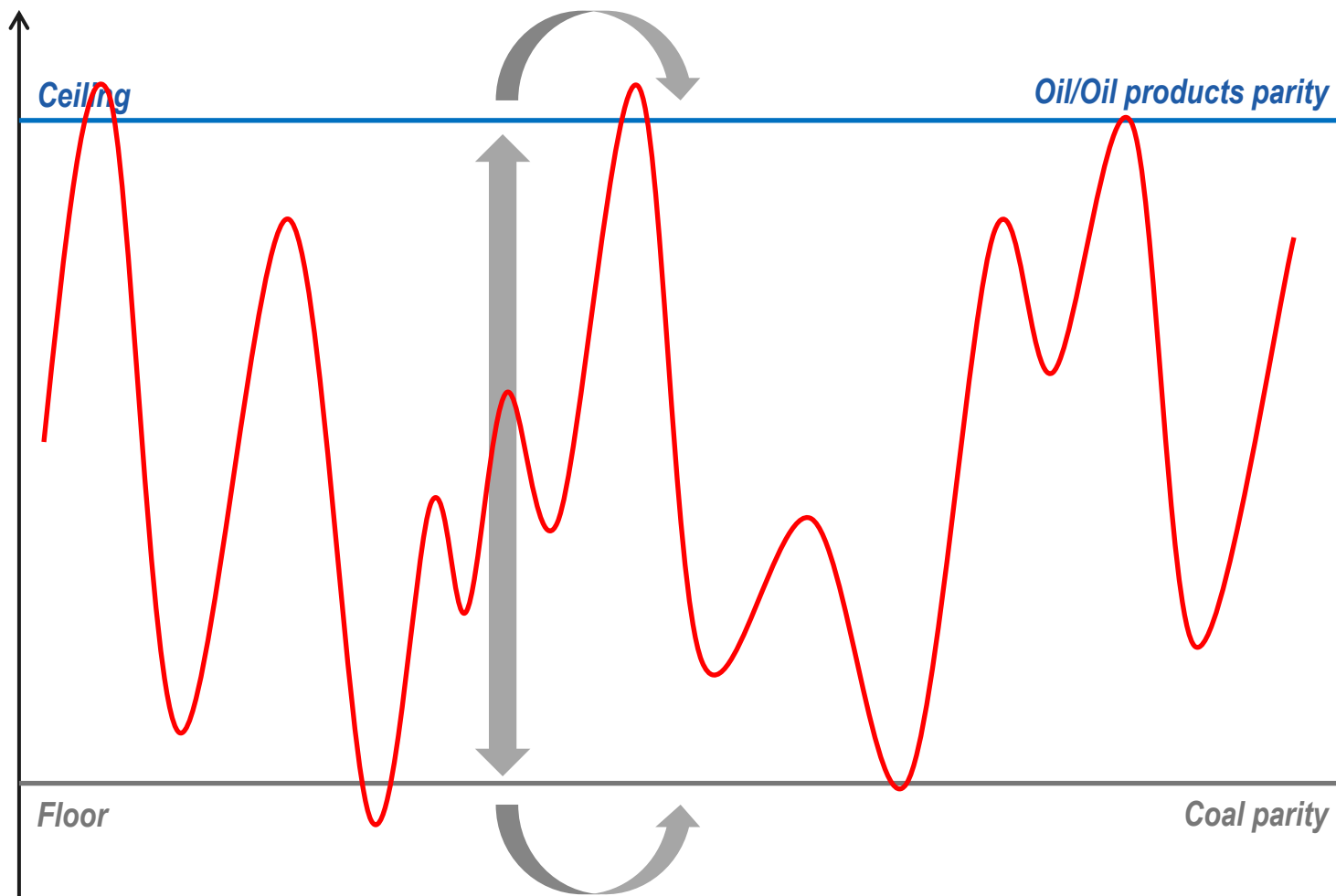
Correlation coefficient = **0.87**

R Square = 0.76

Engle-Granger test for cointegration succeeded

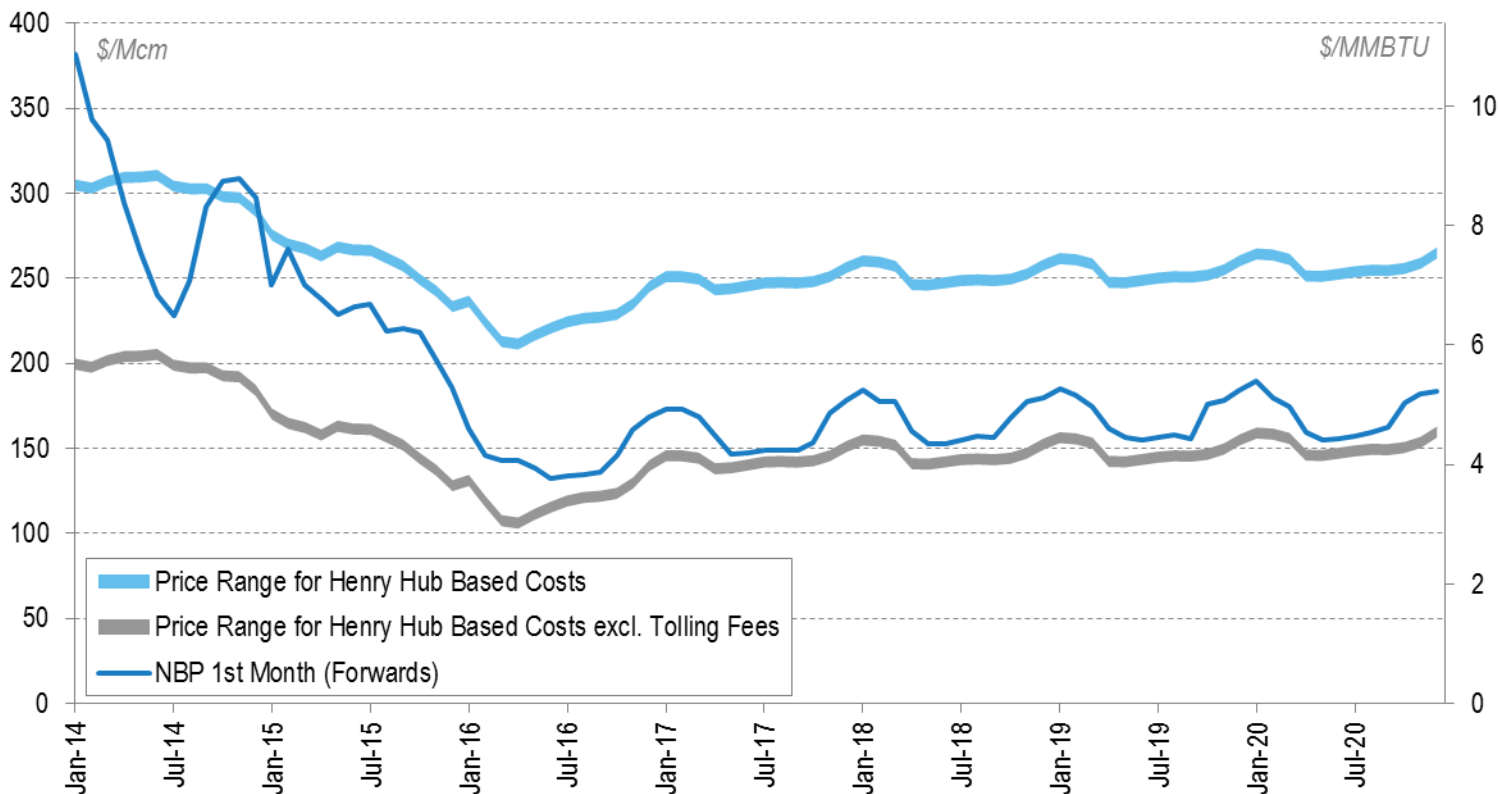
Source: Bloomberg

Price Corridor for Natural Gas is Set by Inter-Fuel Competition



Full Costs of LNG Deliveries from North America to Europe

Price Range* of US LNG Deliveries to Europe vs. Forward Prices** of European Hubs



In the medium-term, full costs of LNG deliveries to Europe are significantly higher than the forward prices.

