

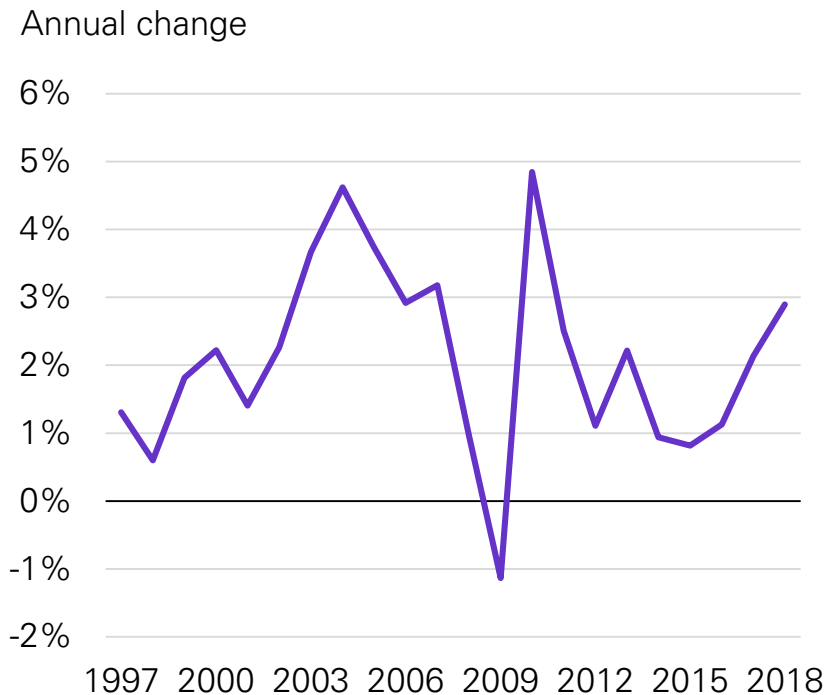
Global Energy Trends
BP Statistical Review and
Energy Outlook 2019

Spencer Dale
Group chief economist

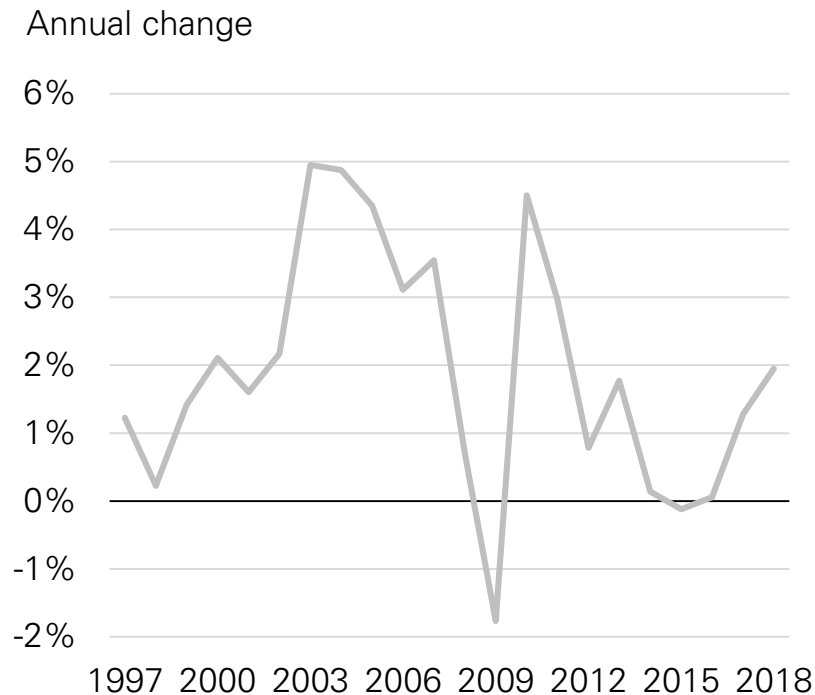
Growth in primary energy and CO₂ emissions



