

Perspectives on the Future of European Gas Market

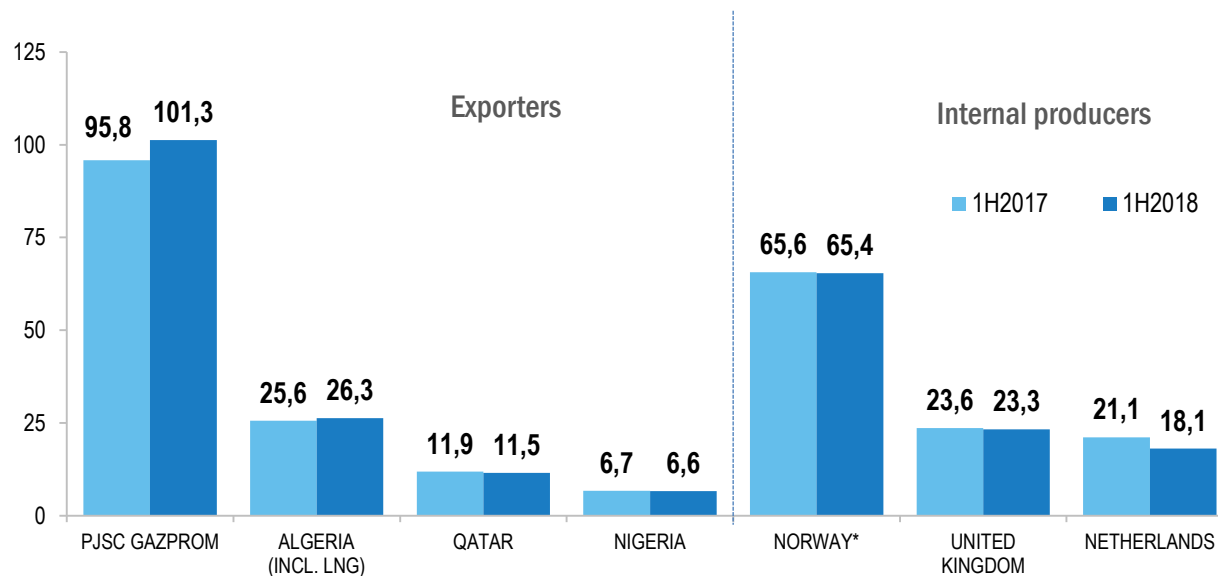
Elena Burmistrova

Director General, Gazprom Export

Stavanger, 27th August 2018

Major Suppliers to European Markets

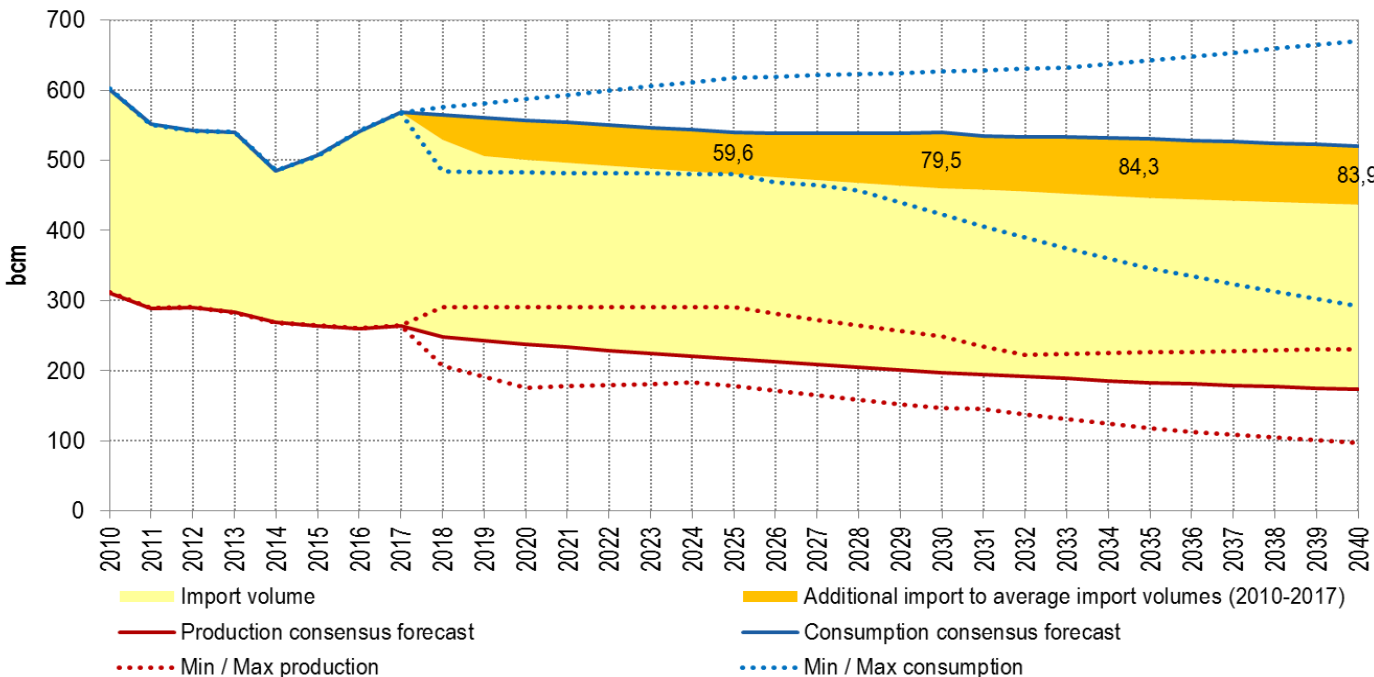
Deliveries by Europe's major exporters and producers in 1H2018, bcm



* Including domestic consumption, pipeline and LNG deliveries