

COAL

Medium-Term Market Report 2014

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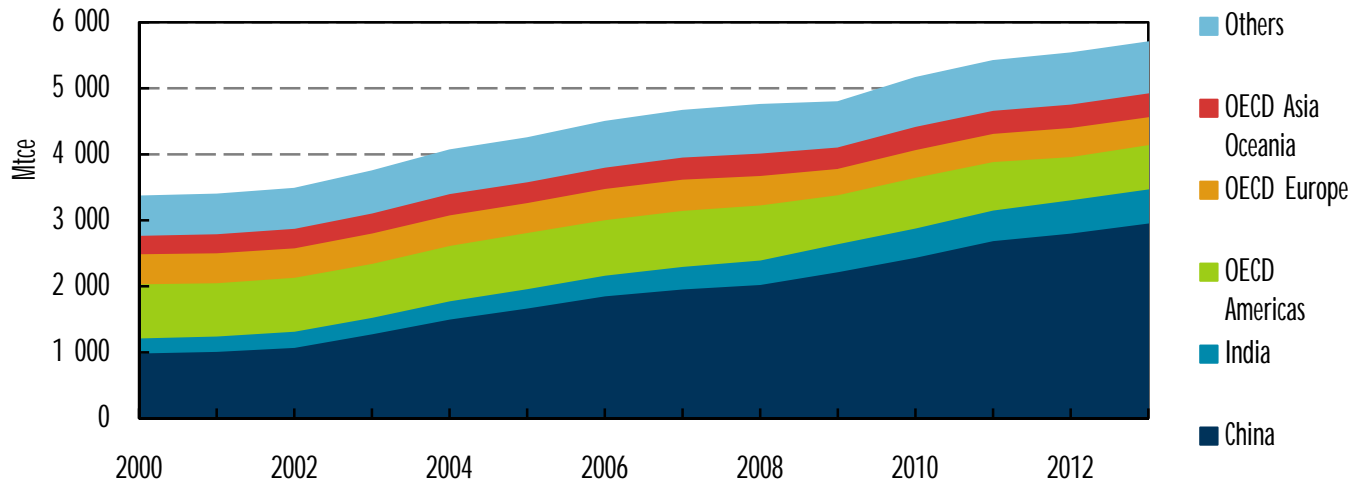
Madrid, 29 January 2015

Market Analysis and Forecasts to 2019

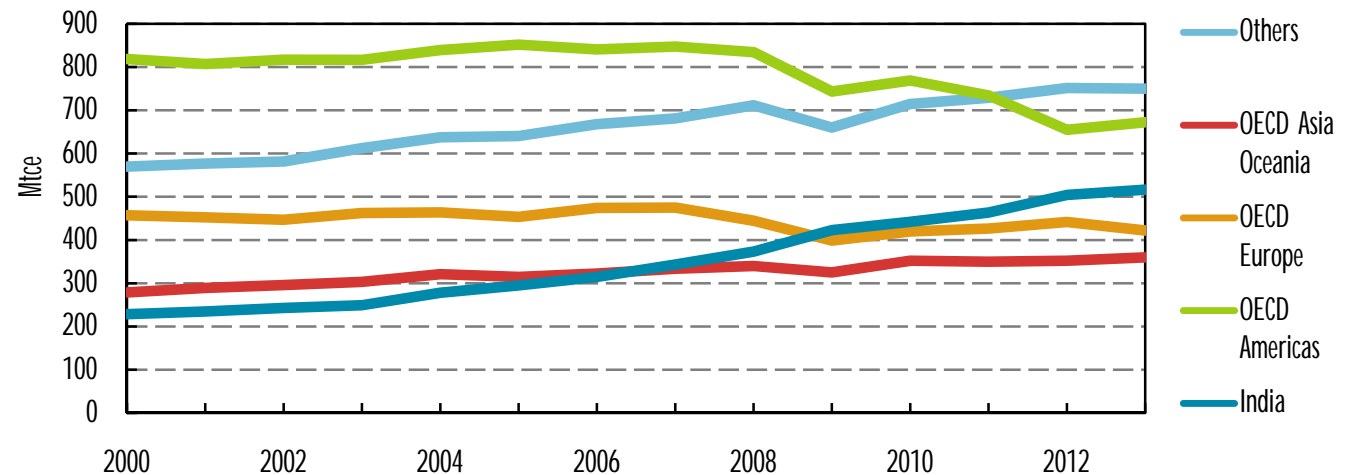


Did nuclear, renewable and gas meet energy demand growth in the last decade?

GLOBAL COAL DEMAND EVOLUTION



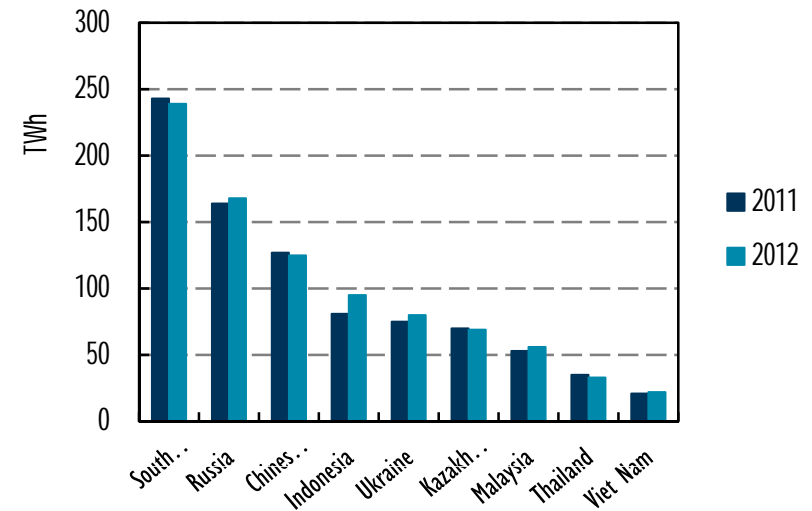
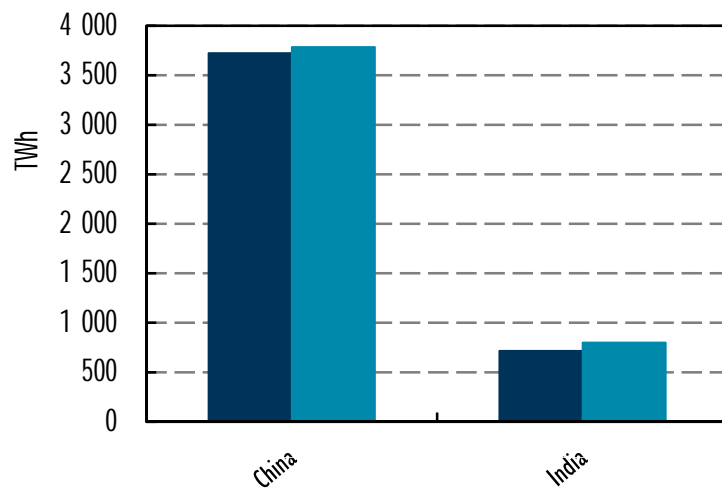
GLOBAL COAL DEMAND EVOLUTION EXCEPT CHINA



Electricity, the main driver



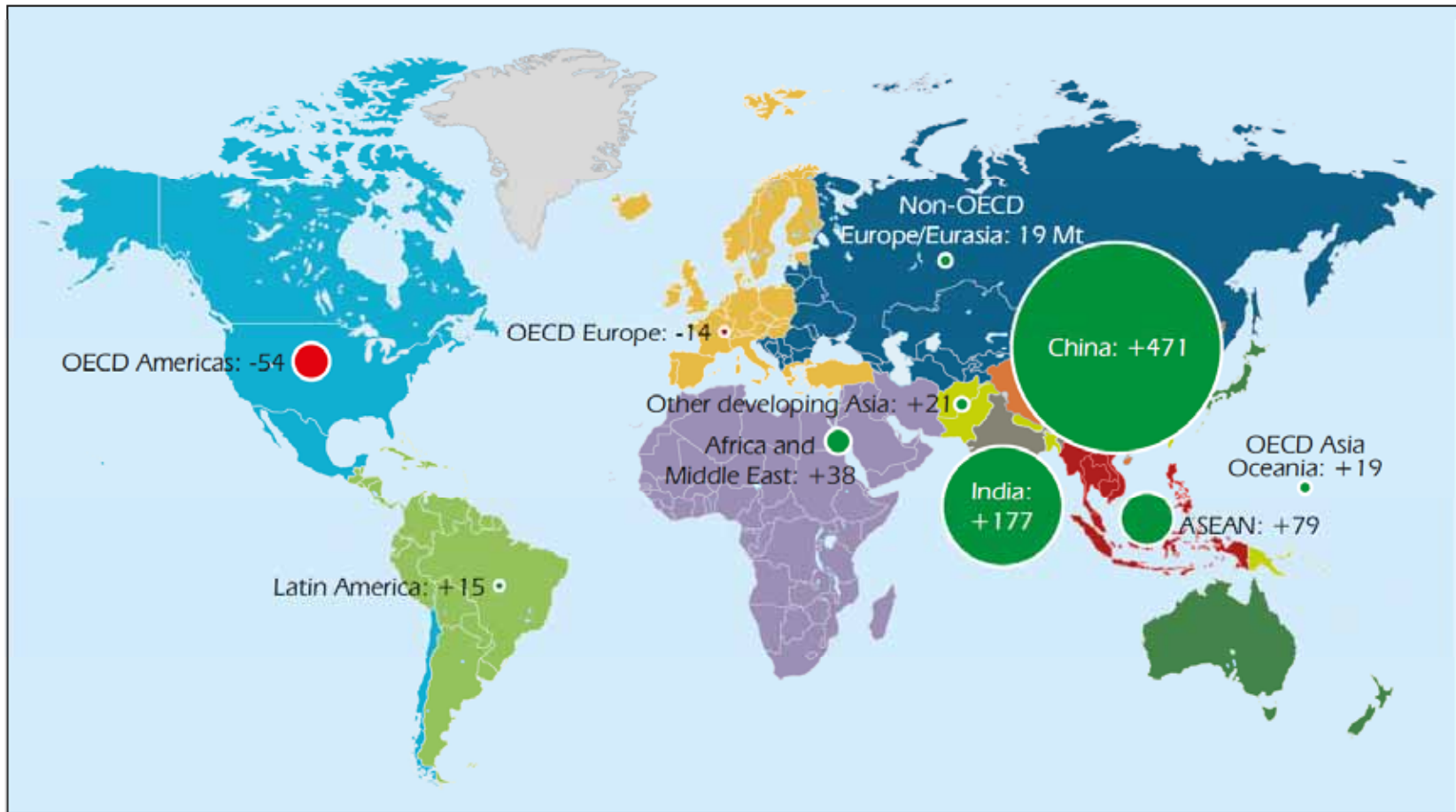
Coal-based electricity generation in selected OECD non-member countries