Primary energy growth



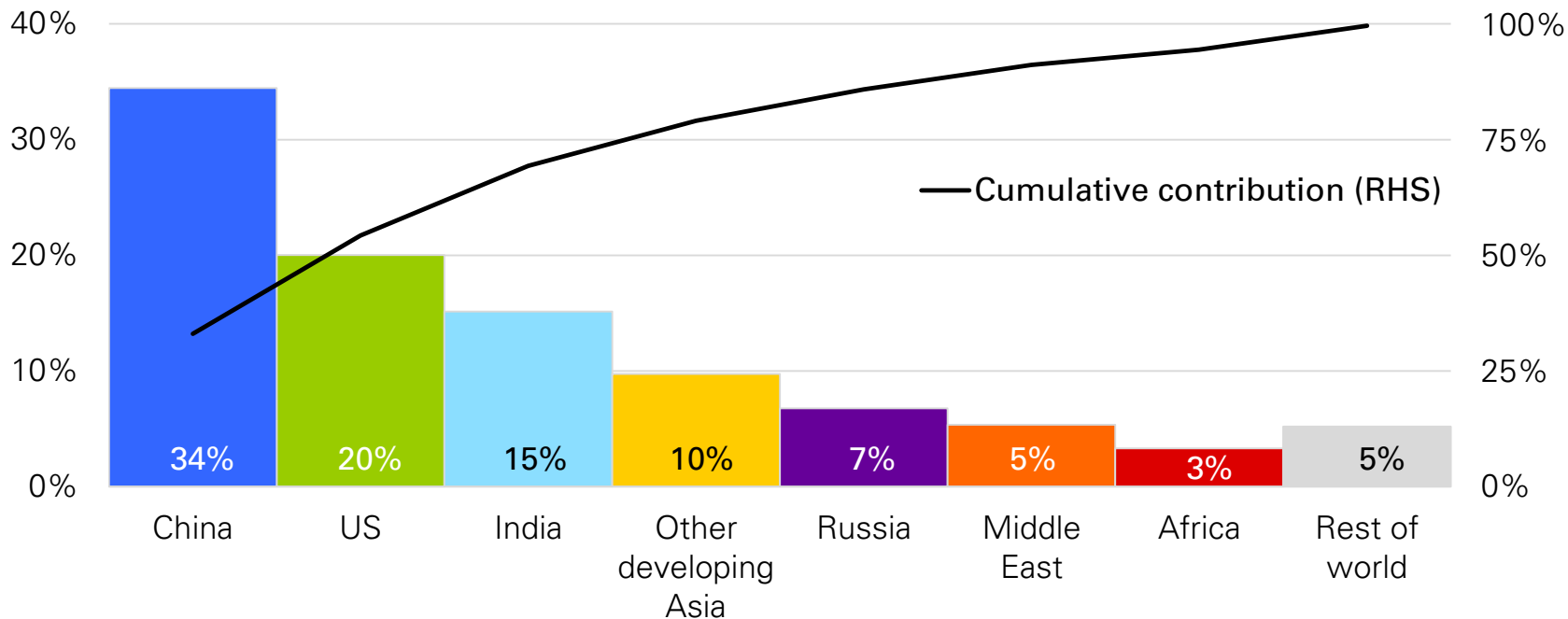
CO₂ emissions from energy use



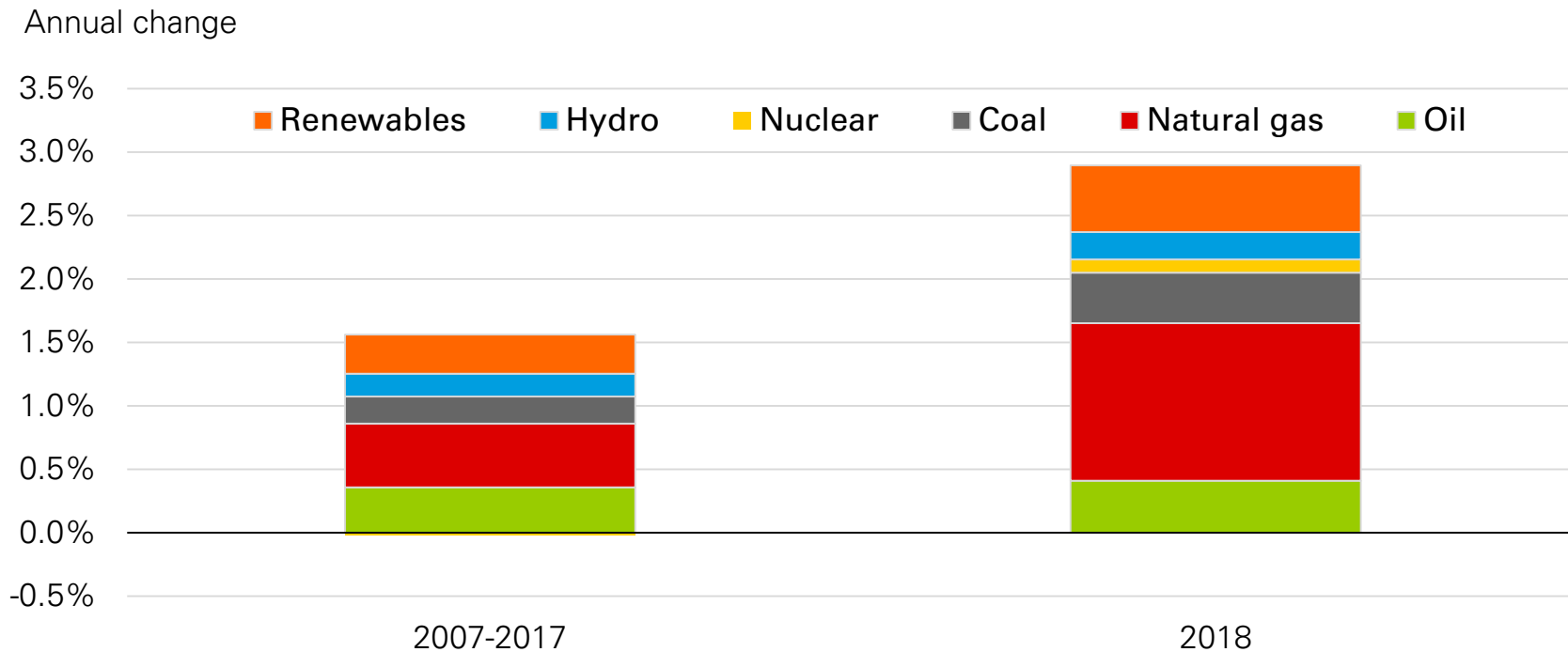
Primary energy



Contribution to primary energy growth in 2018



Primary energy growth by fuel



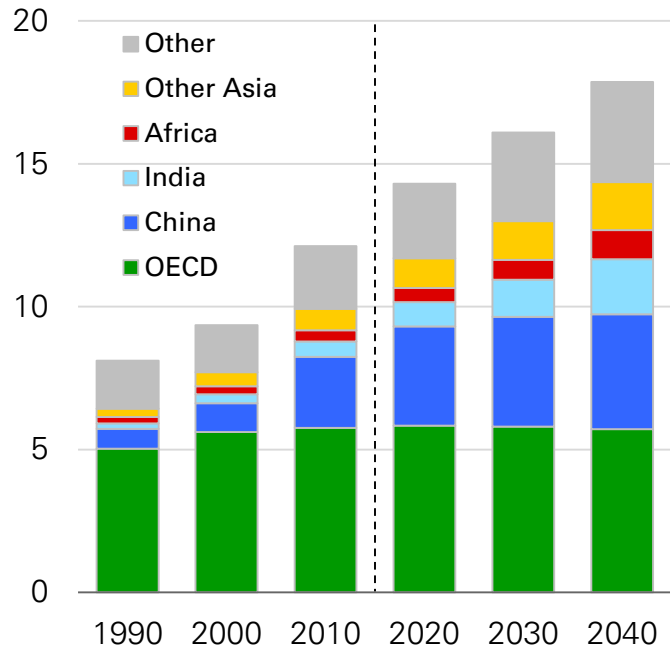


Energy demand: longer-term outlook

Regional energy demand

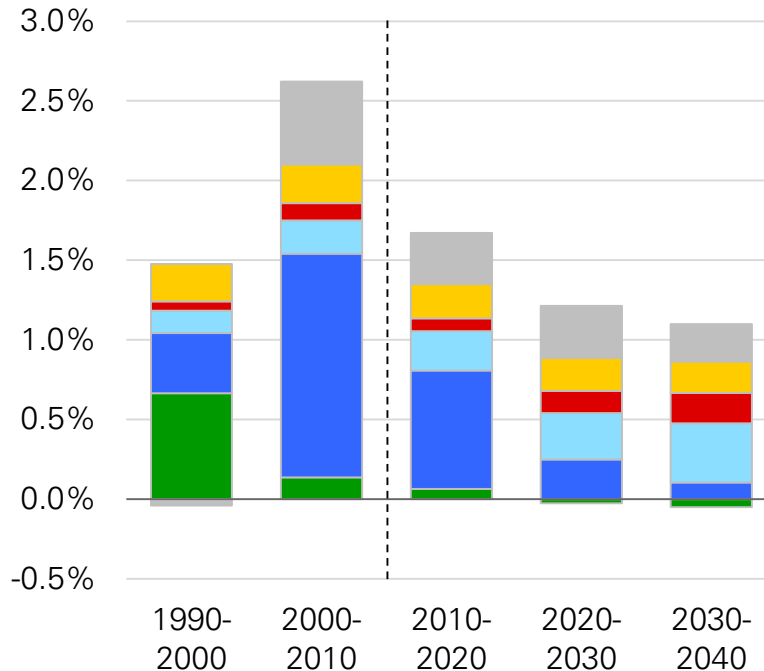
