



BP Statistical Review of World Energy

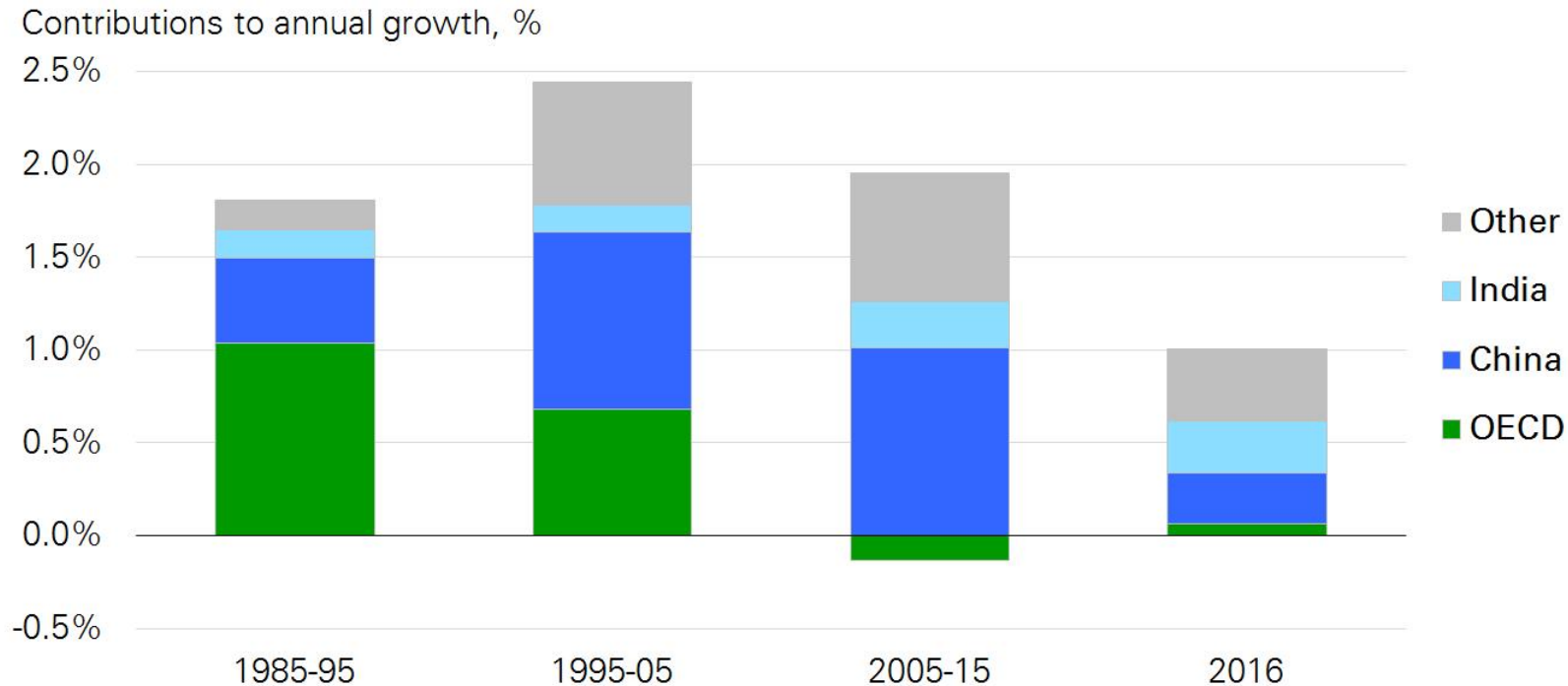
June 2017

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

Damian Bilbao

VP, Commercial Ventures – BP Alaska

Energy consumption growth

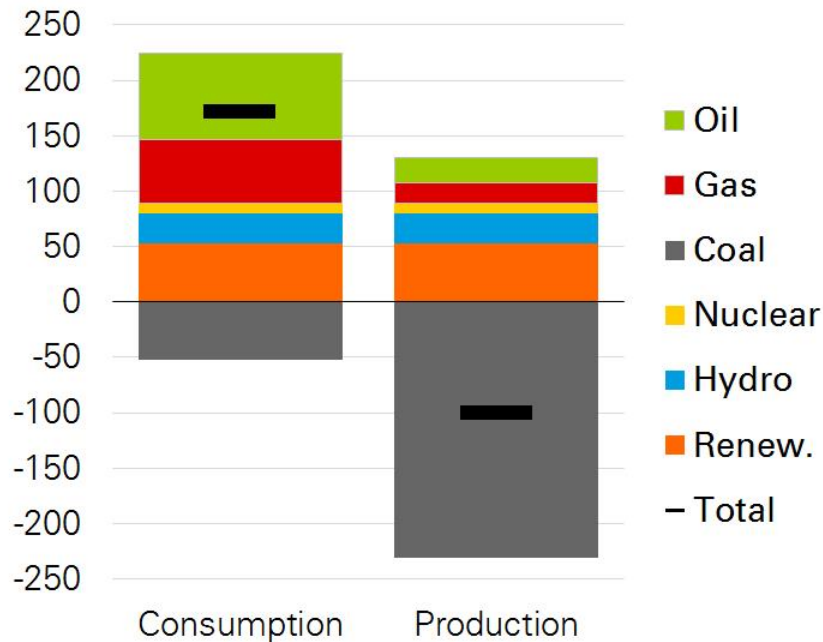


Fuel mix: growth and shares in primary energy

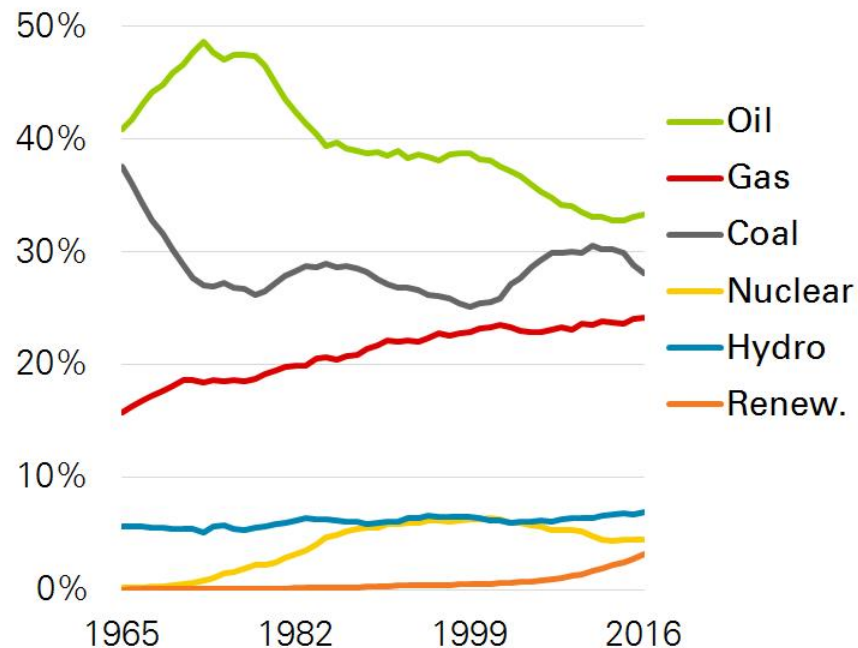


Growth by fuel

Annual change, Mtoe



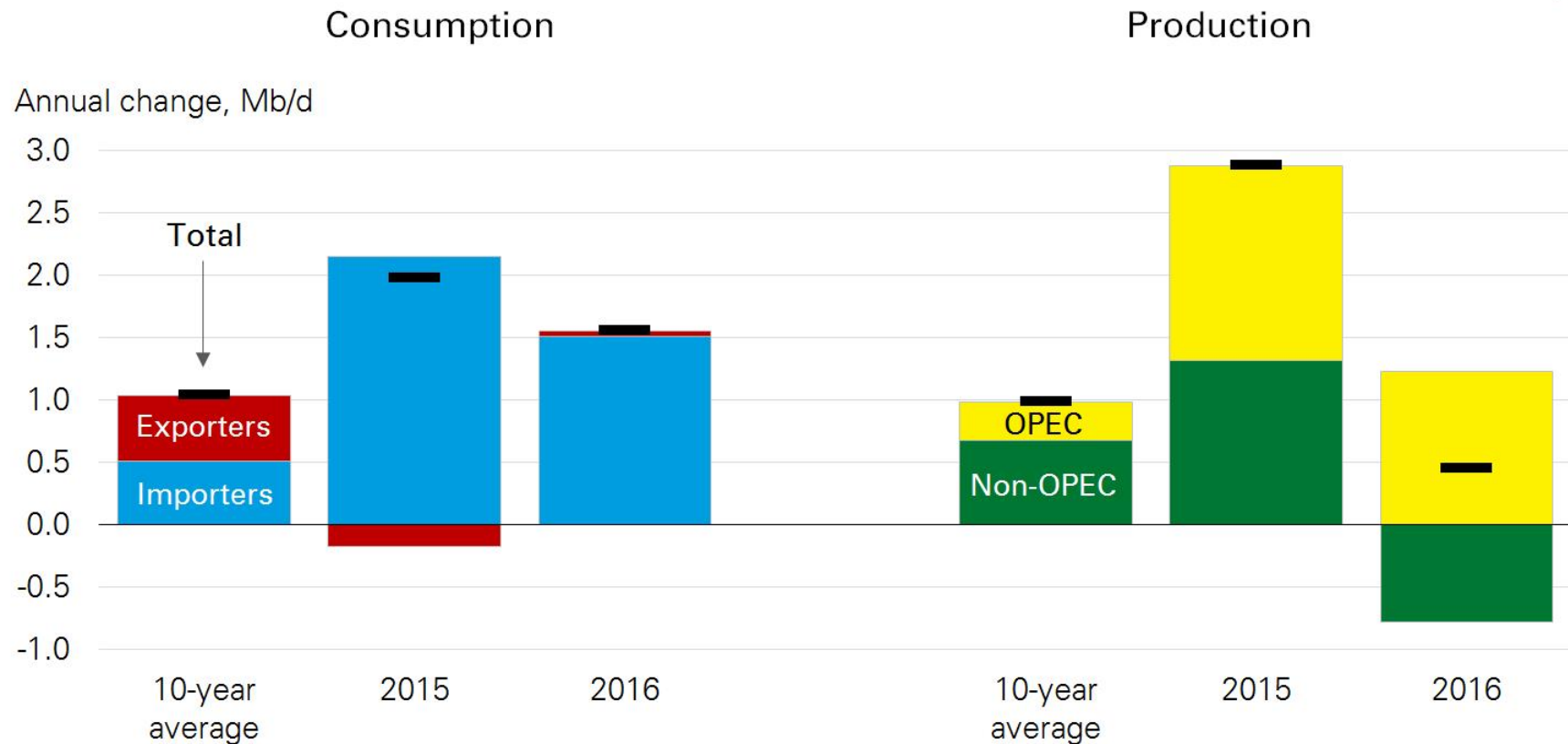
Shares of primary energy consumption





Oil

