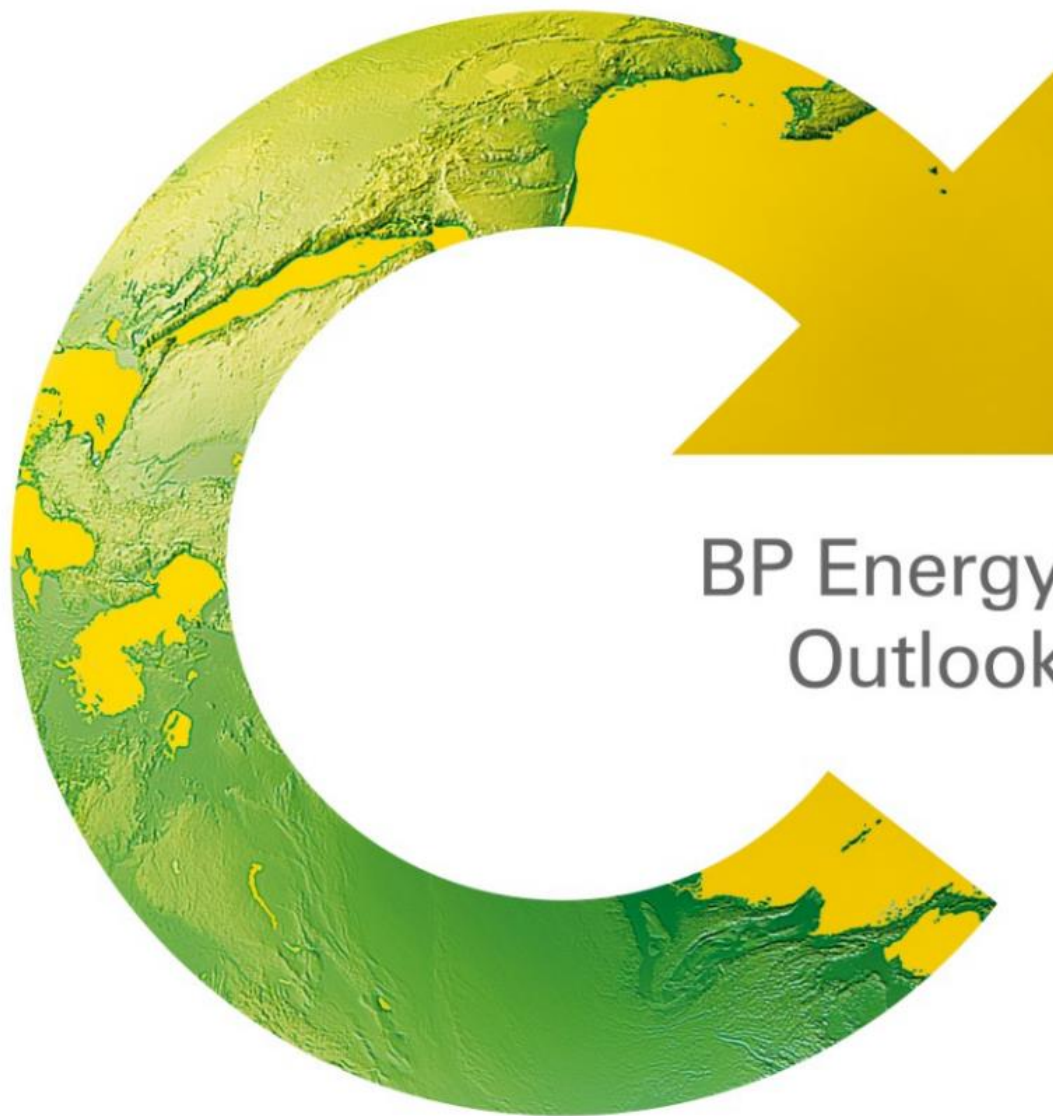


BP Energy Outlook

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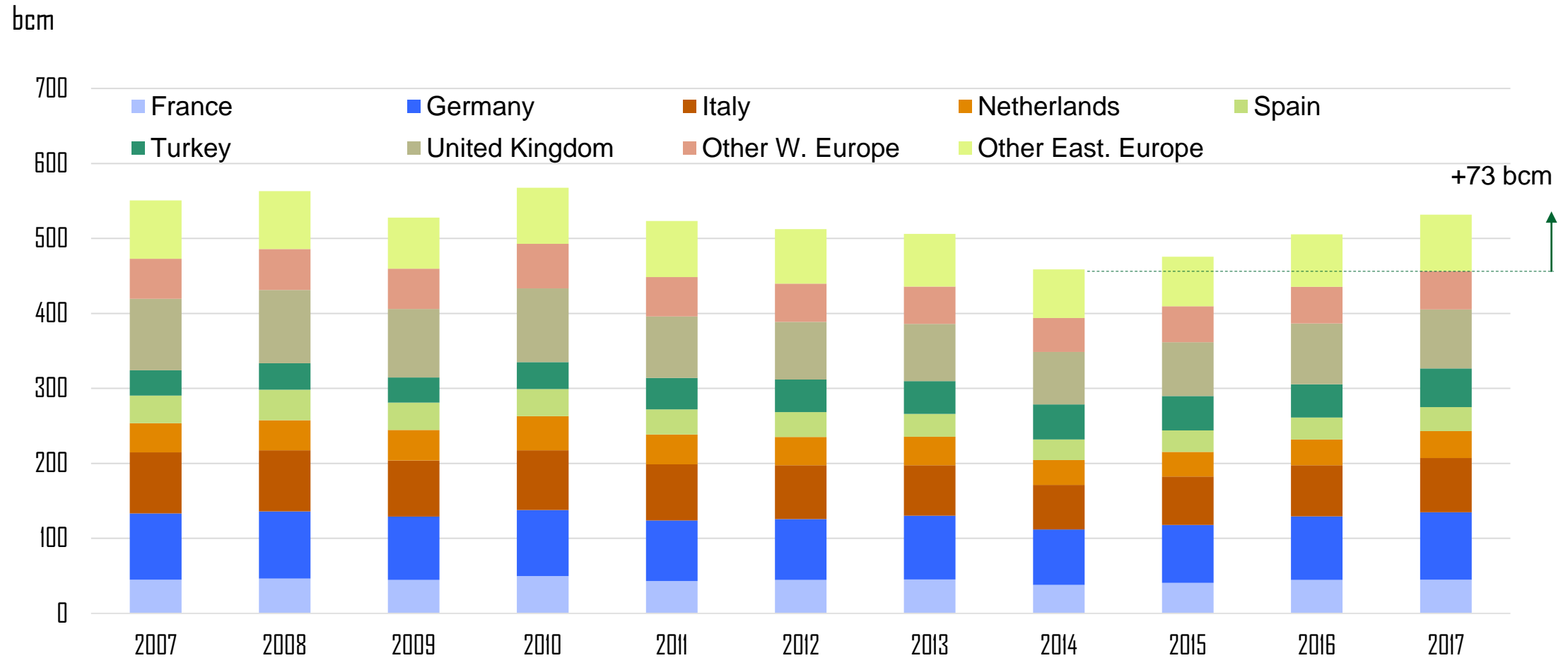
Disclaimer



This presentation contains forward-looking statements, particularly those regarding changes to the fuel mix, global economic growth, population and productivity growth, energy consumption, energy efficiency, mobility developments, policy support for renewable energies, sources of energy supply and growth of carbon emissions. Forward-looking statements involve risks and uncertainties because they relate to events, and depend on circumstances, that will or may occur in the future. Actual outcomes may differ depending on a variety of factors, including product supply, demand and pricing; political stability; general economic conditions; demographic changes; legal and regulatory developments; availability of new technologies; natural disasters and adverse weather conditions; wars and acts of terrorism or sabotage; and other factors discussed elsewhere in this presentation. BP disclaims any obligation to update this presentation. Neither BP p.l.c. nor any of its subsidiaries (nor their respective officers, employees and agents) accept liability for any inaccuracies or omissions or for any direct, indirect, special, consequential or other losses or damages of whatsoever kind in connection to this presentation or any information contained in it.

