



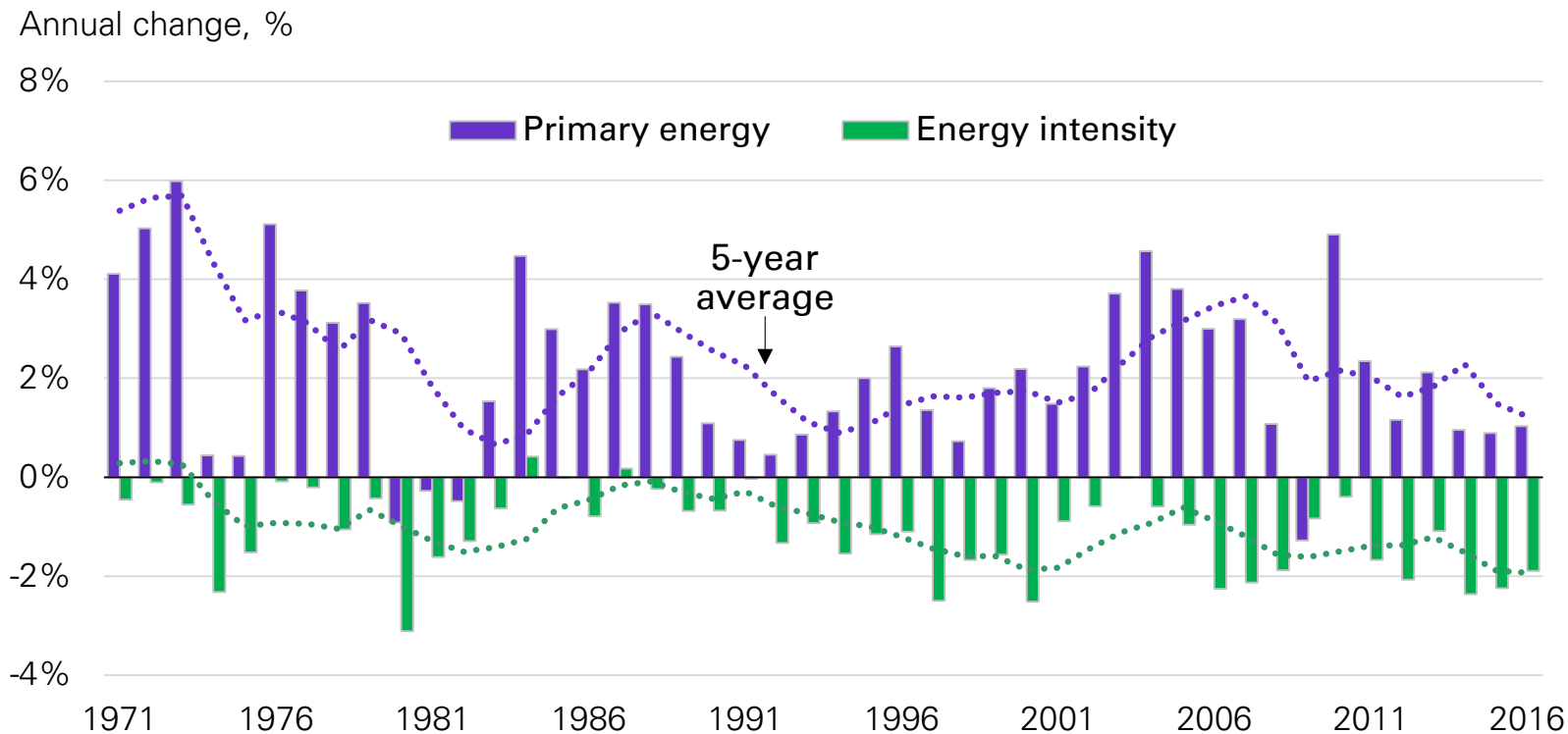
BP Statistical Review of World Energy

June 2017

Energy in 2016: short-run adjustments and long-run transition

Mark Finley

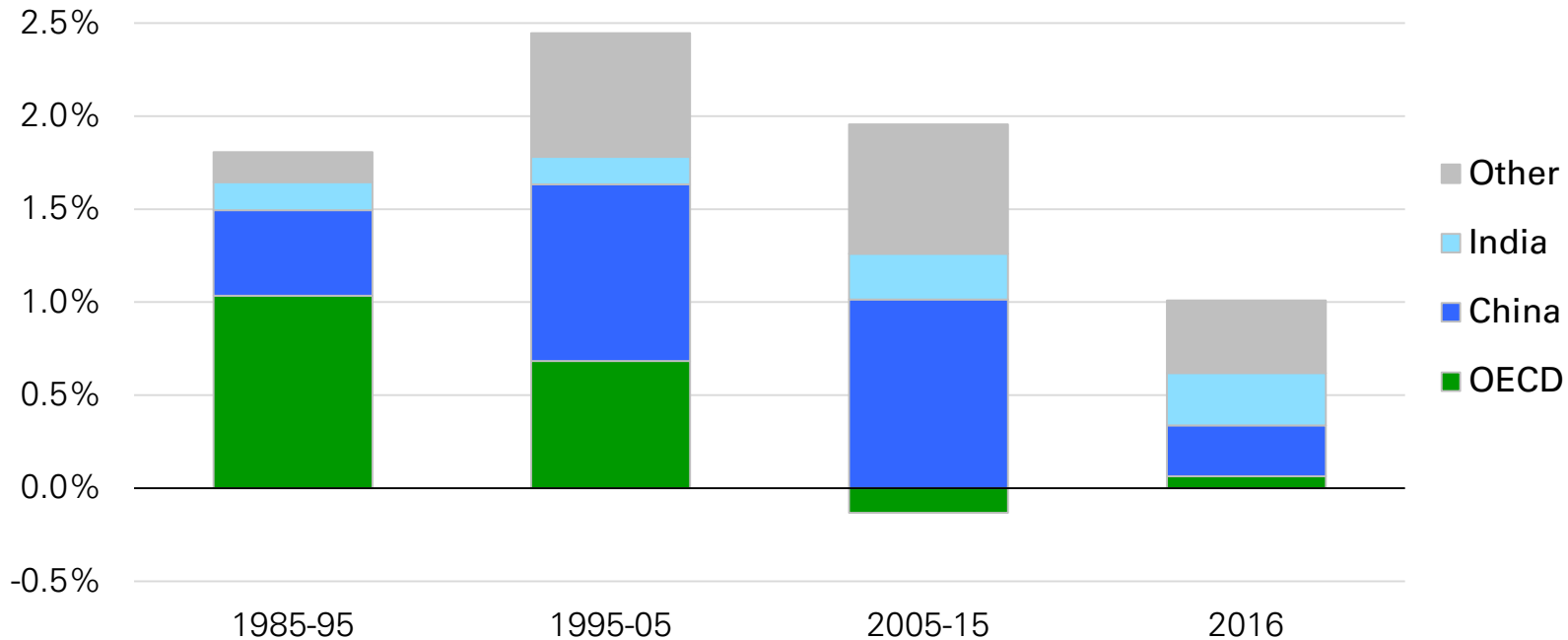
Primary energy and energy intensity



Energy consumption growth



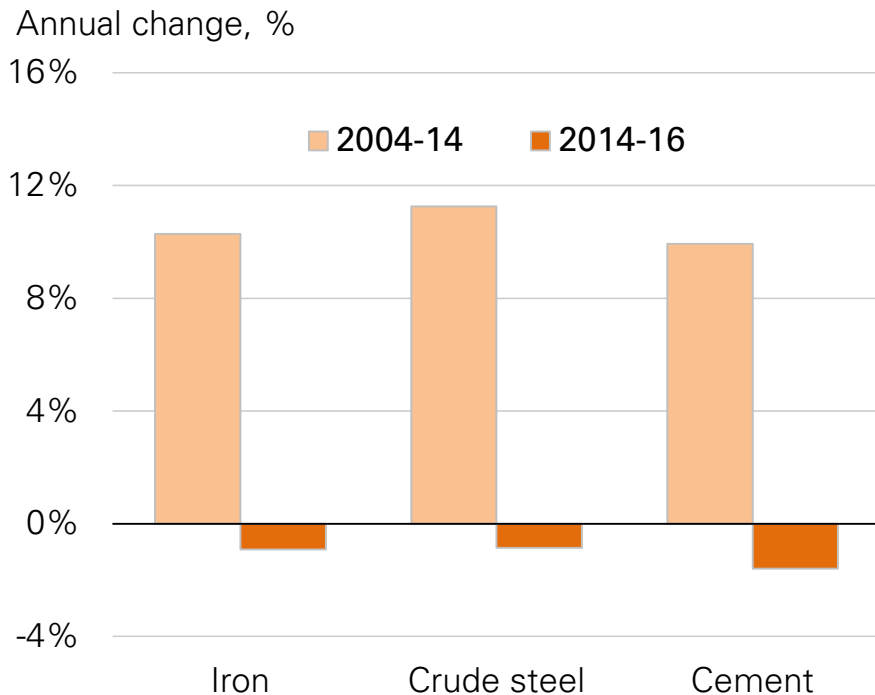
Contributions to annual growth, %



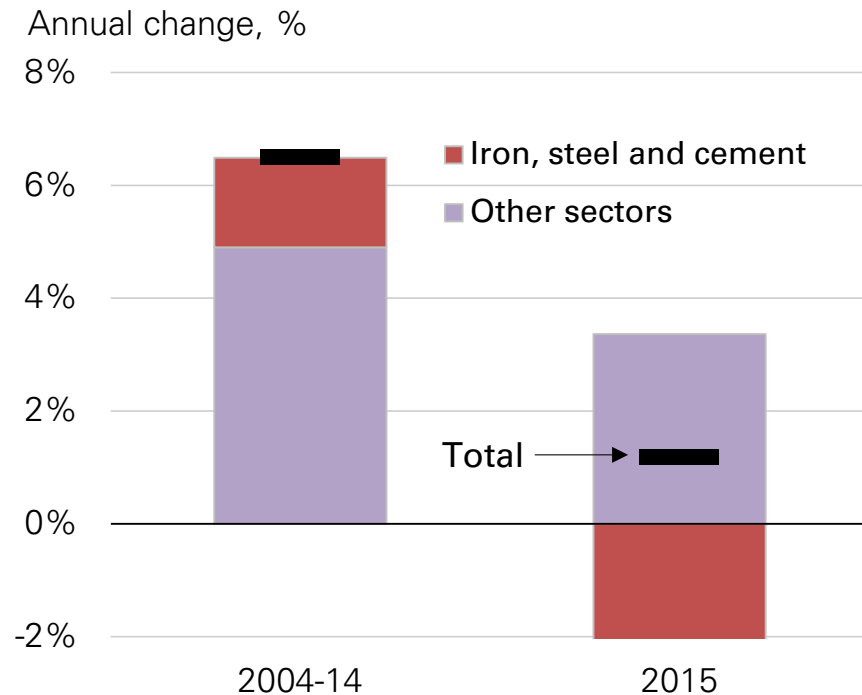


China industrial output and energy demand

Outputs of iron, steel and cement