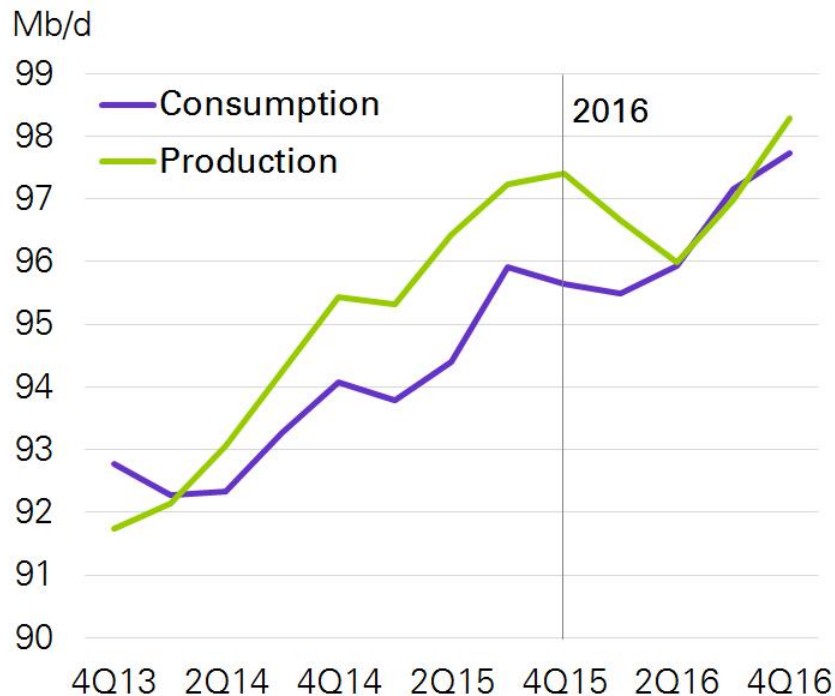
Oil market in 2015 and 2016



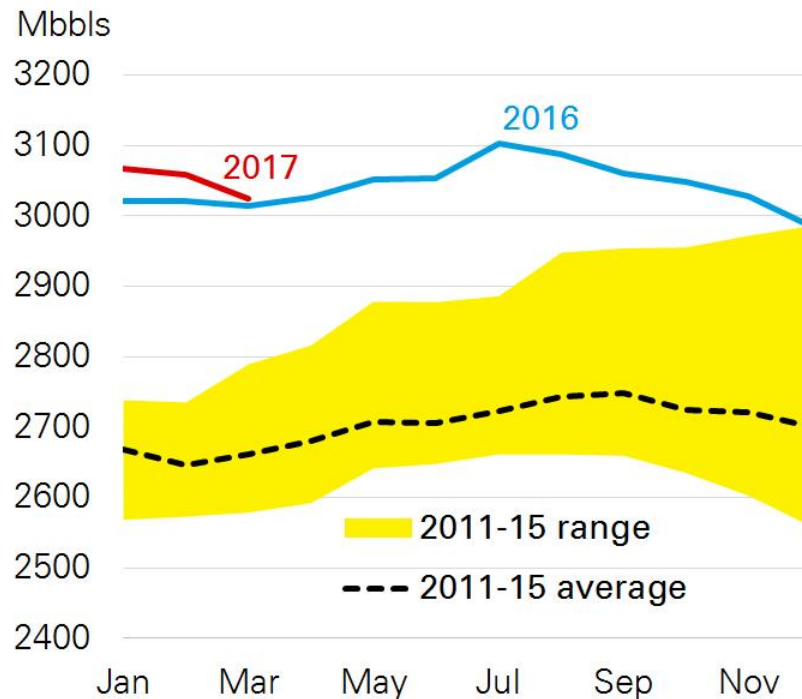
Oil market: balance and inventories



Oil production and consumption



OECD commercial inventories

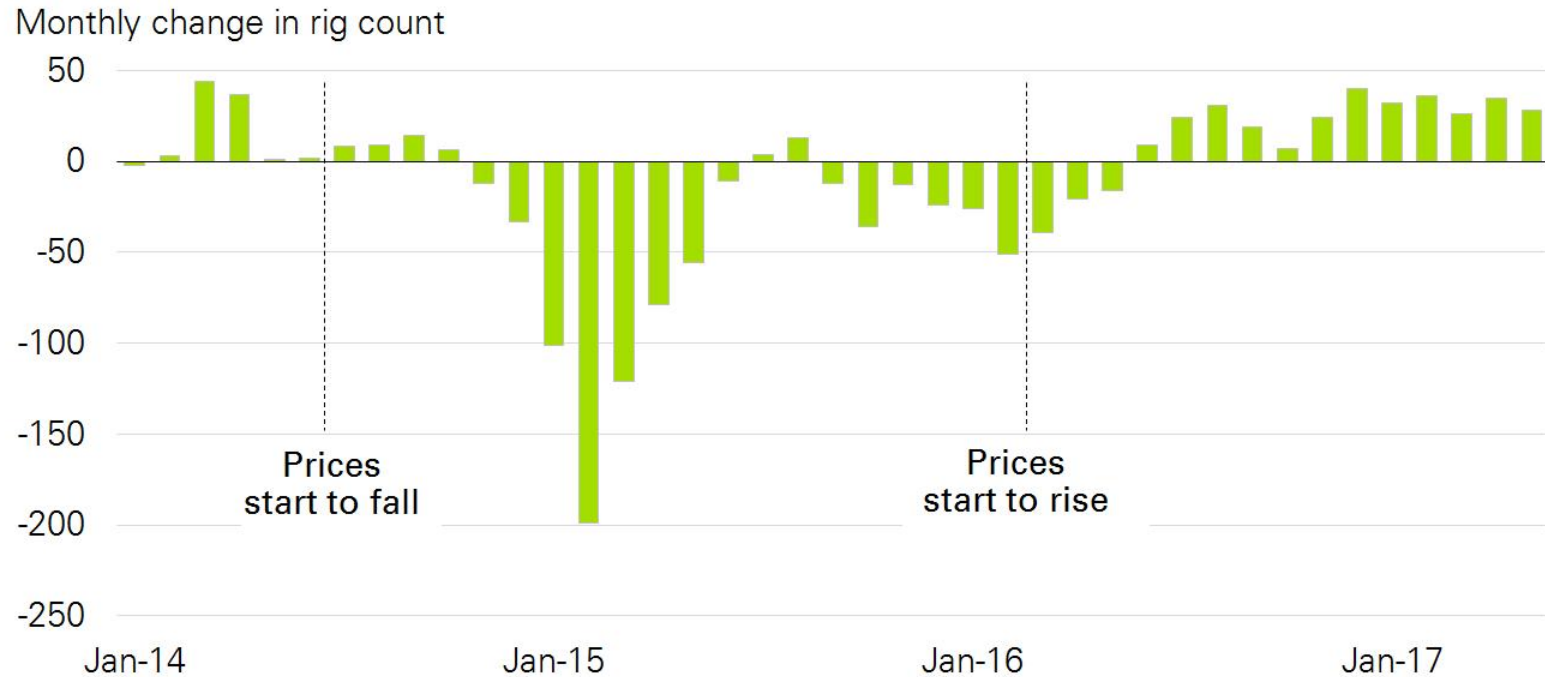


US Tight Oil

US tight oil rigs



Change in US tight oil rig count



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

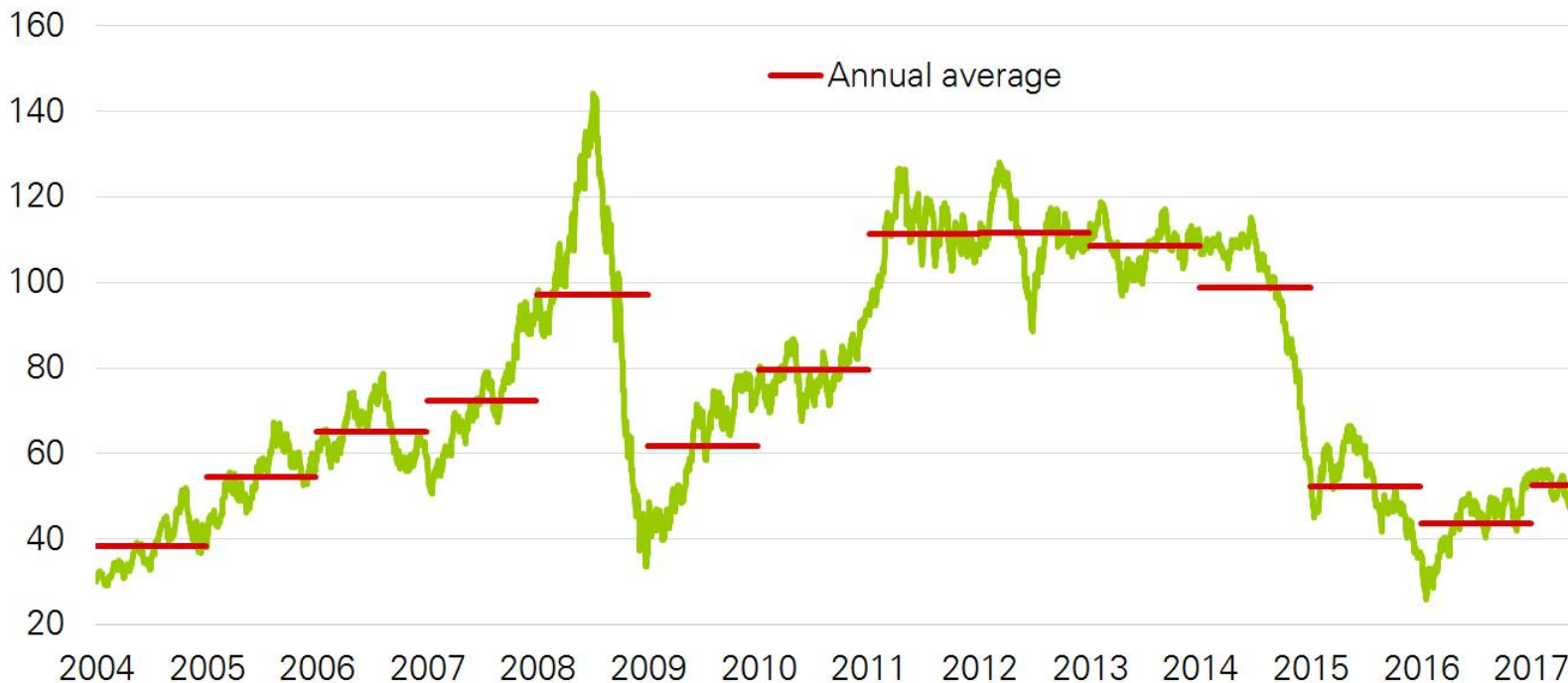
Minister of Energy, Industry and Mineral Resources, Saudi Arabia