Primary energy consumption by region

Billion toe



Primary energy growth and regional contributions

% per annum

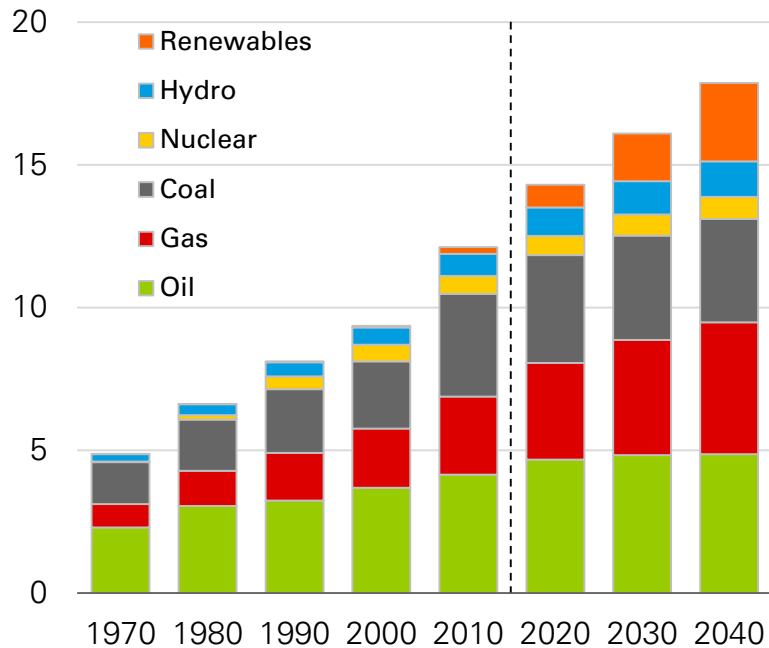




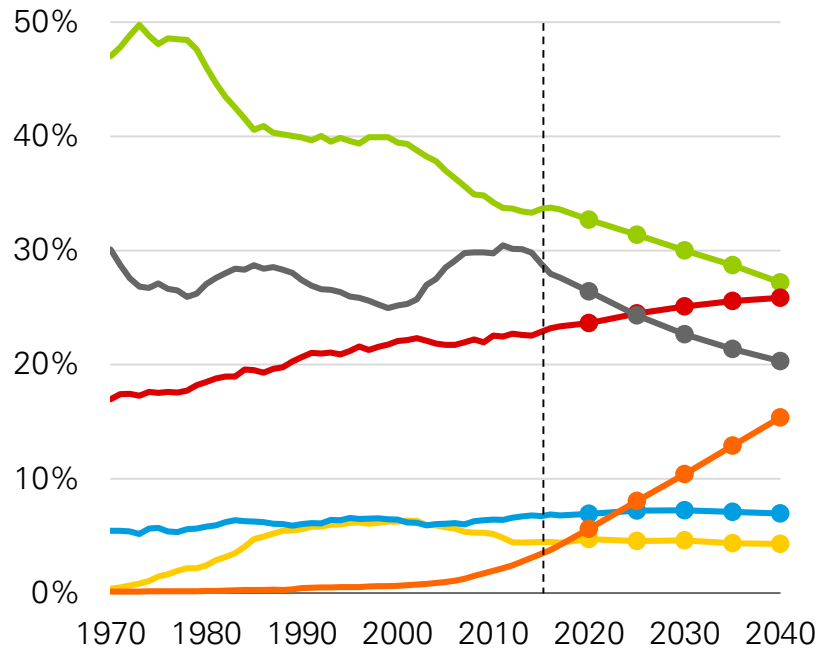
Global energy by fuel type

Primary energy consumption by fuel

Billion toe



Shares of primary energy



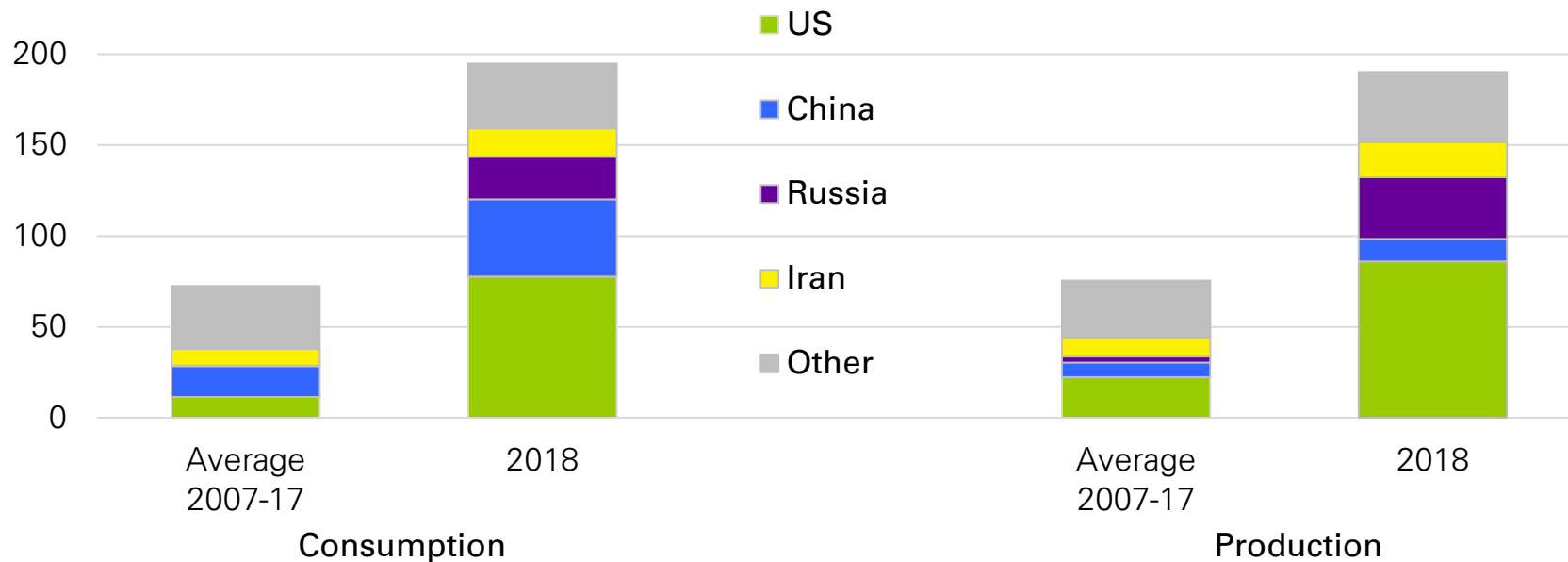