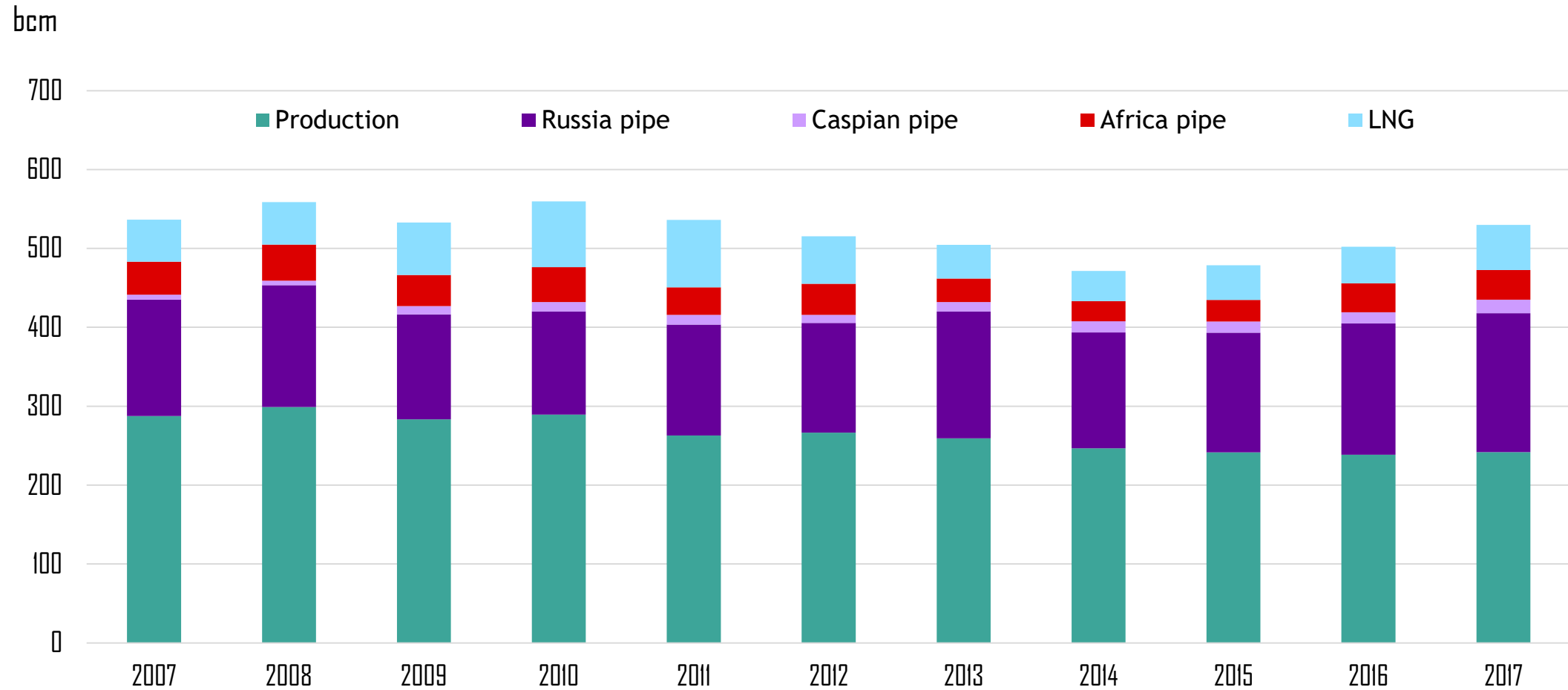


European gas demand has been recovering...



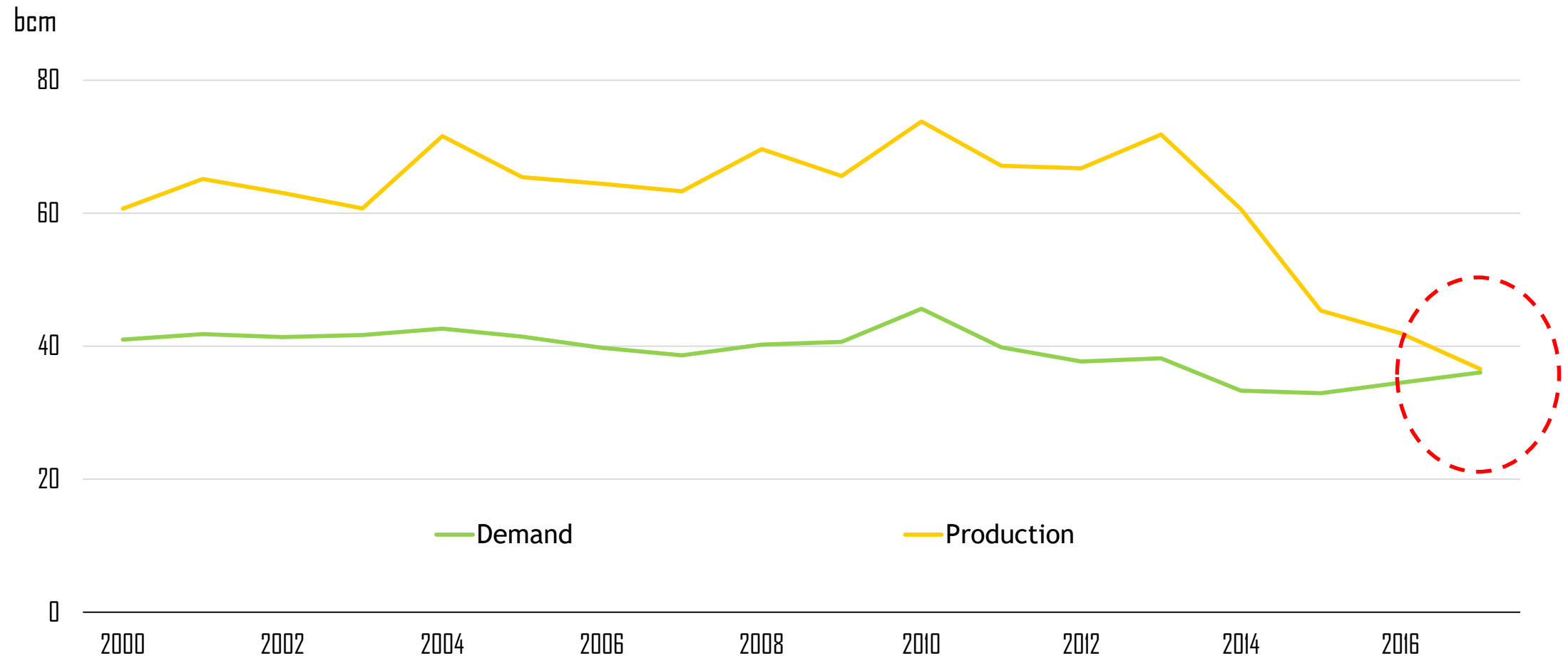
Source: BP Statistical Review 2018

So has import dependency



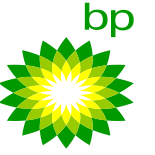
Source: BP Statistical Review 2018

As Dutch production has decreased

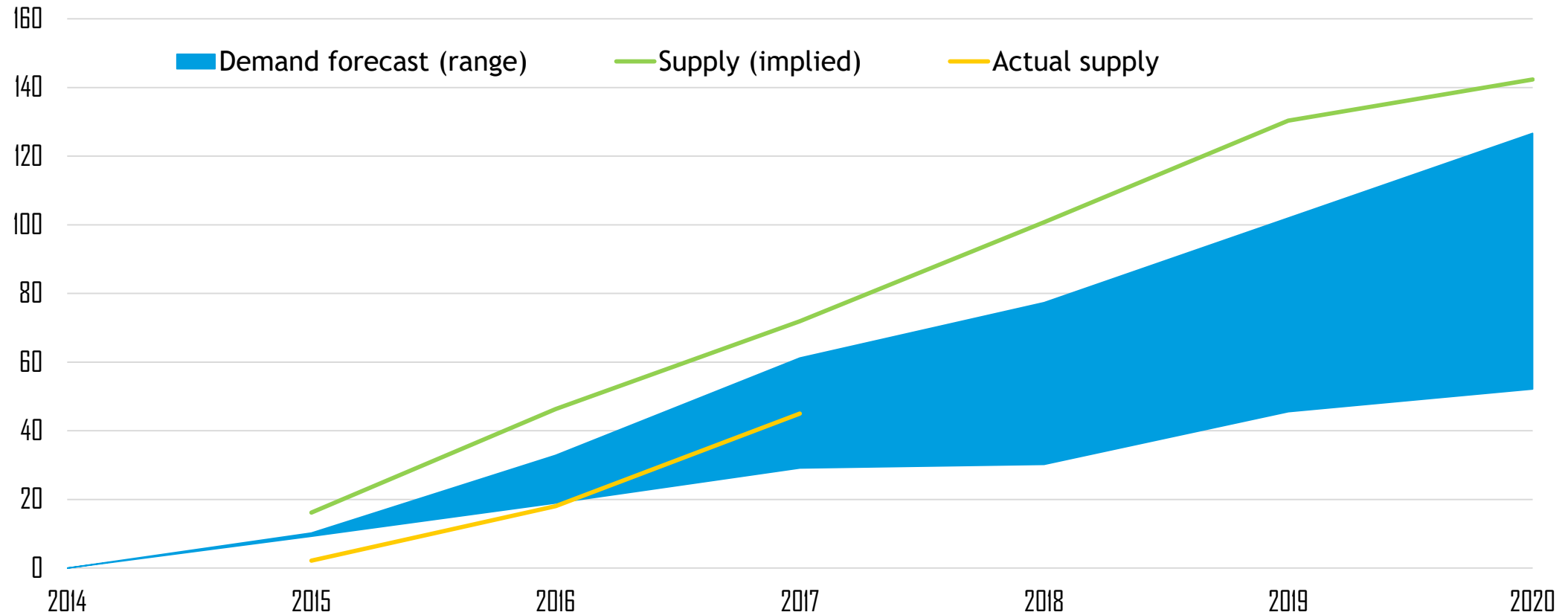


Source: BP Statistical Review 2018

There is still no LNG glut...