CERAWeek, March 2017

Oil prices



Dated Brent, \$/bbl



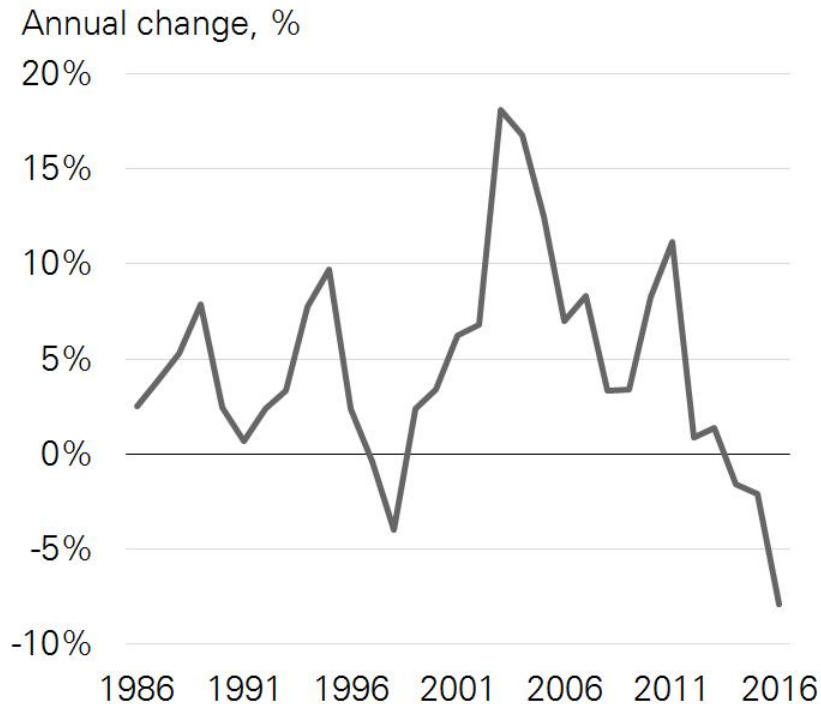
Source: includes data from Platts

Coal

Chinese coal production and global prices

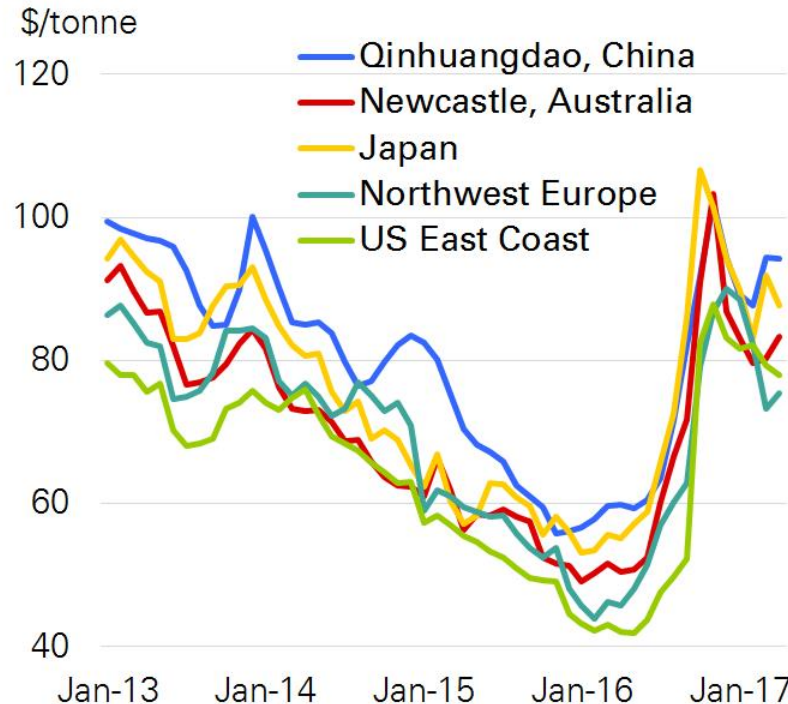


Coal production growth



Source: includes data from IHS McCloskey

Steam coal prices



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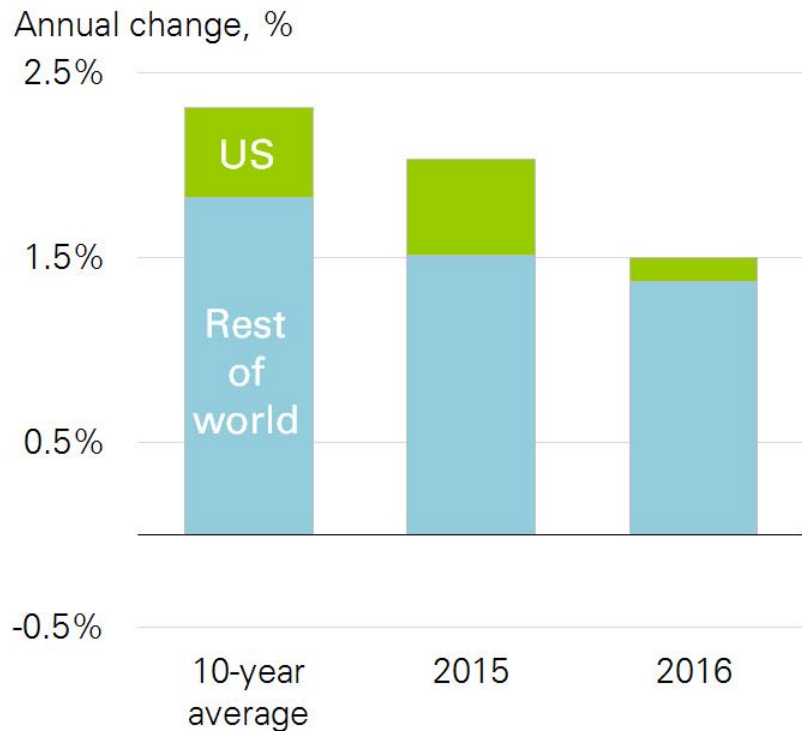
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Natural gas

