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Medium-Term Coal Market Report 2015

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Coal in today's energy system

- **The importance and implication of coal today**
 - *Generates over 40% of electricity*
 - *Can be important for economic & social development & energy security*
 - *Produces almost 50% of CO₂ emissions & is a key source of air pollution*

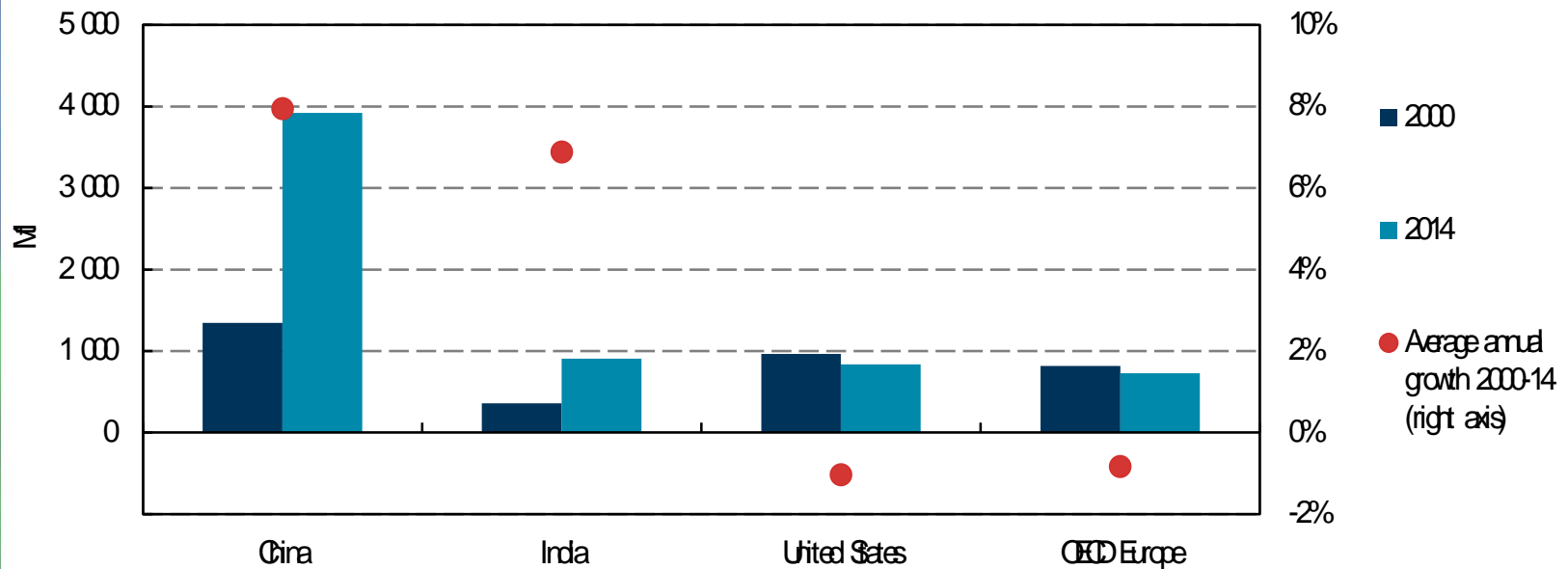
- **China is at the center of the coal world**
 - *Responsible for 80% of rise in coal use since 2000 & now half global use*
 - *Is world's top coal producer and – until recently – largest importer*

- **After a decade of growth, global coal use halted in 2014 and is expected to decline in 2015**
 - *Coal prices are at decade lows on a glut of supply & tepid demand*