Contributions to energy demand growth

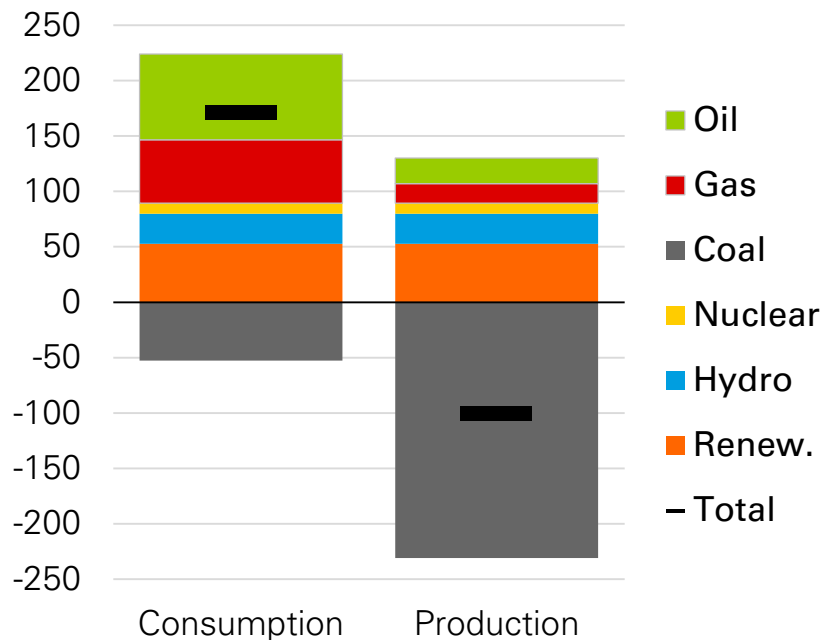




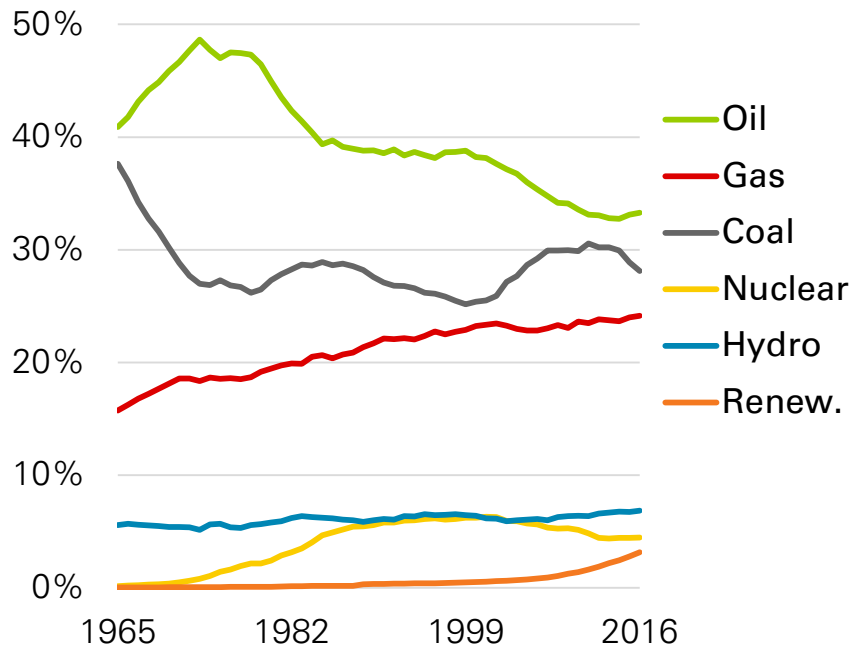
Fuel mix: growth and shares in primary energy

Growth by fuel

Annual change, Mtoe



Shares of primary energy consumption





Oil

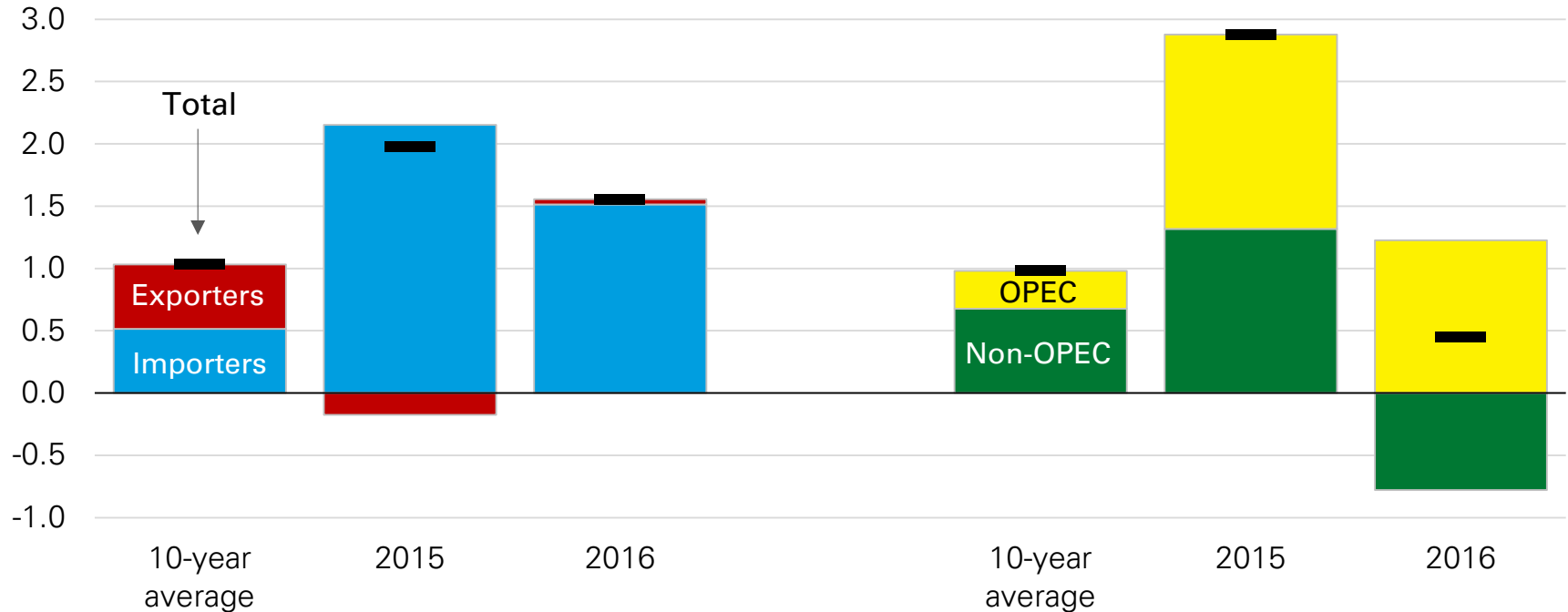
Oil market in 2015 and 2016



Consumption

Production

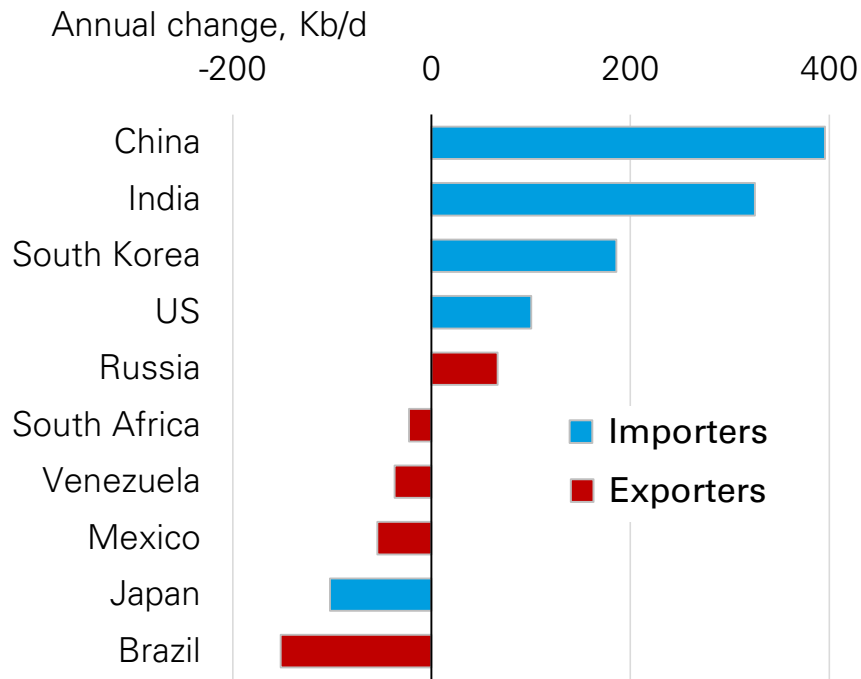
Annual change, Mb/d



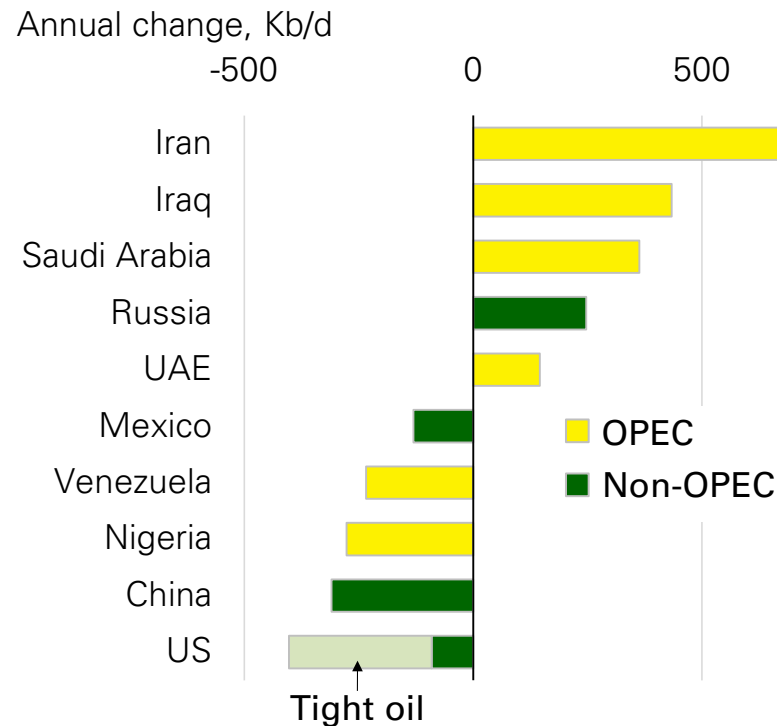
Largest changes to oil demand and supply