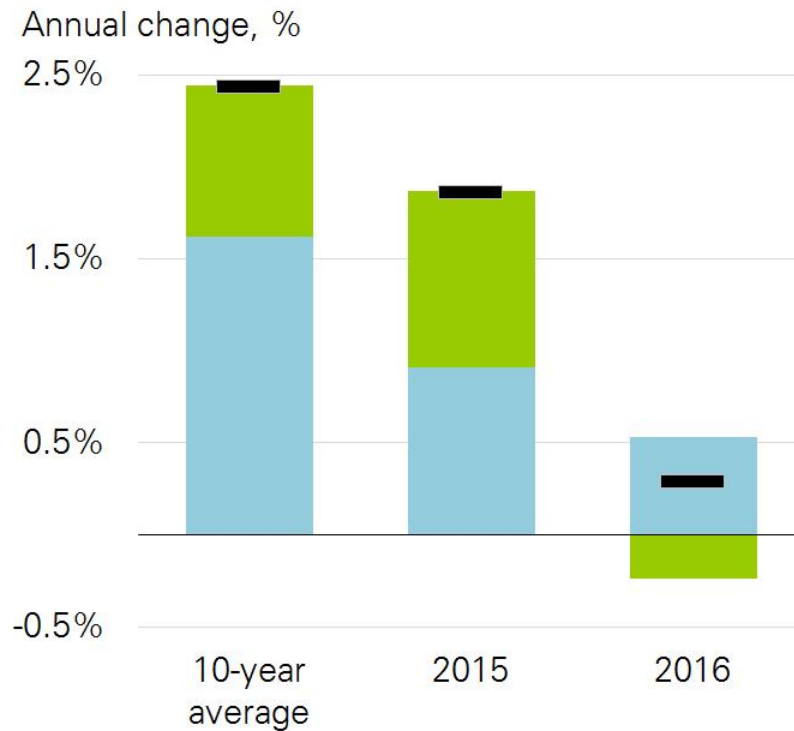
Growth in natural gas demand and supply



Gas consumption



Gas production

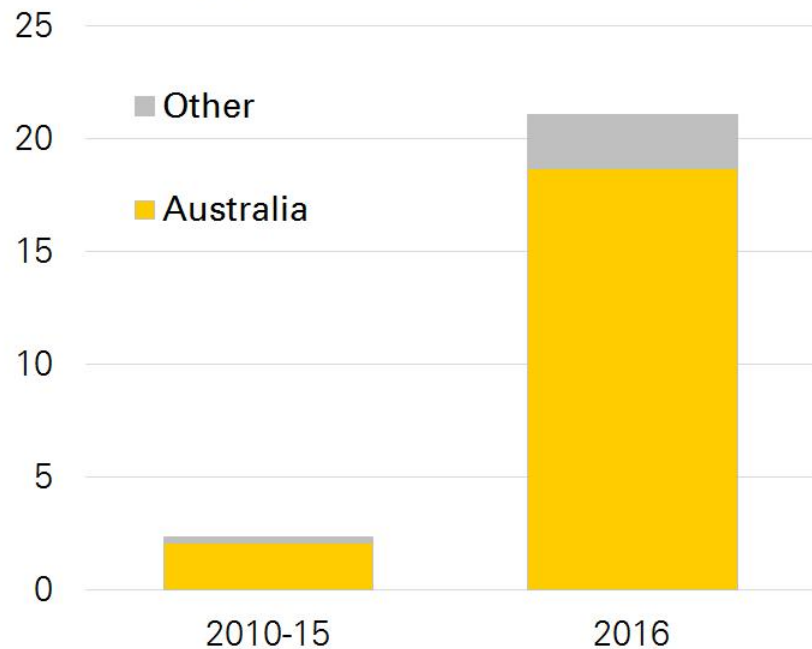


LNG trade



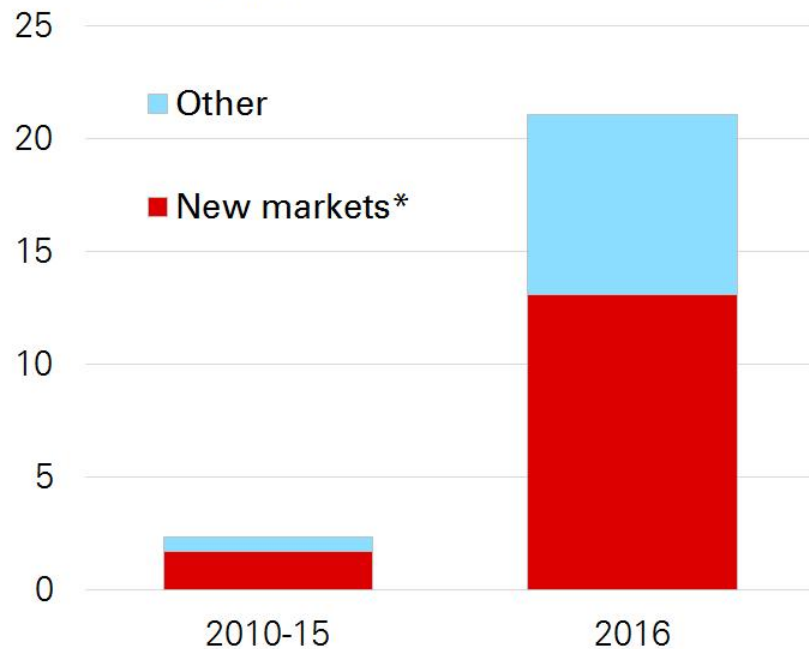
Exports

Annual change, Bcm



Imports

Annual change, Bcm



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

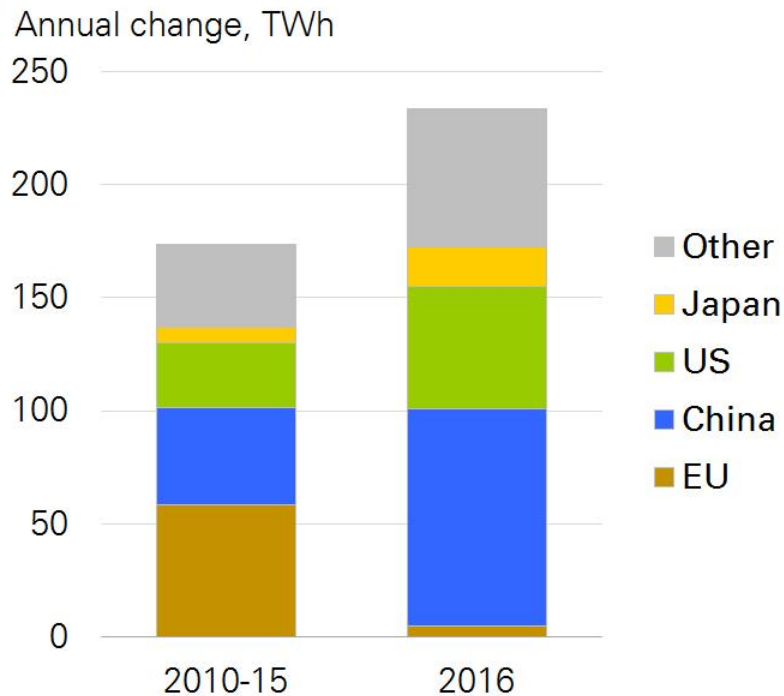


Renewables

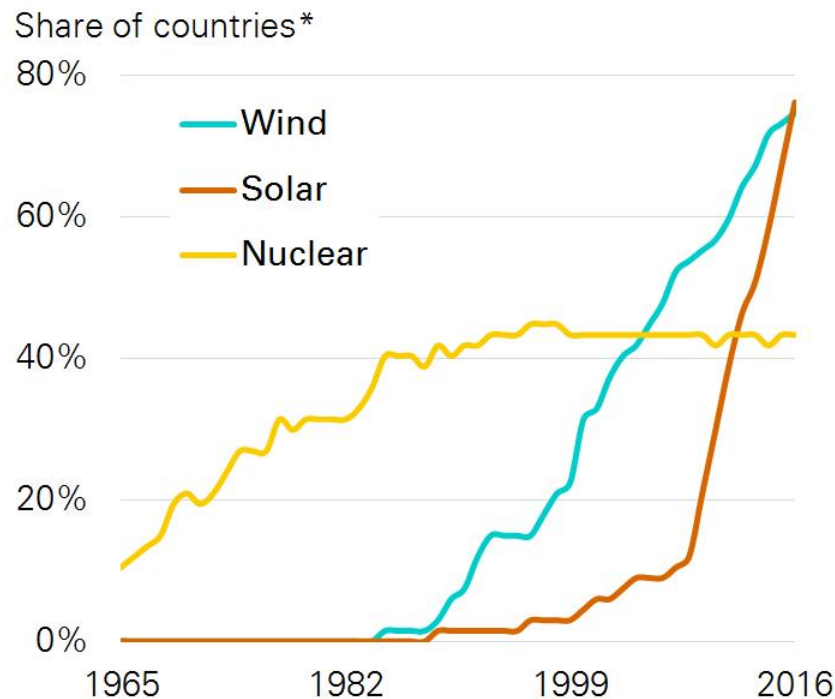
Growth and diffusion of renewables