from Norway to the European market, but not LNG to Asia and America

Source: PJSC Gazprom, Eurostat, National Statistics, IEA, Bloomberg, ENTSOG, IHS, S&P Global Platts

Gas Demand of European Countries in 2030-2040



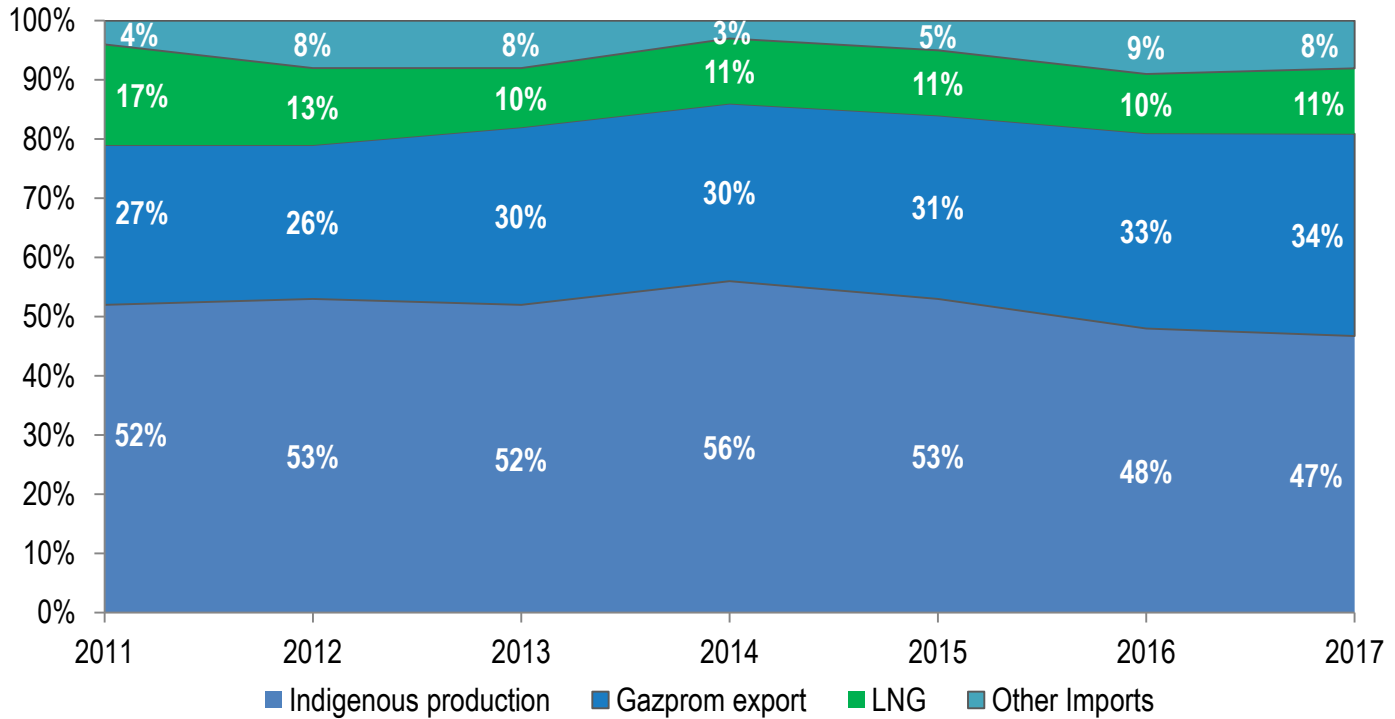
According to the consensus-forecast, Europe's additional demand for gas imports will amount to:
80 bcm in 2030
84 bcm in 2040