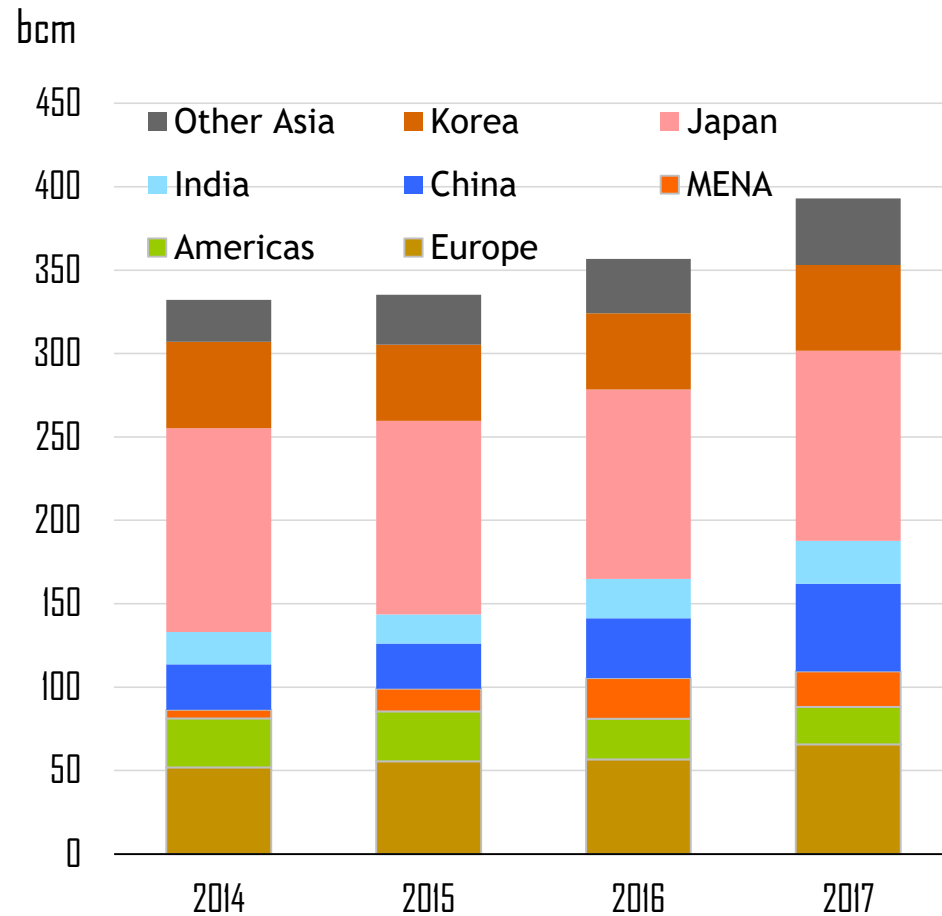
Additional demand/supply from 2014 (million tonnes)



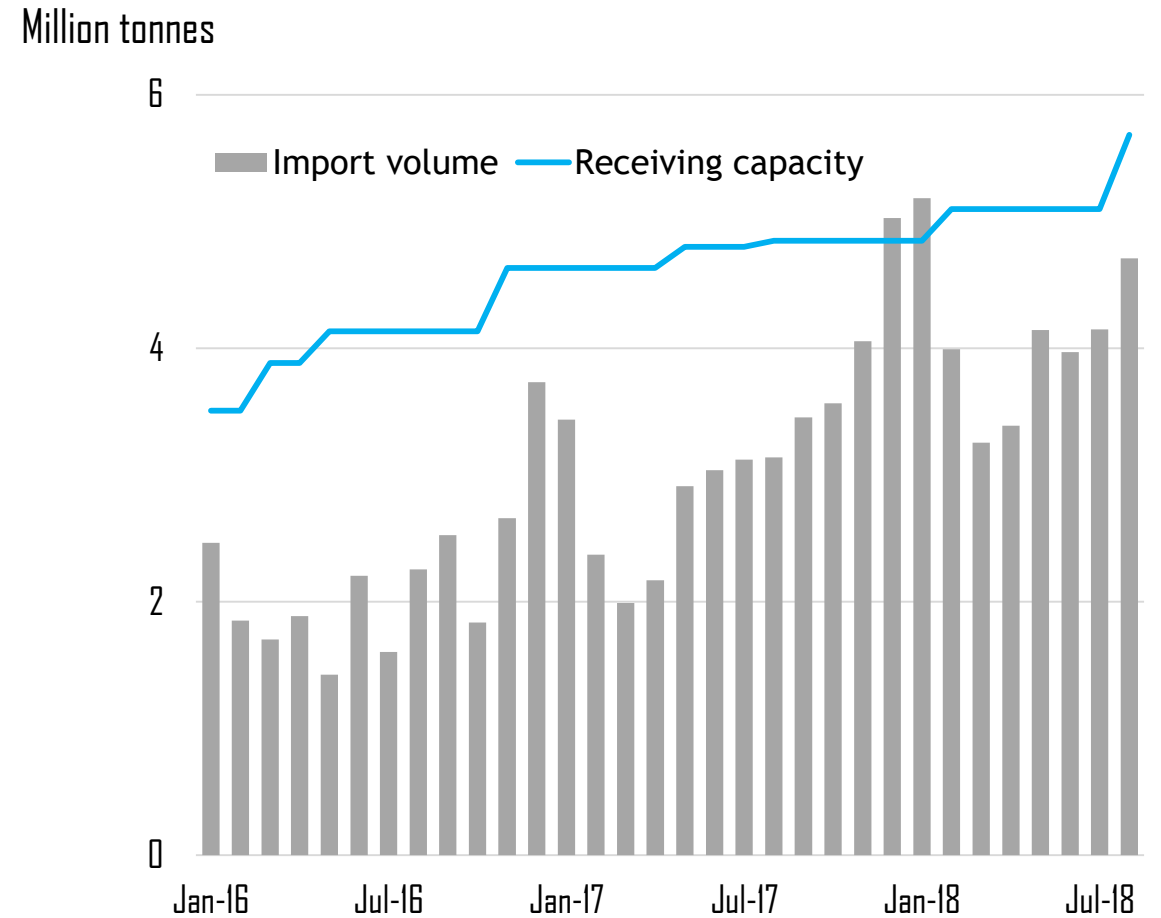
Source: BP Statistical Review 2018; include data from PIRA, IHS and Wood Mackenzie