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

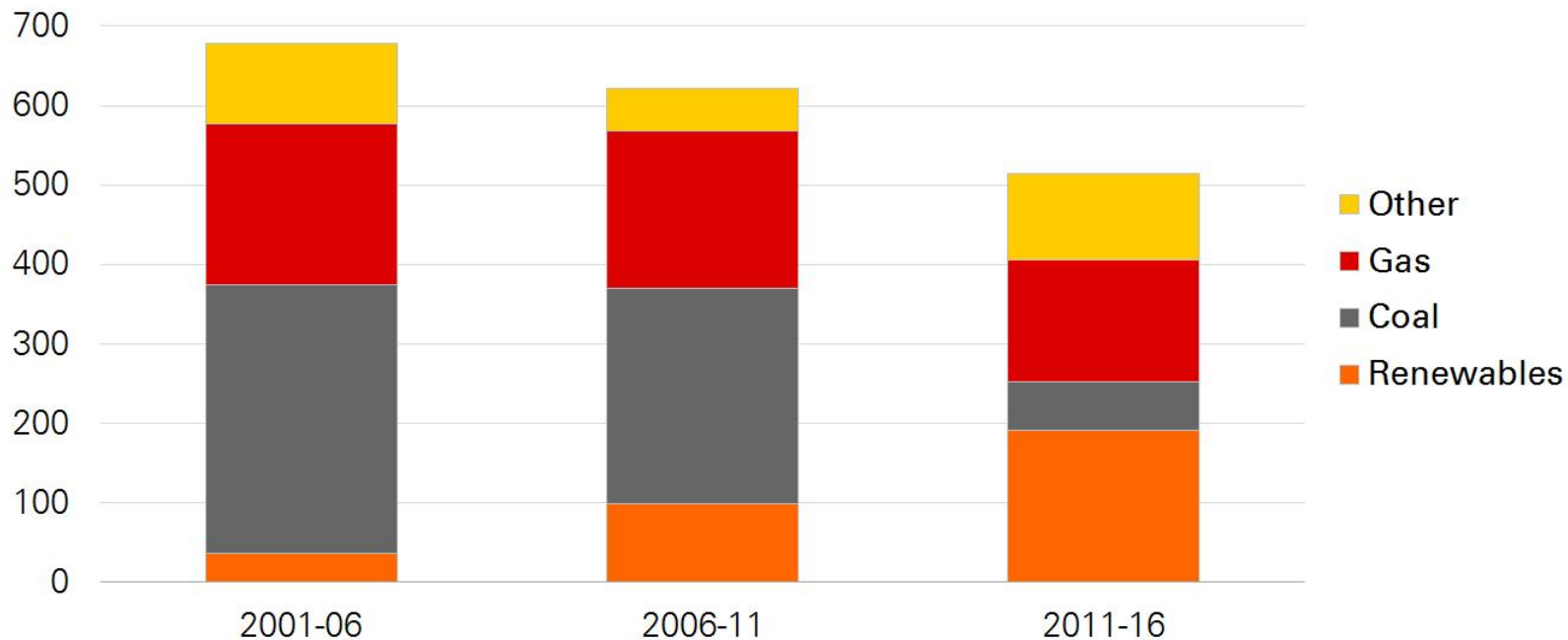


Power

Growth of power generation by fuel



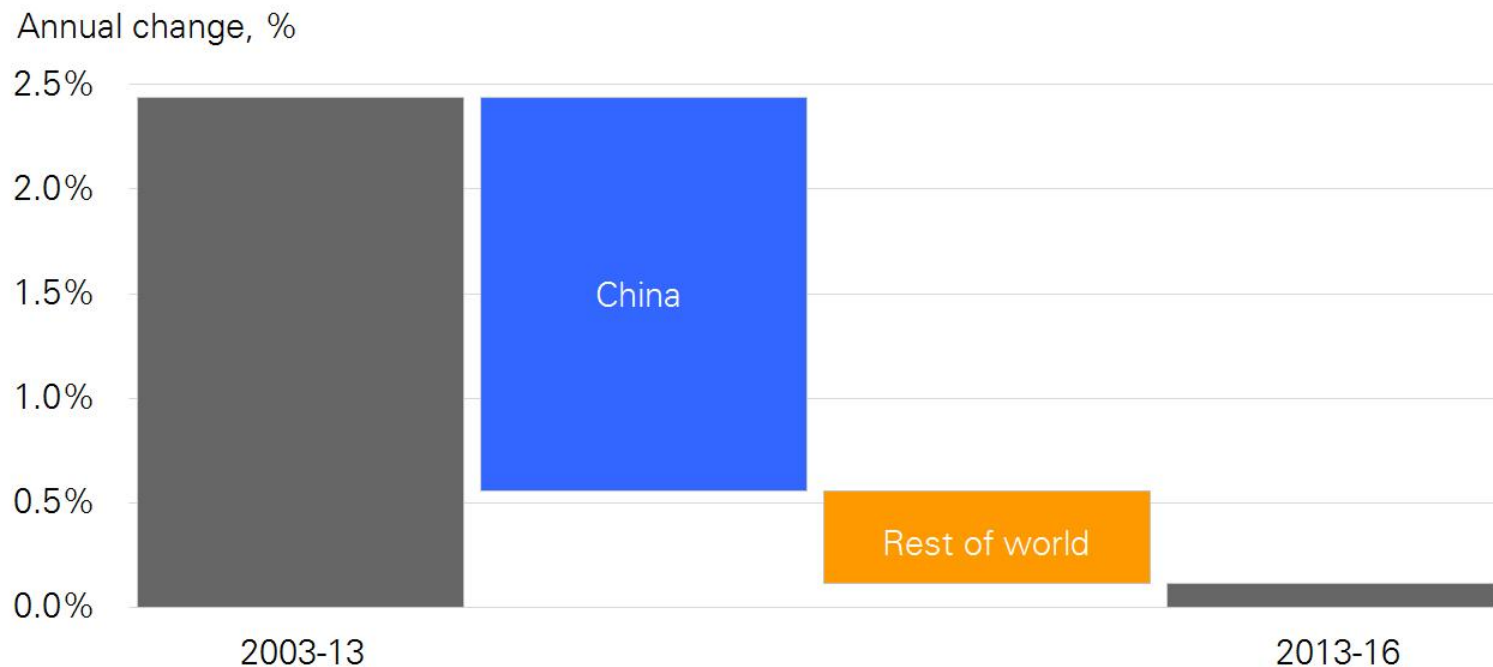
Annual change, TWh



Carbon emissions

Changes in growth in carbon emissions

Factors slowing growth in CO₂



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



Pioneering the Past, Fueling Alaska's Future



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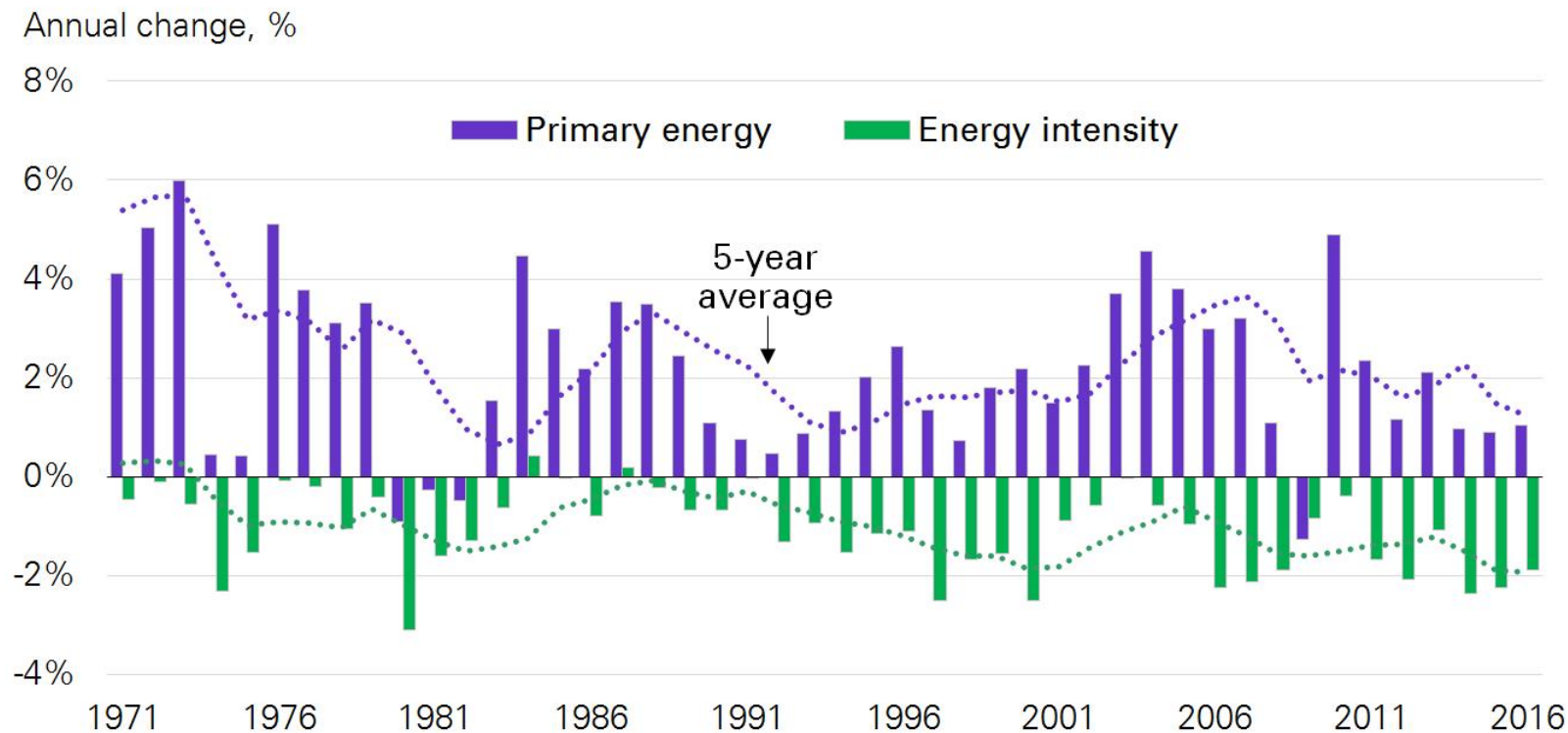
June 2017