Oil consumption



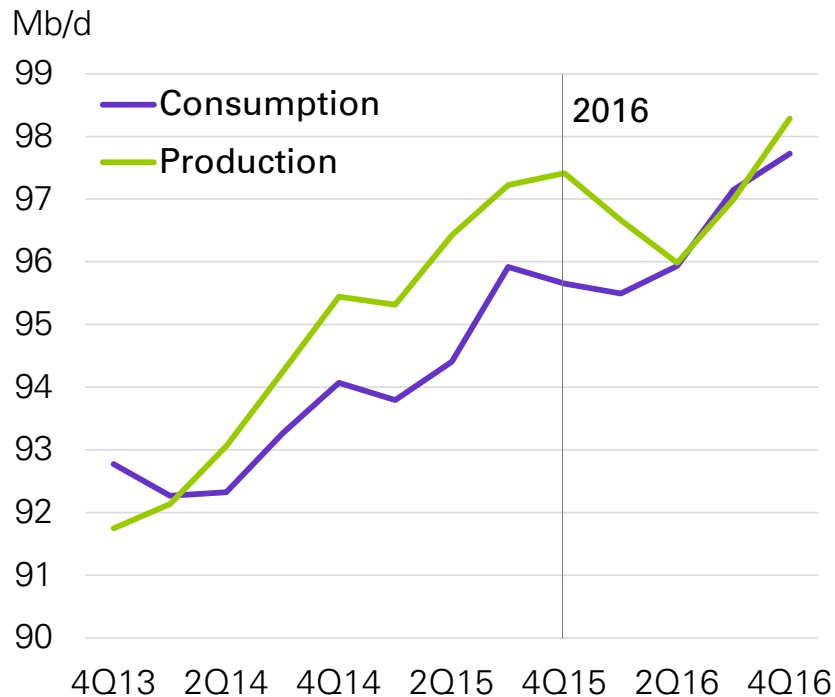
Oil production



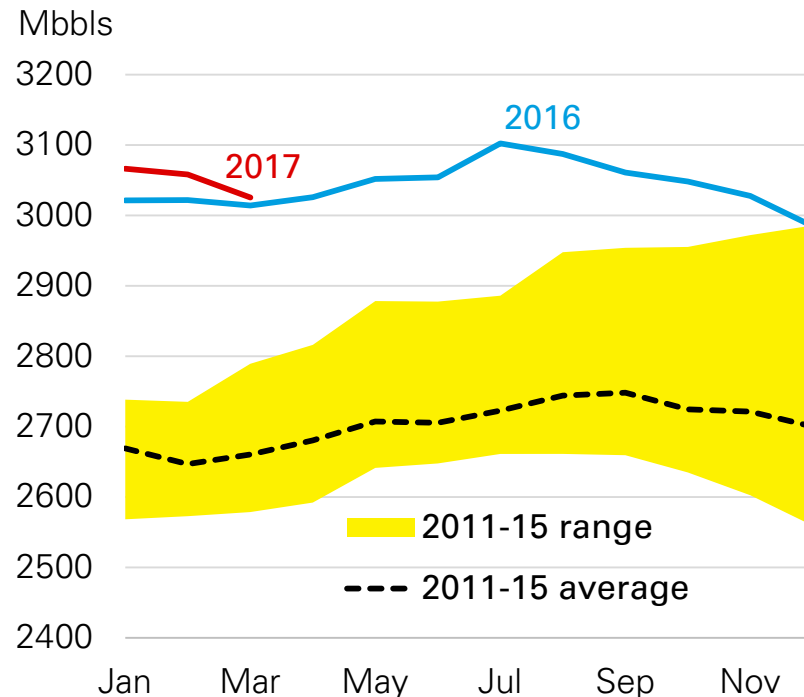
Oil market: balance and inventories



Oil production and consumption



OECD commercial inventories





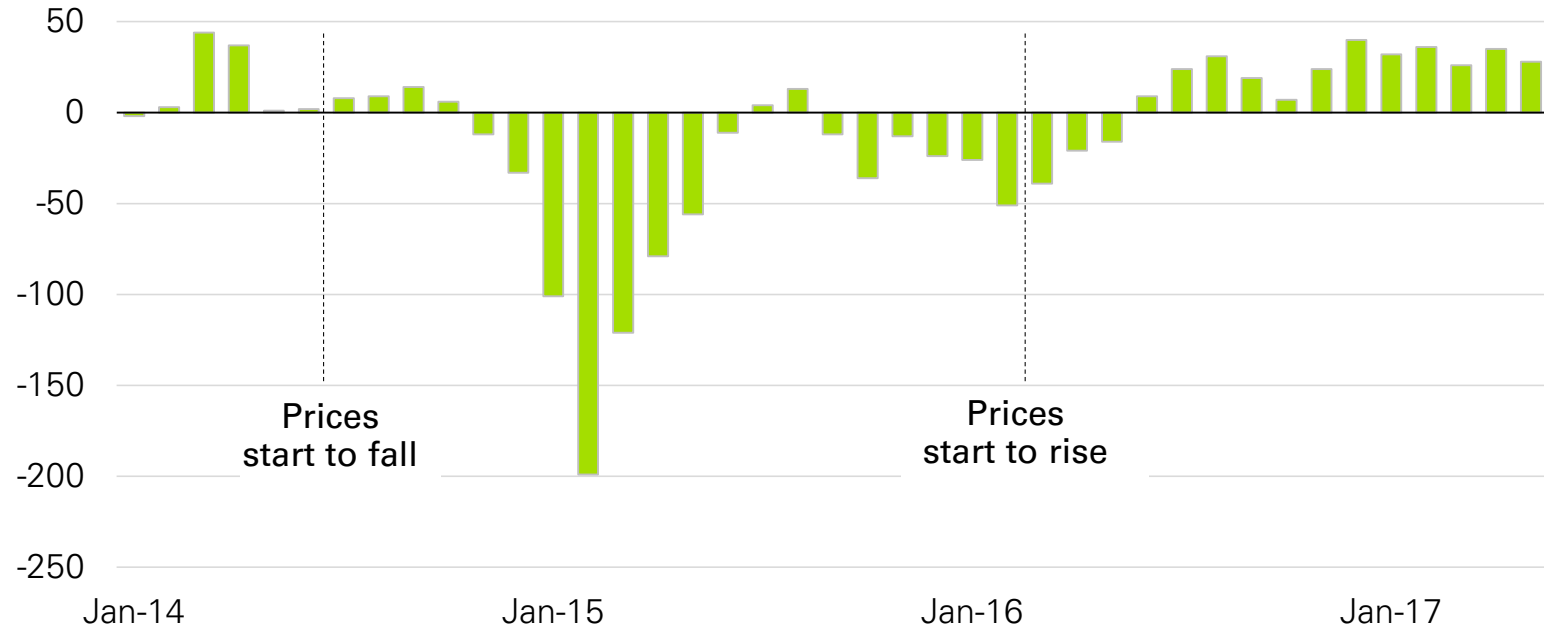
US Tight Oil

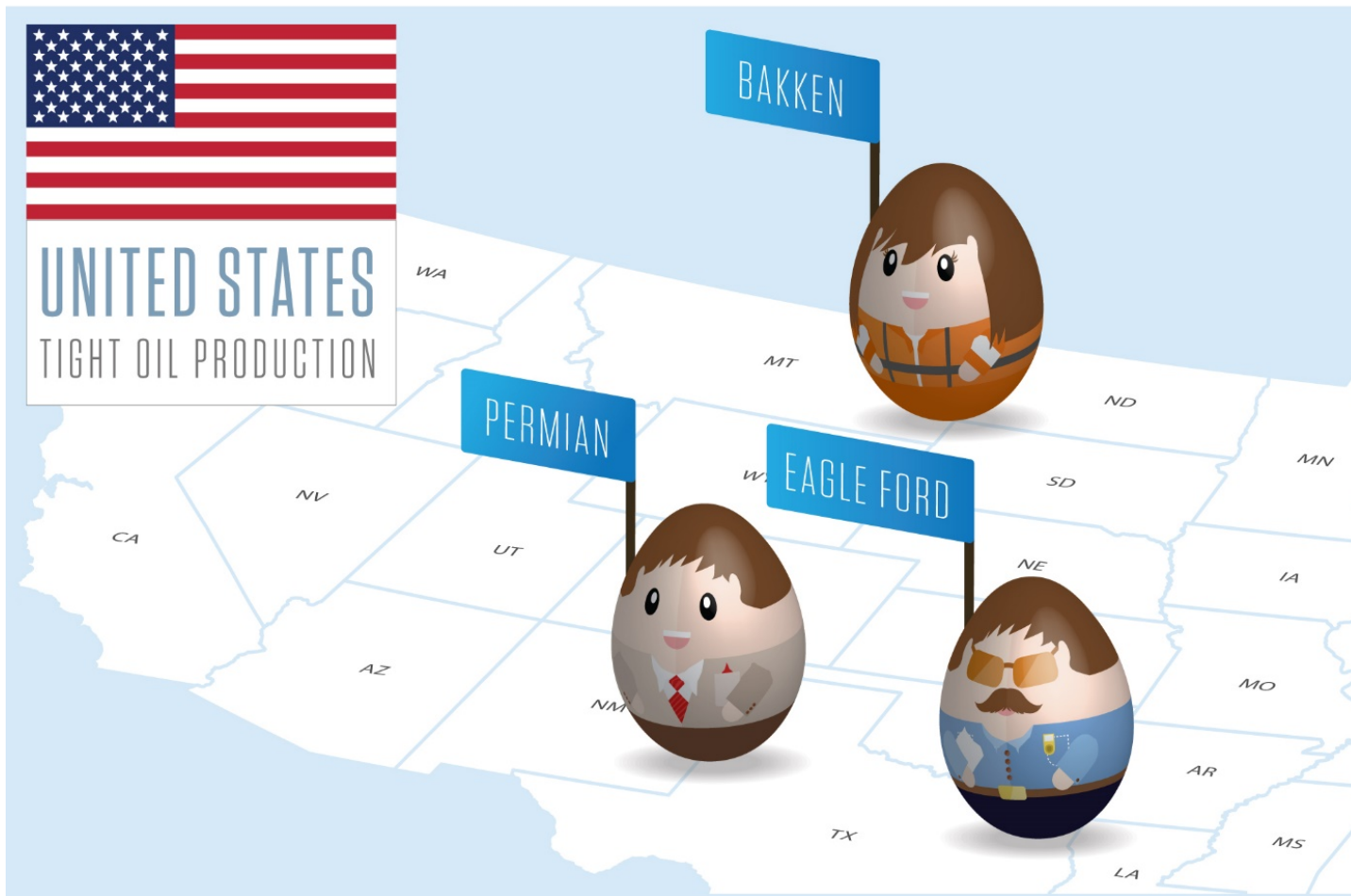
US tight oil rigs



Change in US tight oil rig count

Monthly change in rig count







OPEC



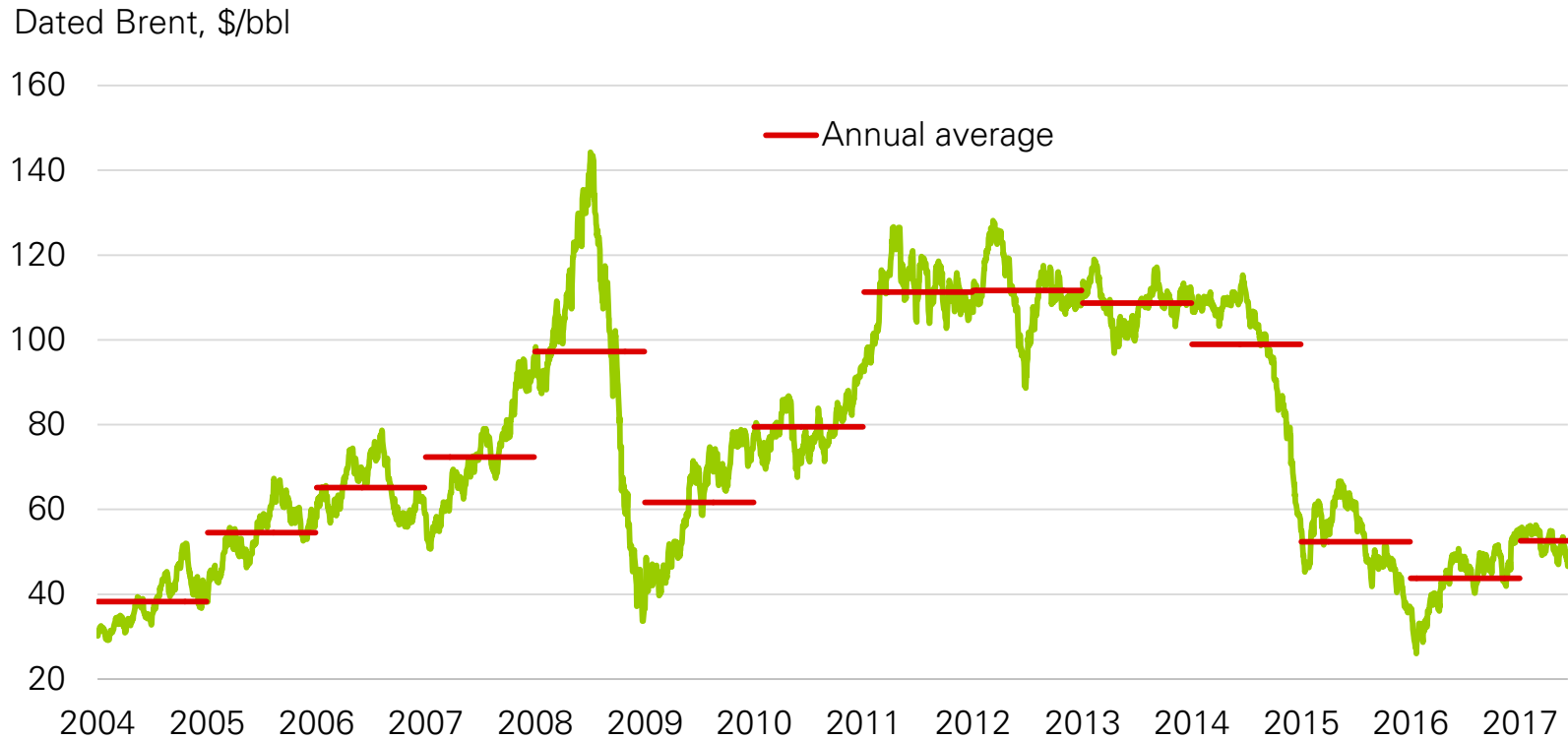
“OPEC remains an important catalyst to the stability and sustainability of the market... but history has also demonstrated that intervention in response to structural