Natural gas

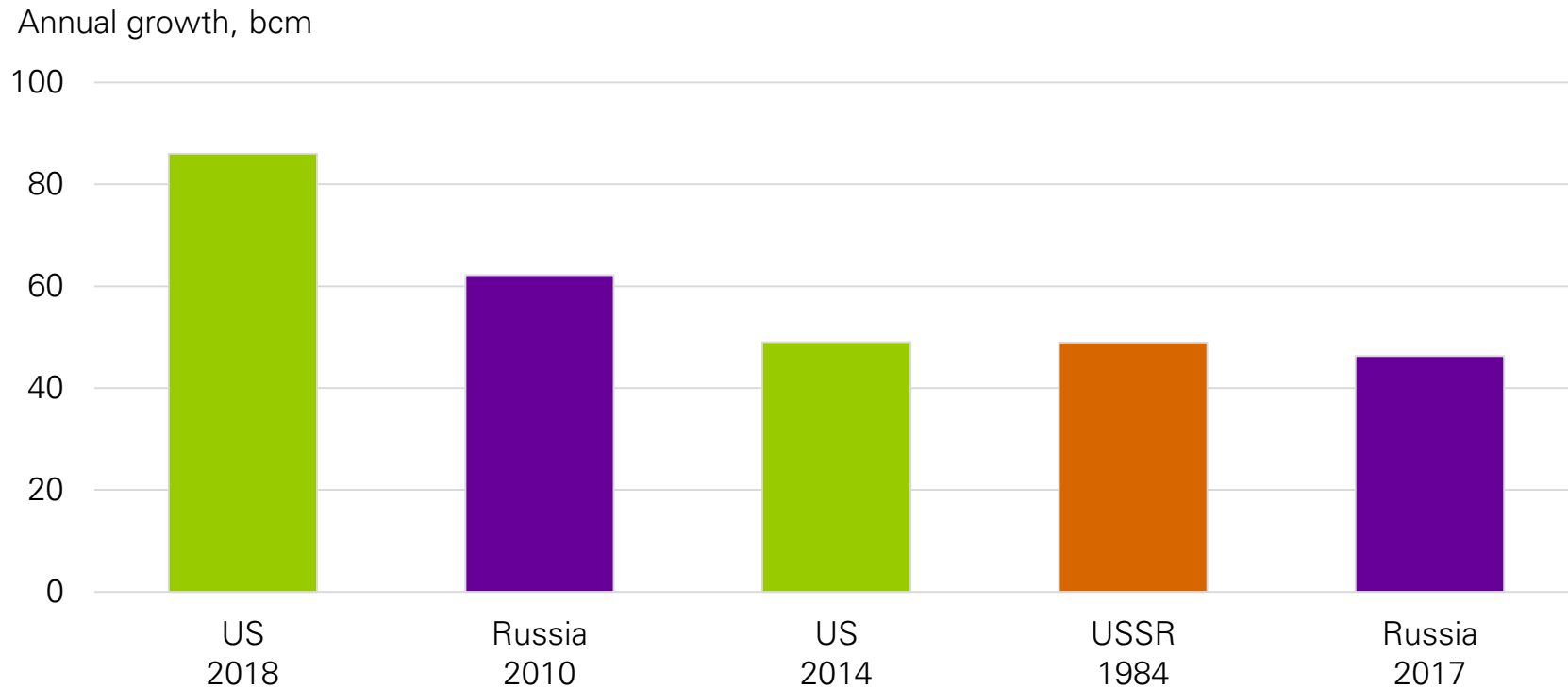
Global growth in natural gas



Annual change, bcm



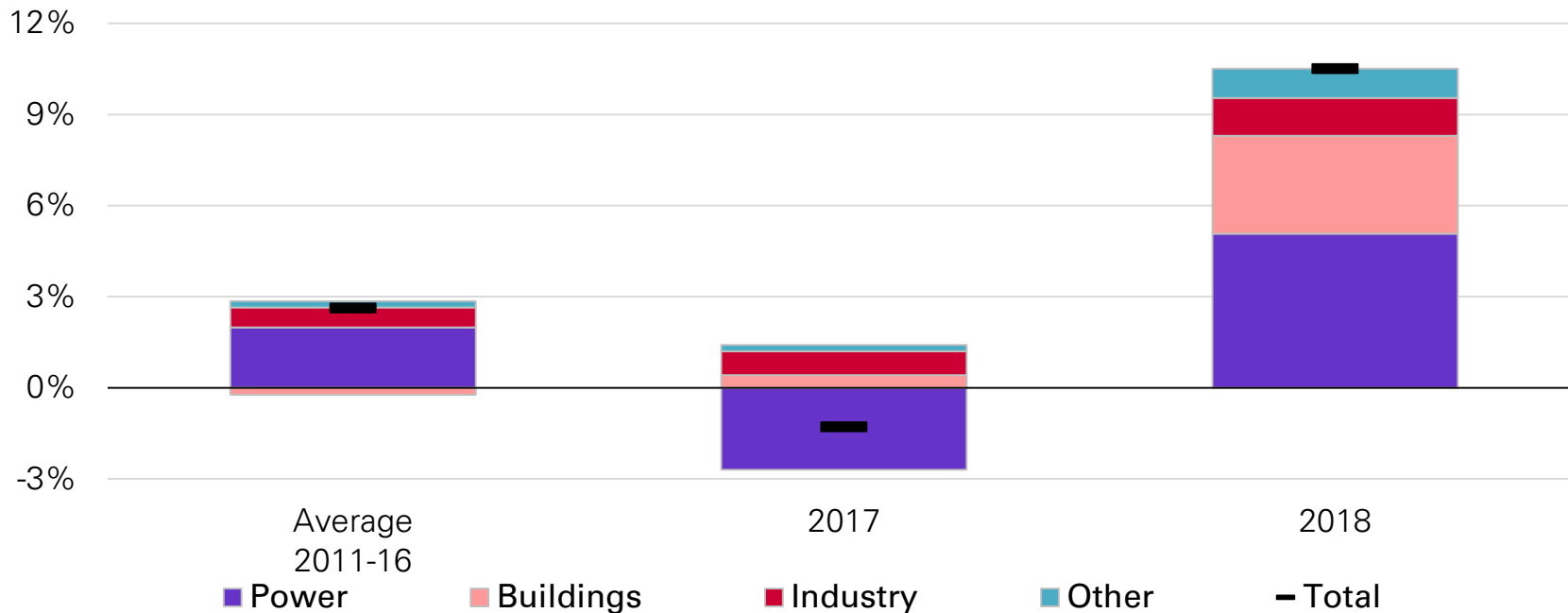
Largest increases in gas production



Growth in US gas consumption



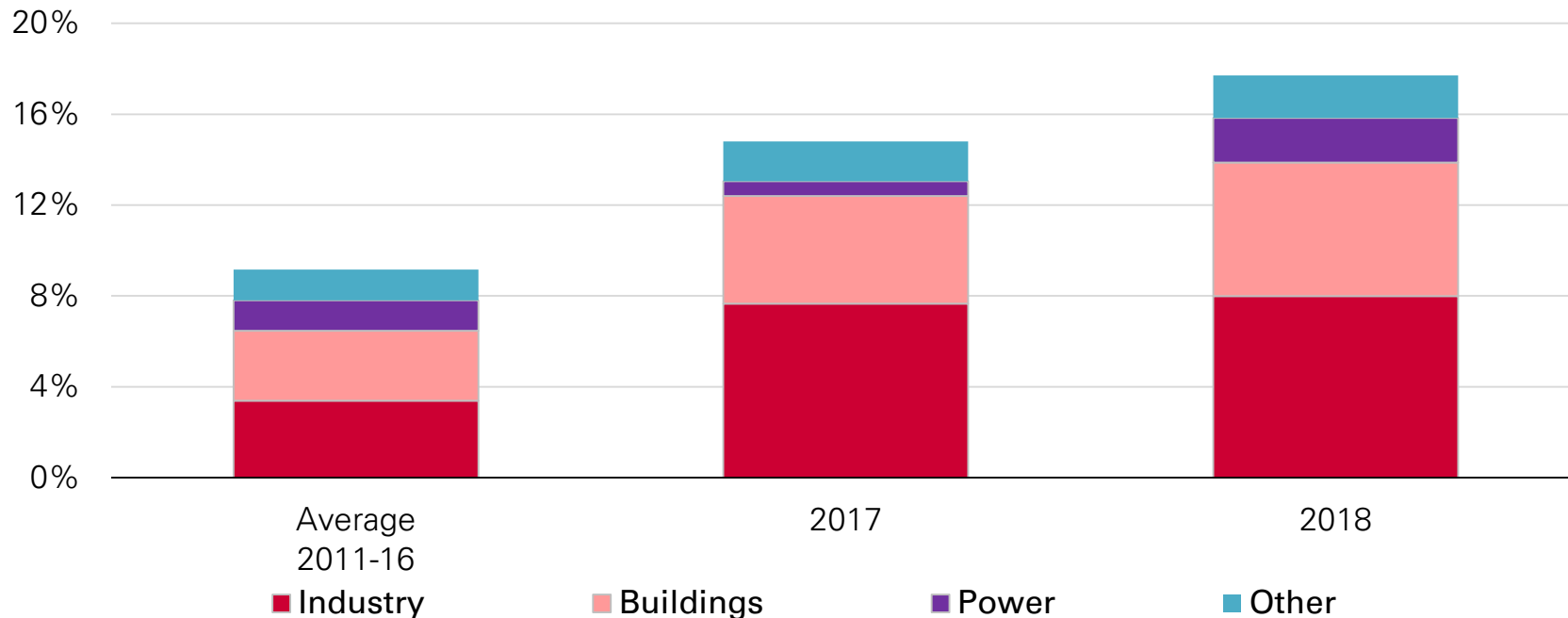
Annual change



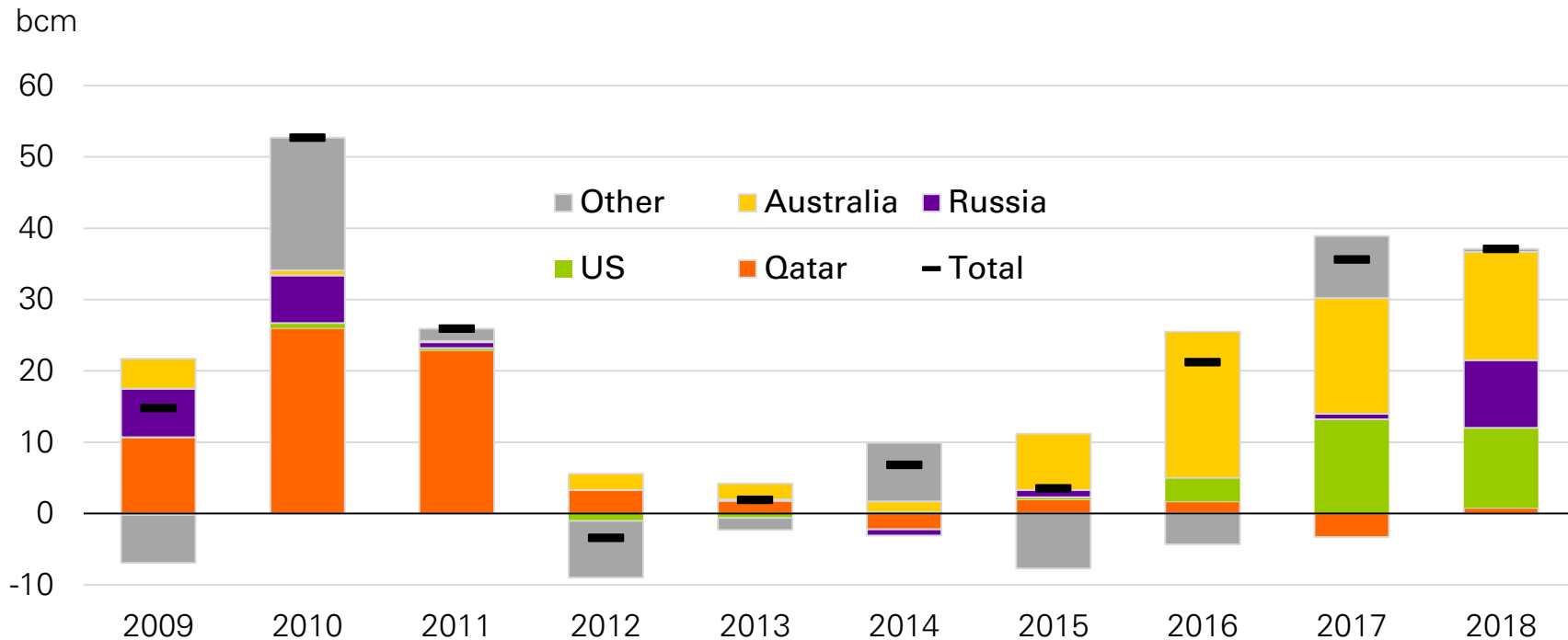
Growth in Chinese gas consumption