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

Mark Finley

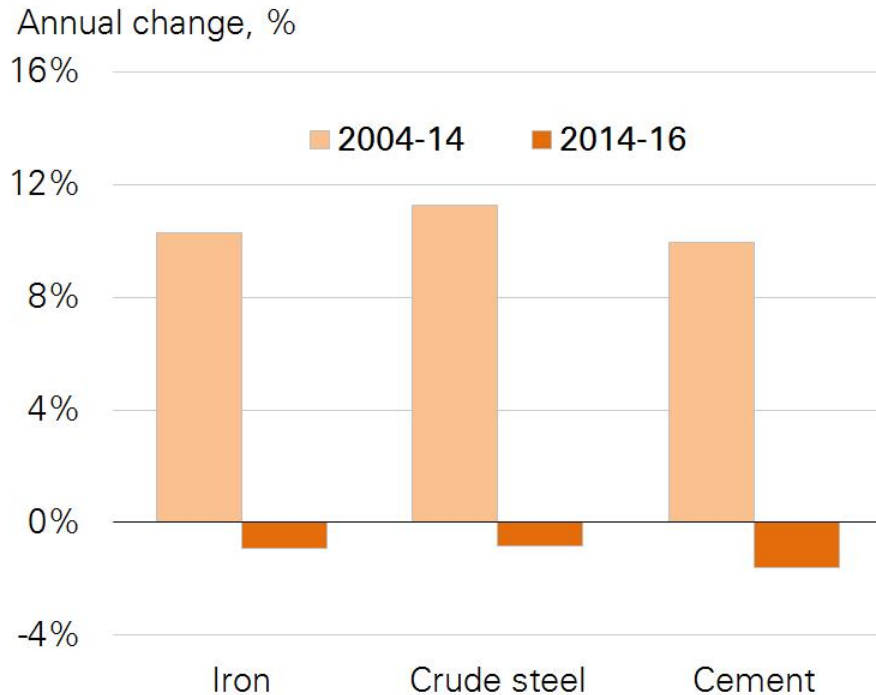
Backups

Primary energy and energy intensity

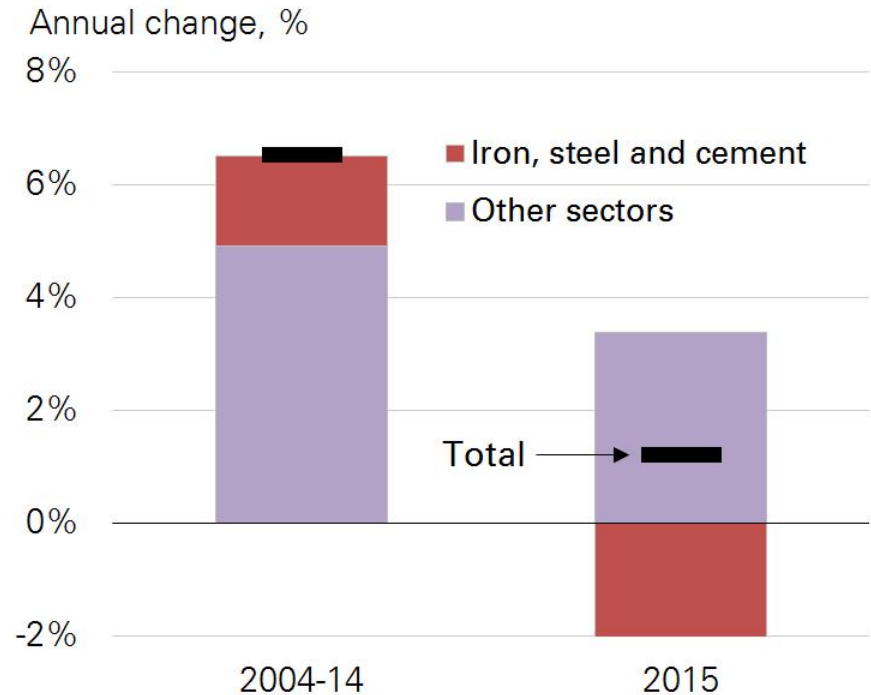


China industrial output and energy demand

Outputs of iron, steel and cement

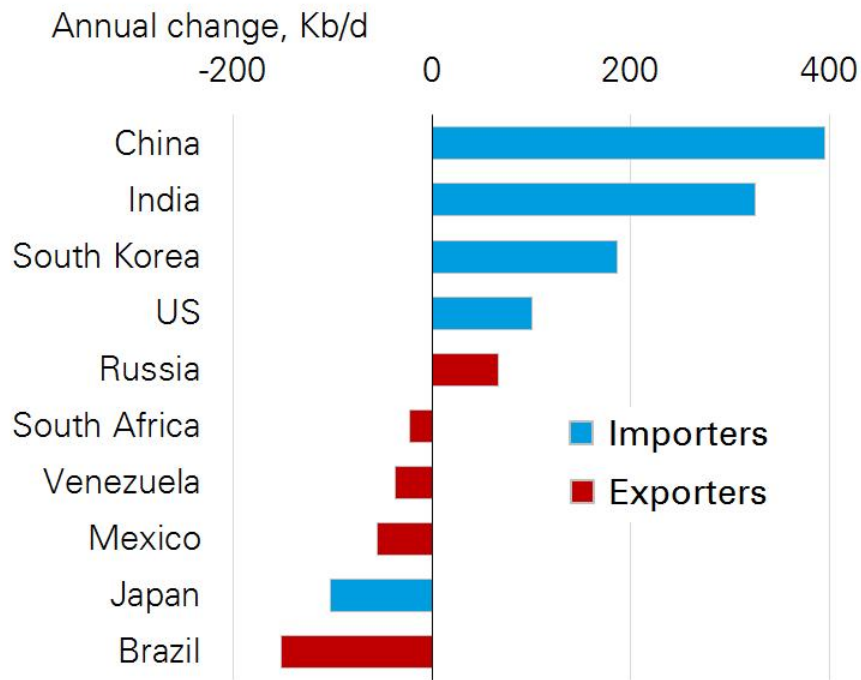


Contributions to energy demand growth

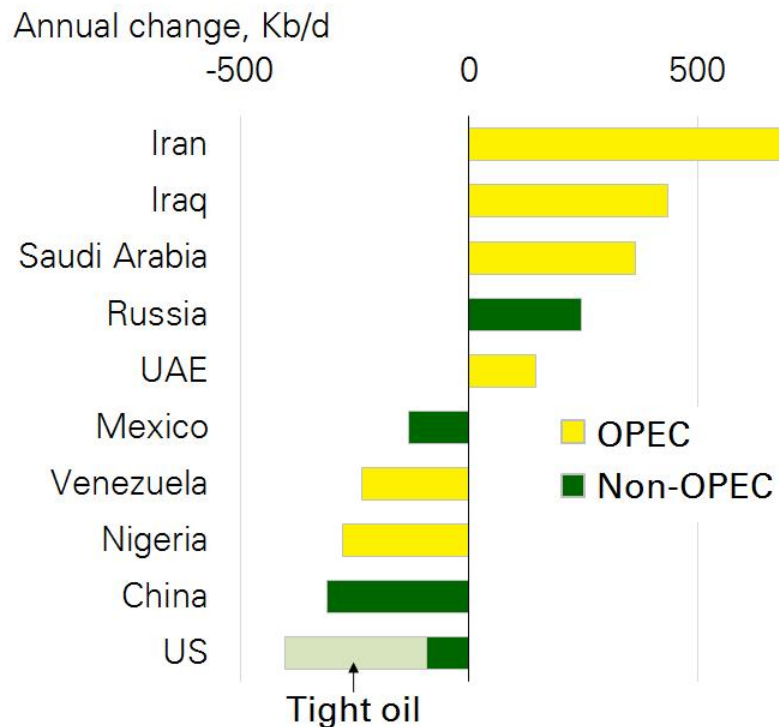


Largest changes to oil demand and supply

Oil consumption

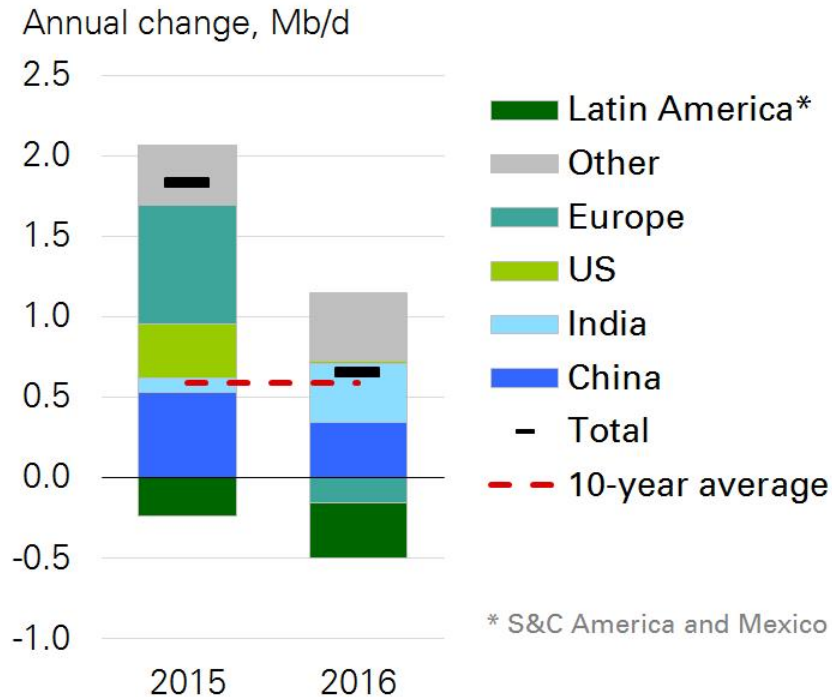


Oil production

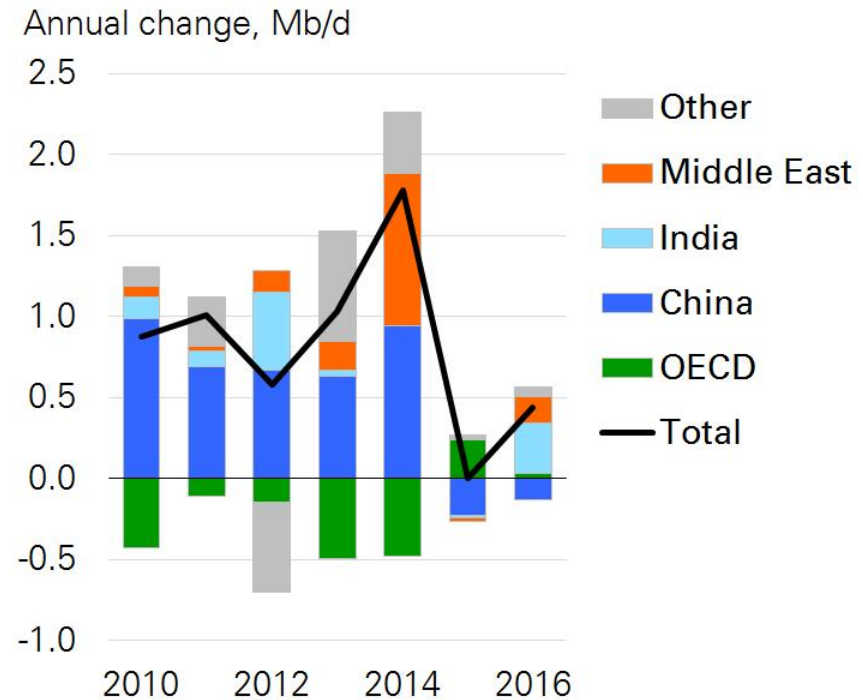