shifts is largely ineffective... that’s why Saudi Arabia does not support OPEC intervening to alleviate the impacts of long-term structural imbalances, as opposed to addressing short-term aberrations....”

HE Khalid Al-Falih

Minister of Energy, Industry and Mineral Resources, Saudi Arabia

CERAWeek, March 2017

Oil prices



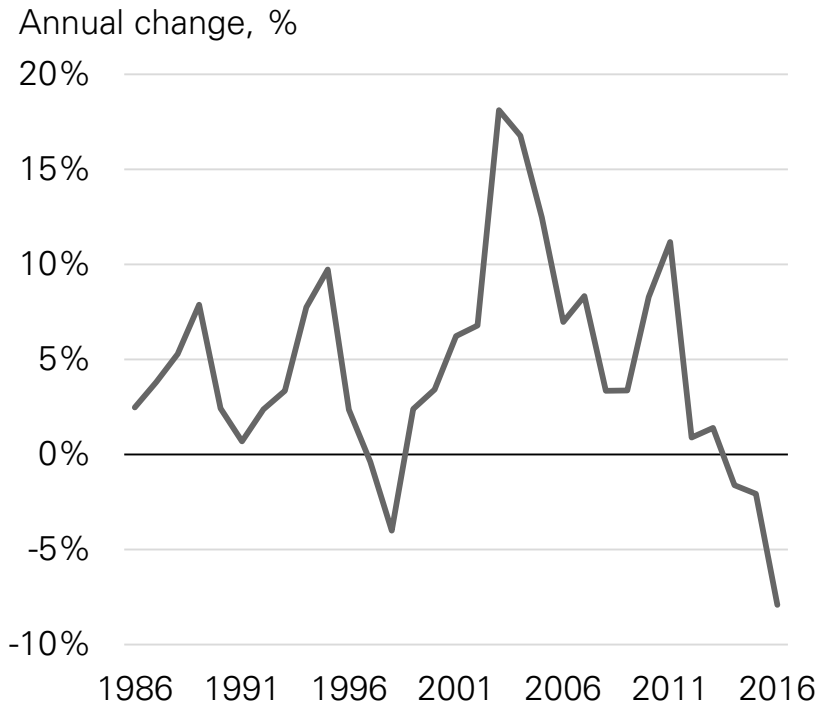


Coal

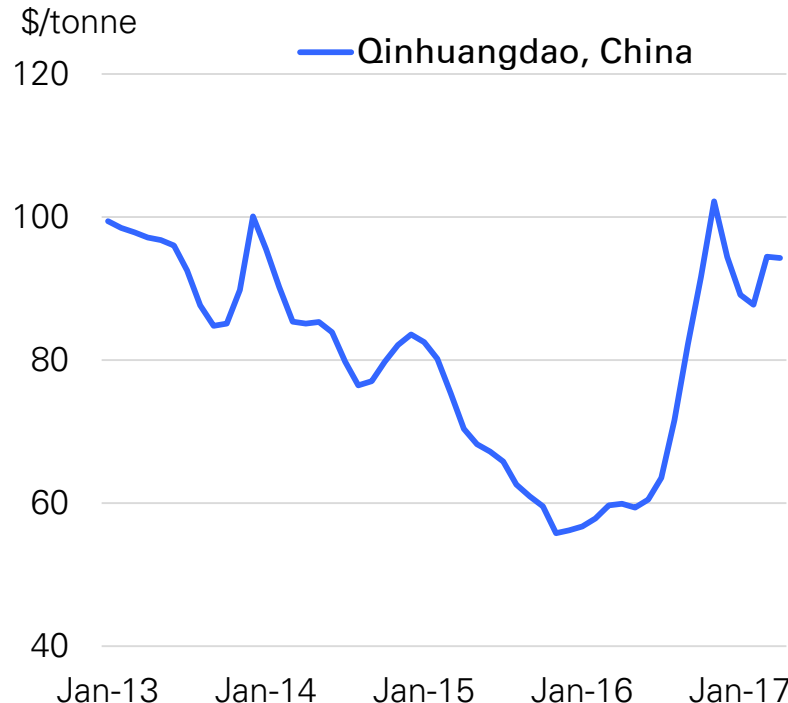
Chinese coal production and prices



Coal production growth



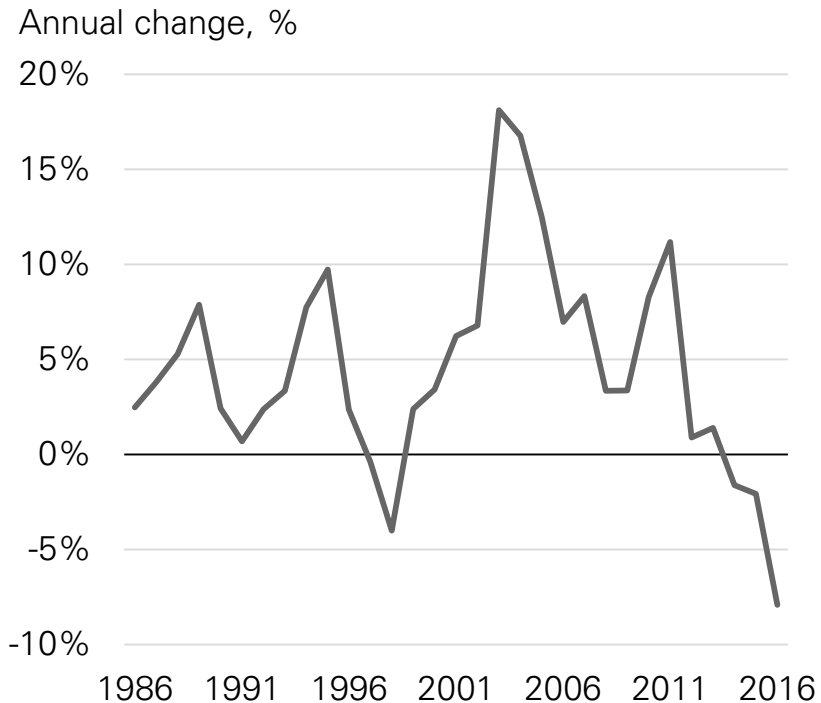
Steam coal prices



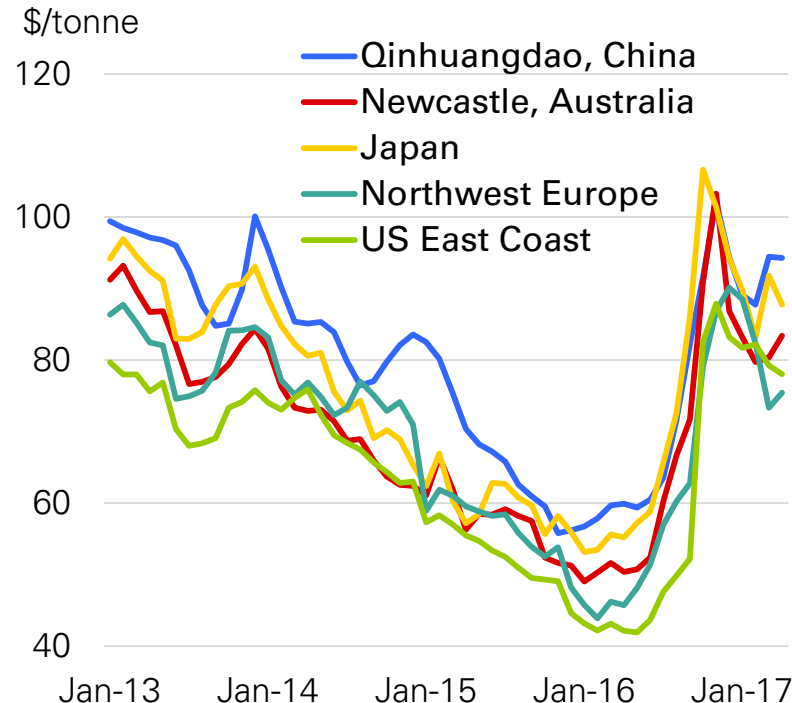
Chinese coal production and global prices