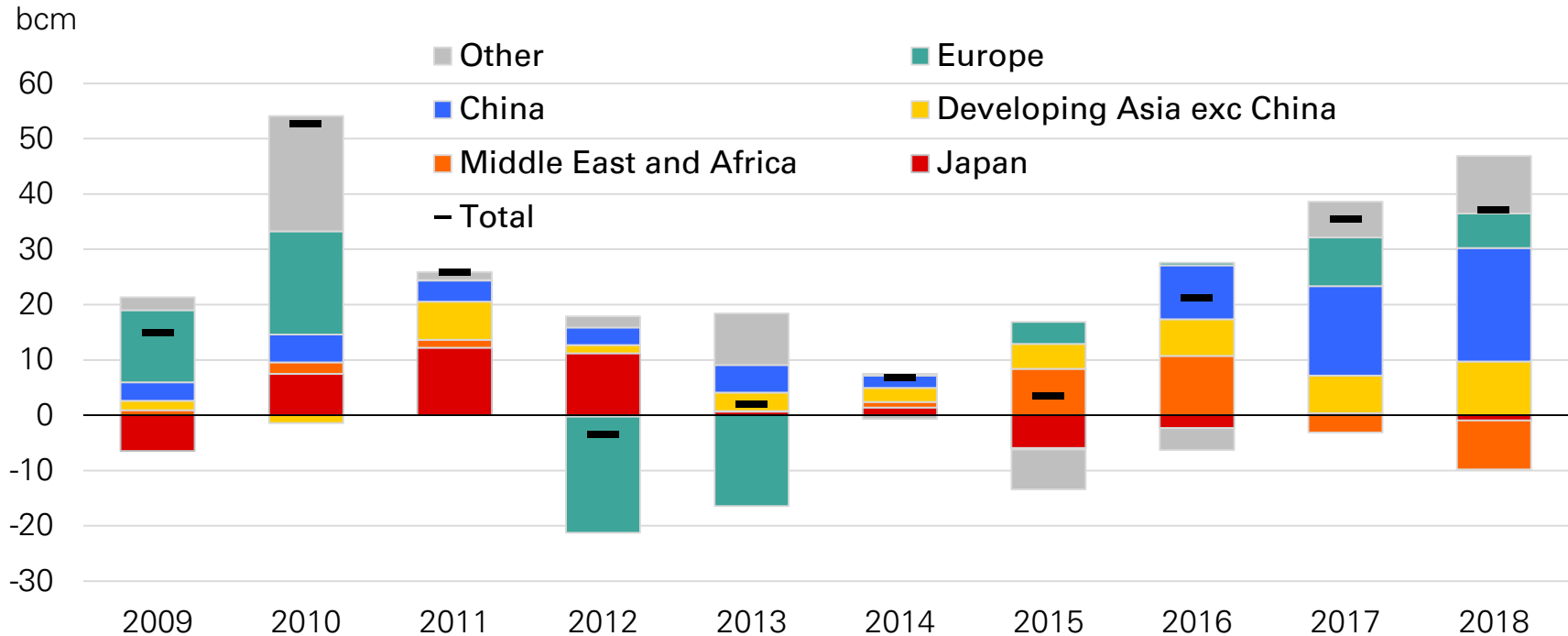
Annual change



Annual increase in LNG exports

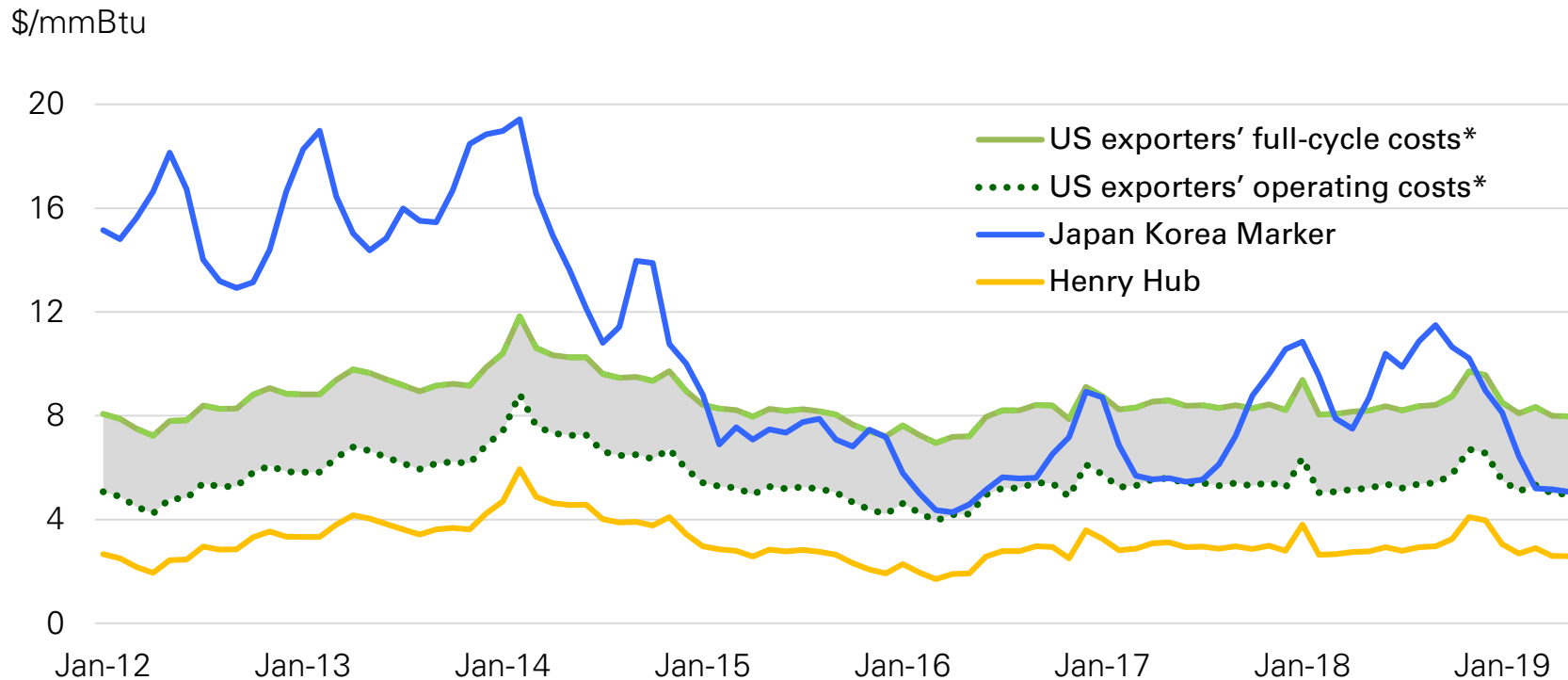


Annual increase in LNG imports





US LNG exporters' costs & Asian spot prices



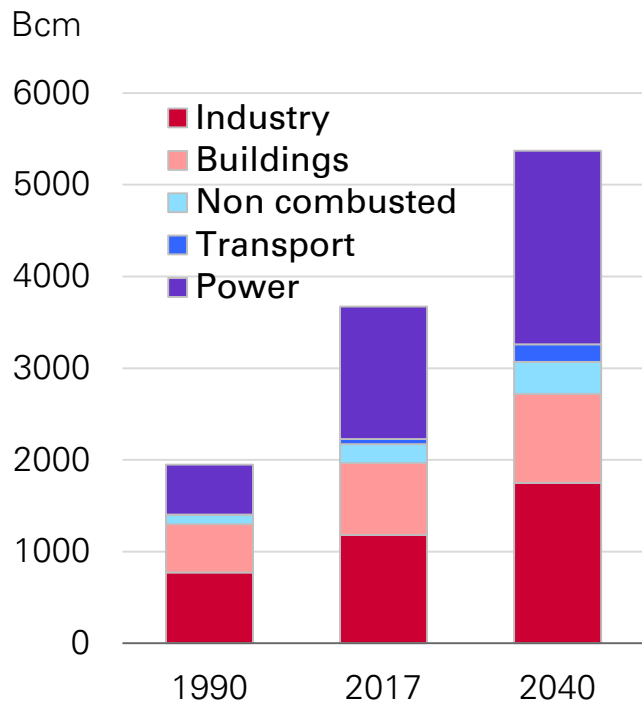
* Operating costs = 1.15* Henry Hub + \$2/mmBtu (transport) ; Full costs also include liquefaction fee (\$3/mmBtu)