Is coal a declining industry?

Incremental coal demand during the outlook period

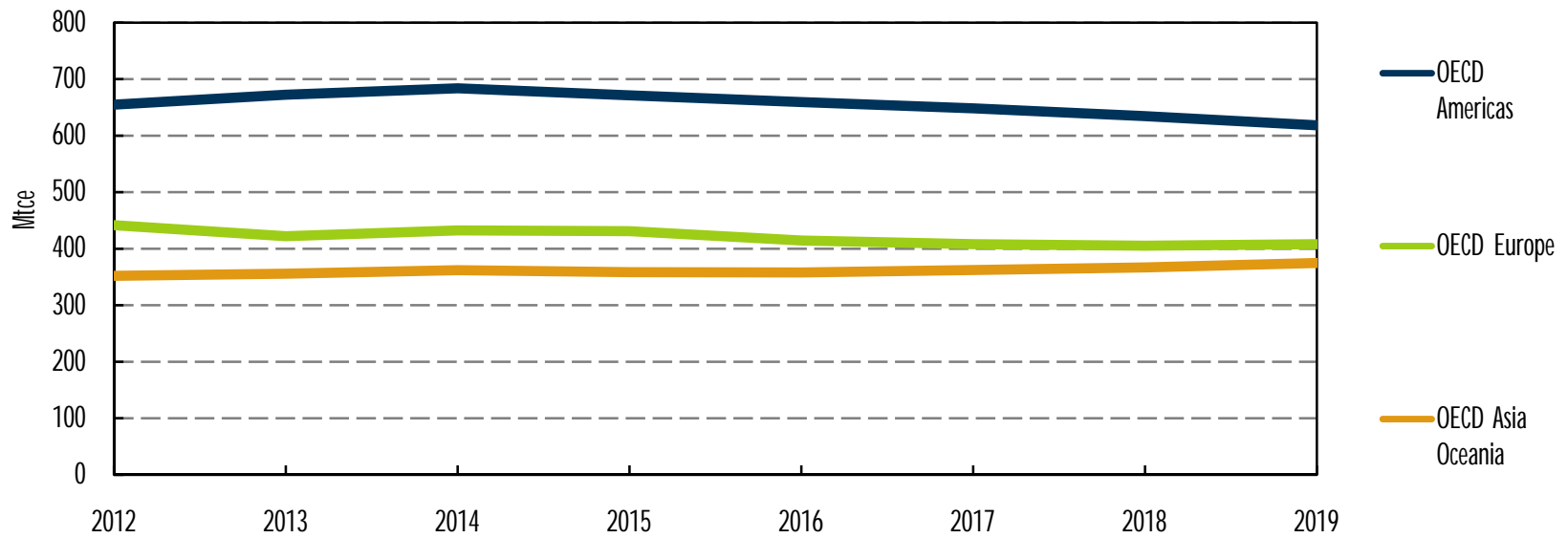


This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city or area.



Are developed countries getting rid of coal?

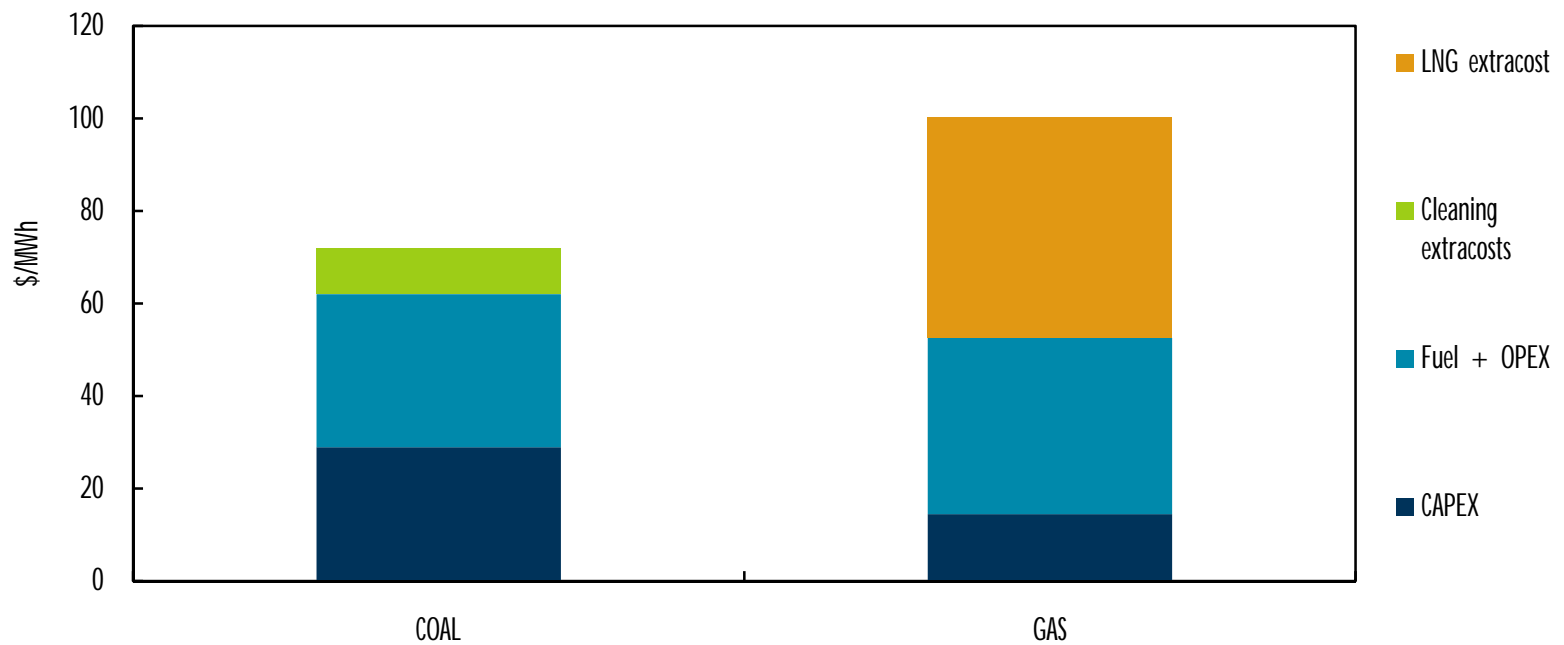
Coal demand projections





Are EPA rules pushing coal out of US power mix?