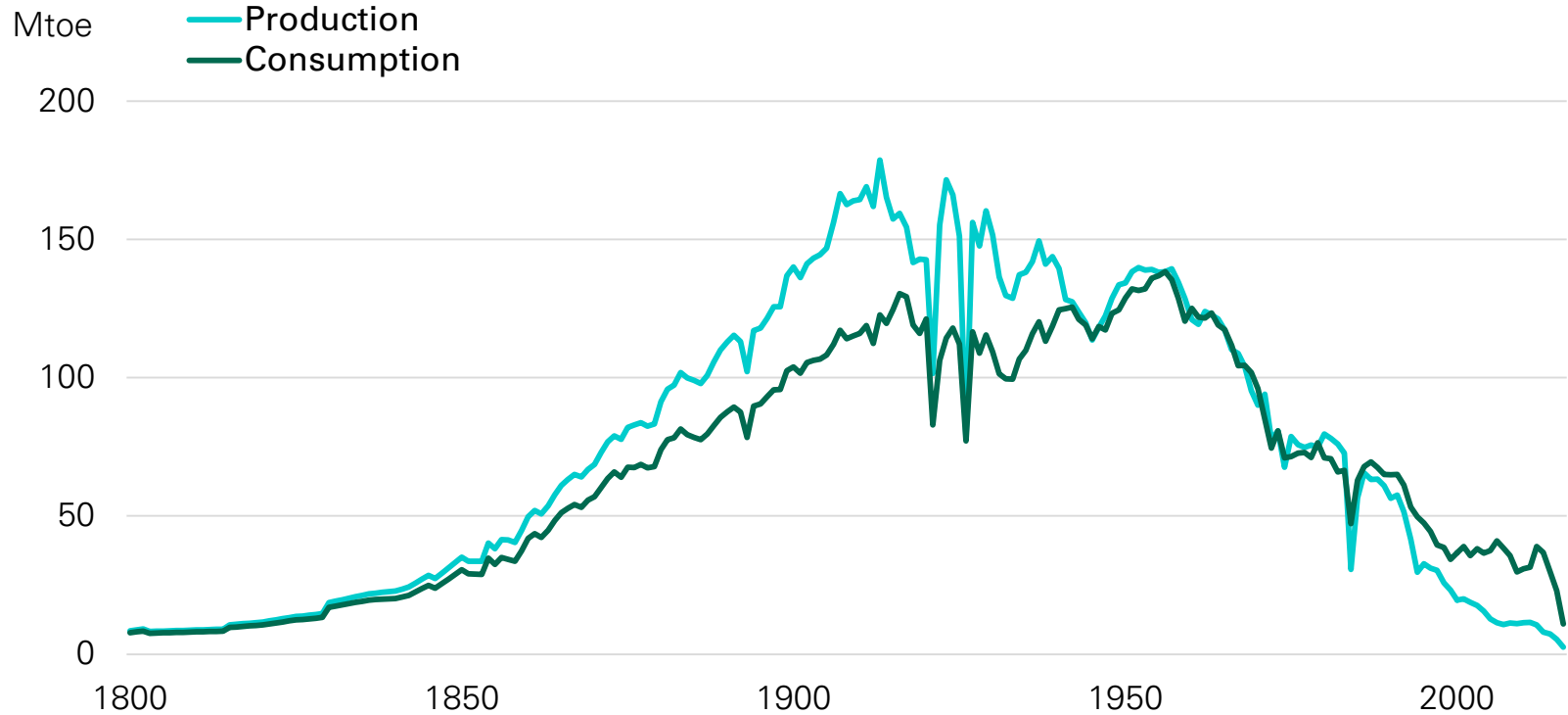
Coal production growth



Steam coal prices



UK coal



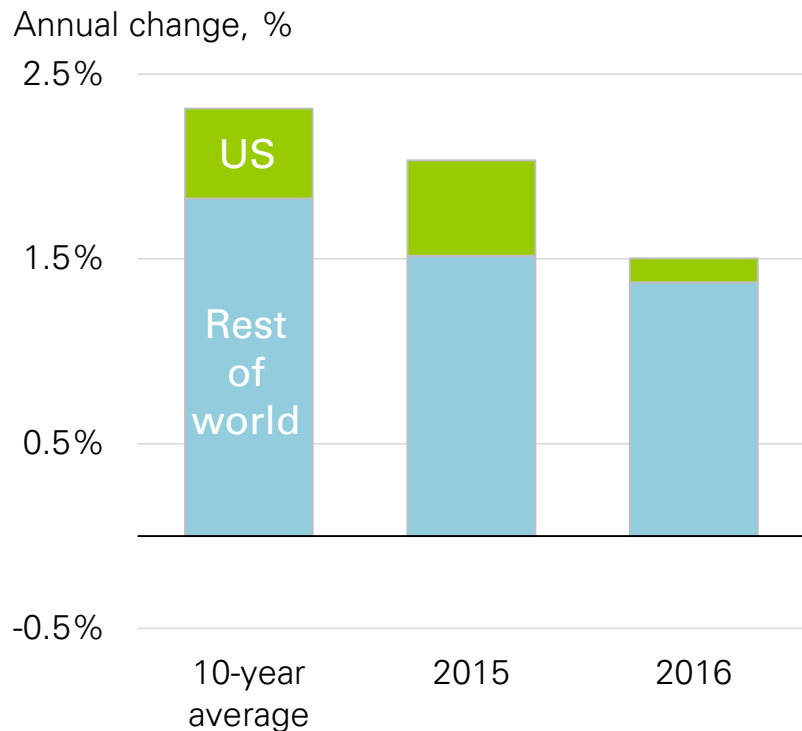


Natural gas

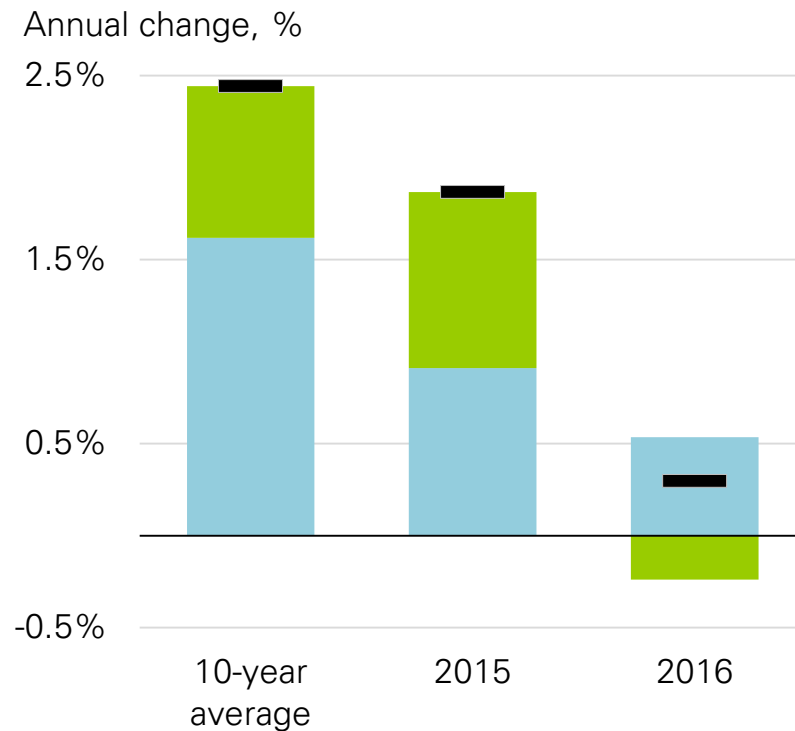


Growth in natural gas demand and supply

Gas consumption



Gas production

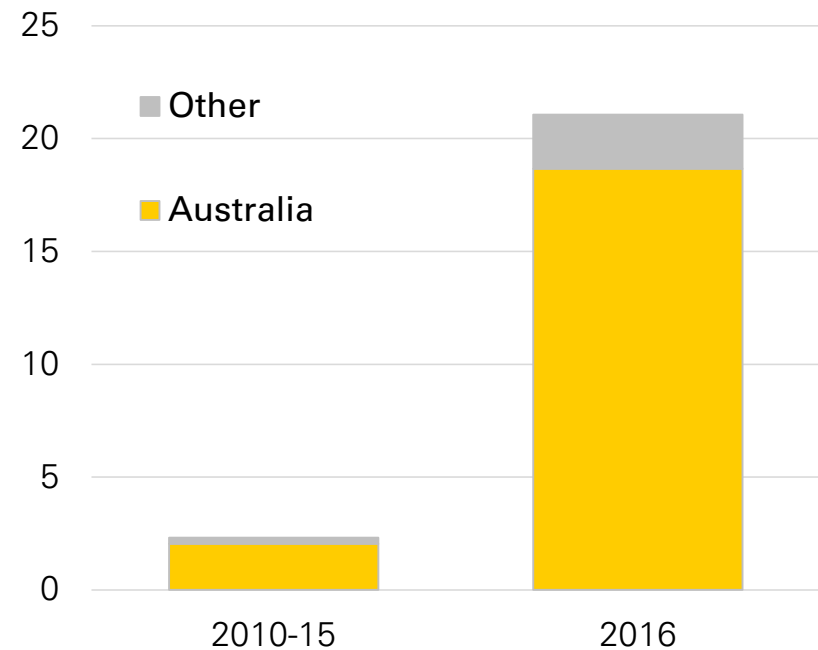


LNG trade



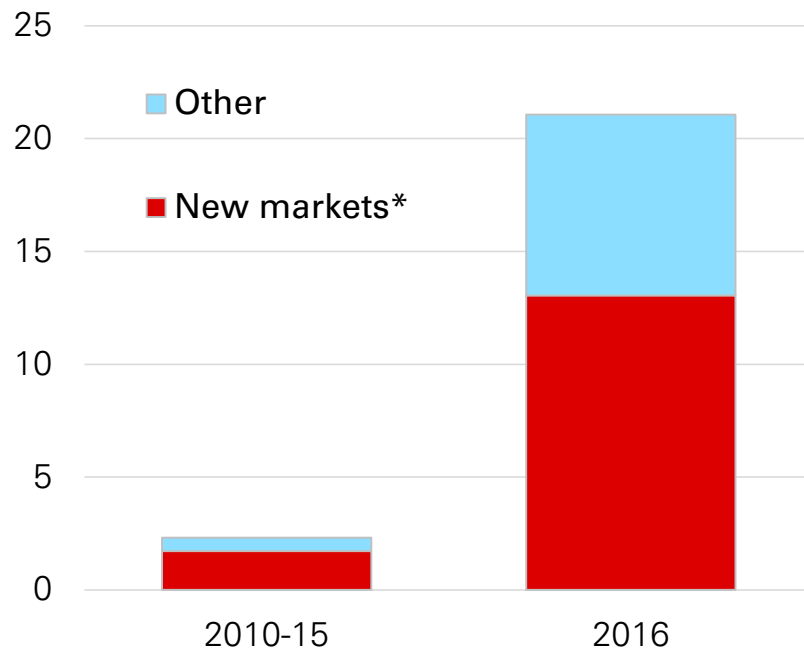
Exports

Annual change, Bcm



Imports

Annual change, Bcm

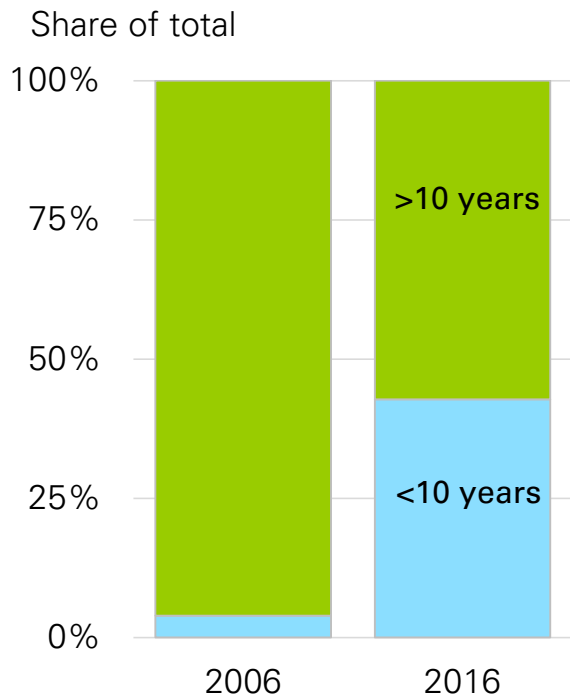


* Includes Egypt, Pakistan, Poland, Jordan, Jamaica, Colombia and Lithuania

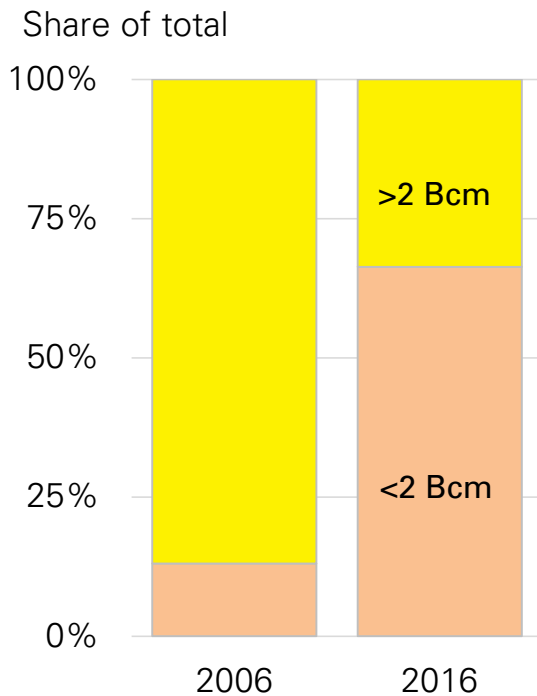
LNG market characteristics