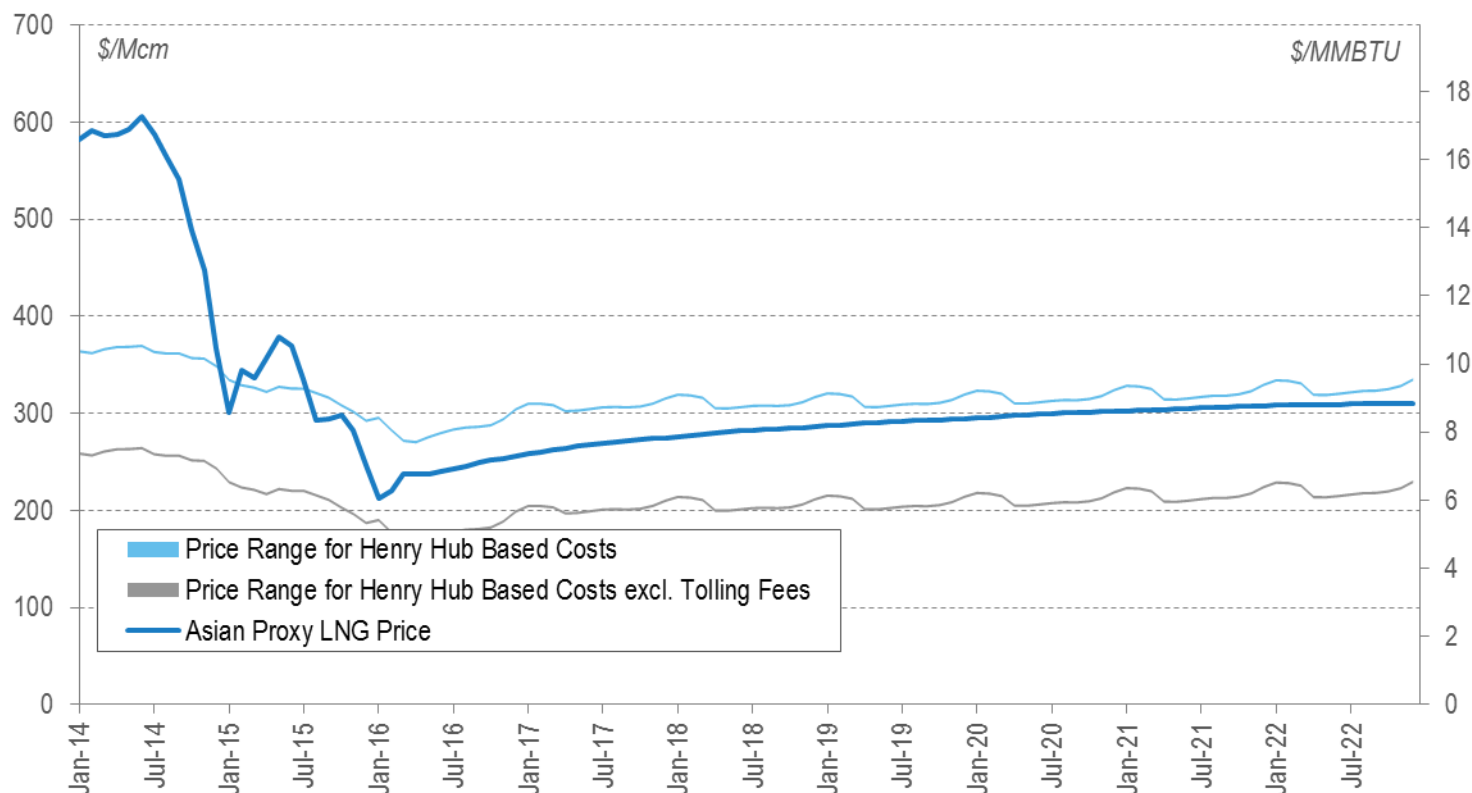
* $P = HH * 115\% + X$, where HH – Henry Hub Forwards, X – total volume of estimated costs, pls., see slide #3

** NBP Forwards

Source: Bloomberg, Wood Mackenzie

Full Costs of LNG Deliveries from North America to Asia

Price Range* of US LNG Deliveries to Asia vs. Estimated Prices** of Asian Proxy Contract



Full costs of deliveries of American LNG to Asia are higher than prices under proxy for a standard Asian contract in the medium-term, nevertheless oil price recovery may minimize losses.

* Based on oil forward prices and contract formula $P (\$/MMBTU) = 14\% \times \text{Brent Futures} + 1.6$

Source: Argus, Bloomberg, Wood Mackenzie

US LNG Exports to Europe and Asia

US FOB LNG Price (2018-2020) =
\$6.0 – \$6.5/MMBTU
 (115%*HH + \$3.0/MMBTU)

	<i>Transport</i>	<i>Regas.</i>	<i>Breakeven</i>		<i>NBP</i>	<i>Margin</i>
Europe (UK)	\$0.69	\$0.40	\$7.59	vs.	\$4.3– \$5.4	≈ - \$2.7
					14%JCC+1.6	
Asia (Japan, Korea)	\$2.38	\$0.40	\$9.28	vs.	\$8.0–\$8.5	≈ - \$1.0

As of Q1 2016, Asian premium is USD 1.7 MMBTU.

Source: Bloomberg, Wood Mackenzie



THANK YOU FOR YOUR ATTENTION!