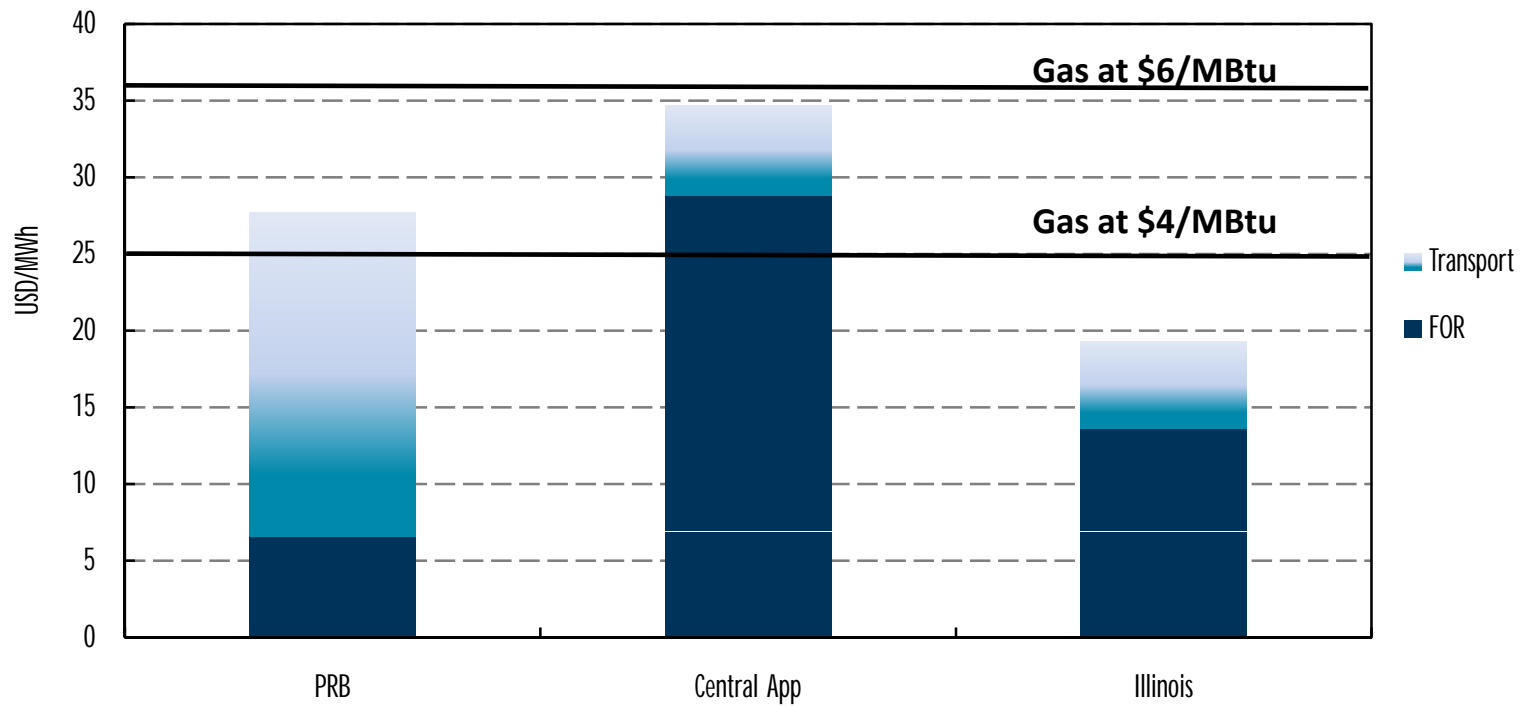
LCOE for retrofitted coal plants and CCGTs at different gas prices





Can US coal compete against natural gas?

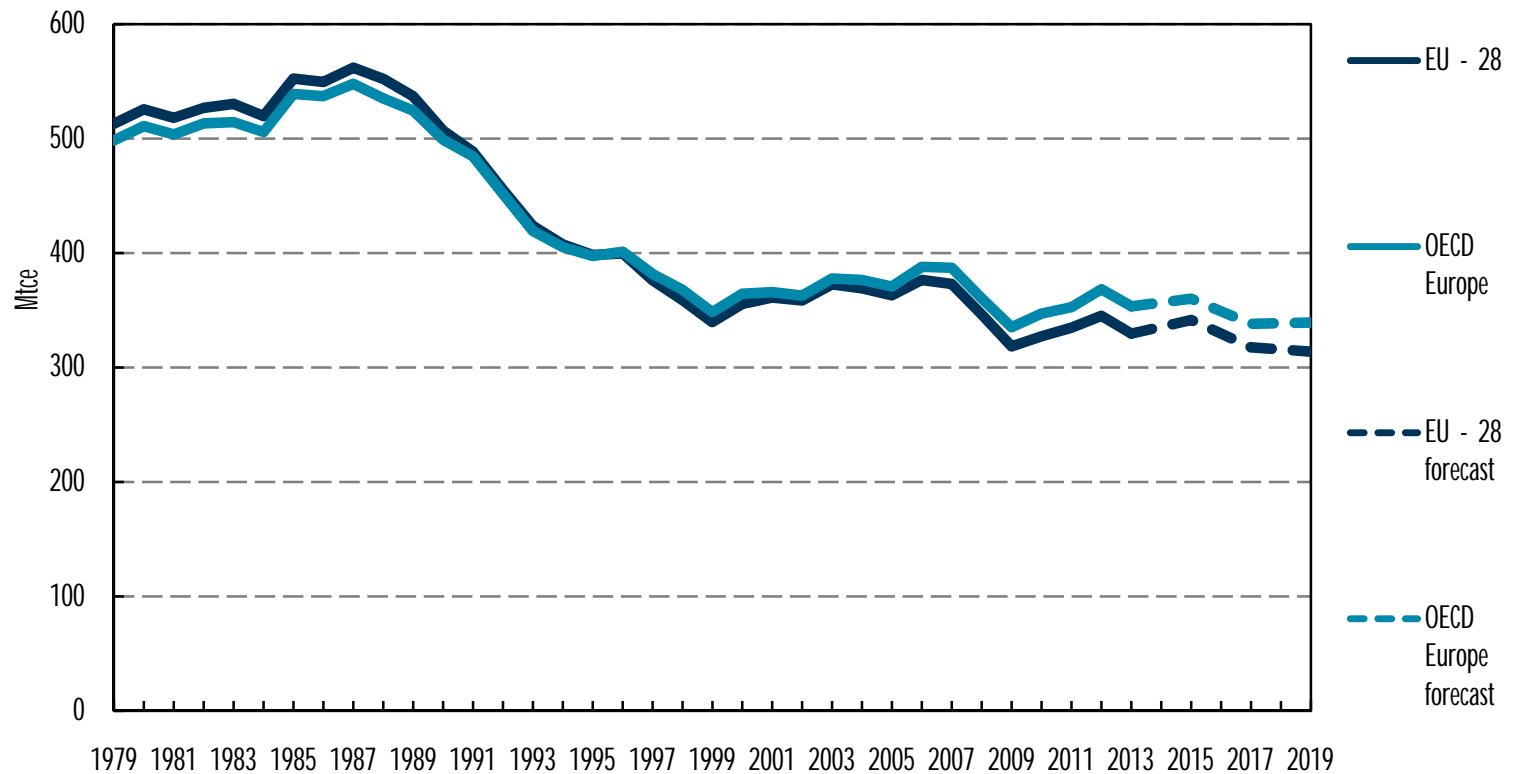
Generation cost of coal versus gas in US





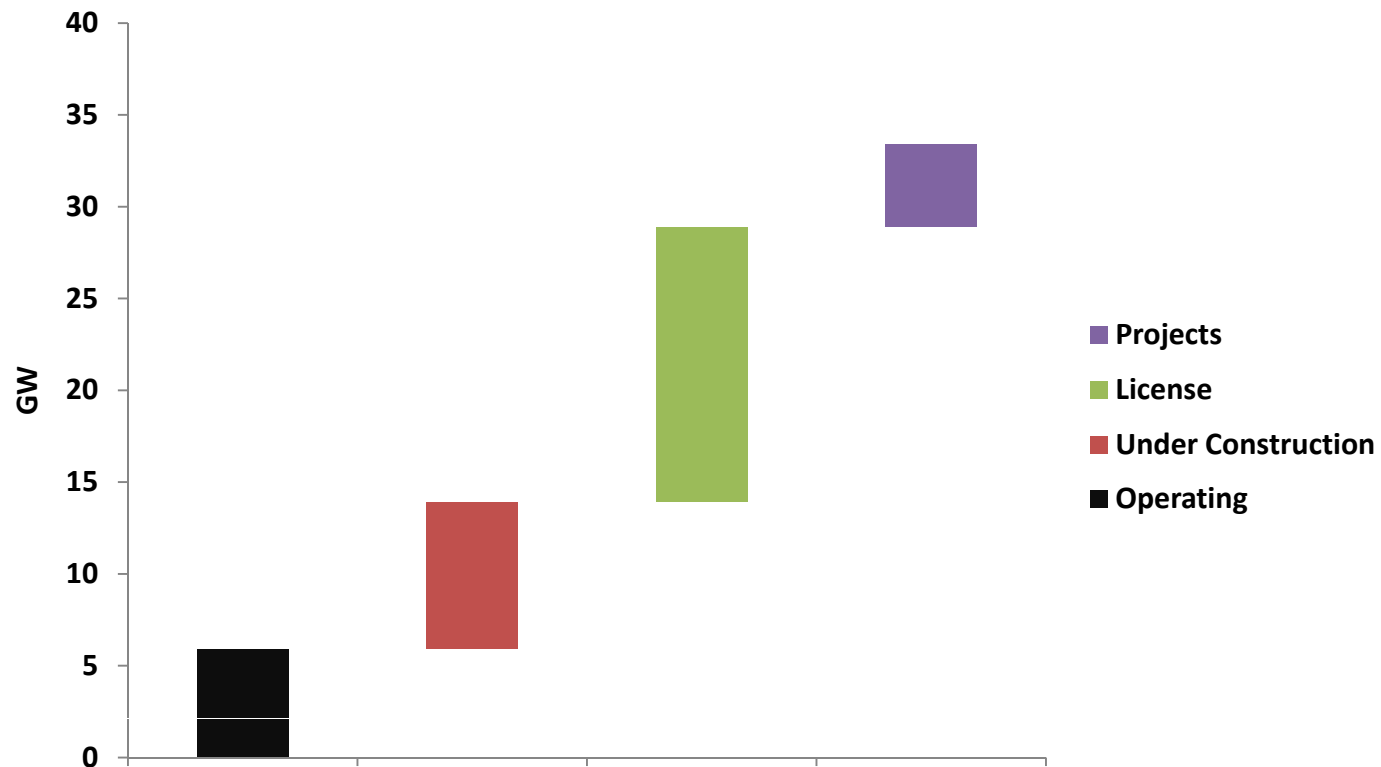
Is a coal renaissance in Europe happening?