As most of the additional LNG goes to Asia

Global LNG imports

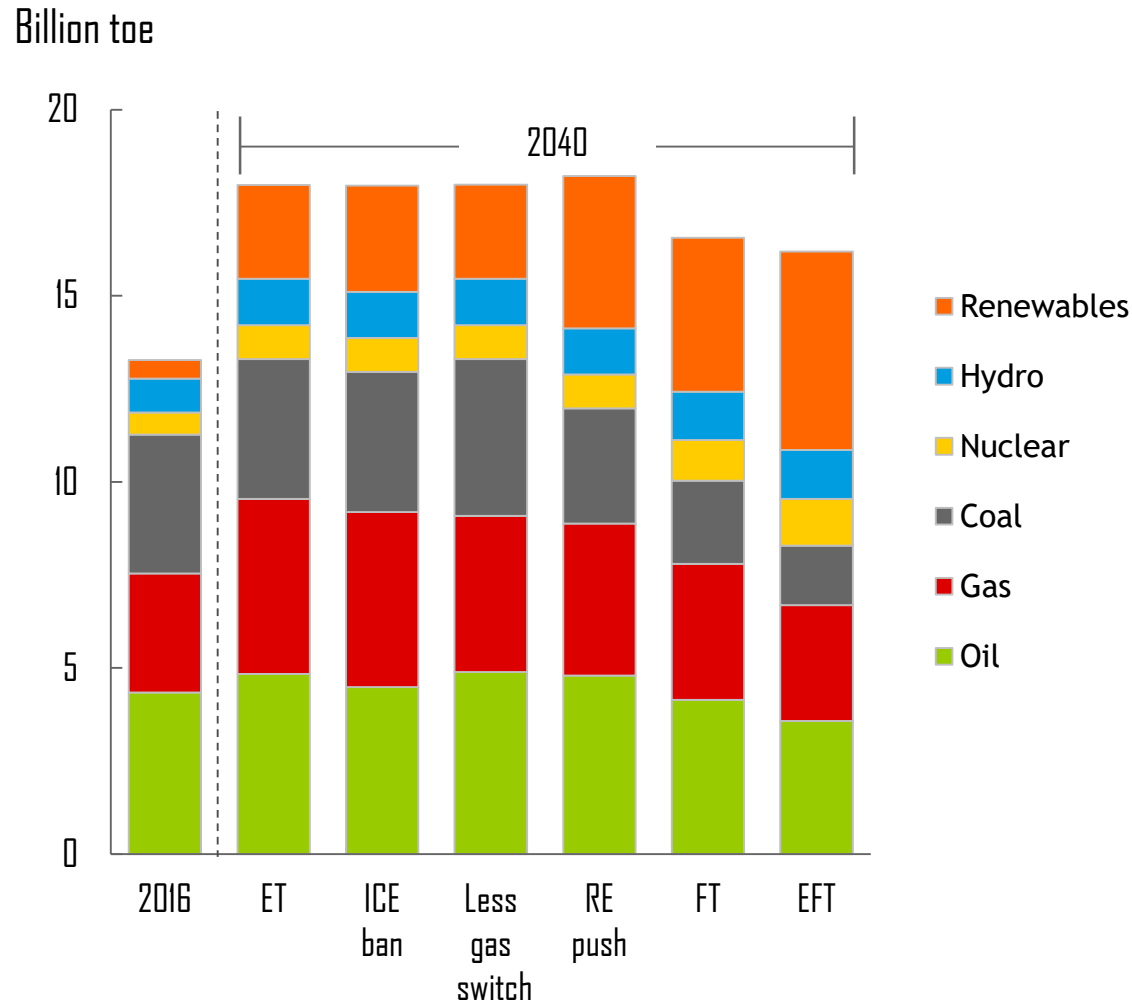


China LNG imports and receiving capacity

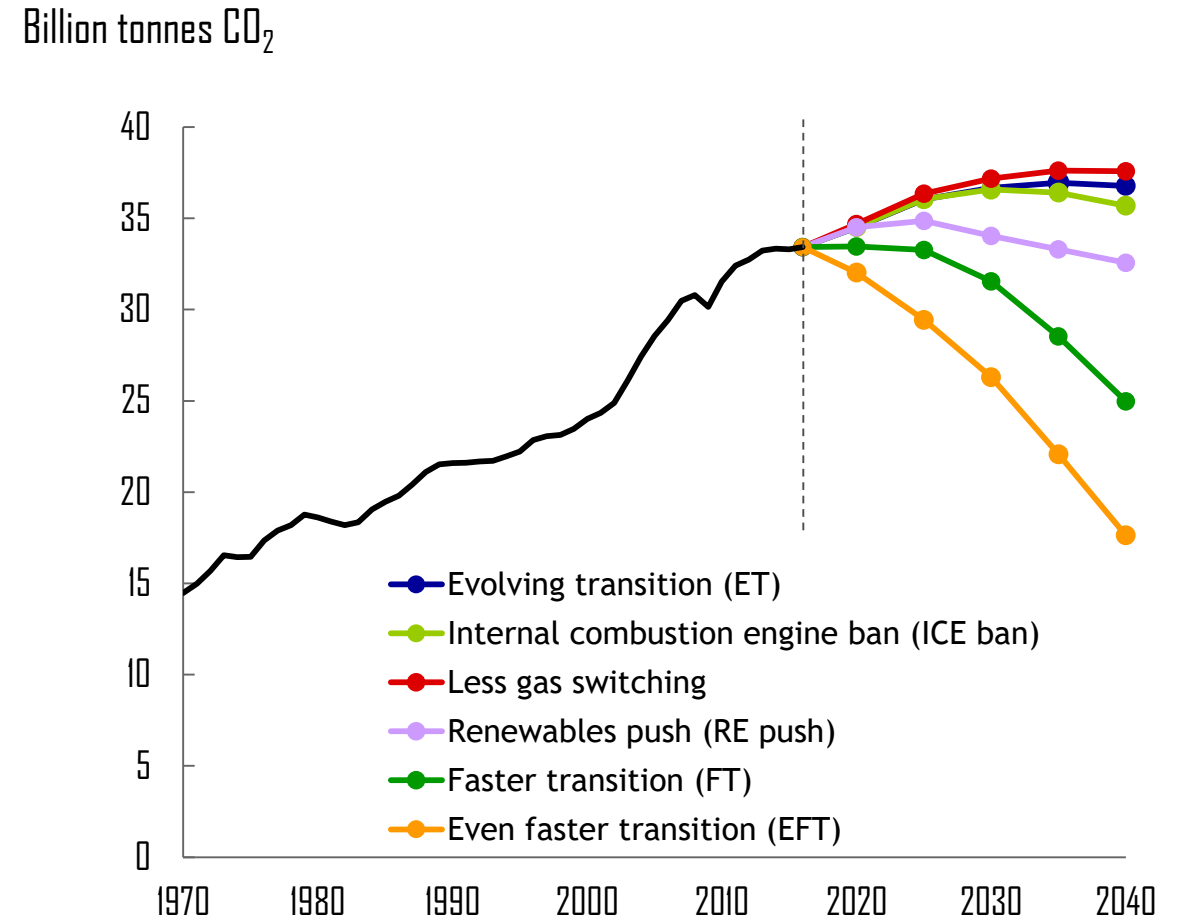


The Outlook considers a range of scenarios...

Primary energy consumption by fuel



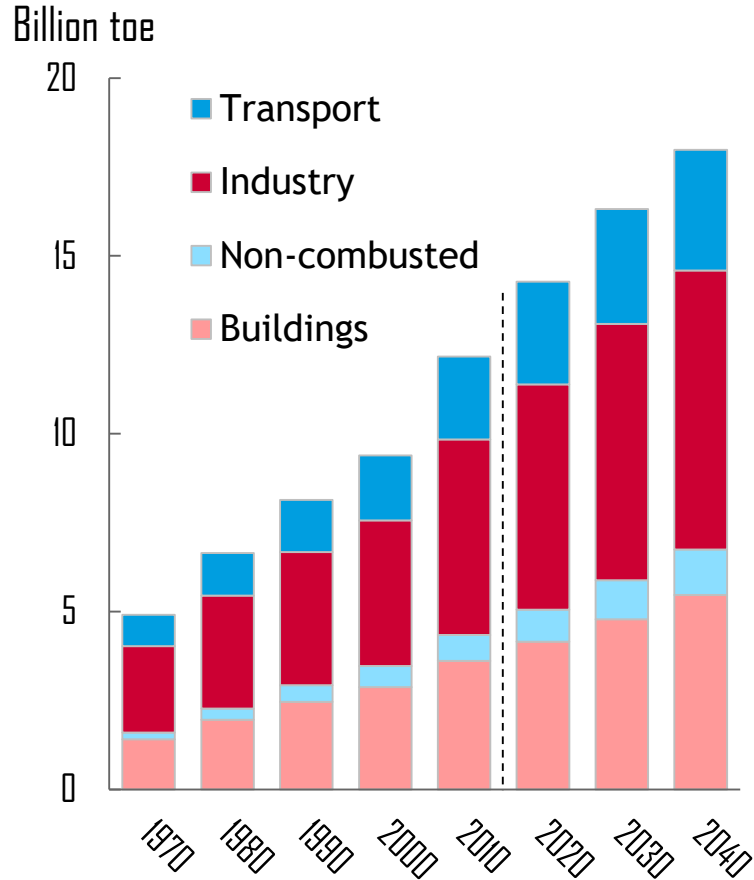
Carbon emissions



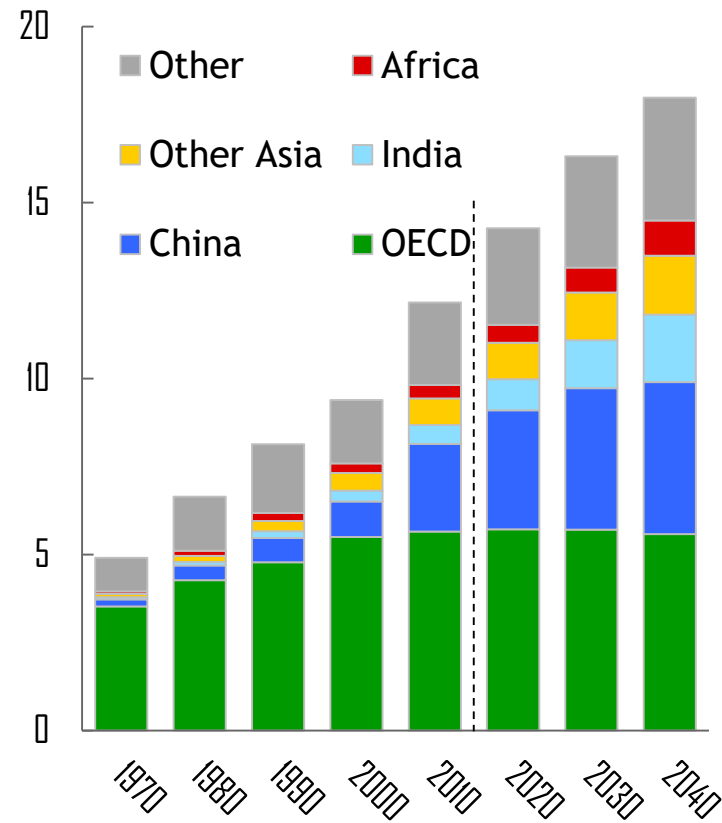
And examines the transition through different lenses