Refinery throughput and capacity

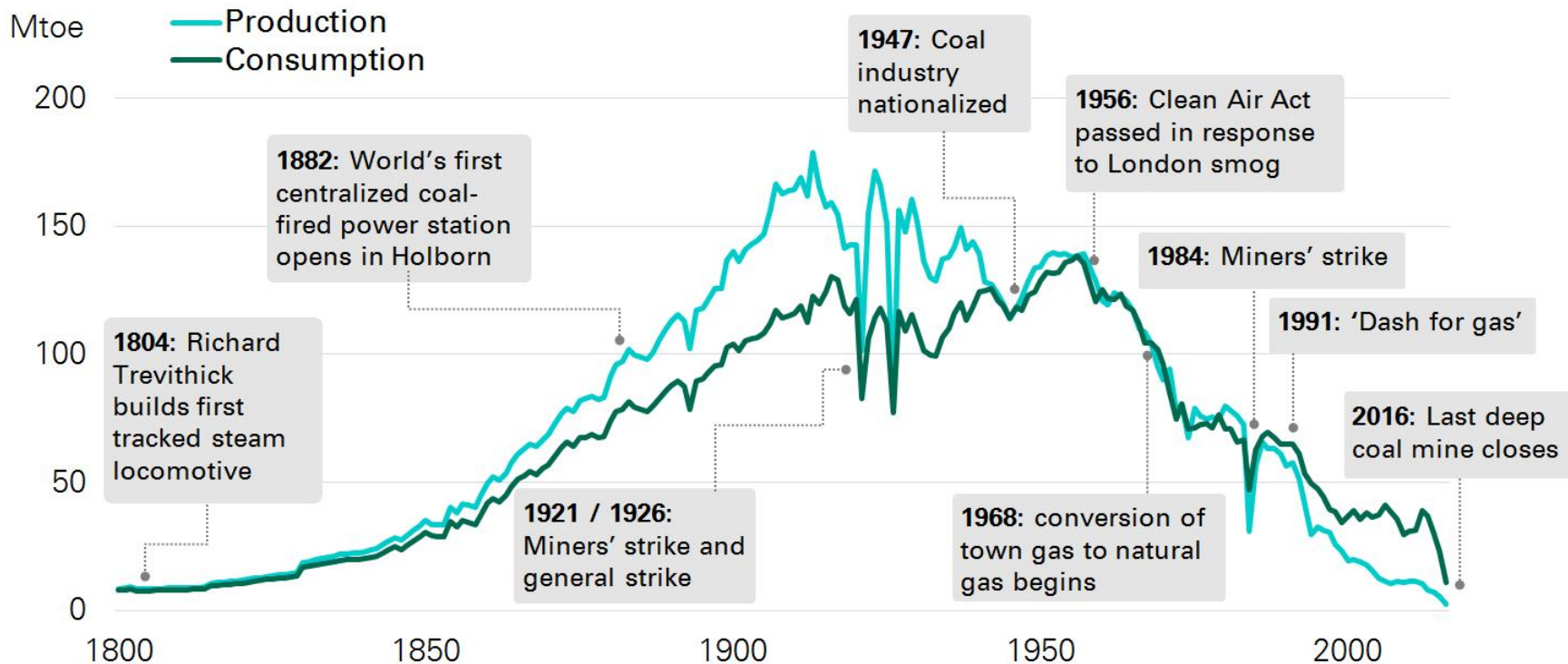
Refinery throughput



Refining capacity



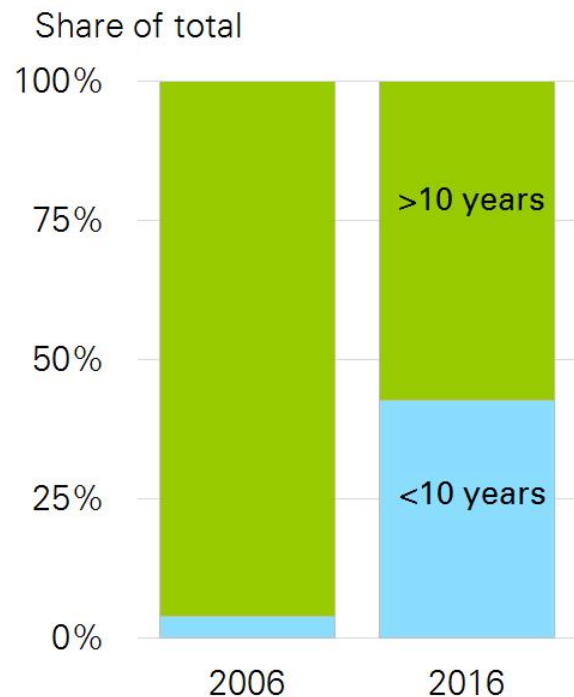
UK coal



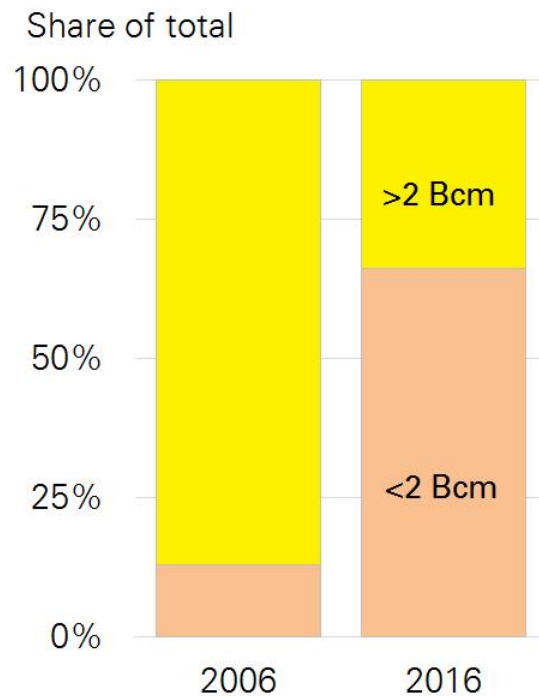
LNG market characteristics



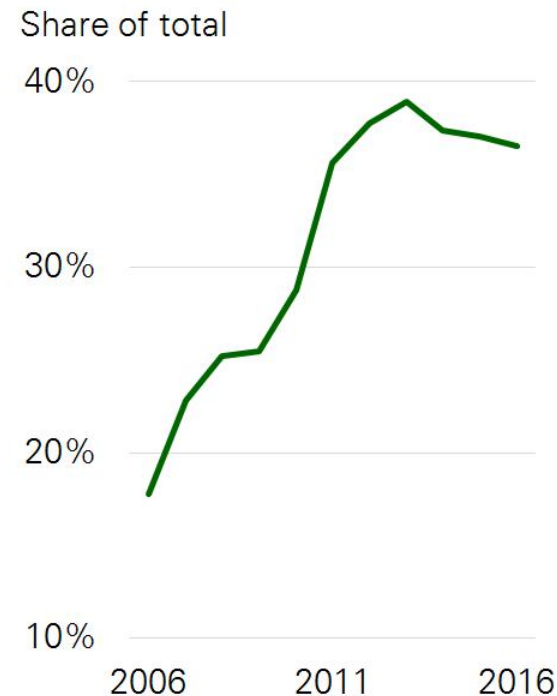
Contract length



Contract size

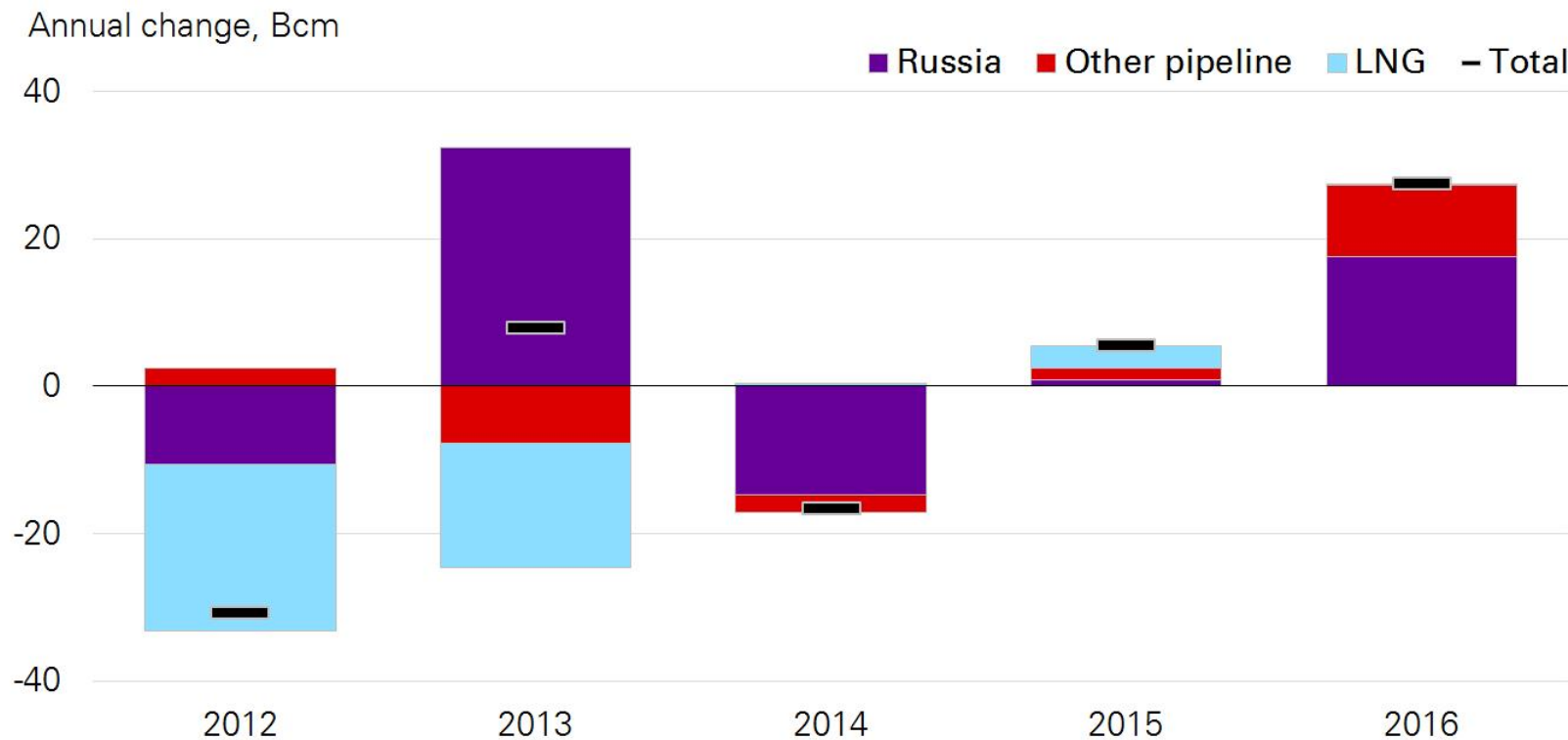


Flexible supply*



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

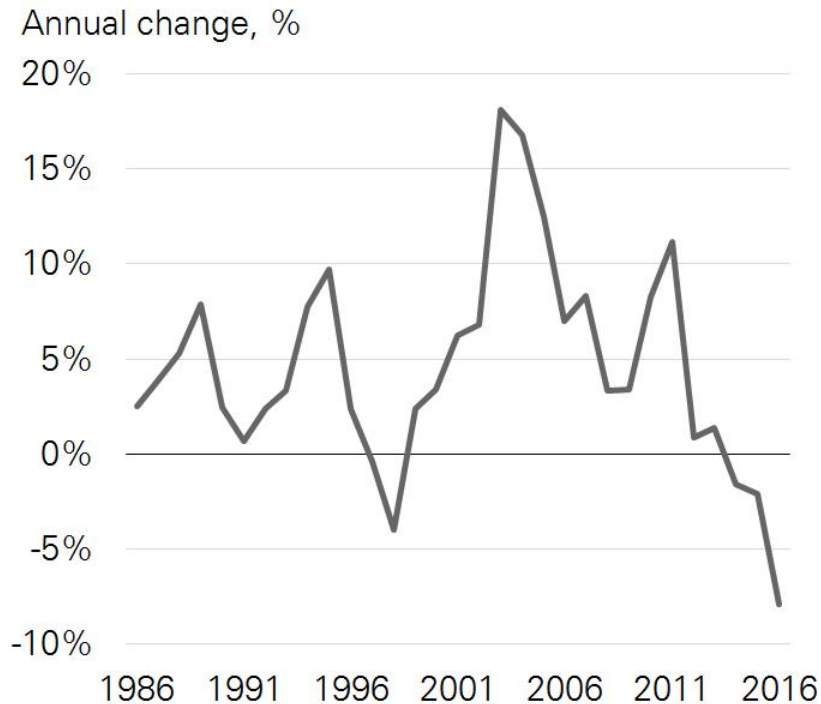
European gas imports



Chinese coal production and prices