Thermal coal and lignite demand in Europe



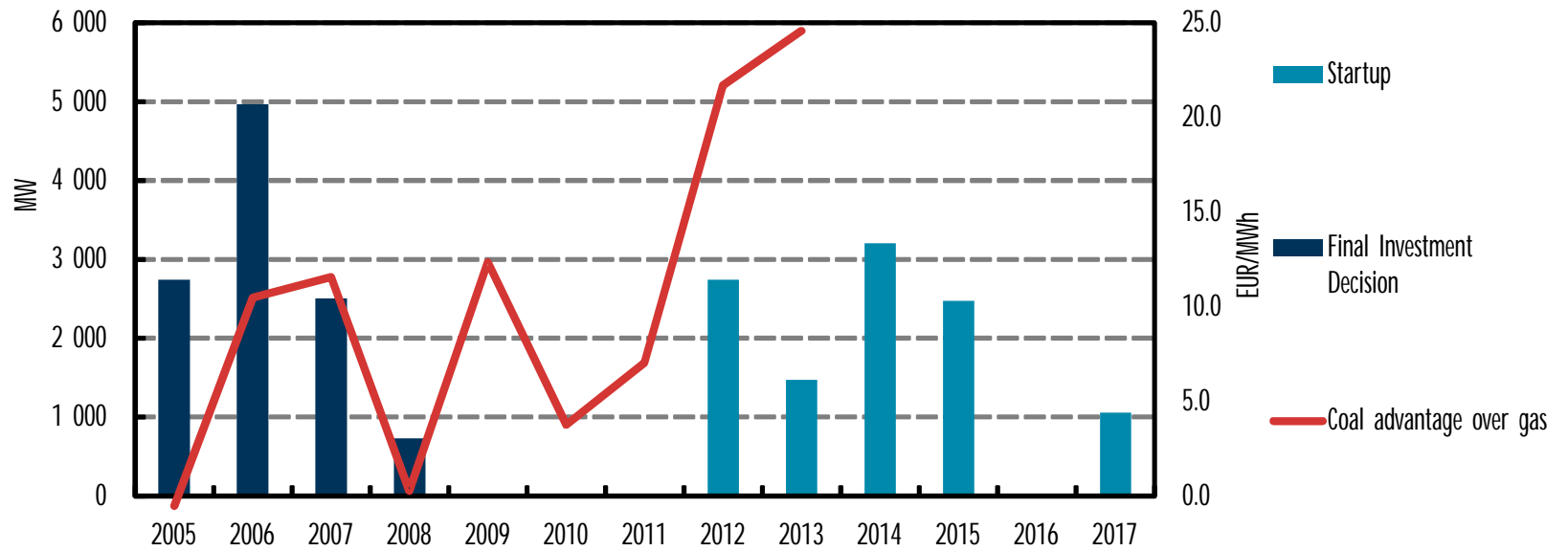
Turkey is unique within OECD-Europe

Hard coal capacity in Turkey



Did low coal prices after 2010 trigger investment?

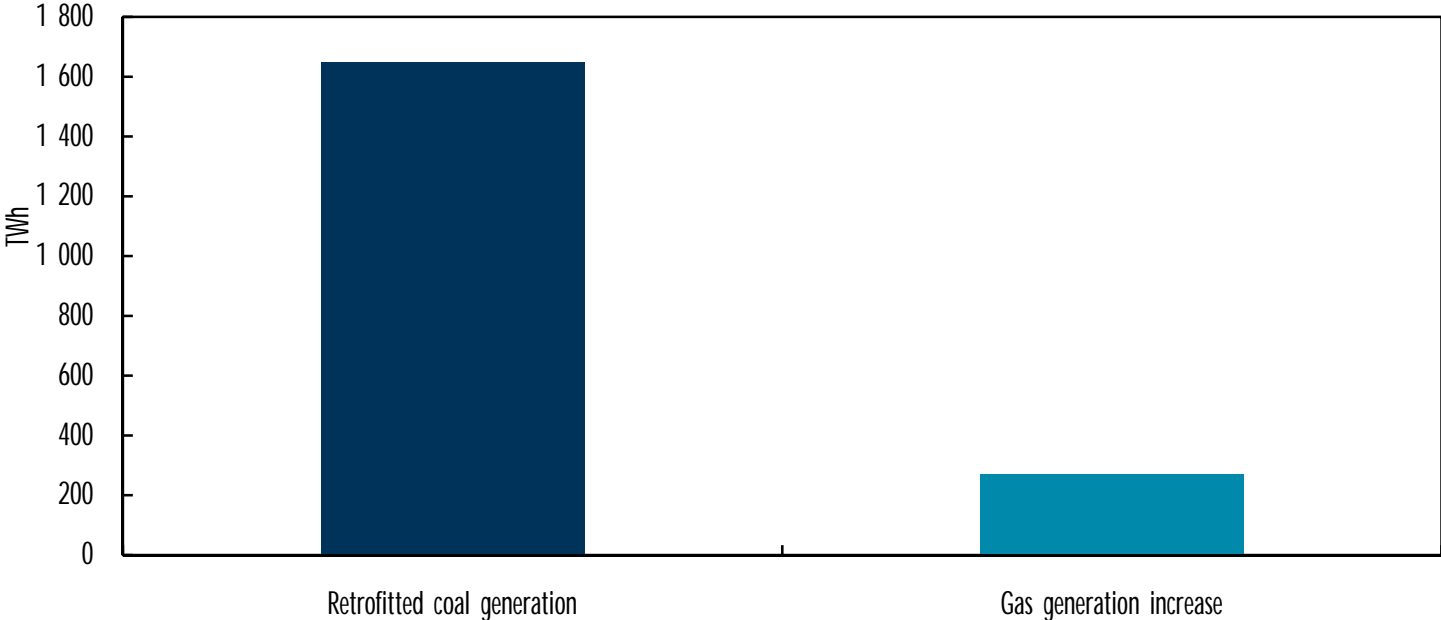
Timeline of new German coal plants





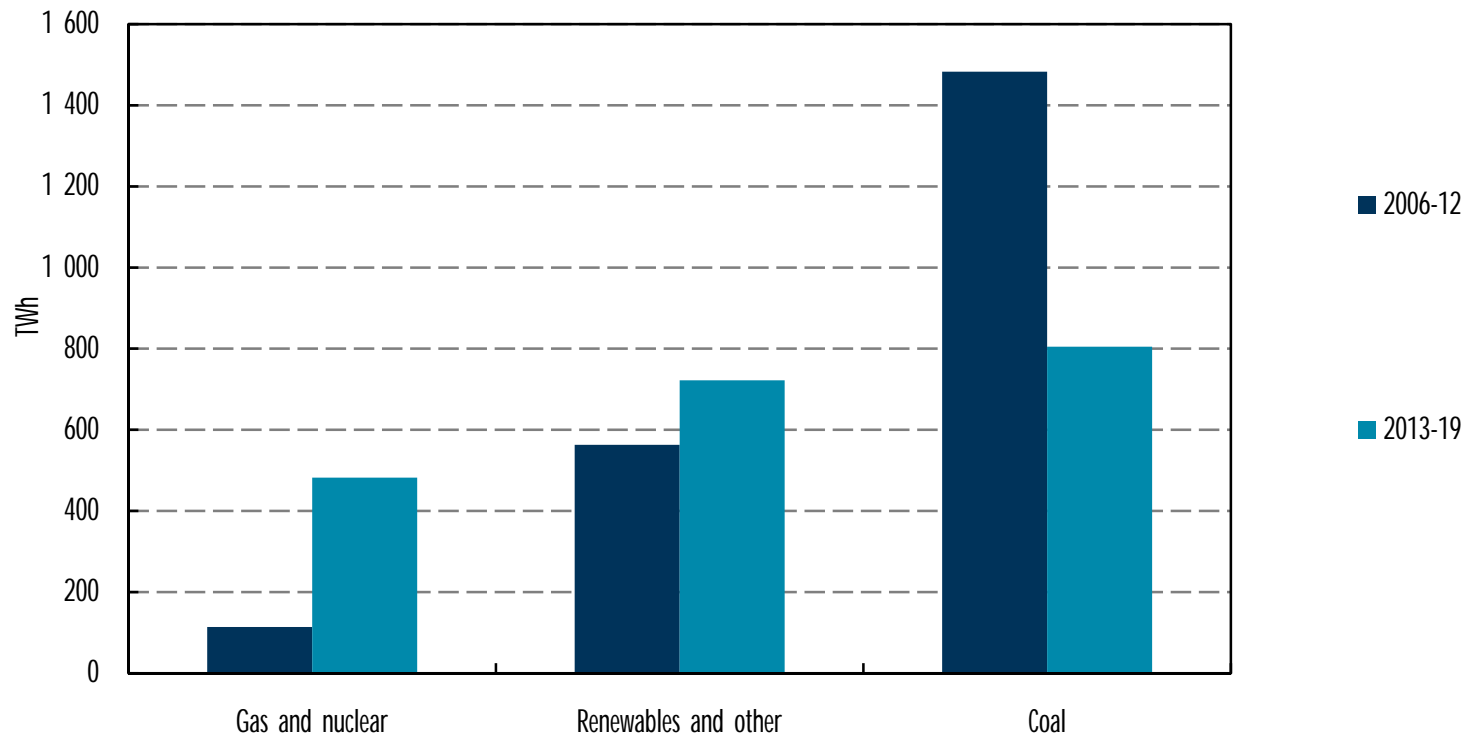
Is local air pollution in China leading to a big coal-to-gas switch?