Primary energy demand

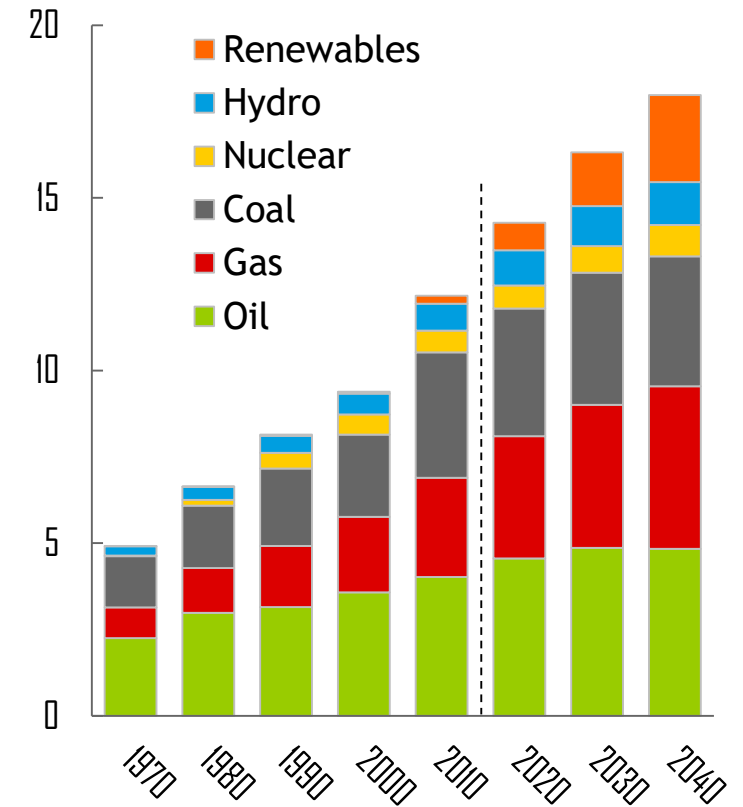
End-use sector



Region



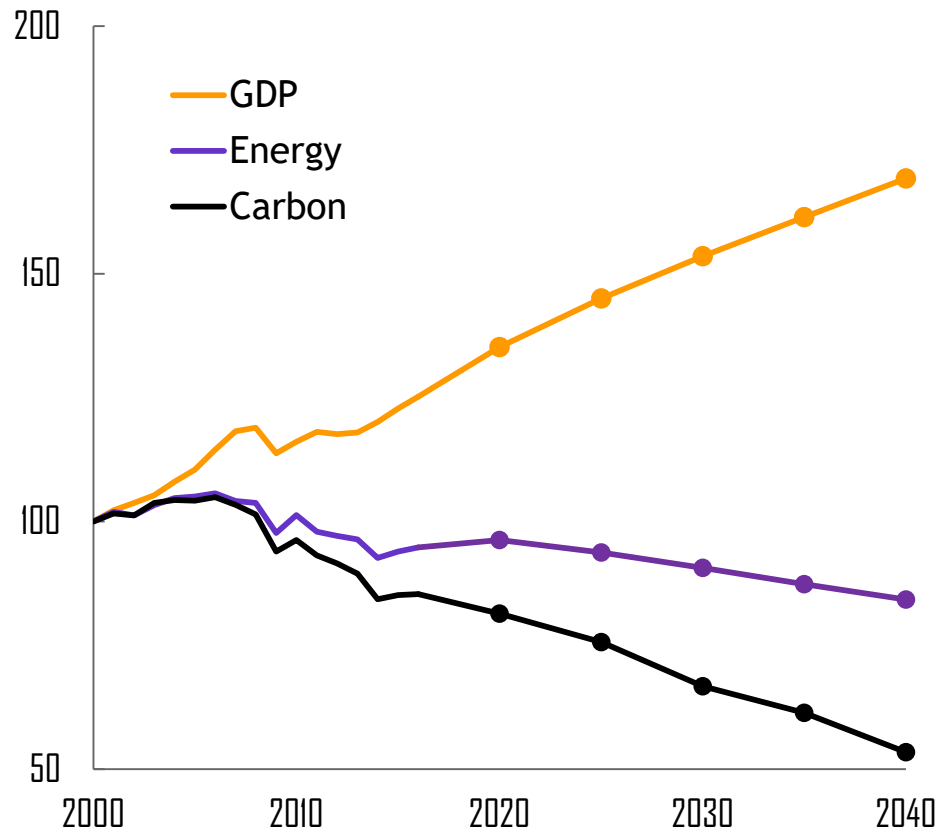
Fuel



Implications for Europe

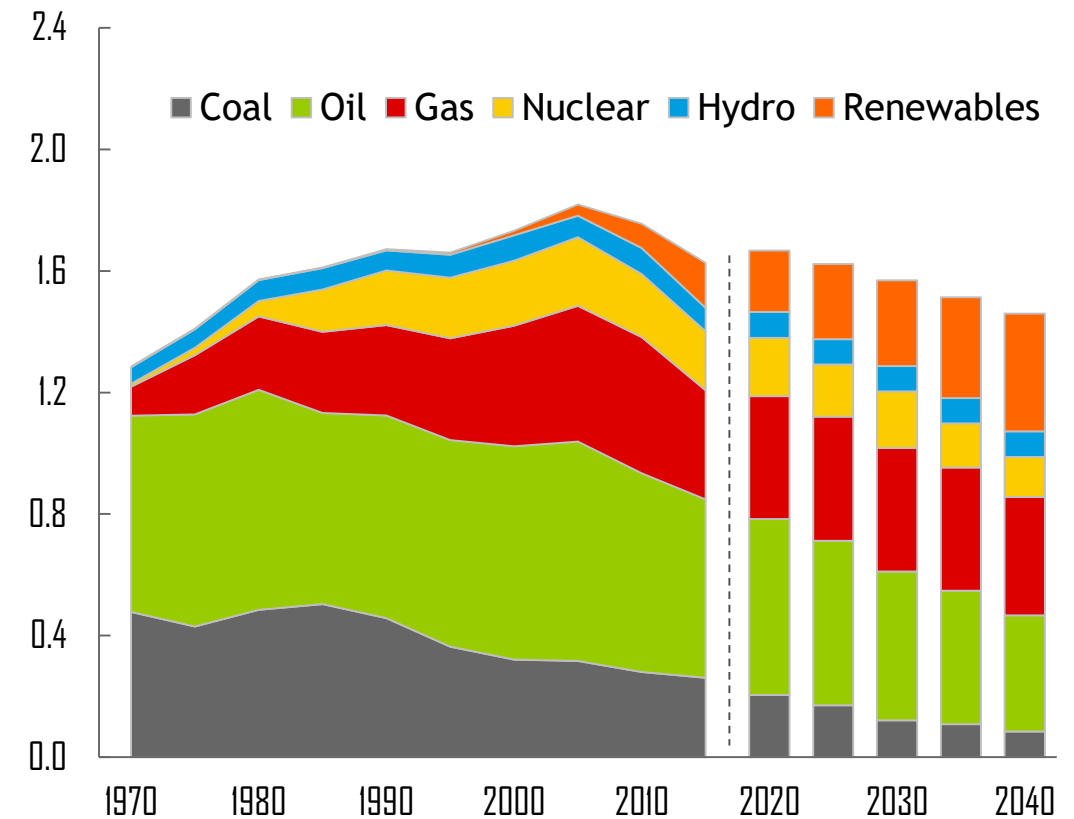
GDP, energy and carbon emissions

Index, 2000=100

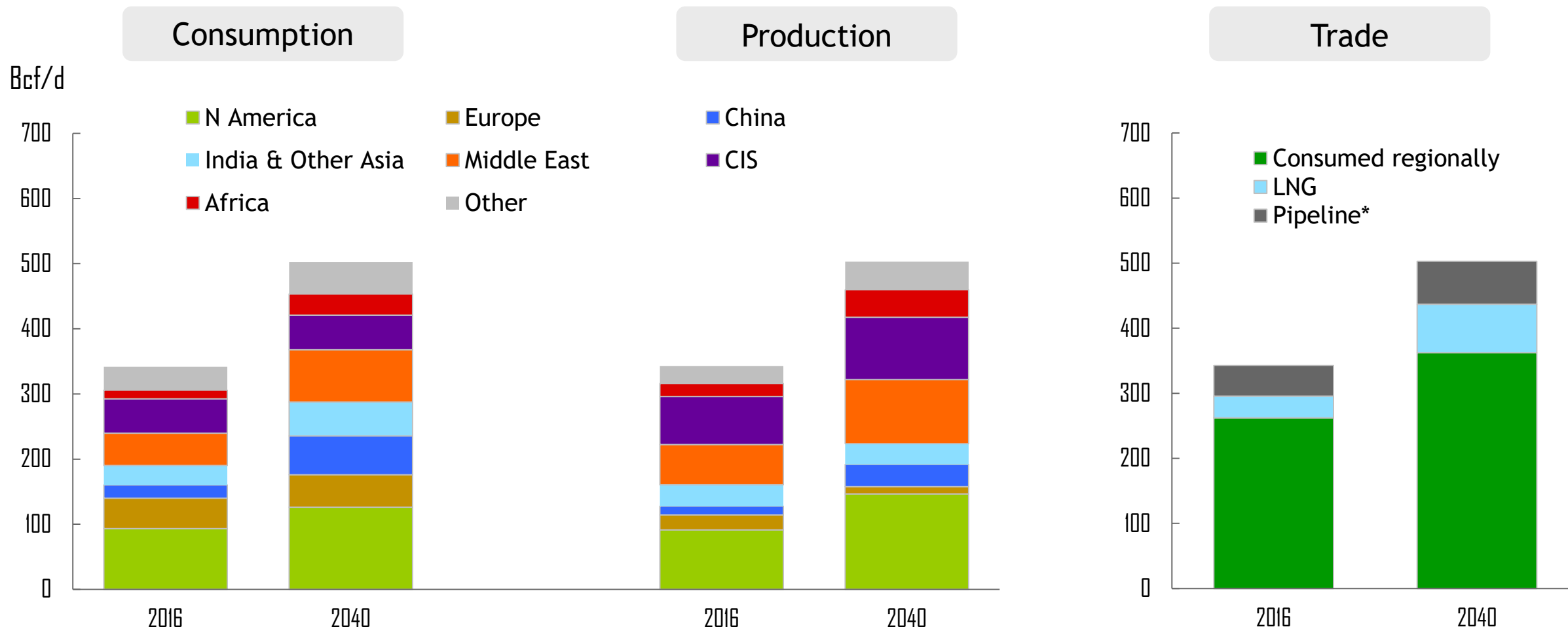