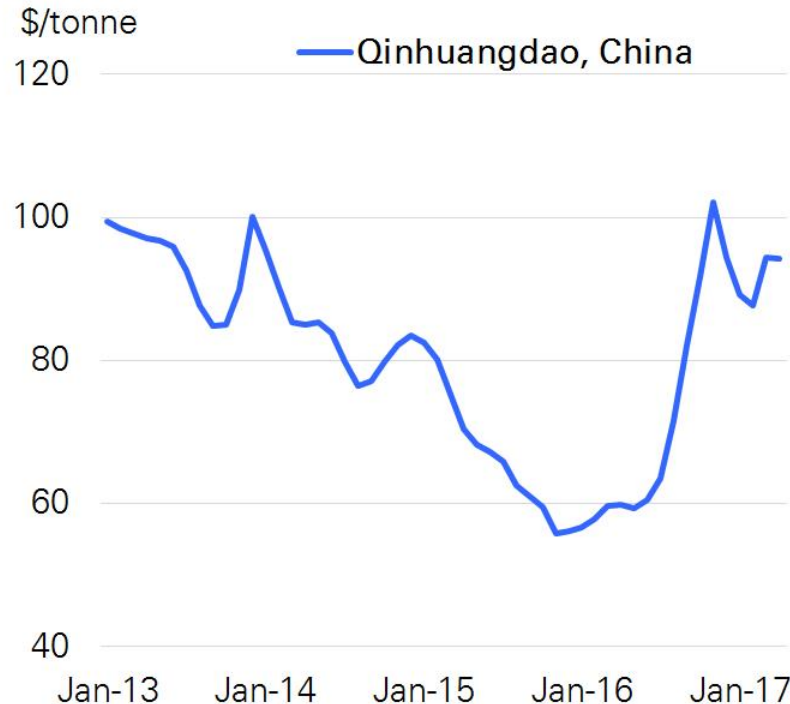


Coal production growth



Source: includes data from IHS McCloskey

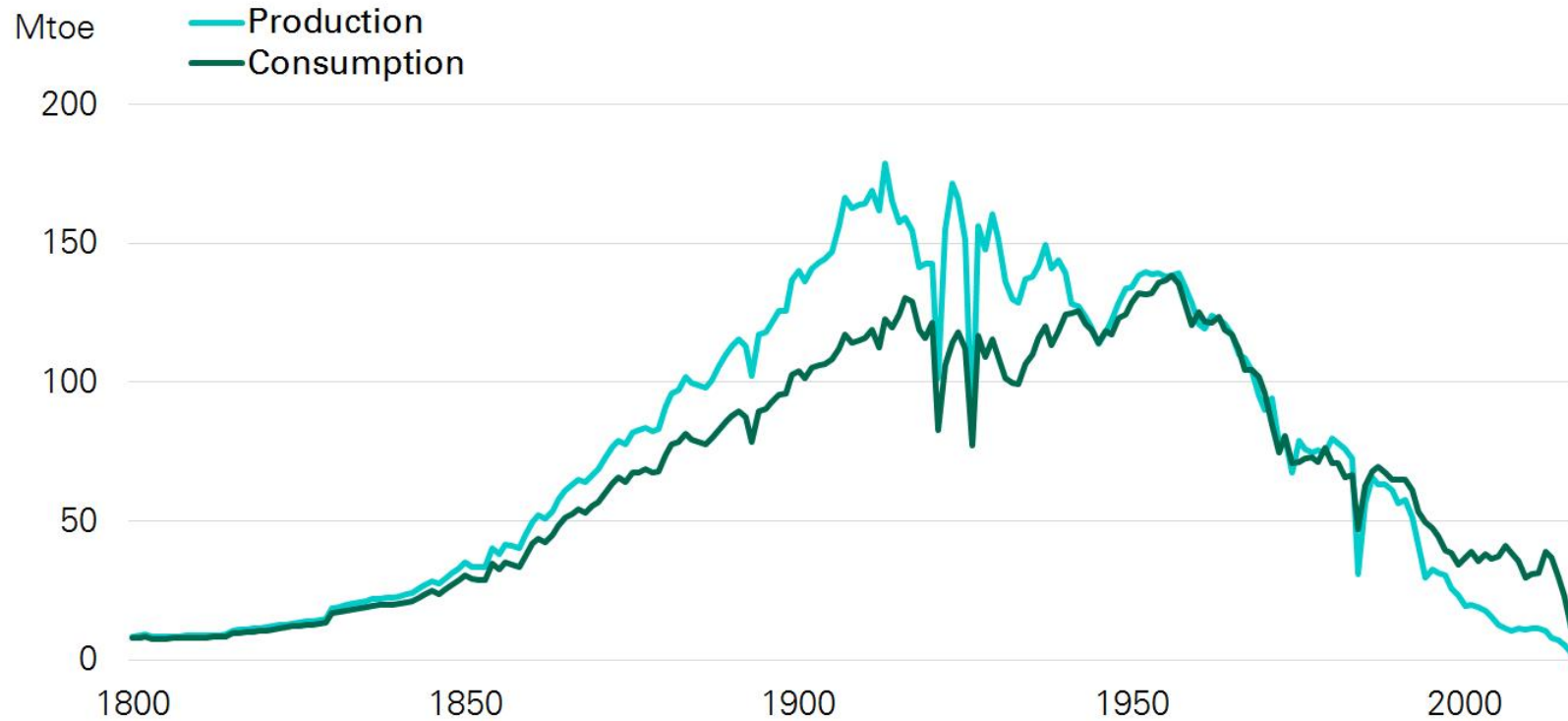
Steam coal prices



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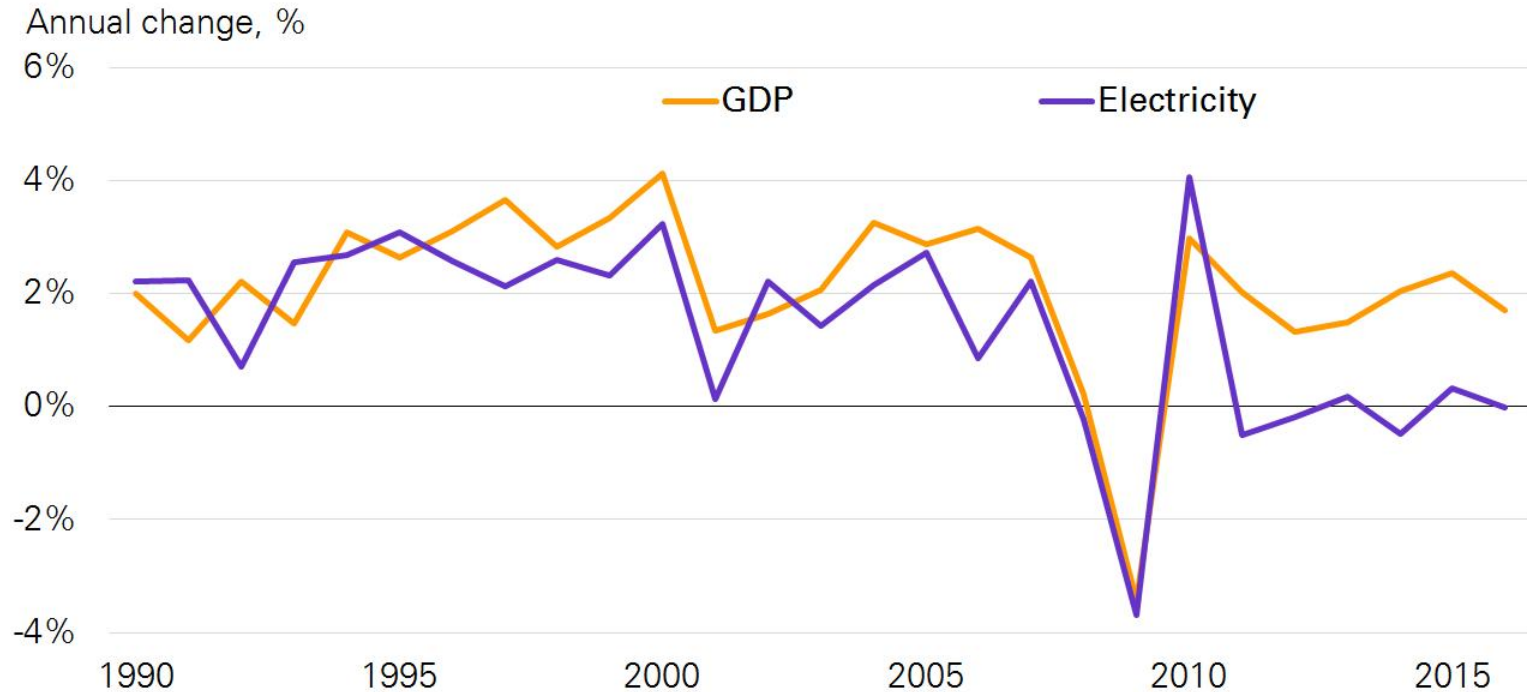
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UK coal



Source: includes data from the UK Department for Business, Energy & Industrial Strategy

OECD GDP and electricity consumption



Growth in carbon emissions



Growth in GDP and carbon emissions