Gas and retrofitted coal plants generation in China (2014-2019)



Does diversification in China mean a decrease in coal demand?

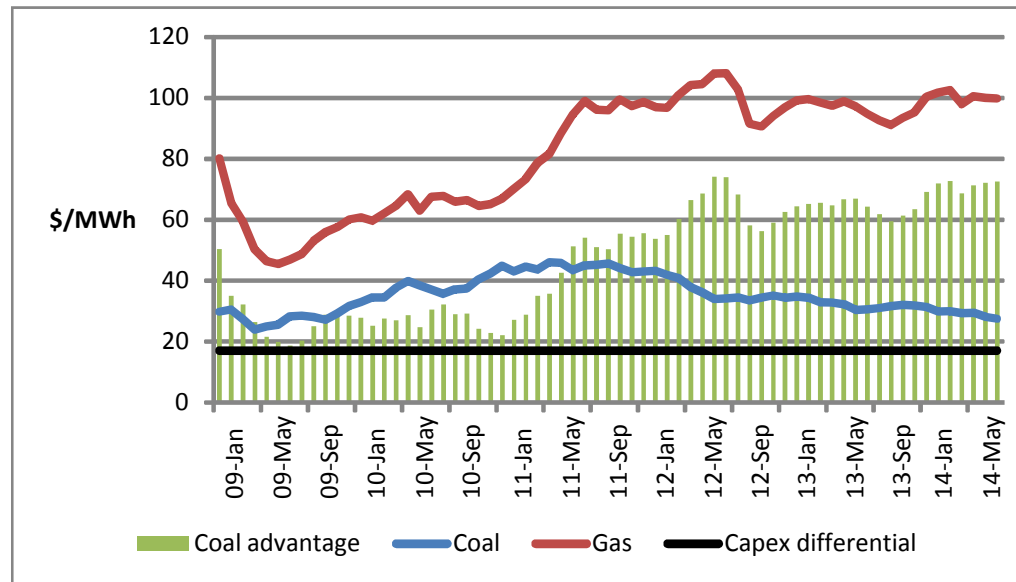
Electricity generation growth in China by fuel





At current fuel prices in Asia, coal is winner

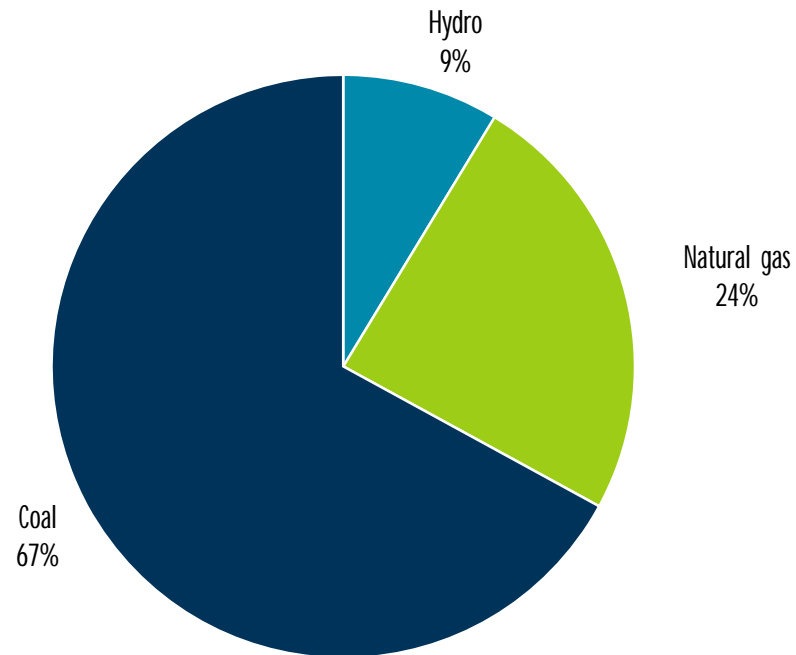
COAL AND GAS GENERATION COSTS IN ASIA





Are gas-rich countries using coal in power generation?