Updated: July 2018

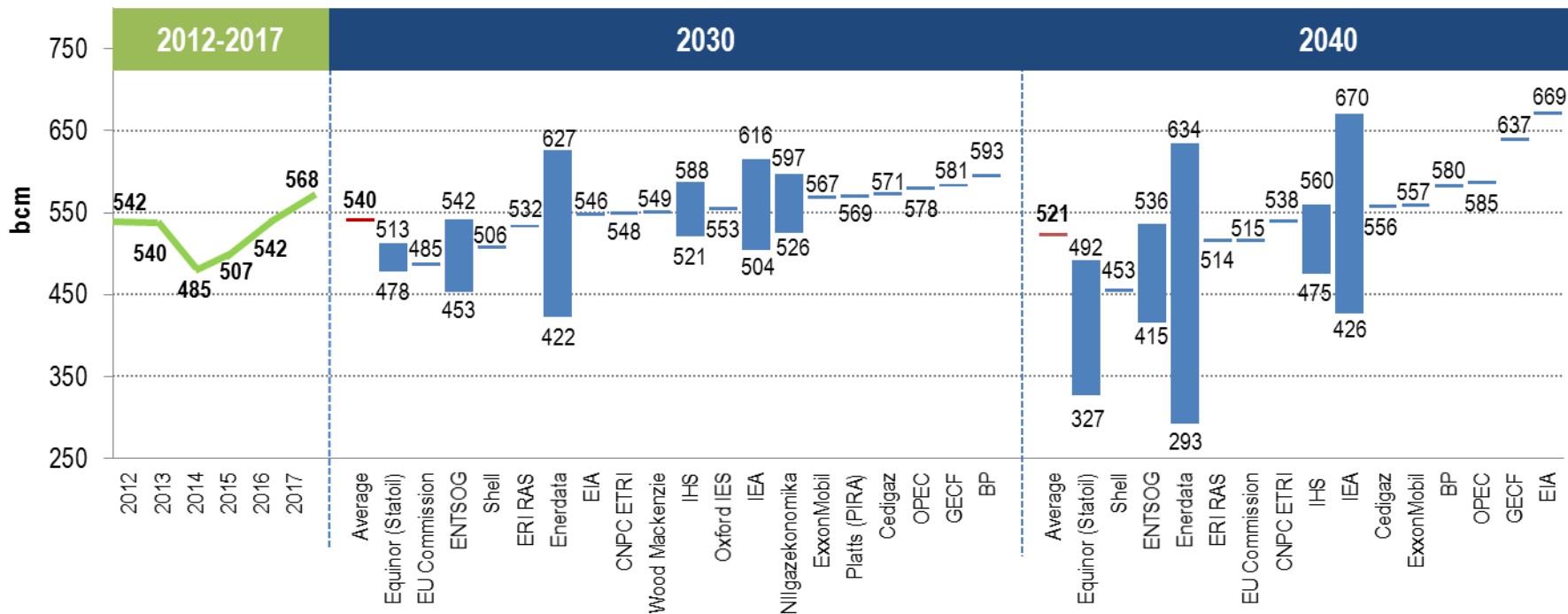
Demand of European countries for gas imports is calculated as the difference between the demand consensus-forecast and production consensus-forecast.
 List of European countries slightly differs depending on the source of the forecasts.
 All the forecasts and scenarios are calculated on the basis of CAGR for the purpose of better comparison.