- **The COP-21 Paris Agreement raises important questions for coal**

Coal demand in the 21st Century

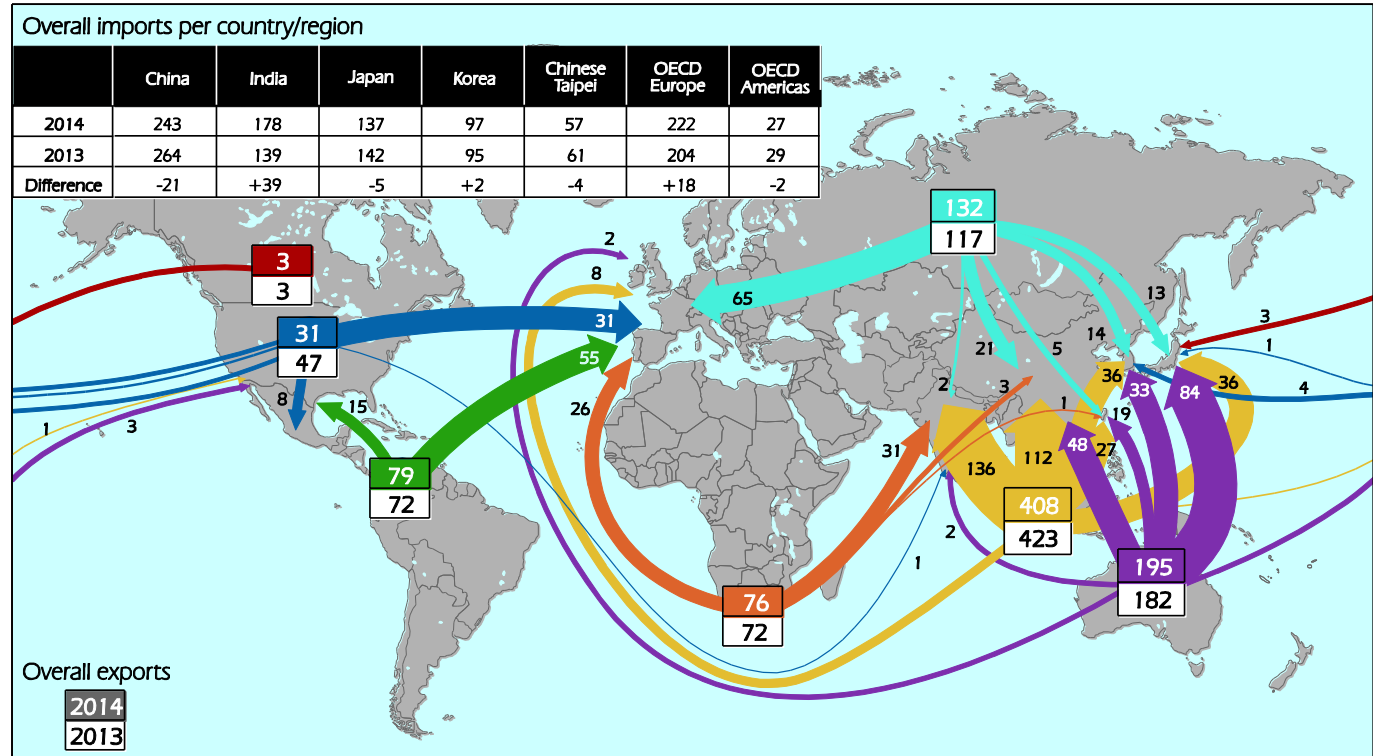
The four major consumers of coal, 2000-14



China and, to a lesser extent, India, led the global growth. Declines in Europe and US were negligible when compared with growth in Asia