New projected capacity in Malaysia



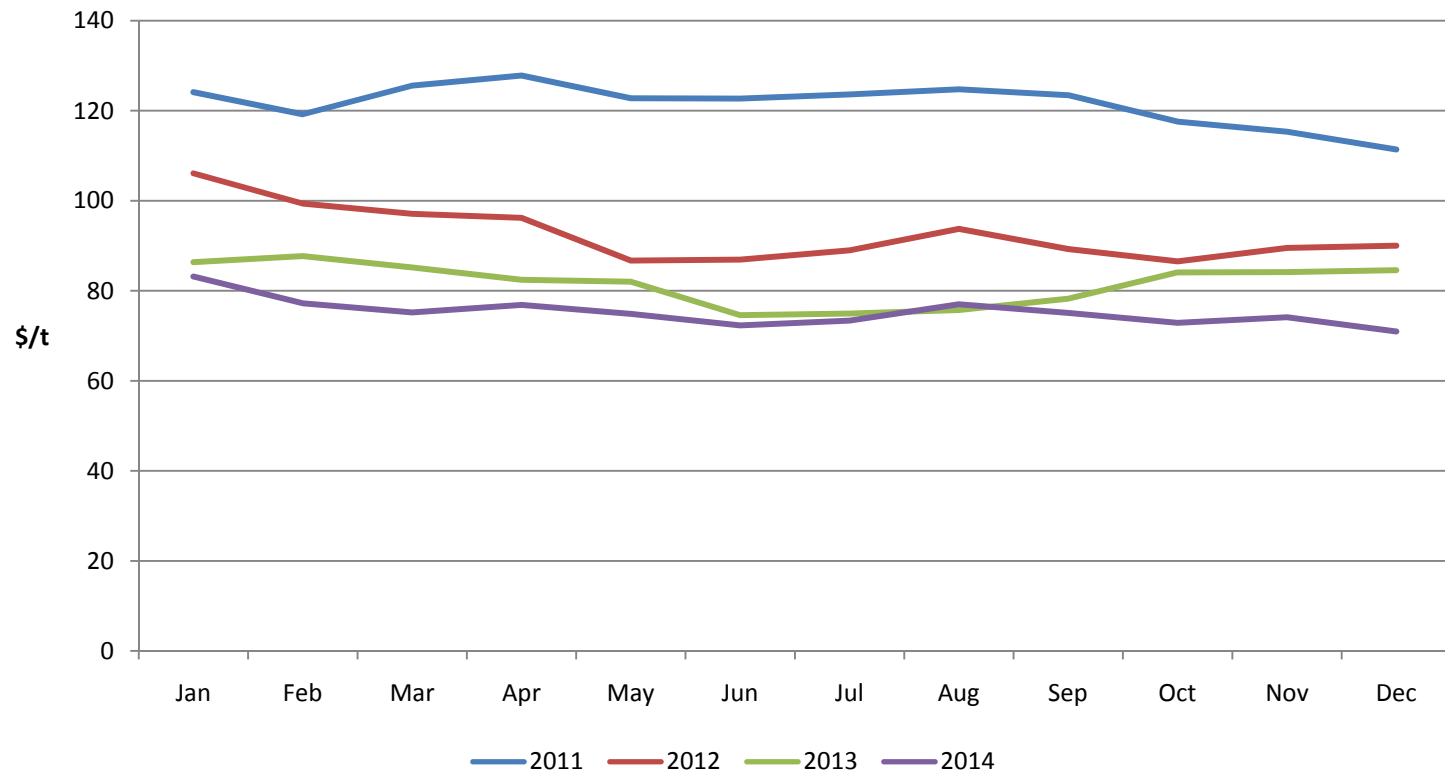
Total: 7 473 MW





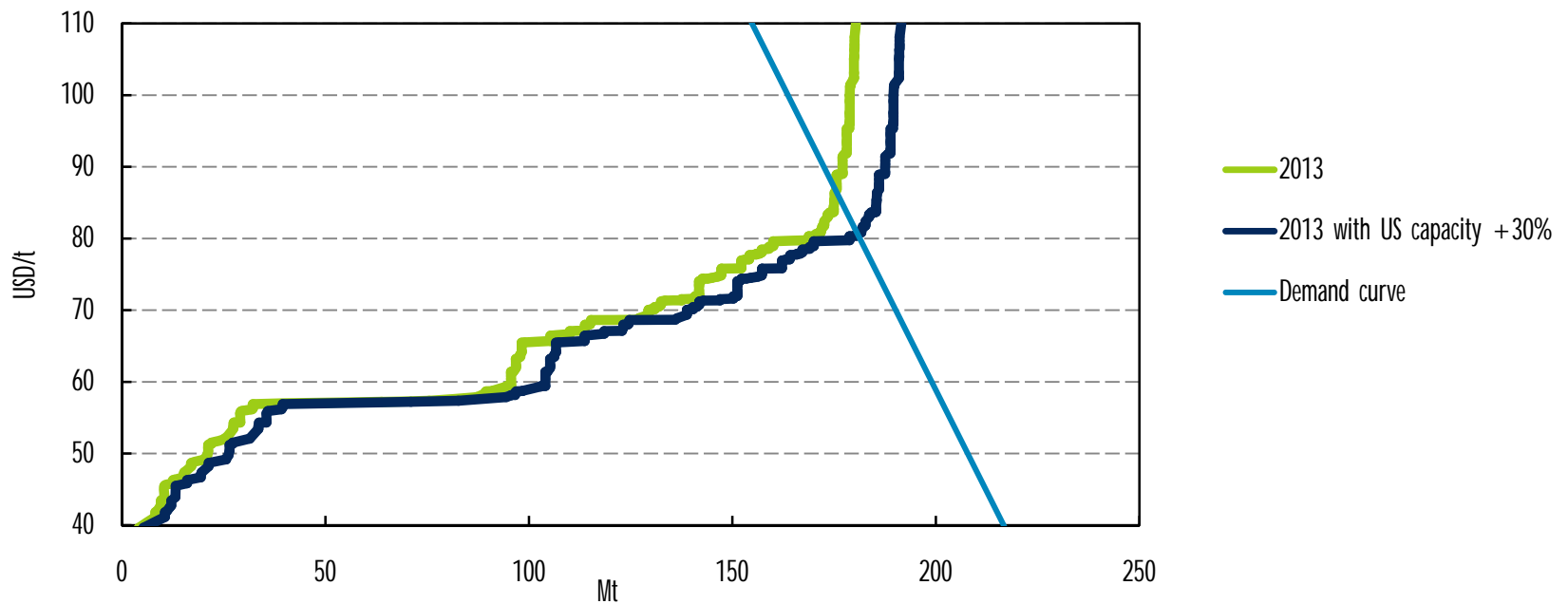
Prices going down and down

CIF ARA MONTHLY PRICES



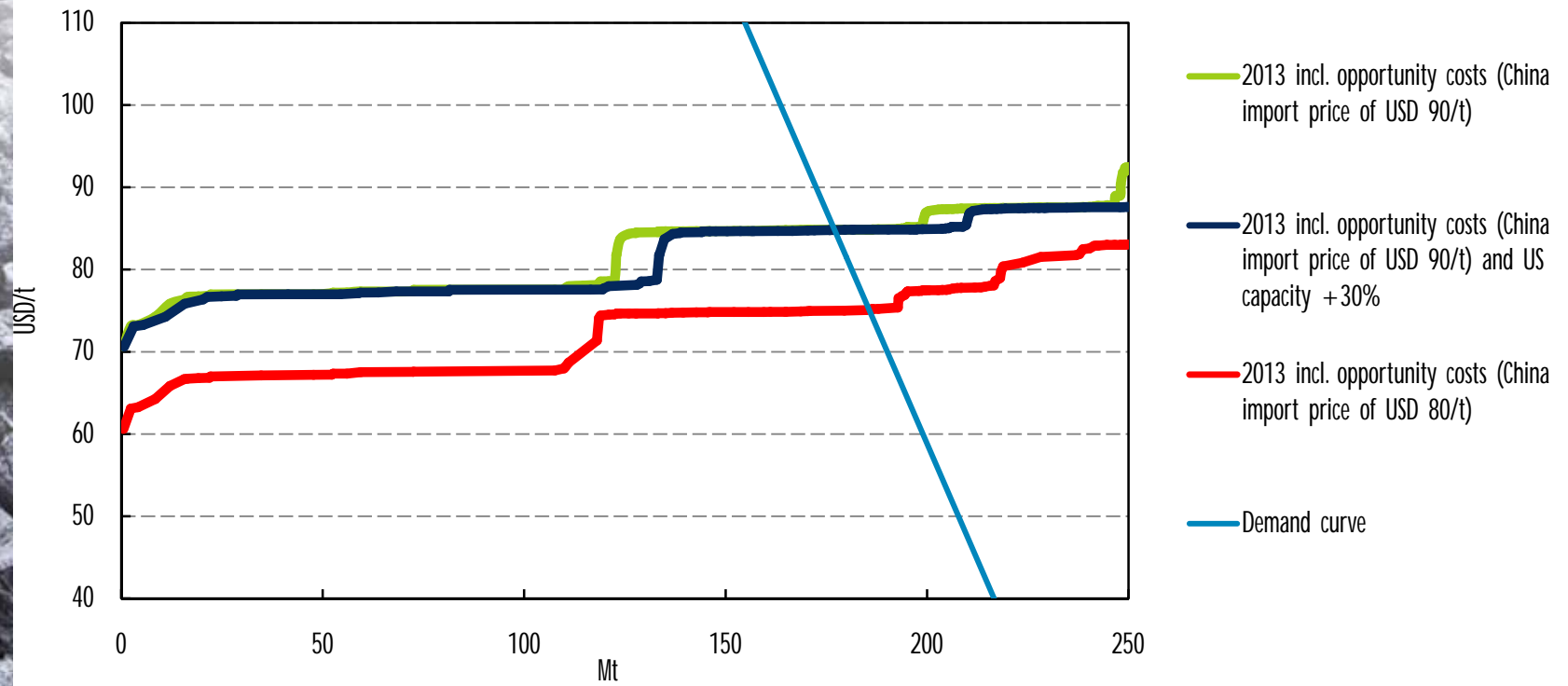


Is US pushing European prices down?



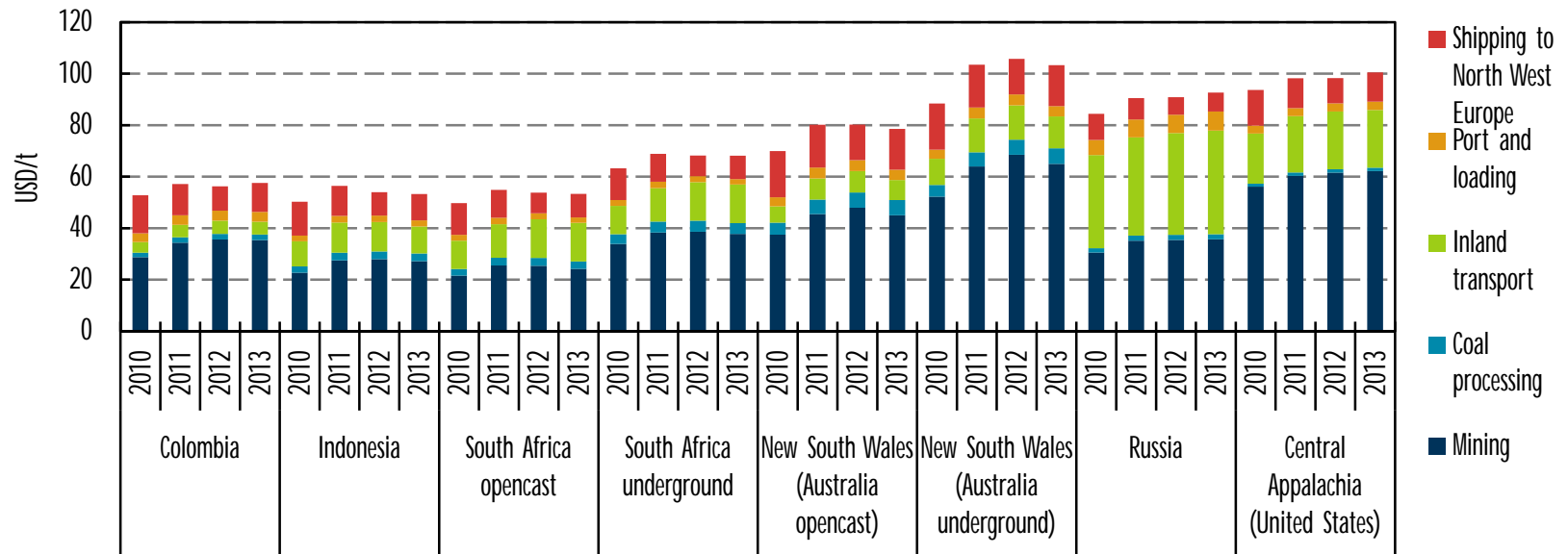


Or maybe China?