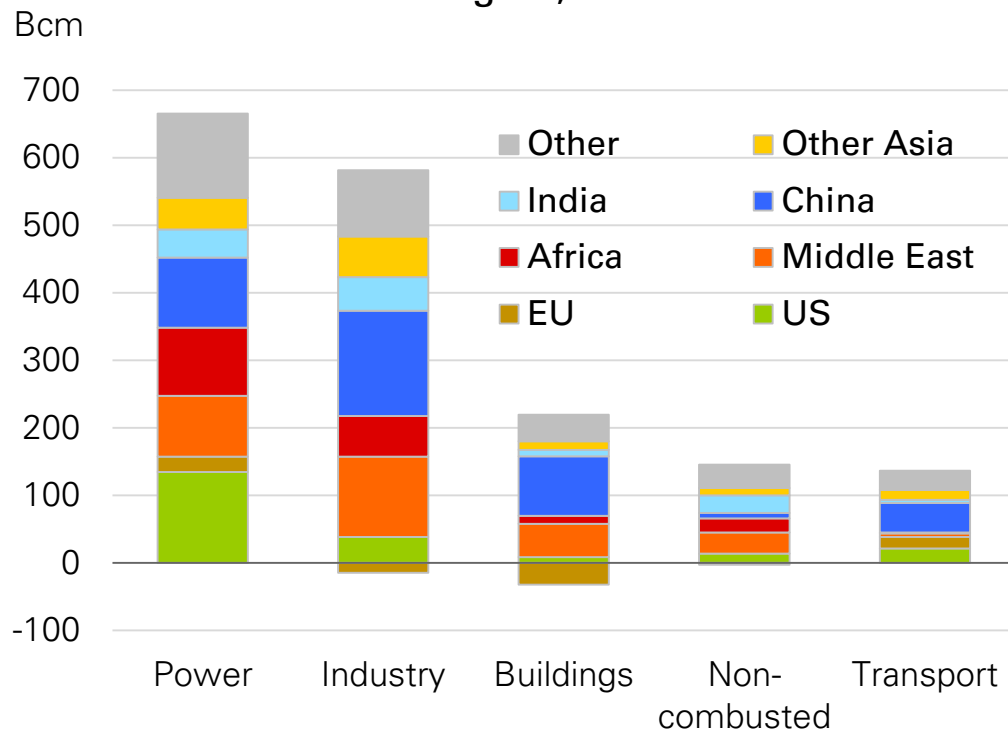
Natural gas: longer-term outlook

Growth in natural gas by sector

Gas consumption: By sector



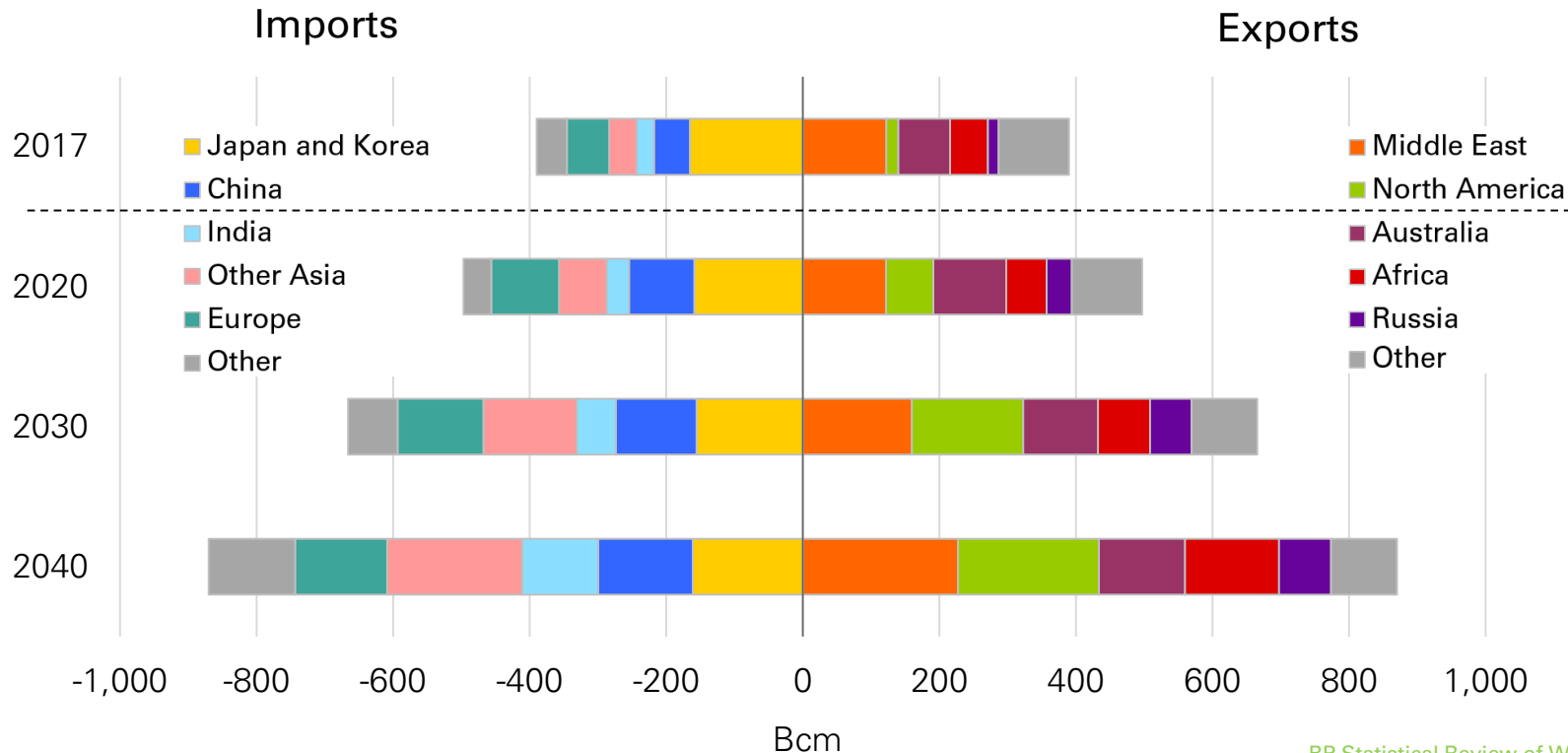
Gas consumption: Growth by sector and region, 2017-2040