Seaborne steam coal trade levelling off

Main steam coal seaborne trade flows

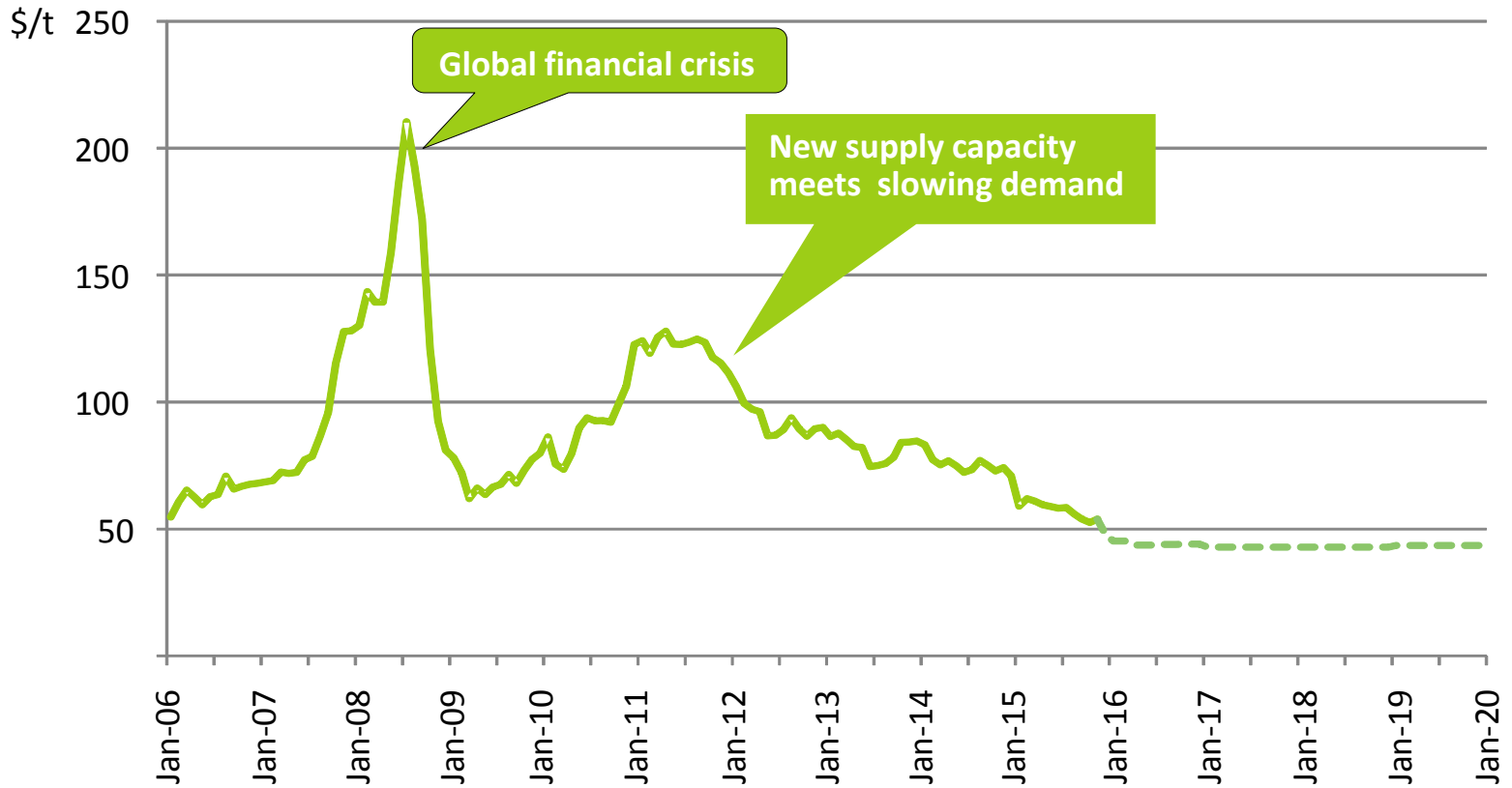


This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city or area.

Chinese imports decline after four years of strong growth, with implications on the global seaborne market