Primary energy consumption

Billion toe

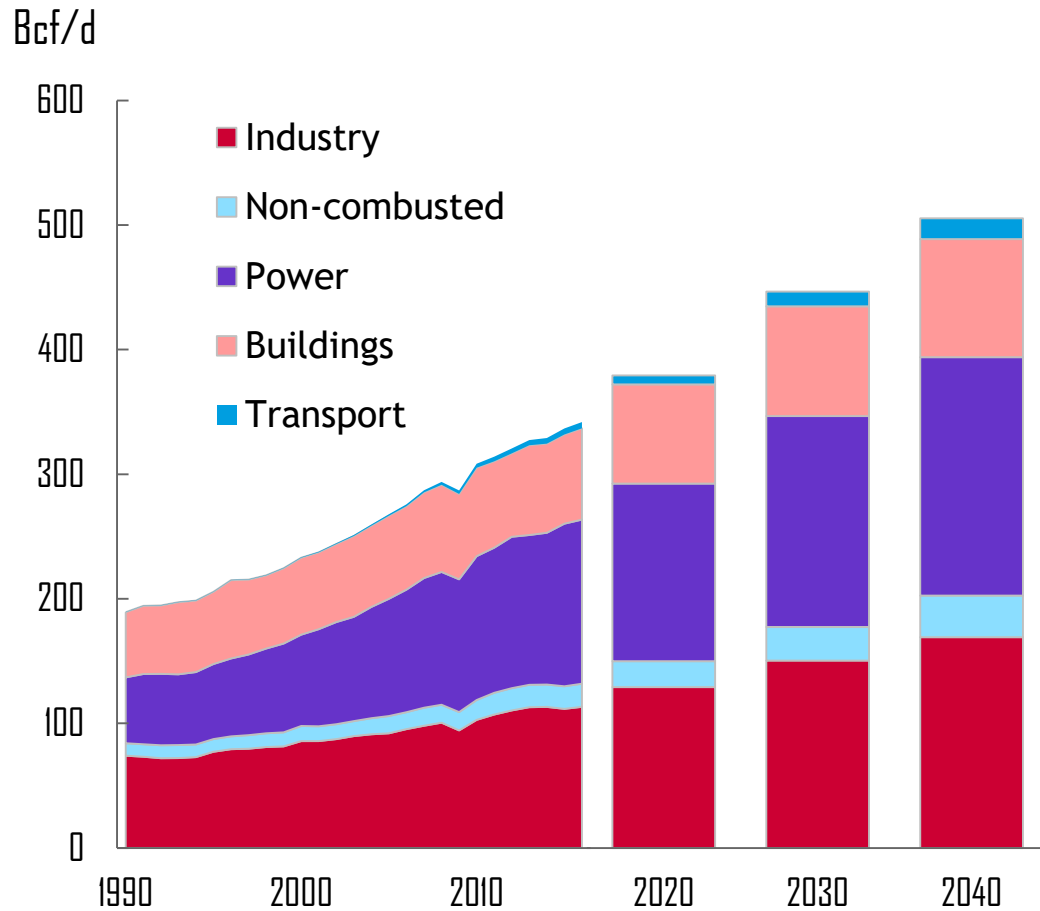


Natural gas grows strongly supported by broad-based demand

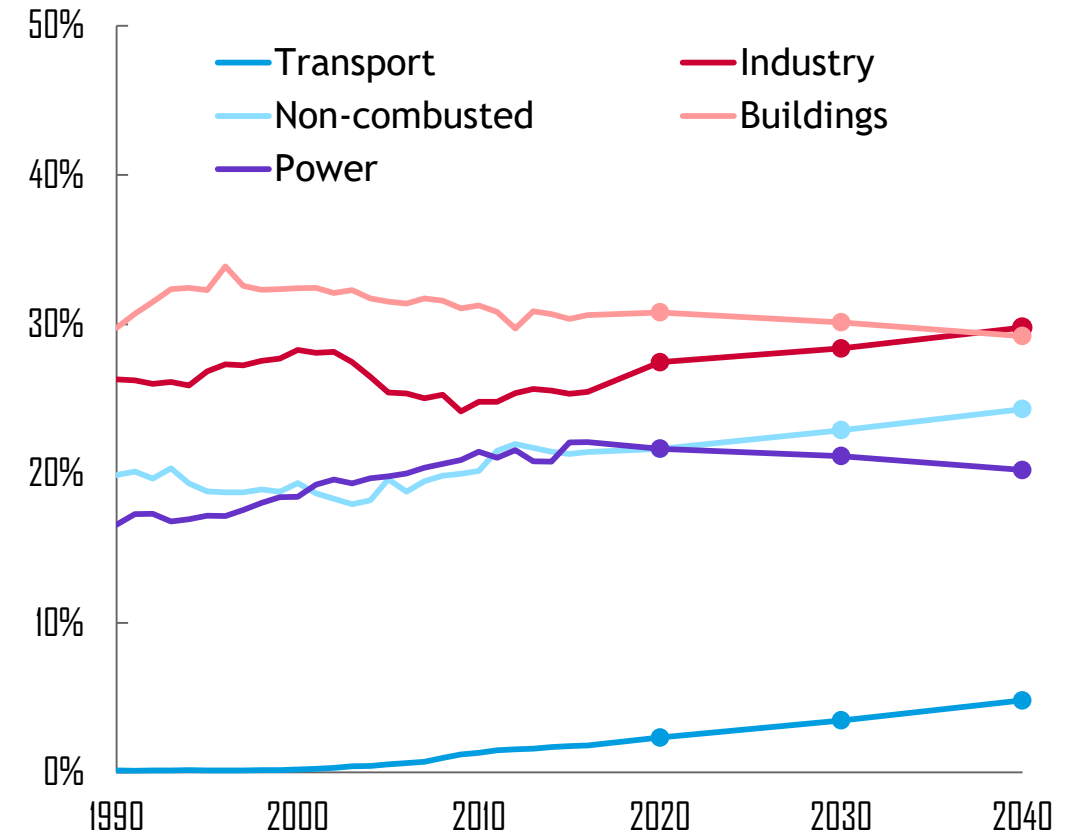


Growth in gas demand is led by industry and power

Gas consumption by sector

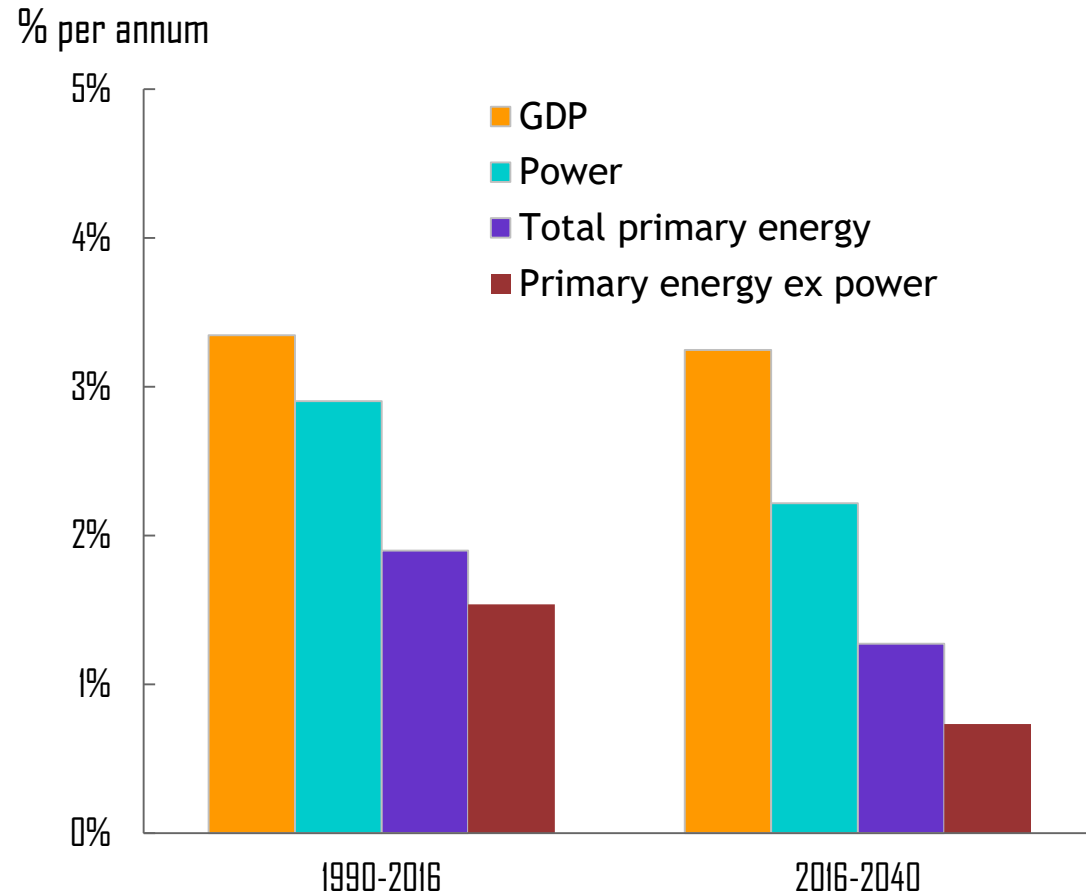