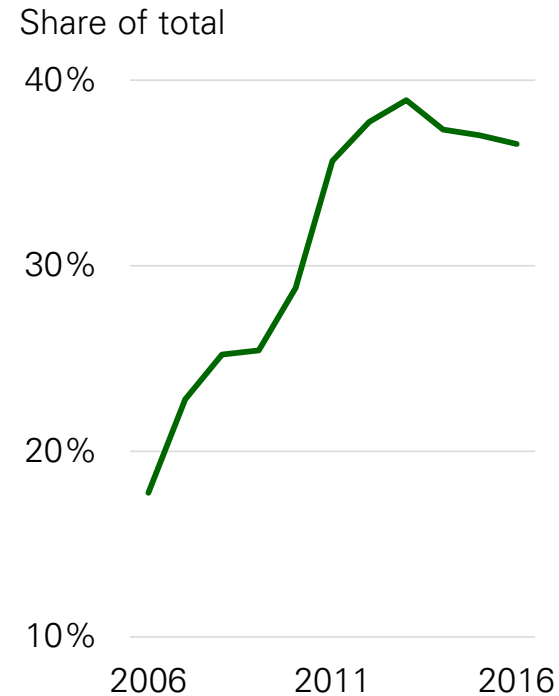
Contract length



Contract size

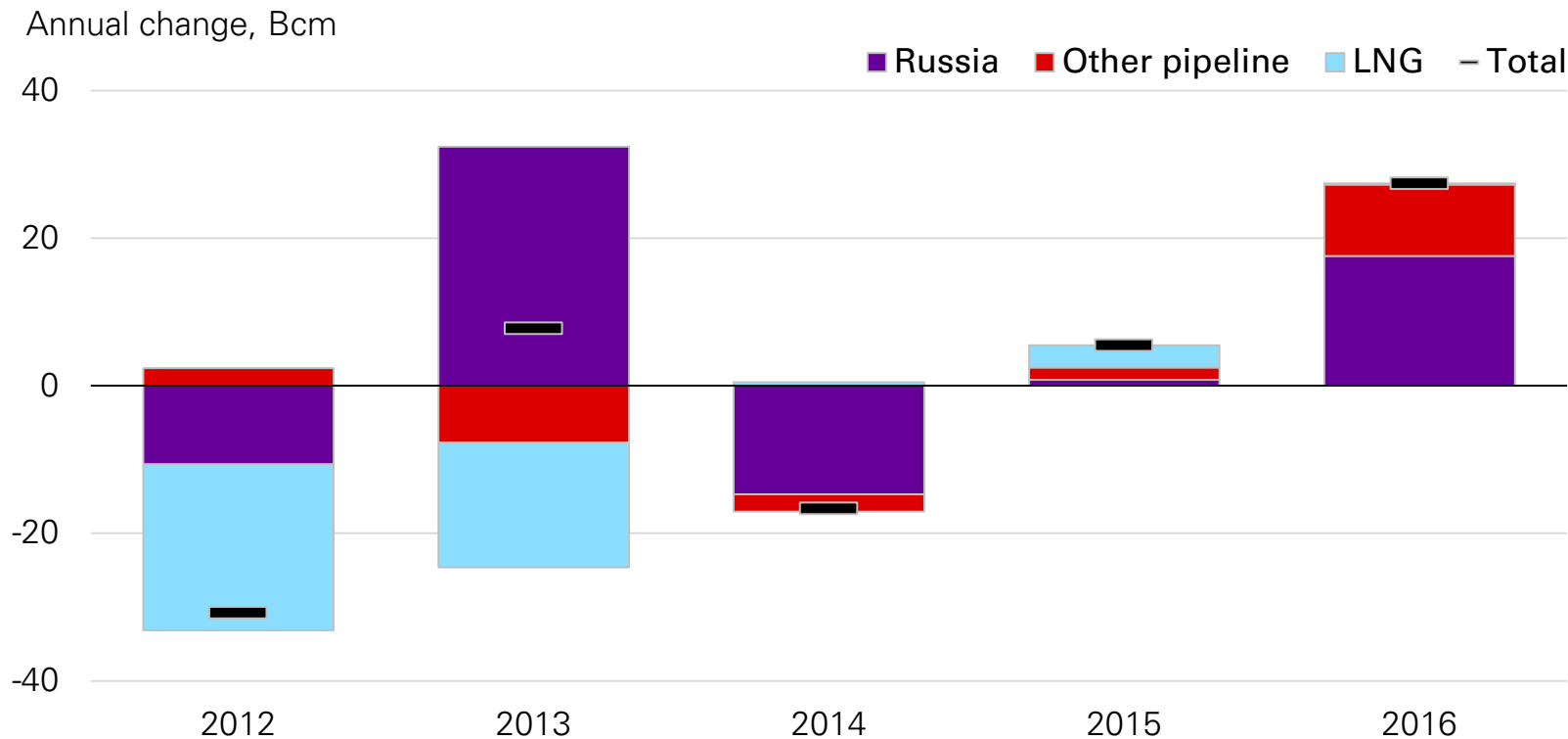


Flexible supply*



*includes spot supply and supplies without fixed destination in the contract

European gas imports



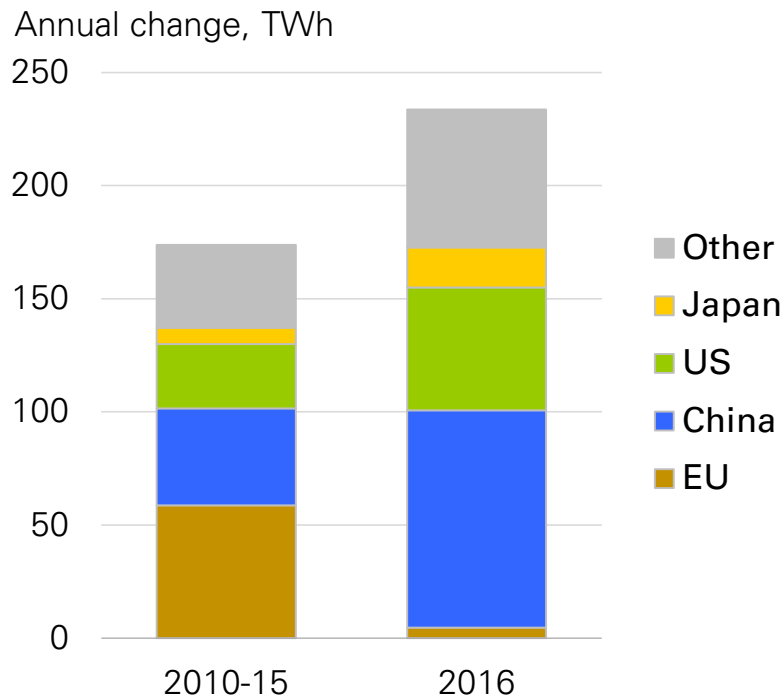


Renewables

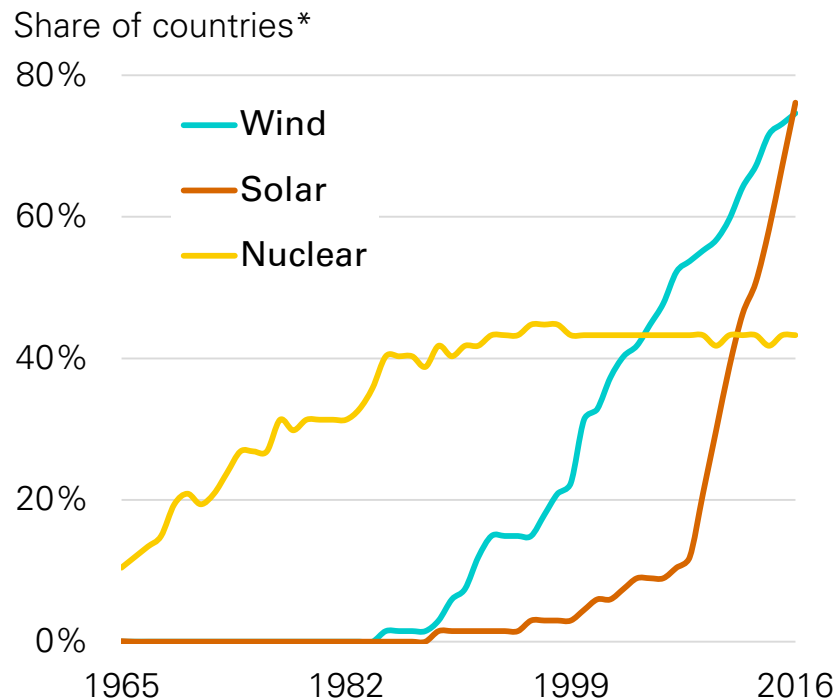
Growth and diffusion of renewables



Growth by country



Diffusion of power technologies

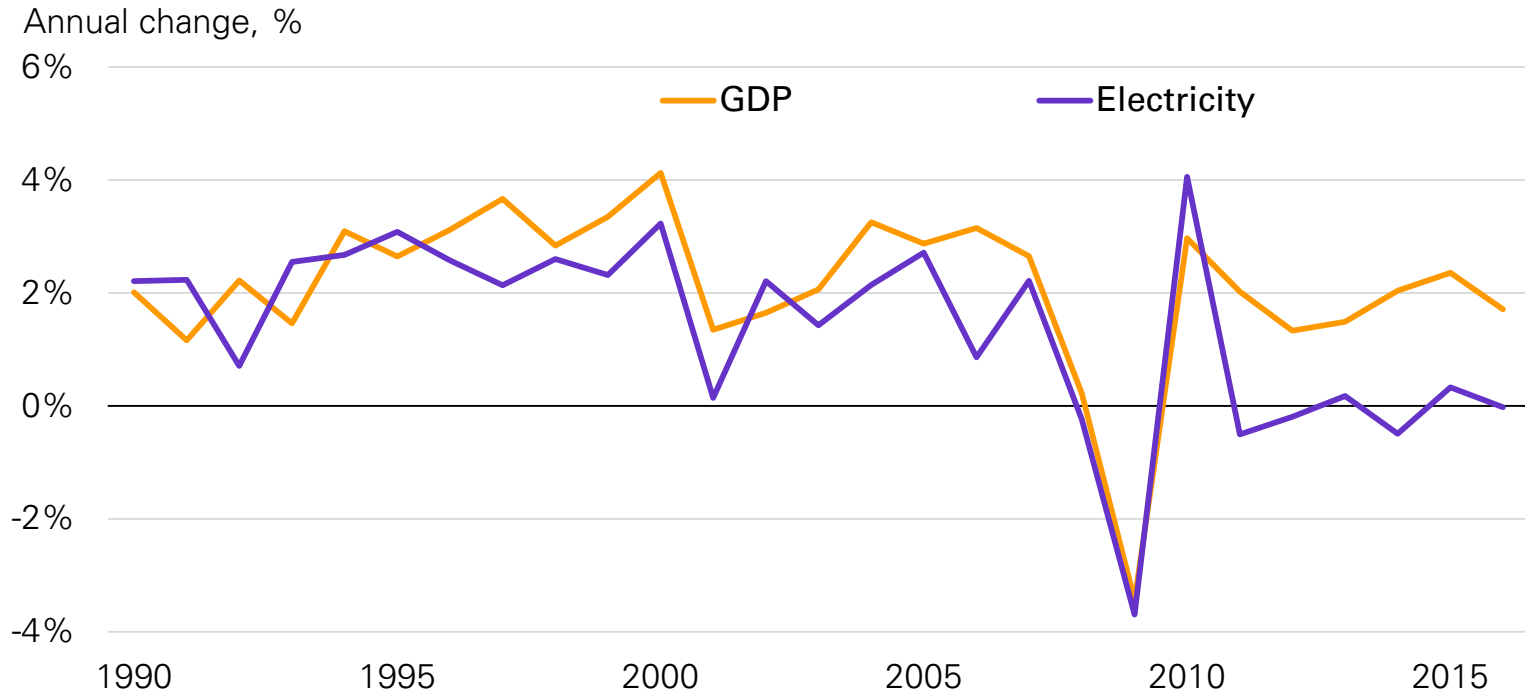


* The proportion of the 67 countries that are individually listed in the Statistical Review with power generation of at least 50 GWh from the specified technology