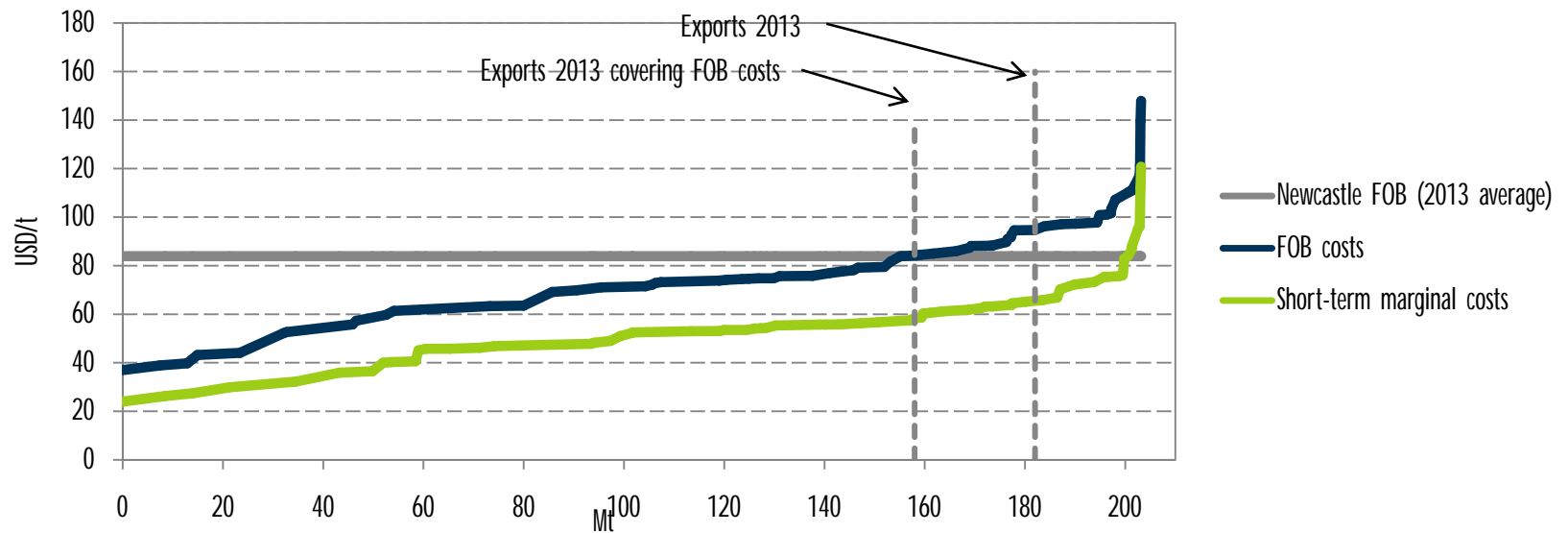
Cost moderation

CIF supply costs to Europe





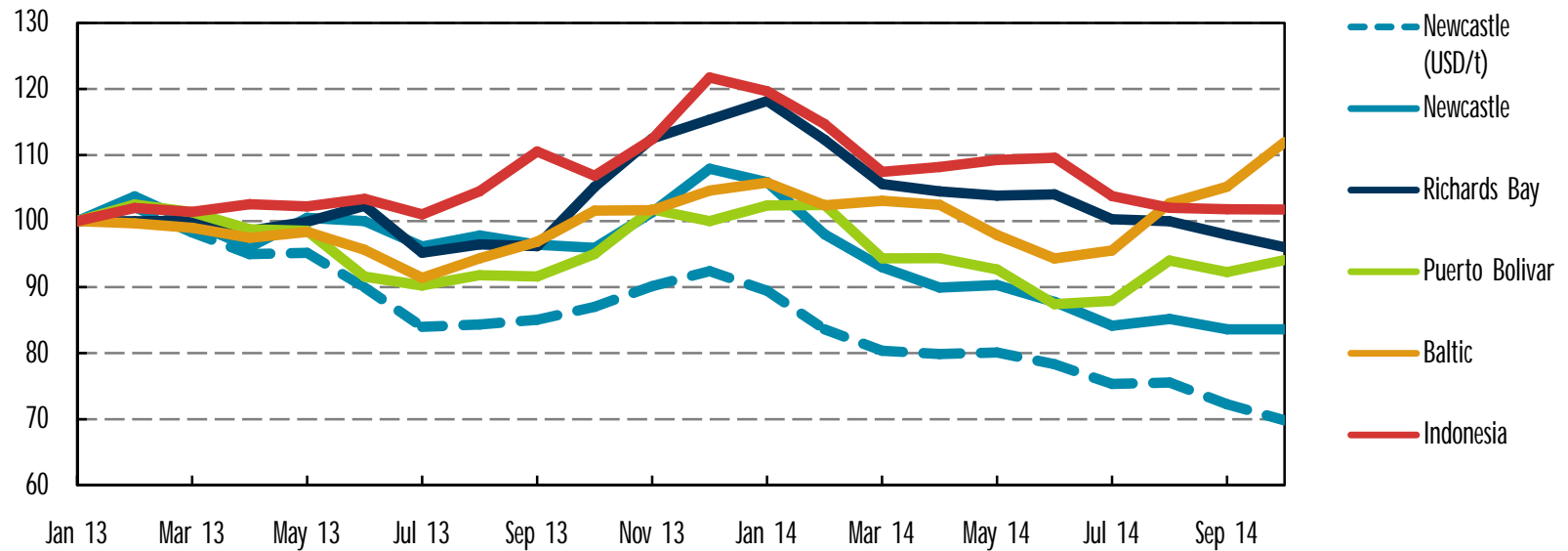
Take-or-pay contracts



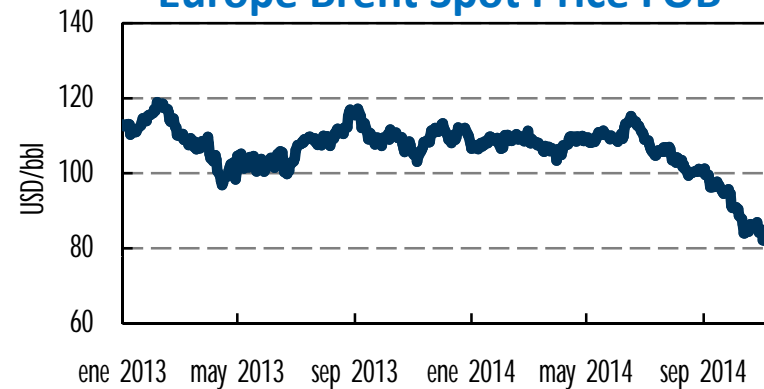


Why have prices decreased further?