Gazprom's Share in Europe is on a Rise

European Gas Balance



Long-Term European Natural Gas Consumption: Scenarios and Forecasts

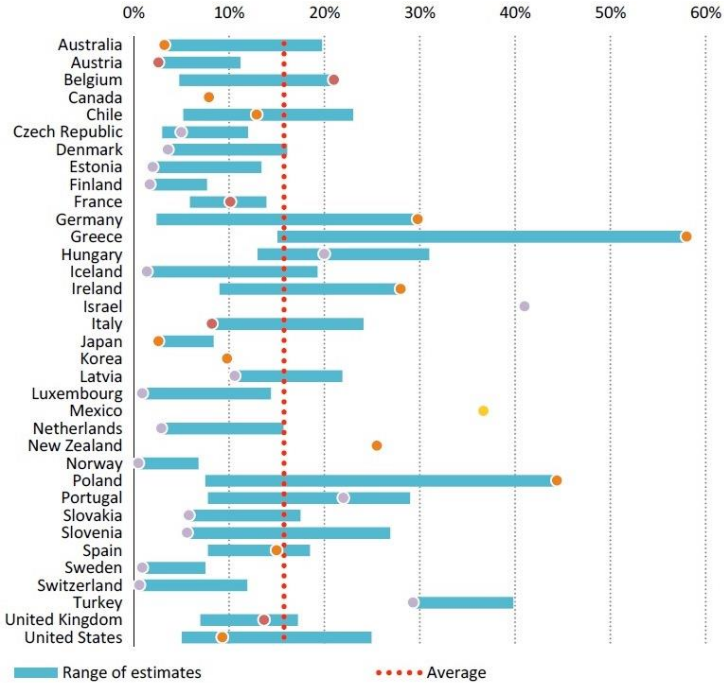


List of European countries slightly differs depending on the source of the forecasts.
 All the forecasts and scenarios are calculated on the basis of CAGR for the purpose of better comparison.
 Old data excluded

Updated: July 2018

What Would be a World without Gas?

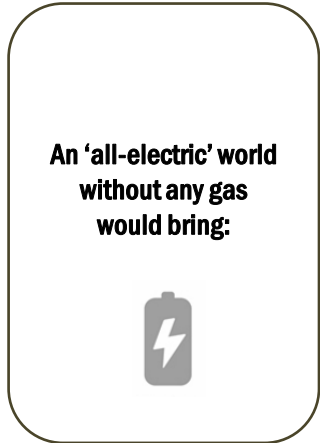
Share of population living in the 'energy poverty' in developed countries, 2015



Selected estimates:

- Nationally endorsed
- Energy expenditure >10% of income
- Unable to keep home sufficiently warm
- Other