Outlook for LNG



LNG imports and exports



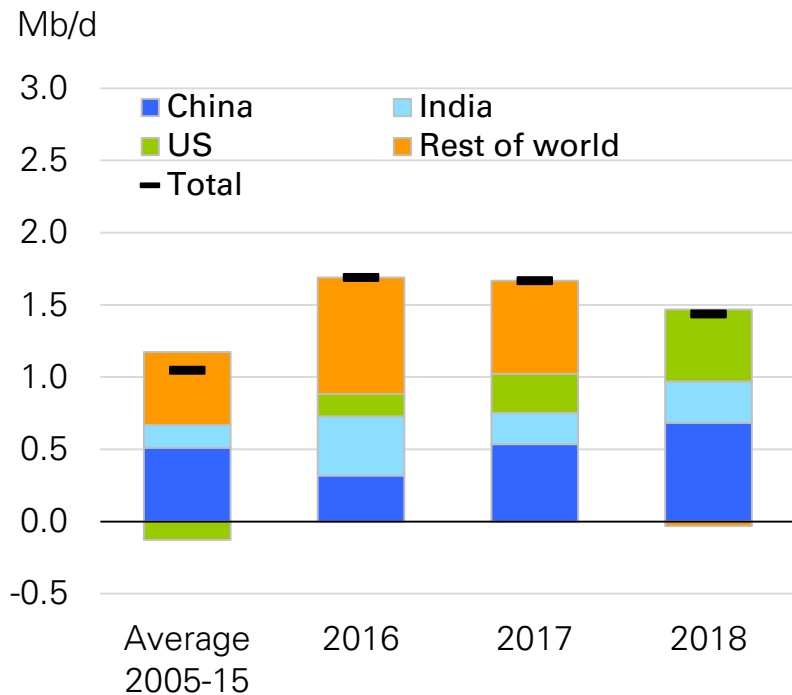


Oil

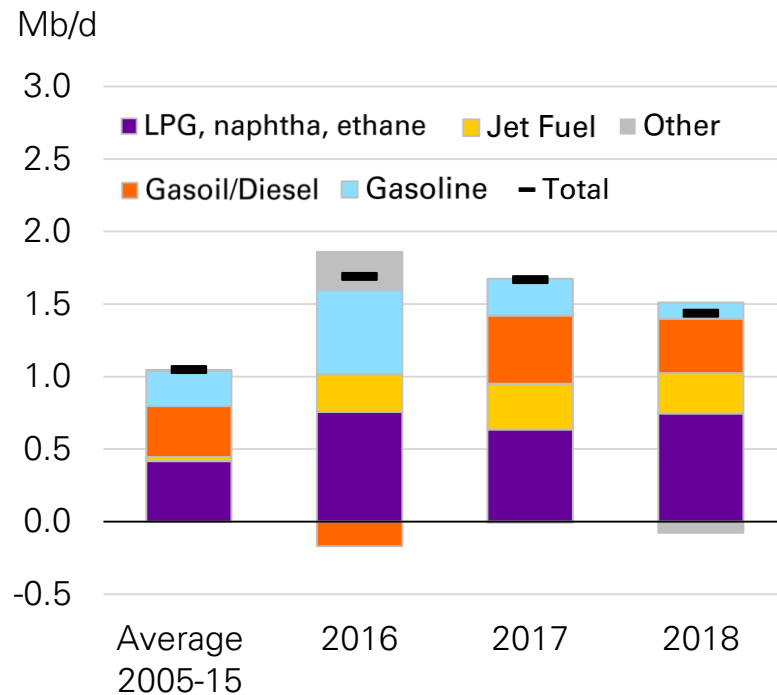
Oil demand



Demand growth by region



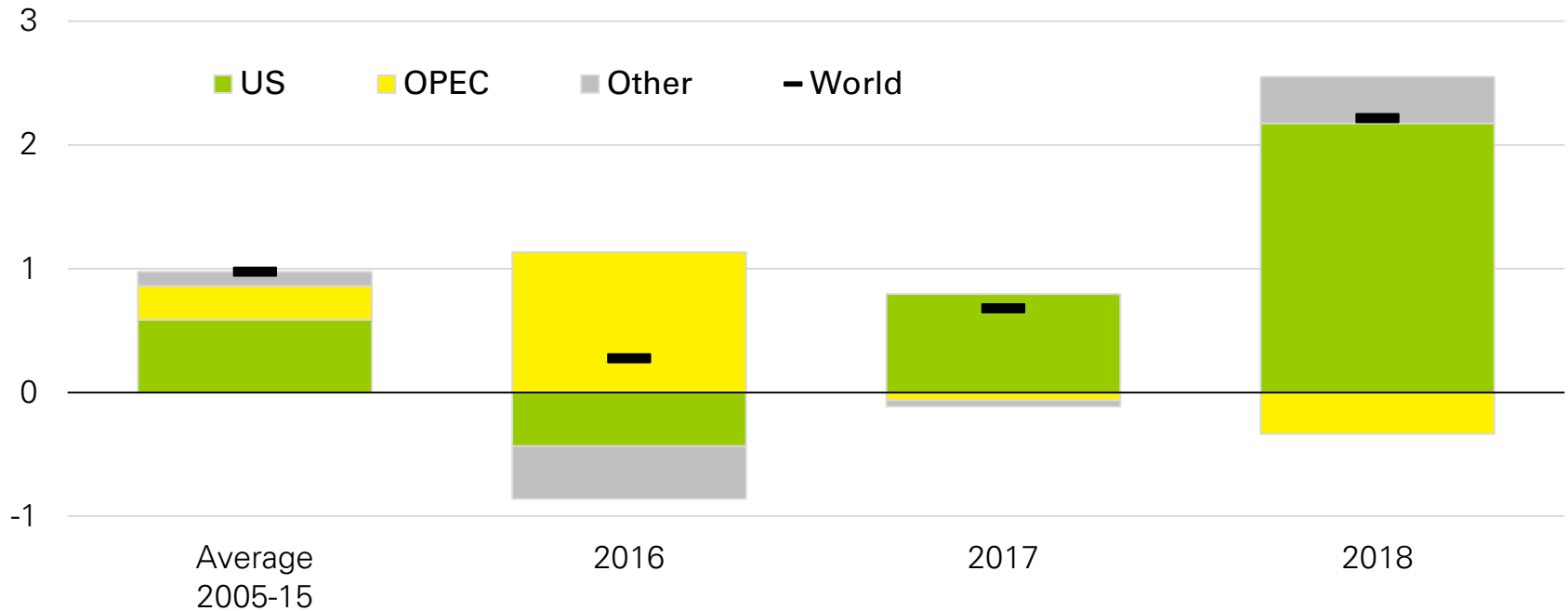
Demand growth by product



Oil production



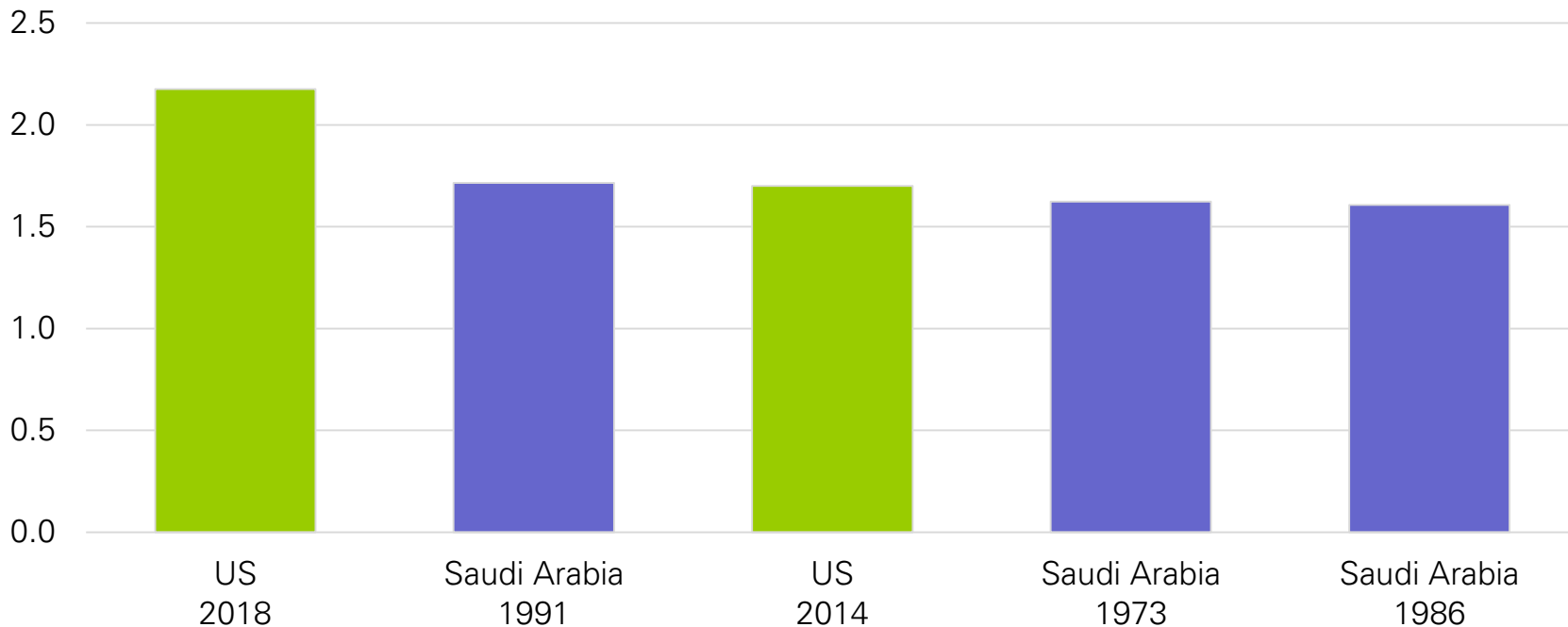
Annual growth, Mb/d





Largest annual increases in oil production

Annual growth, Mb/d



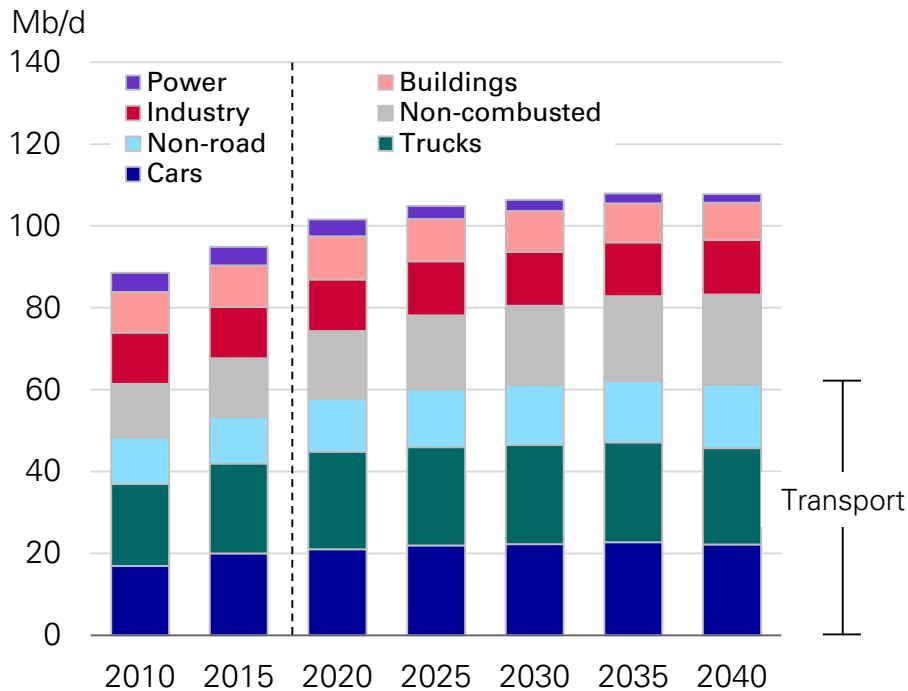


Oil: longer-term outlook

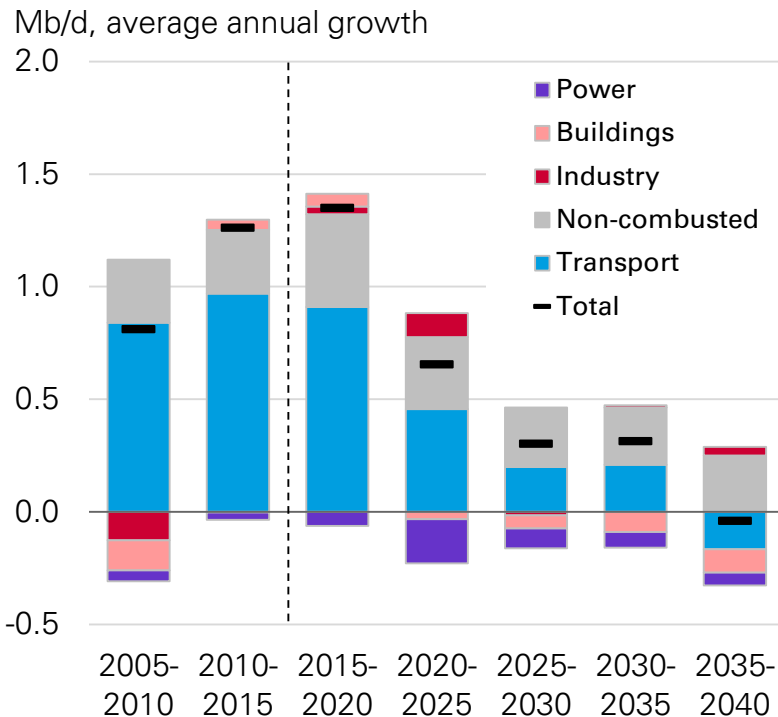


Demand for oil and other liquid fuels