Indexed coal price markers in local currency



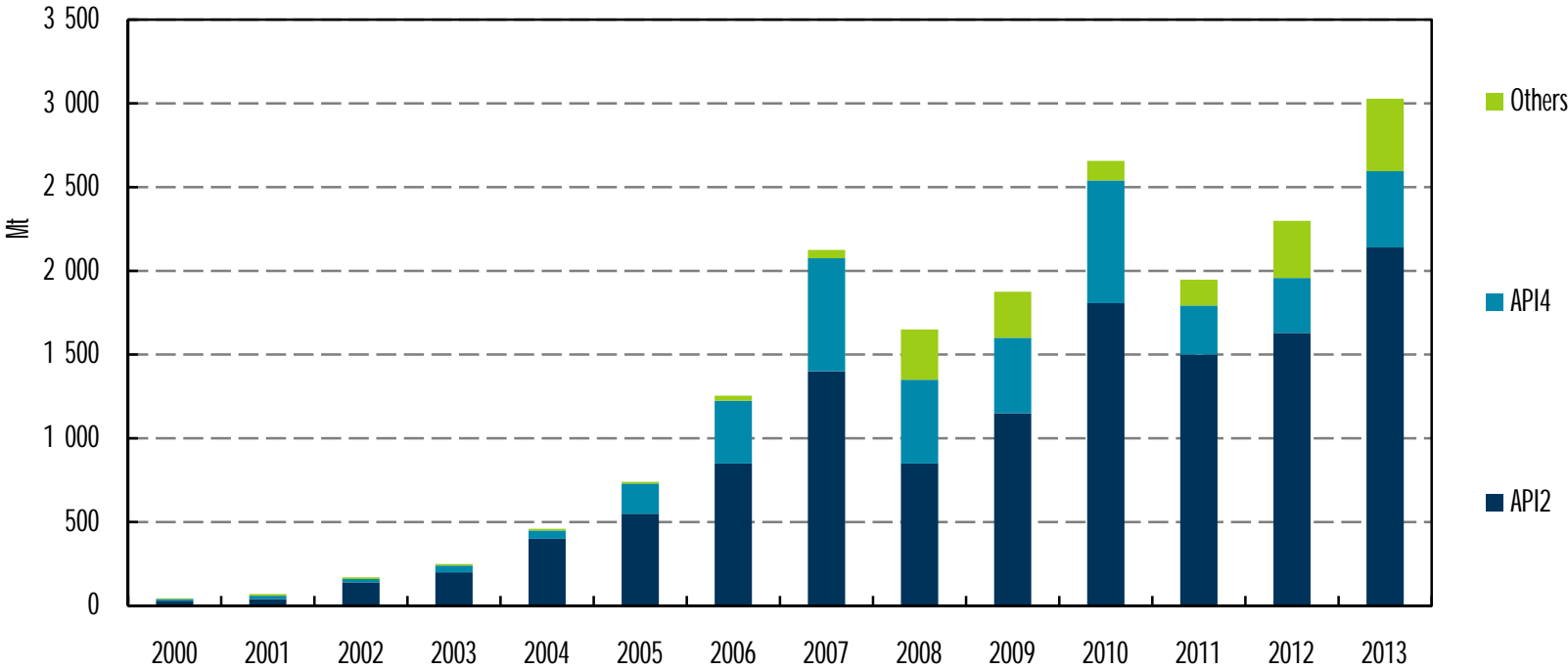
Europe Brent Spot Price FOB





Significant growth in derivatives

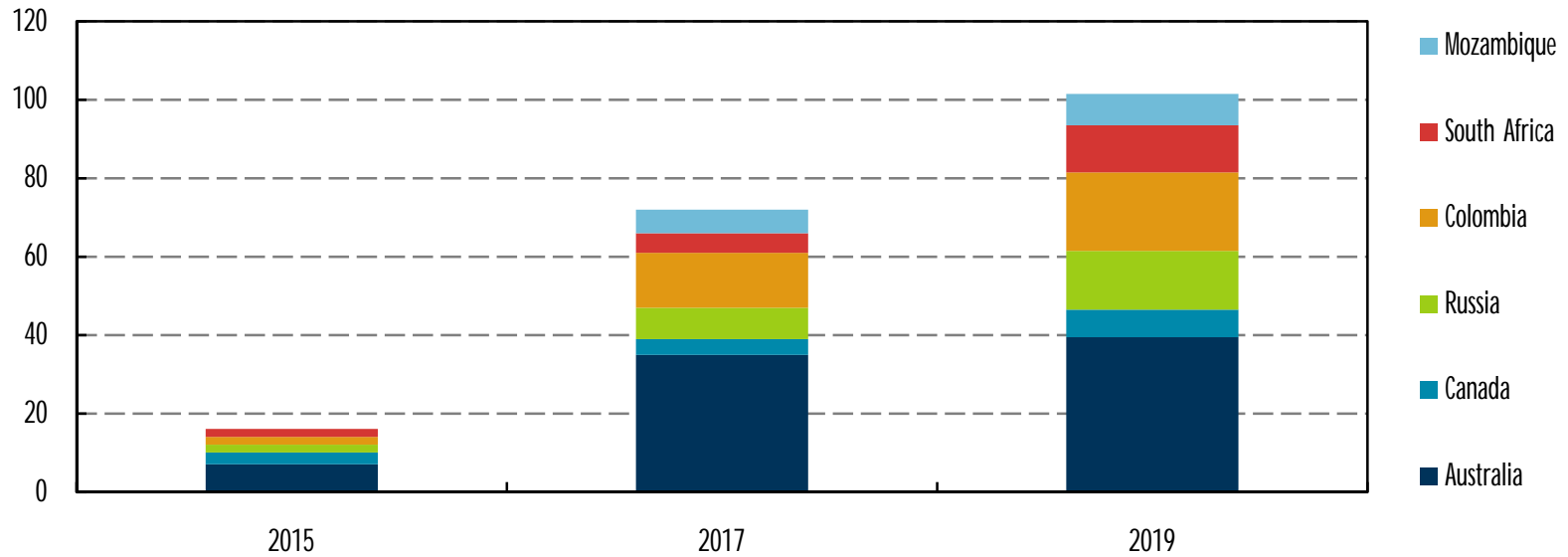
Development of trade volumes for coal derivatives



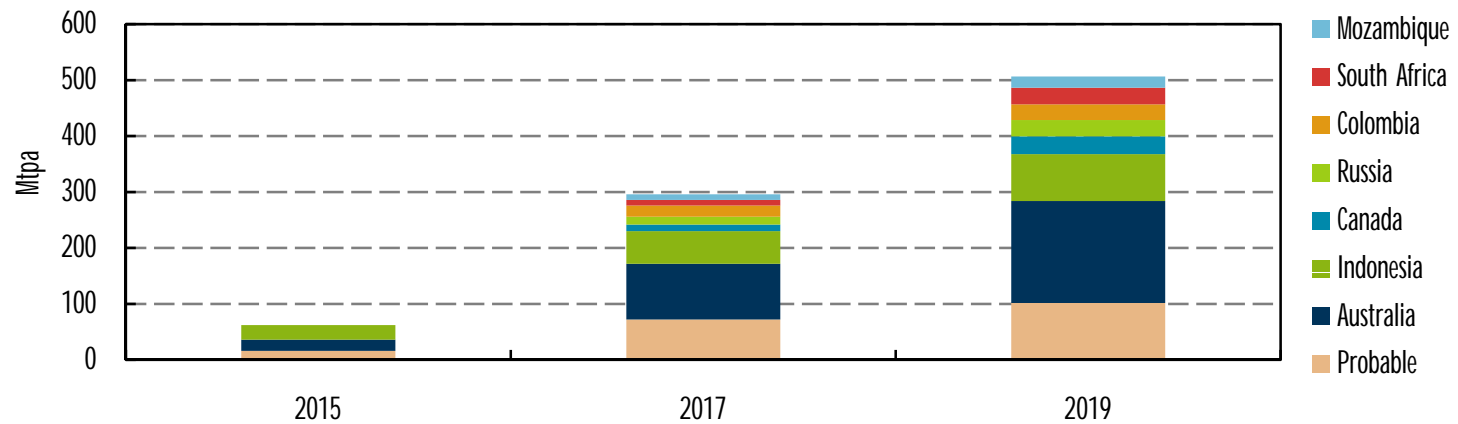


Seaborne coal trade remains concentrated in few exporting countries

Probable mining capacity additions



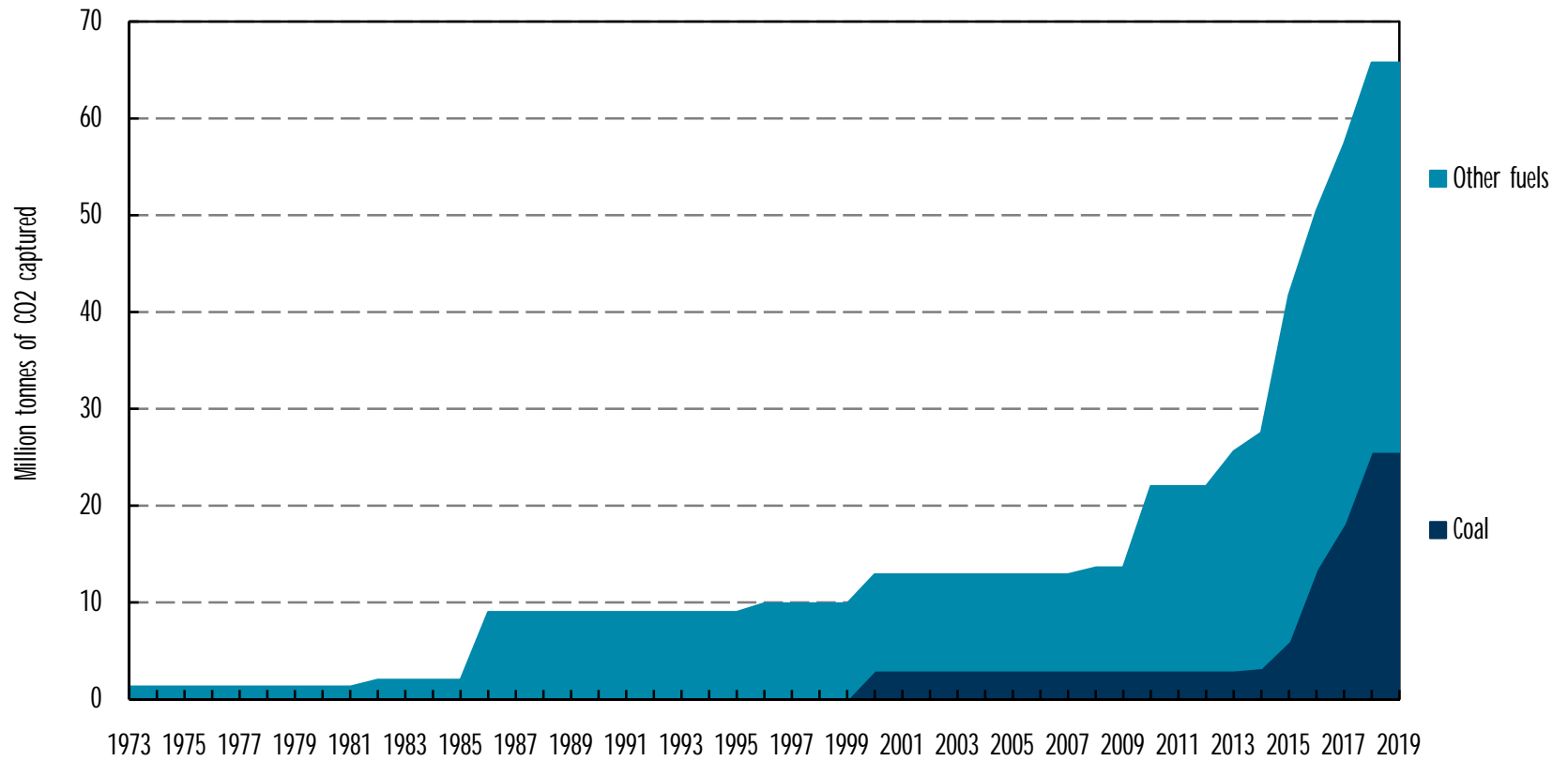
Potential mining capacity additions





Is CCS dead?

Cumulative CO₂ captured from production and use of different fuels





Concluding Remarks

- **Coal demand will grow at 2.1% per year on average, surpassing the 9-billion-tonne threshold**
- **All the net growth will occur in Asia, as declines in US and Europe are offset by higher demand in other regions**
- **China has entered a moderate pace of growth, but it will remain the elephant in the room for a while**
- **Low prices remain due to various reasons all pushing prices down**
- **The coal renaissance in Europe is over and no strong growth of US exports to Europe is foreseen.**

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Comments to the report are welcome
and should be addressed to:

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Market Analysis and Forecasts to 2019