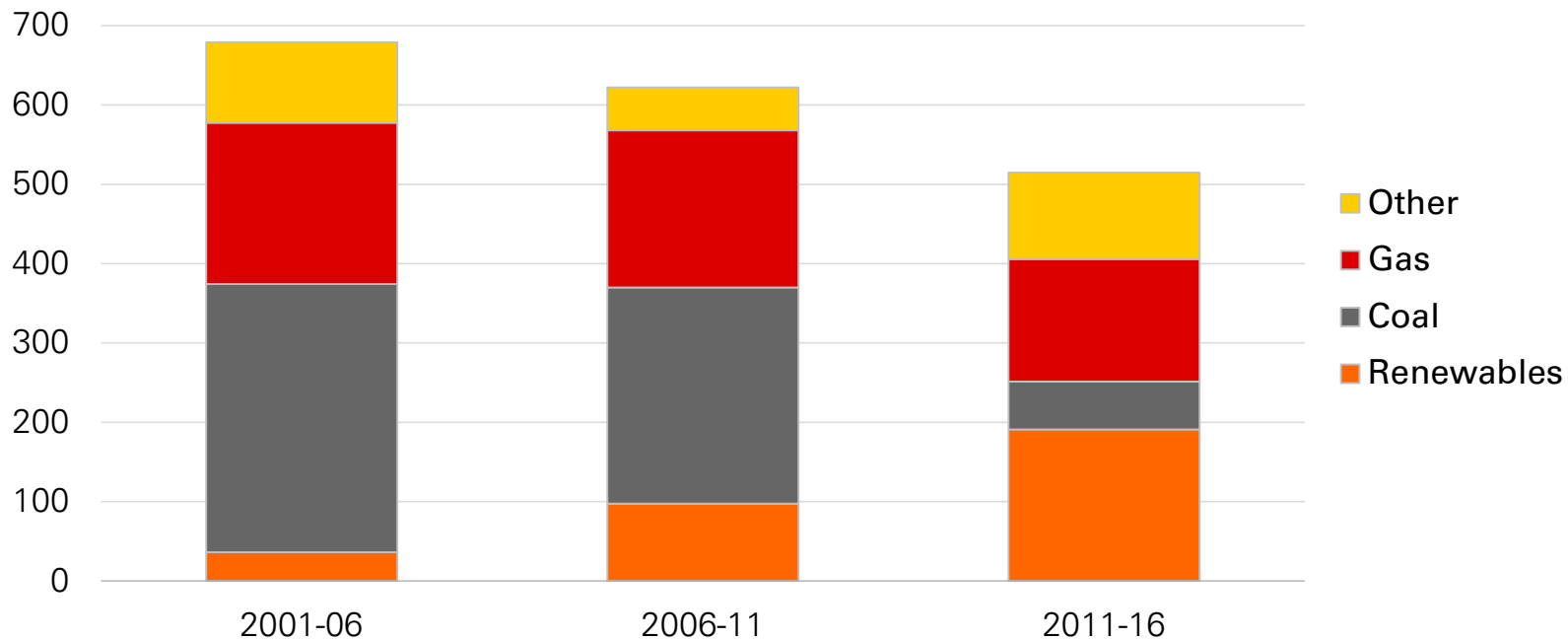
Power

OECD GDP and electricity consumption



Growth of power generation by fuel

Annual change, TWh



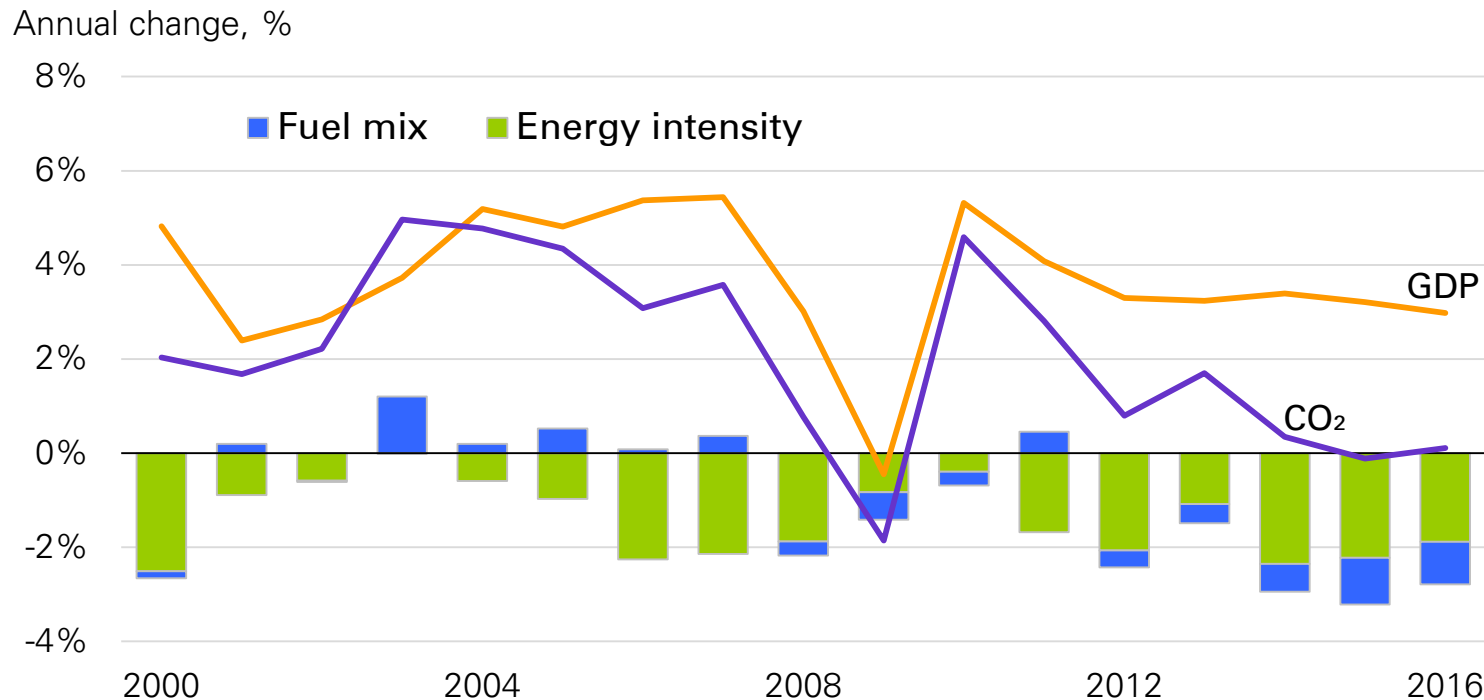


Carbon emissions

Growth in carbon emissions

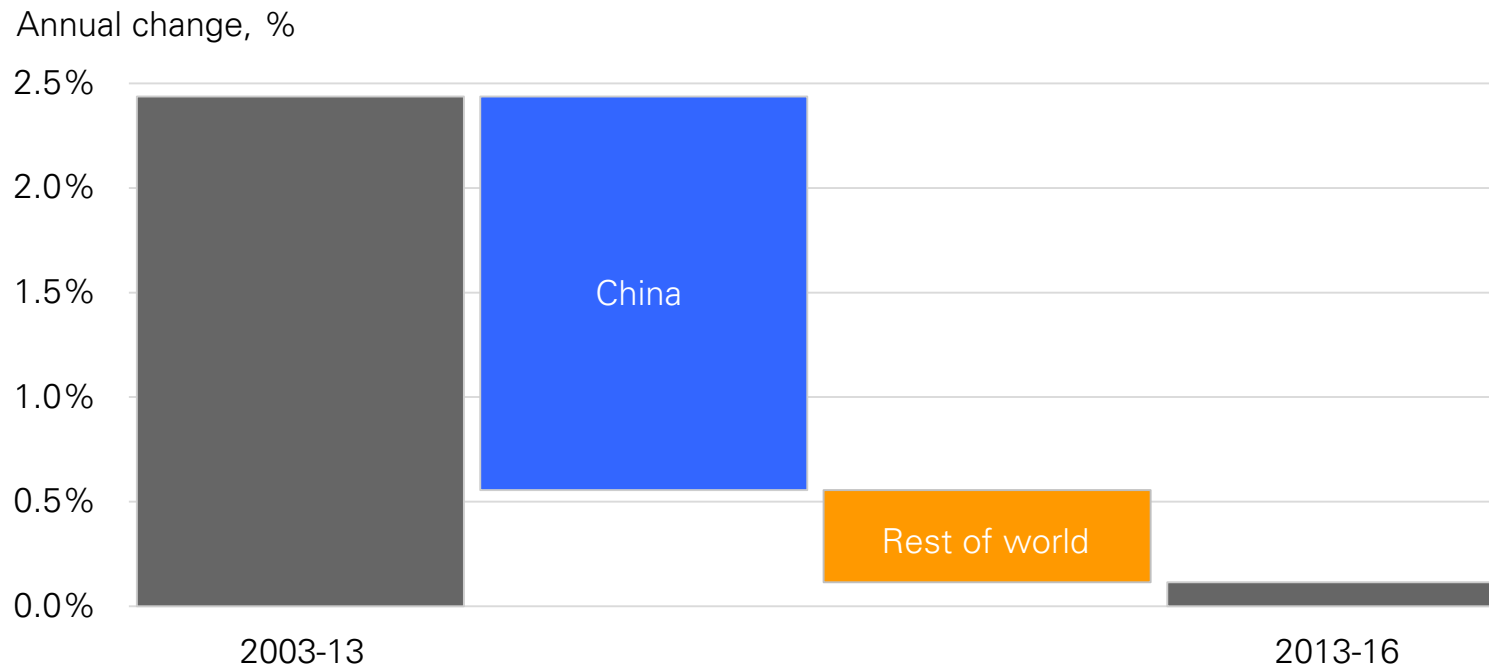


Growth in GDP and carbon emissions



Changes in growth in carbon emissions

Factors slowing growth in CO₂



Conclusions



Energy in 2016: short-run adjustments and long-run transition

- weak growth in energy demand and carbon emissions driven by both factors