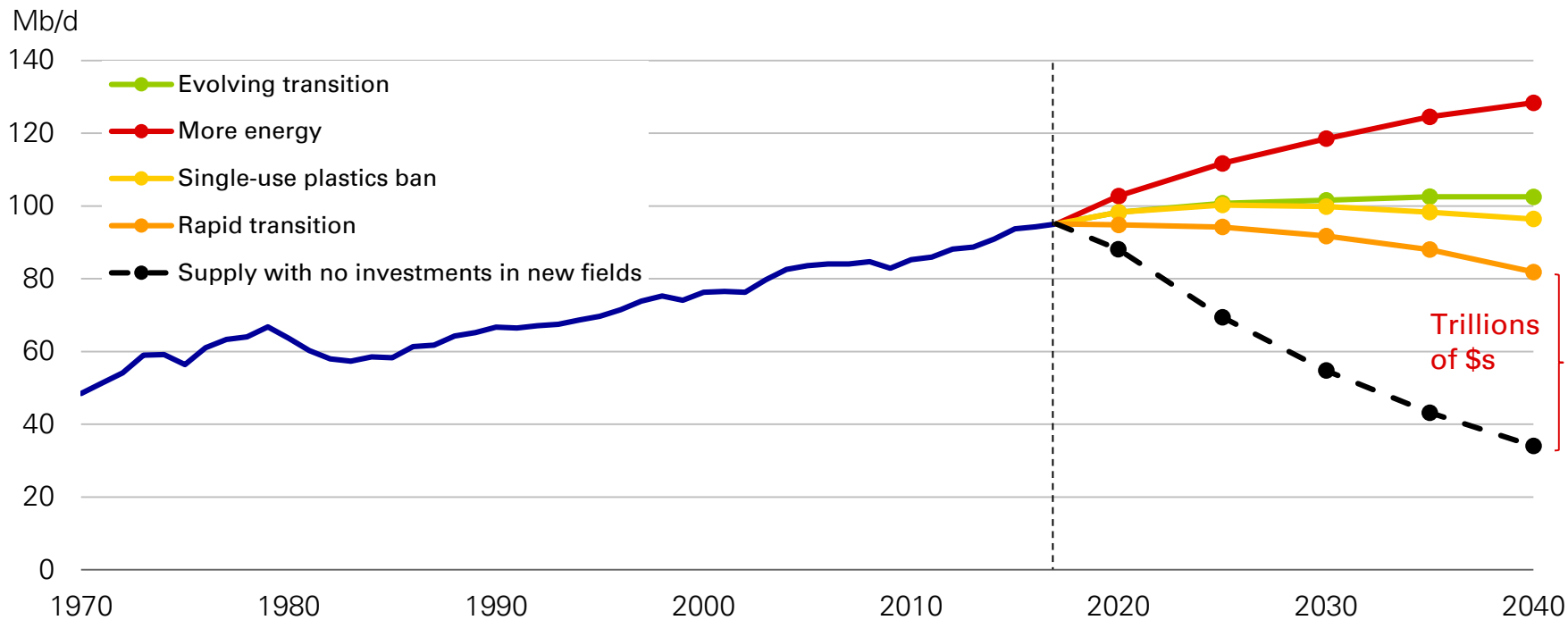
Liquids demand



Liquids demand growth



Demand and supply of oil

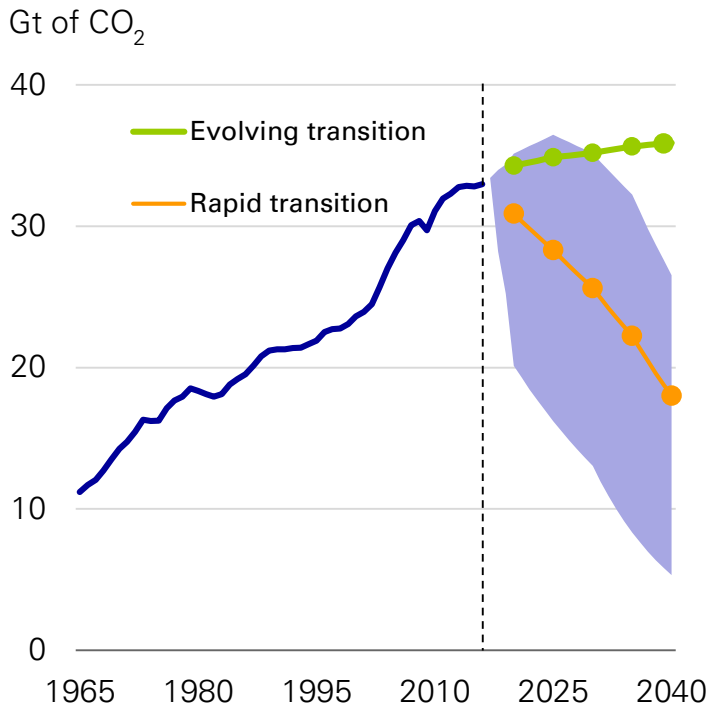




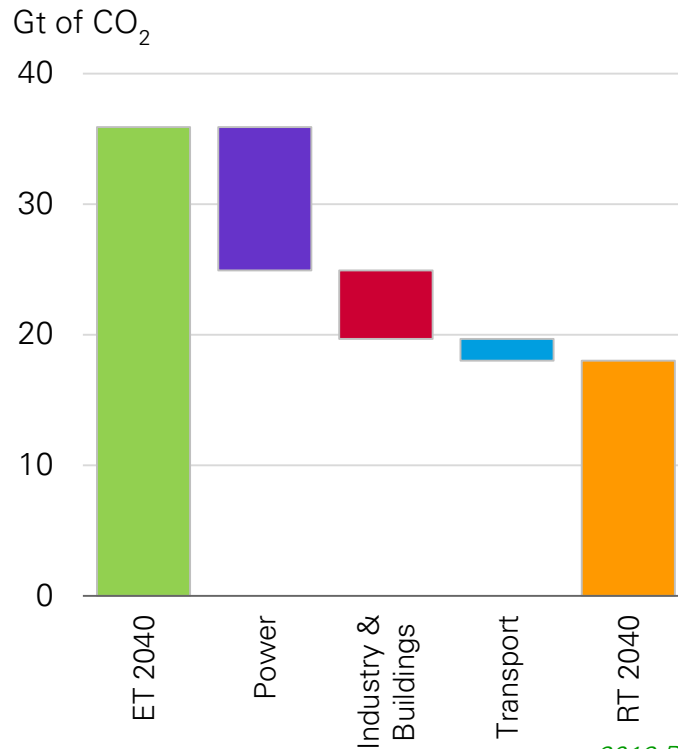
CO₂ emissions

CO₂ emissions

CO₂ emissions



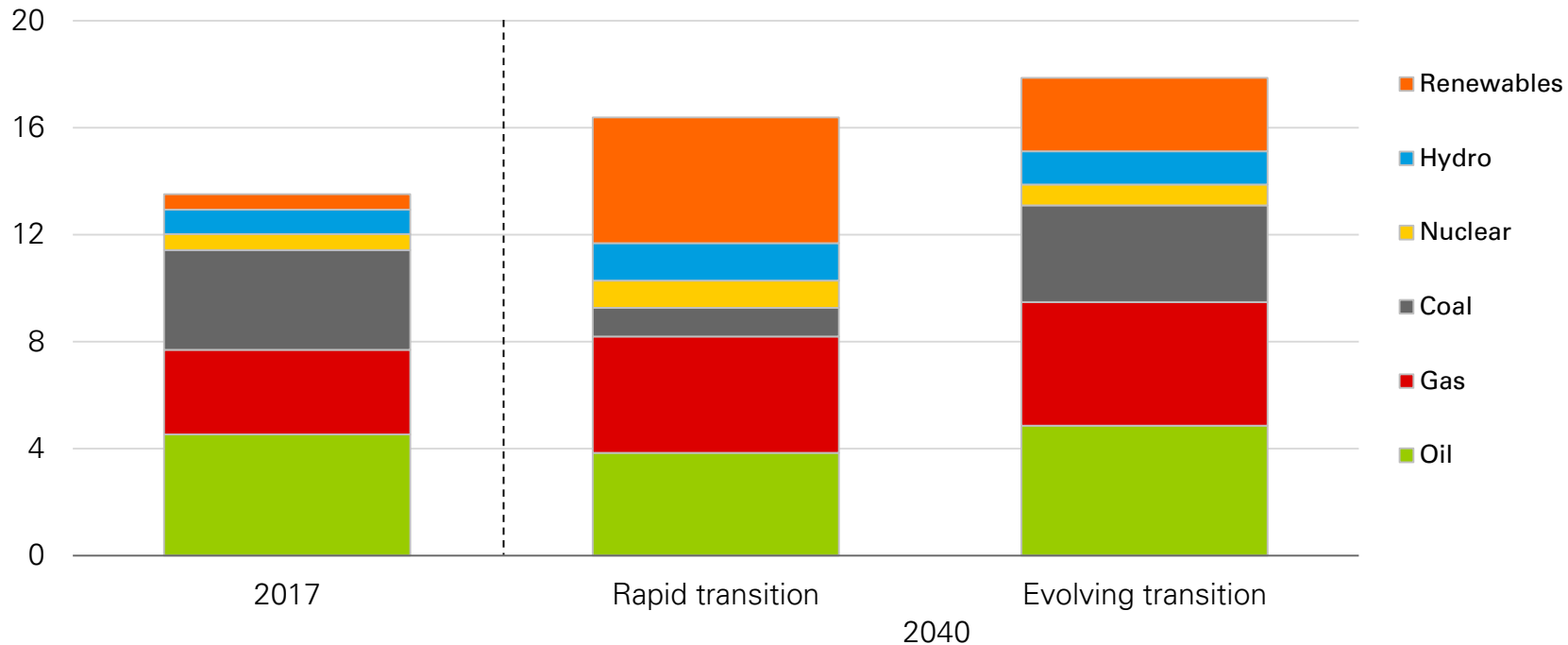
CO₂ in 2040: ET vs RT scenario

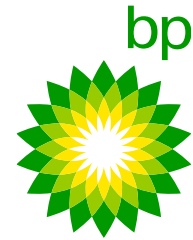


Global energy demand and fuel mix

Primary energy consumption by fuel

Billion toe





Global Energy Trends
BP Stats Review and
Energy Outlook 2019

Spencer Dale
Group chief economist