Gas share by sector

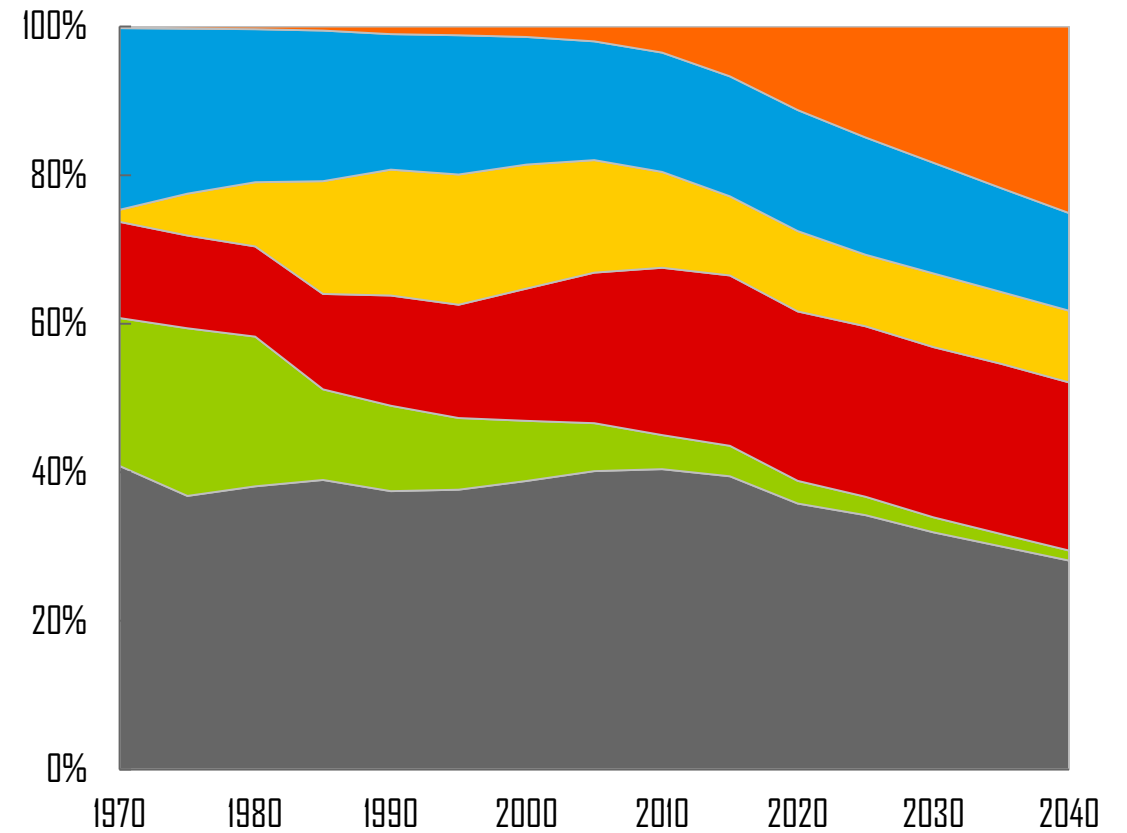


The world continues to electrify

Growth of GDP, power and primary energy



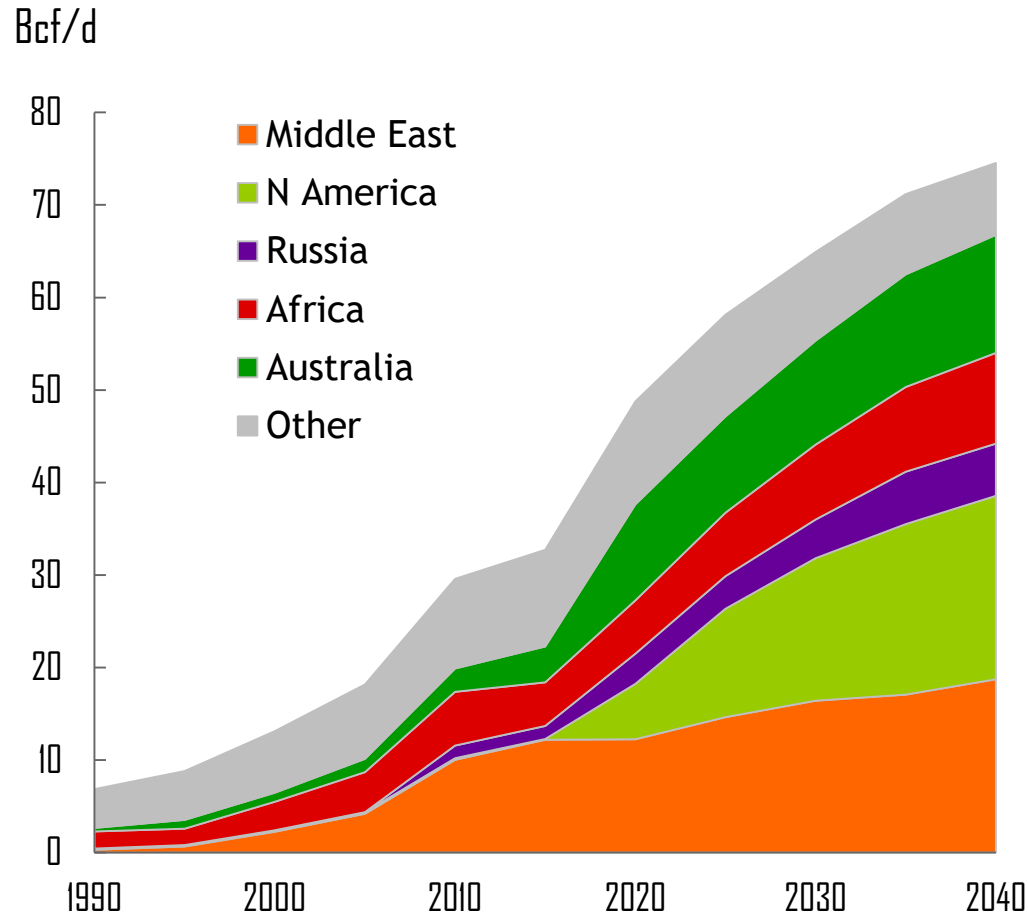
Shares of total power generation



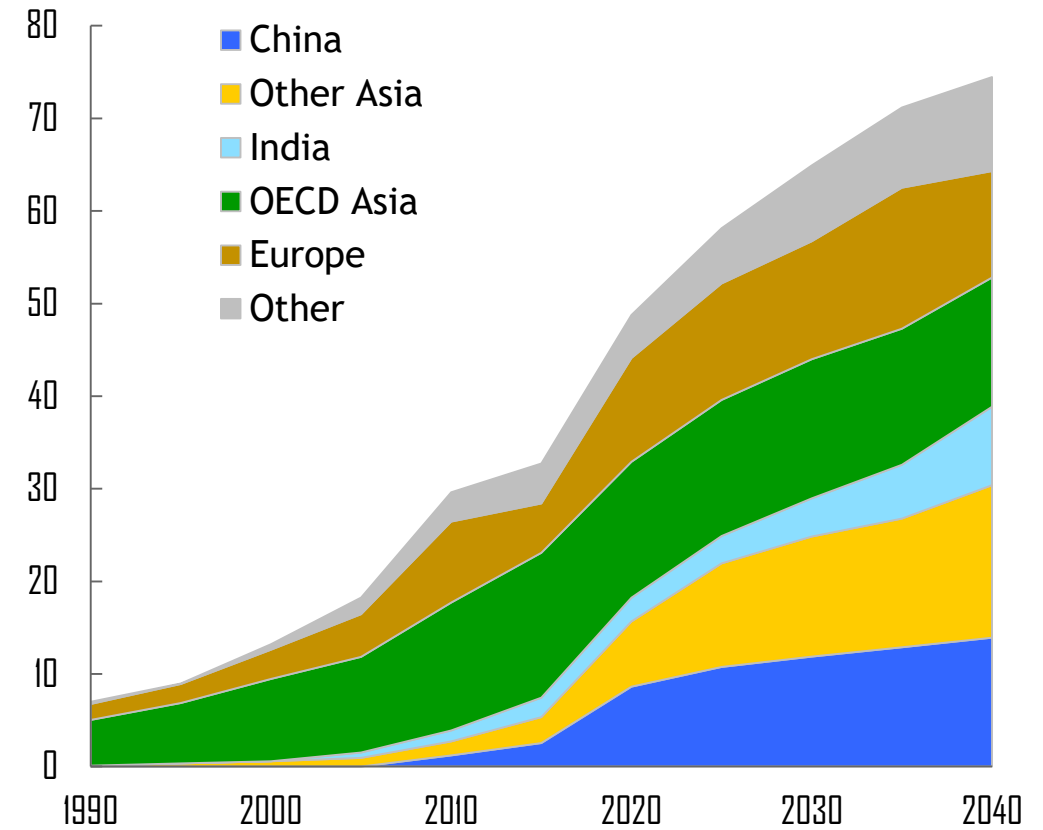


LNG increases the global availability of gas...