Coal prices to remain under pressure

Development of thermal coal prices

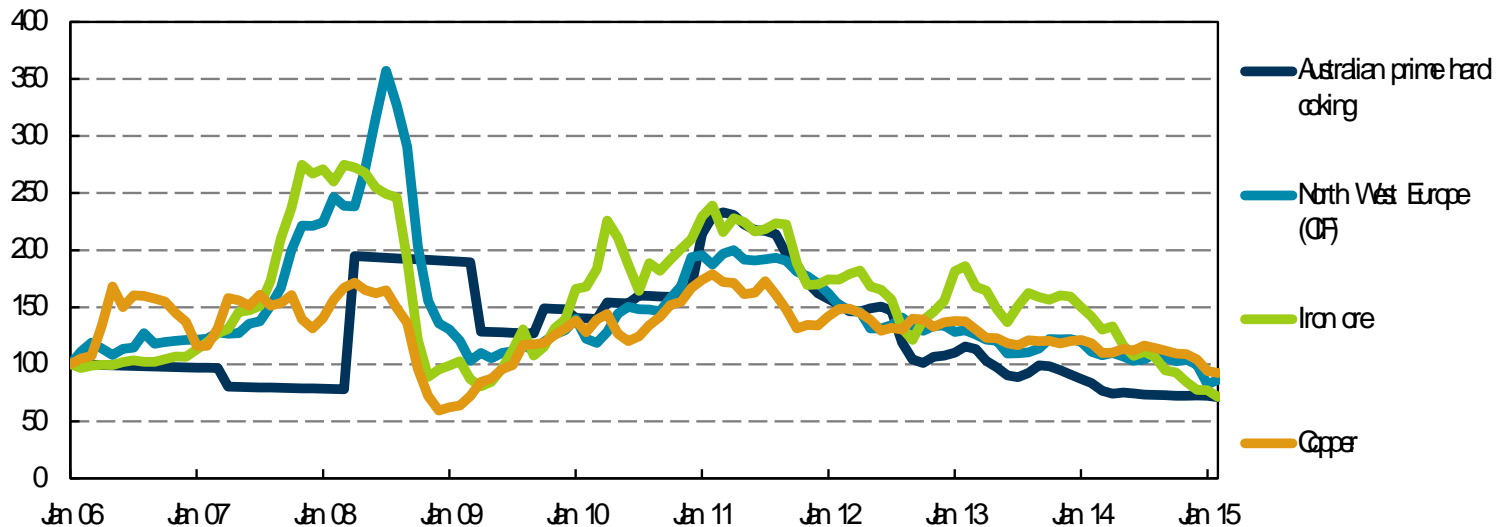


CIF Prices in North West Europe (ARA)

Global overcapacity & weaker than expected demand look set to put further downward pressure on coal prices through to 2020

Are climate policies driving coal prices down?