- strong growth in oil demand as market adjusted to excess supplies
- rapid growth in renewables and further falls in coal driven by energy transition



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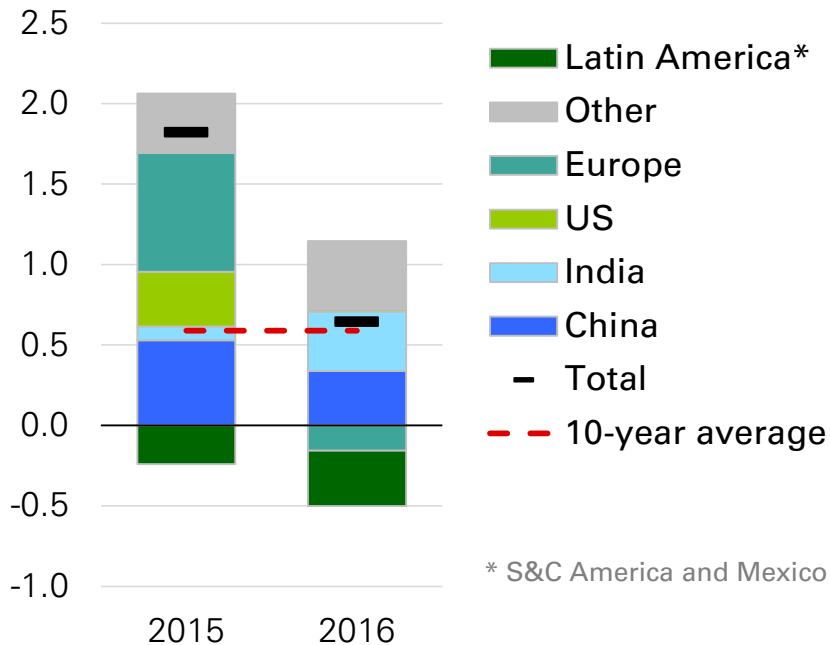


Backups

Refinery throughput and capacity

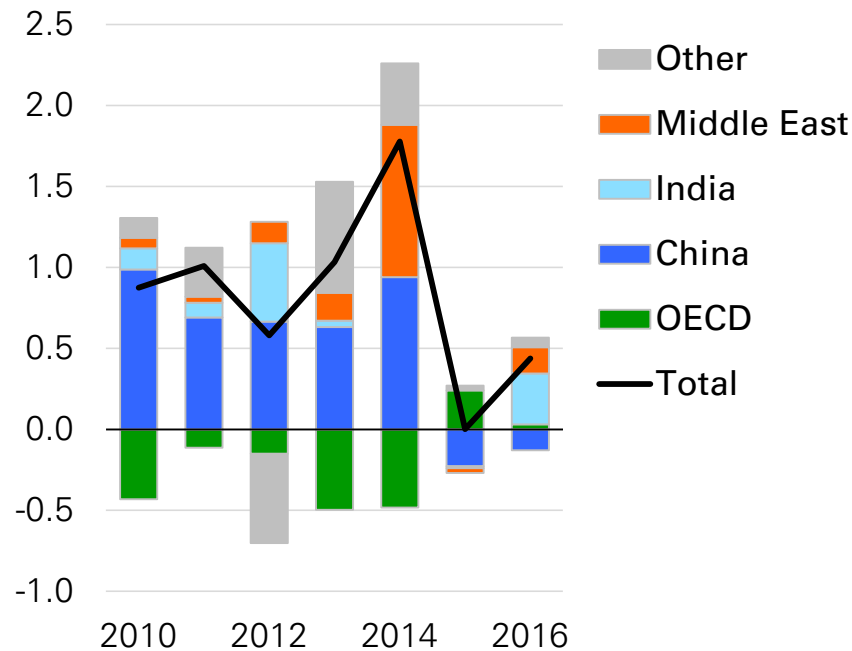
Refinery throughput

Annual change, Mb/d

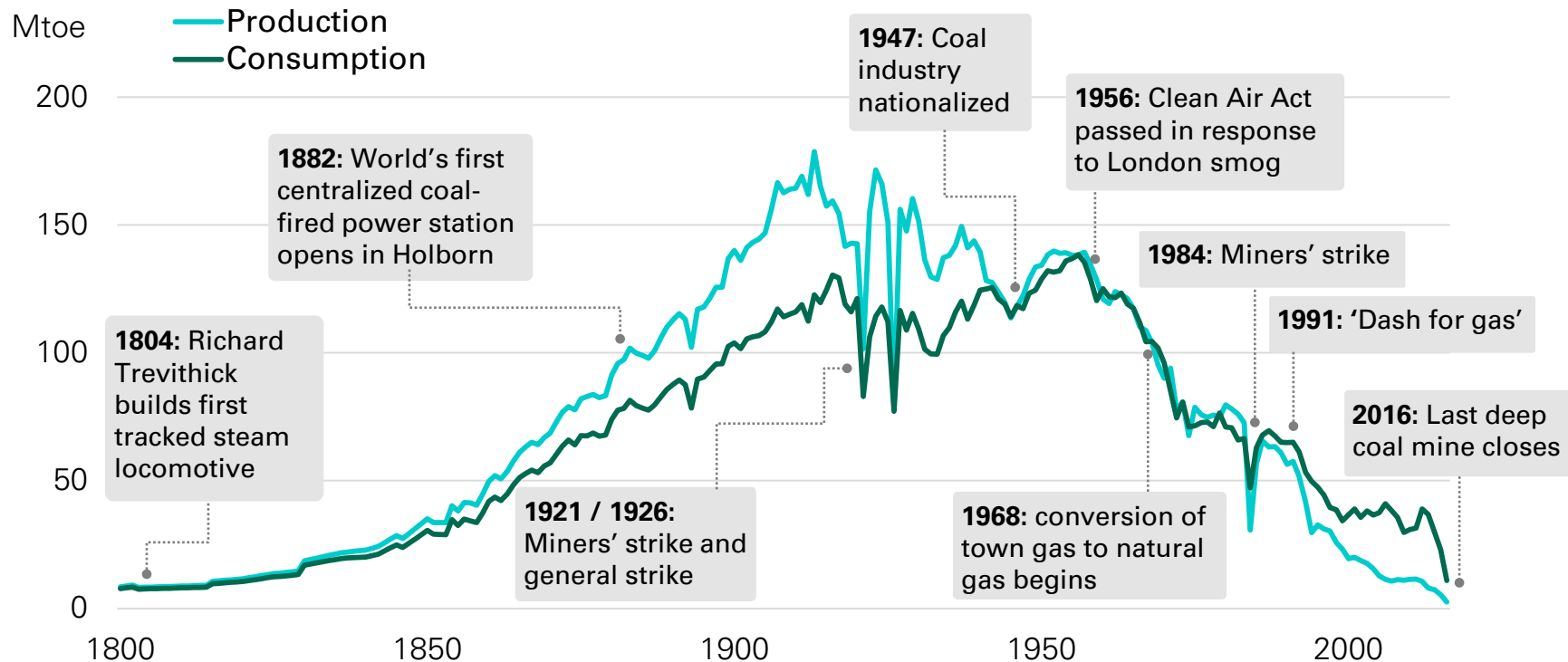


Refining capacity

Annual change, Mb/d



UK coal



Growth in carbon emissions



Growth in GDP and carbon emissions