LNG exports

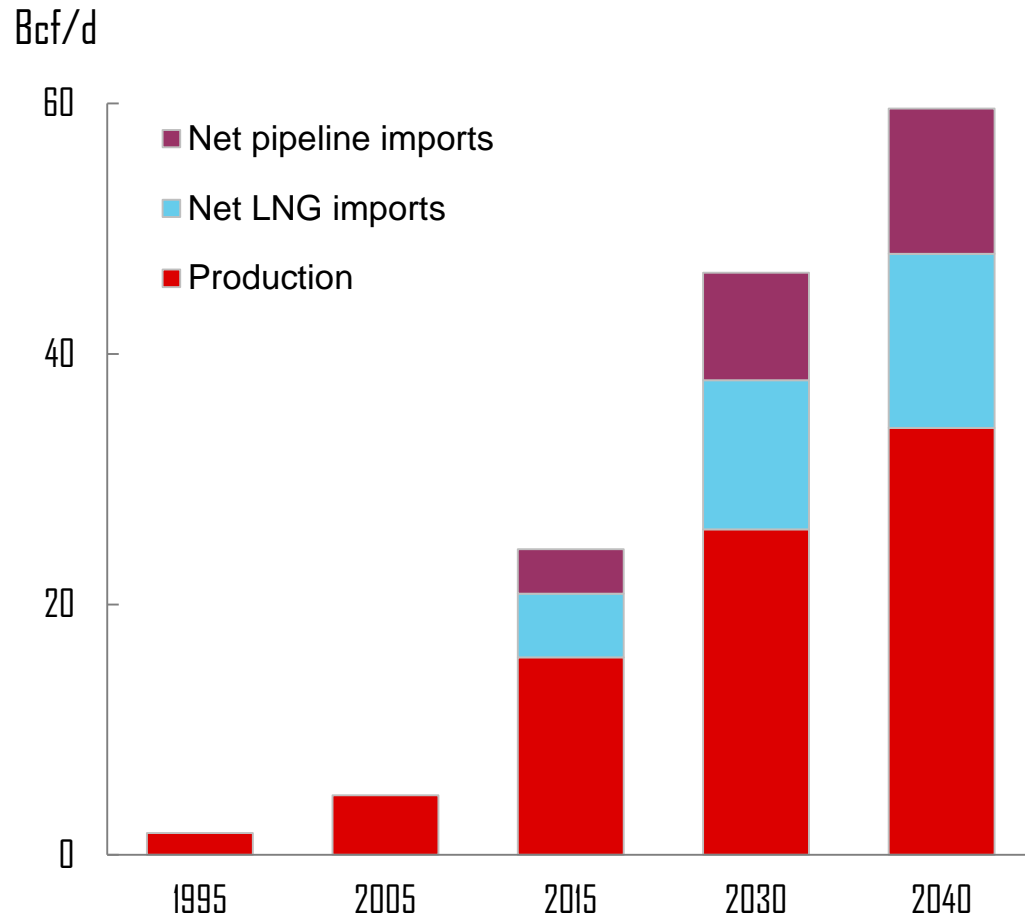


LNG imports

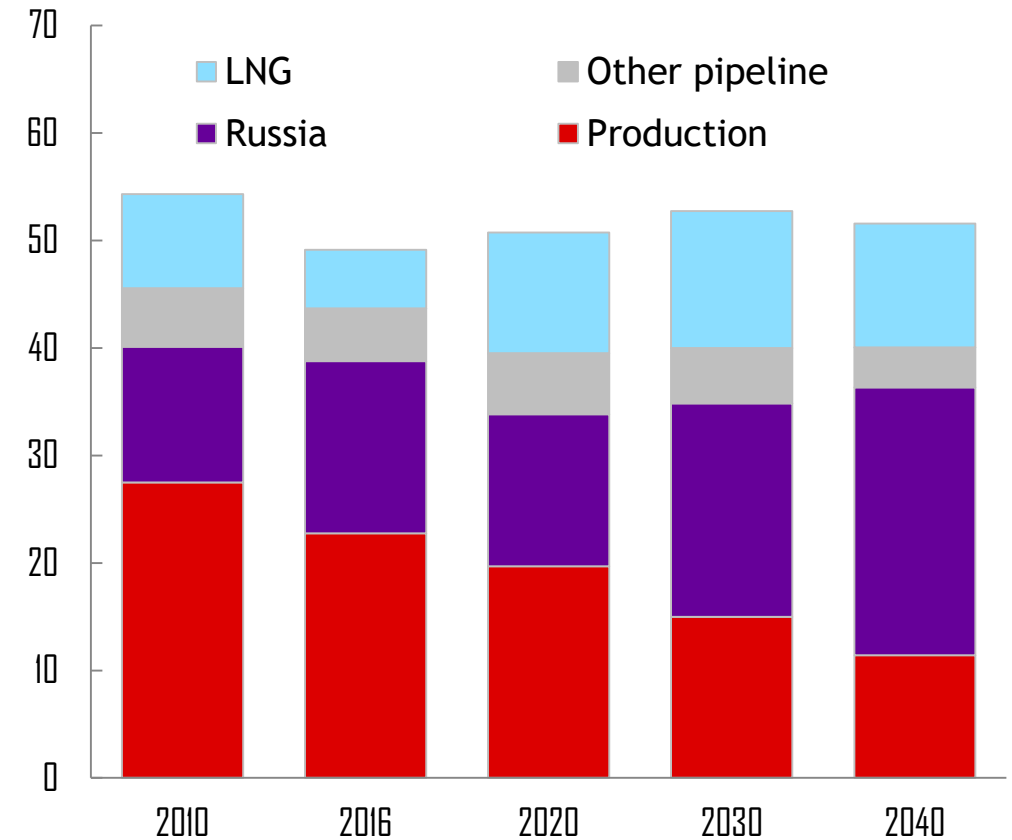


...contributing to supply the largest importing regions

Sources of China's gas supply

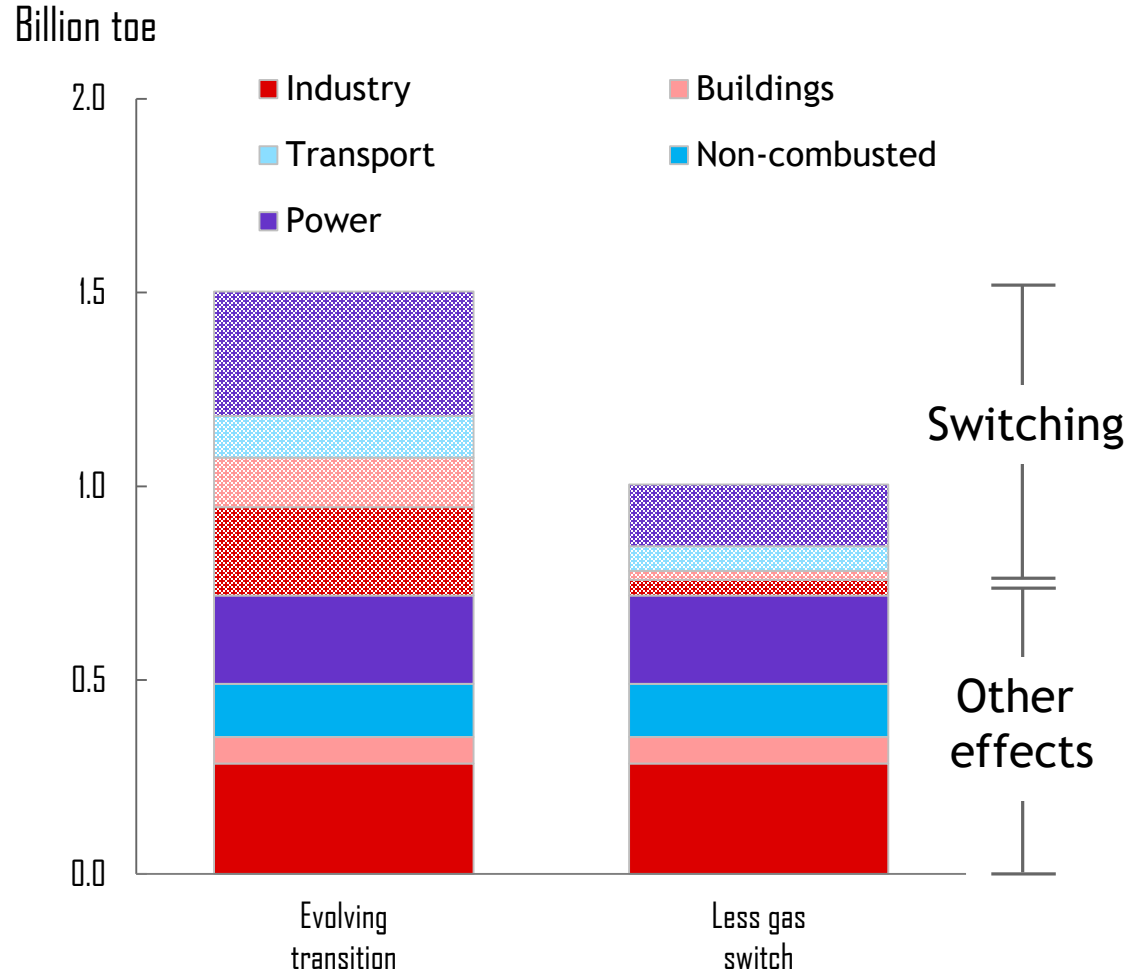


Gas supply to Europe

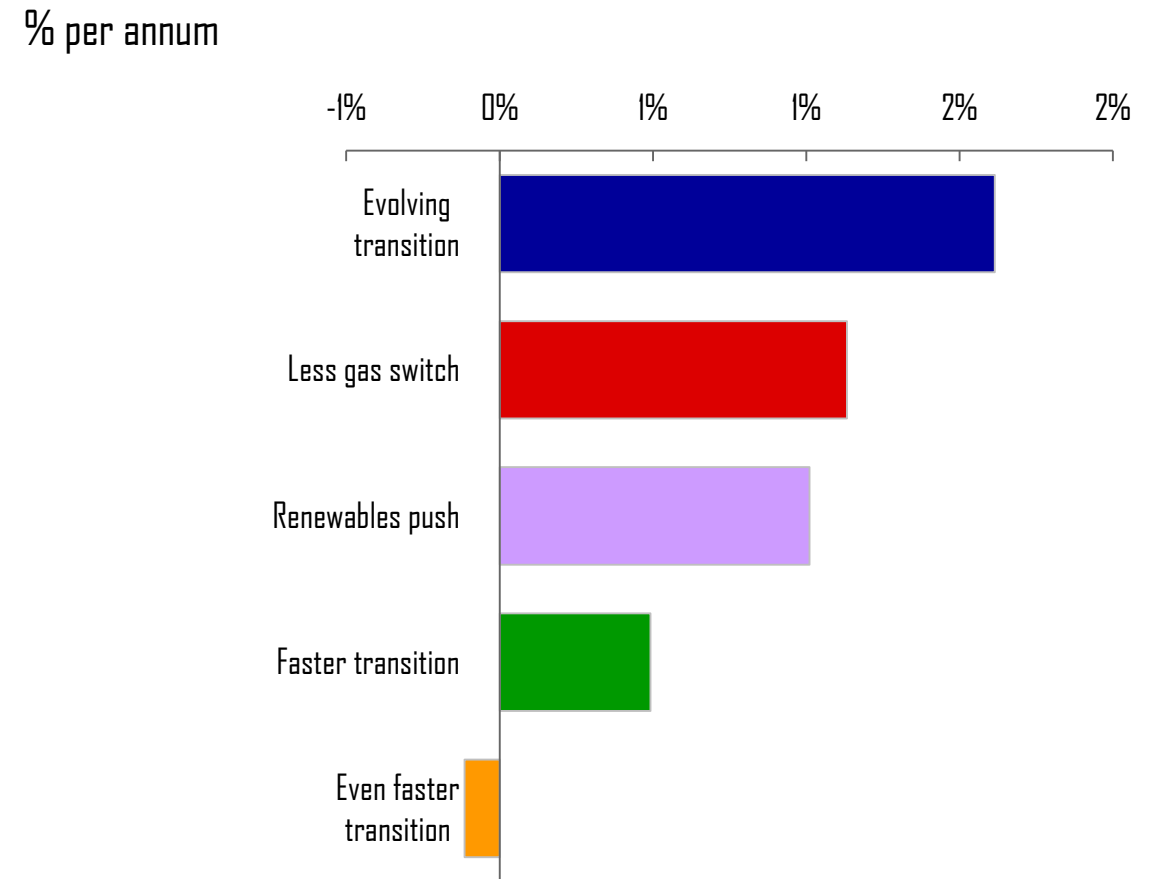


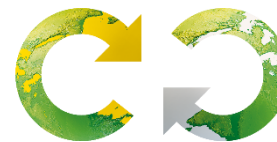
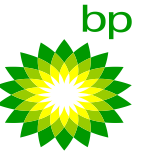
Possible risks to the outlook for natural gas

Gas demand increase
2016-2040



Gas demand growth
2016-2040





BP Energy Economics

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