Source: IEA

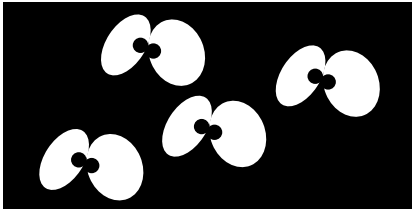


Lower stability

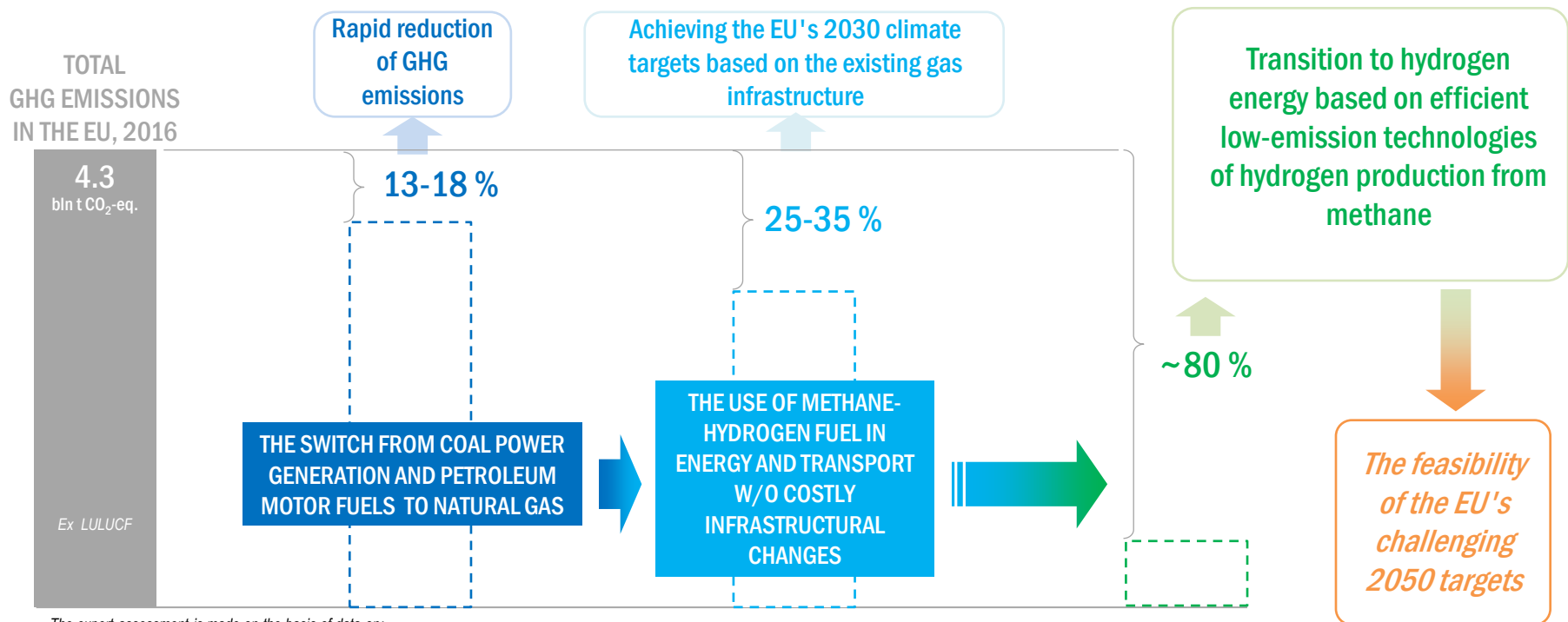
Higher energy costs

Lower industry competitiveness

...and sometimes even higher emissions



Methane-Hydrogen Scenario for Low-Carbon Development of the EU



The expert assessment is made on the basis of data on:

- Carbon intensity from different fuels (U.S. Energy Information Administration estimates);
- Carbon footprint of various motor fuels (European Natural Gas Vehicle Association report, 2014-2015);
- EU GHG emissions (1990 – 2016 National report on the inventory of anthropogenic emissions by sources and GHG removals by sinks not controlled by the Montreal Protocol, IEA)

Thank you for your attention!