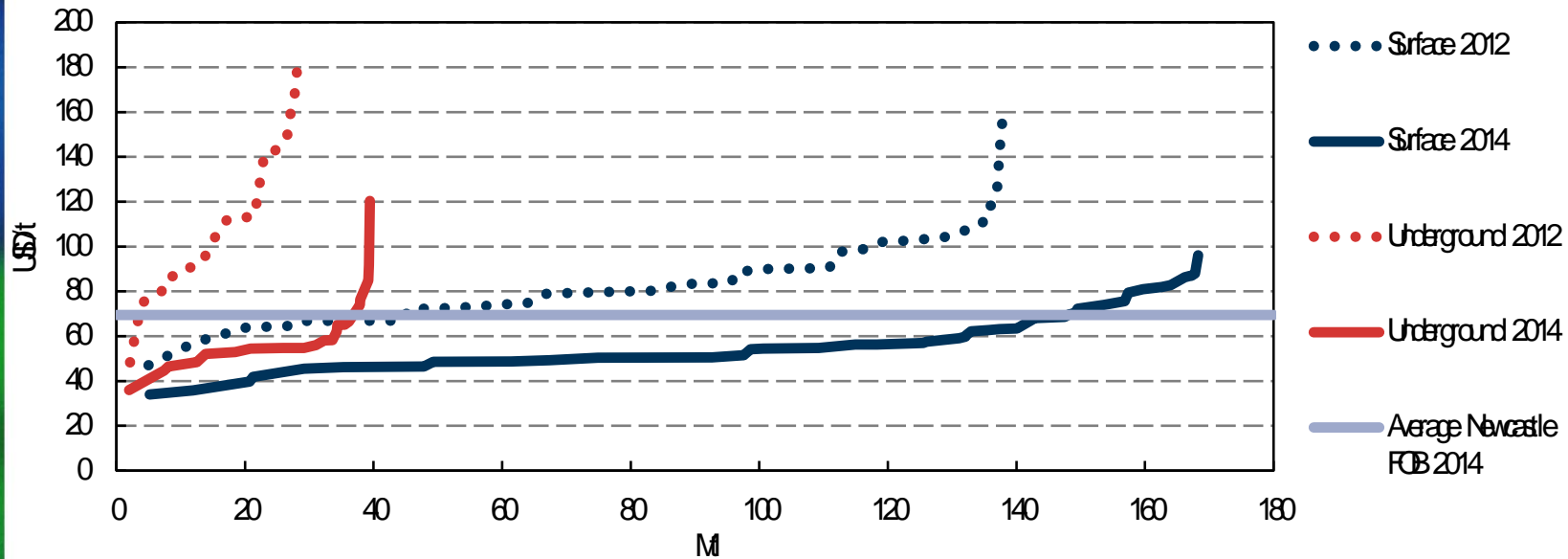
Indexed real commodity prices



A strong correlation between industrial and energy commodities suggests the dominance of macroeconomic factors

Cost reduction is real

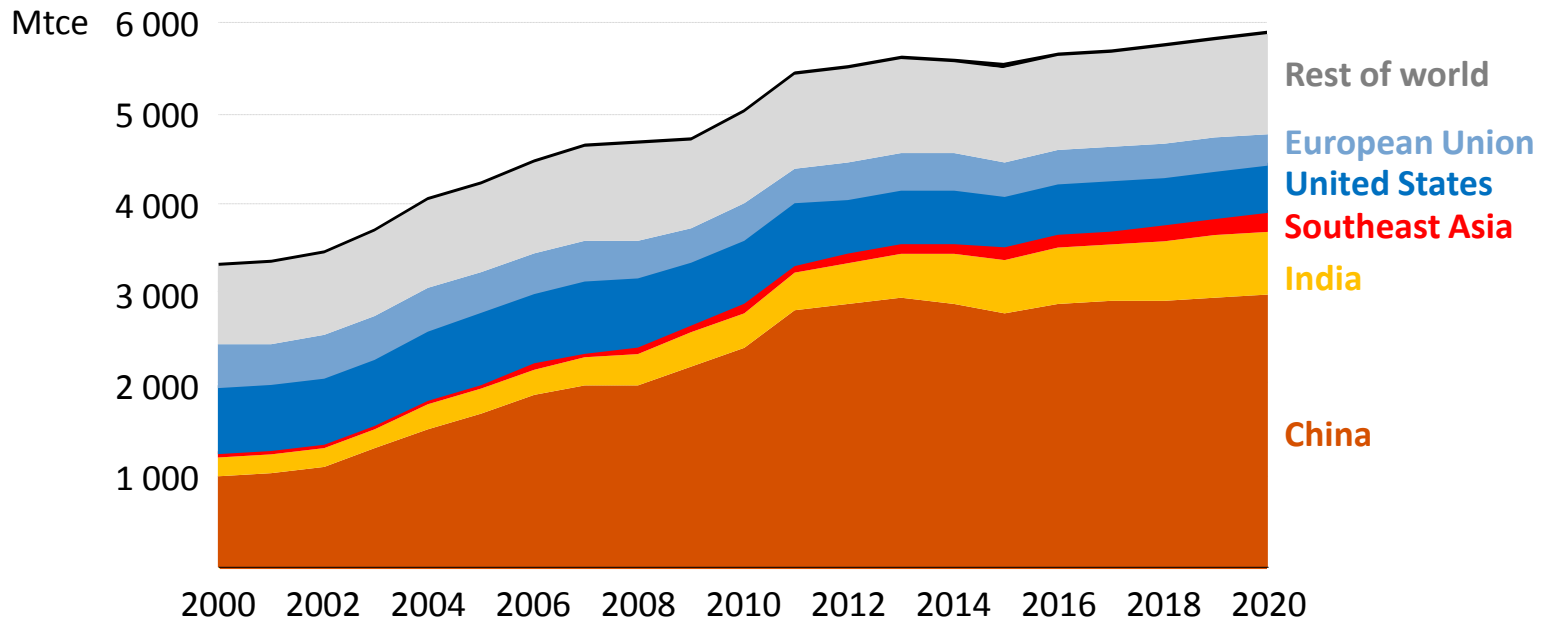
Supply cost curve of Australian exports



The capacity of the industry to reduce costs in a low price environment is often overlooked.

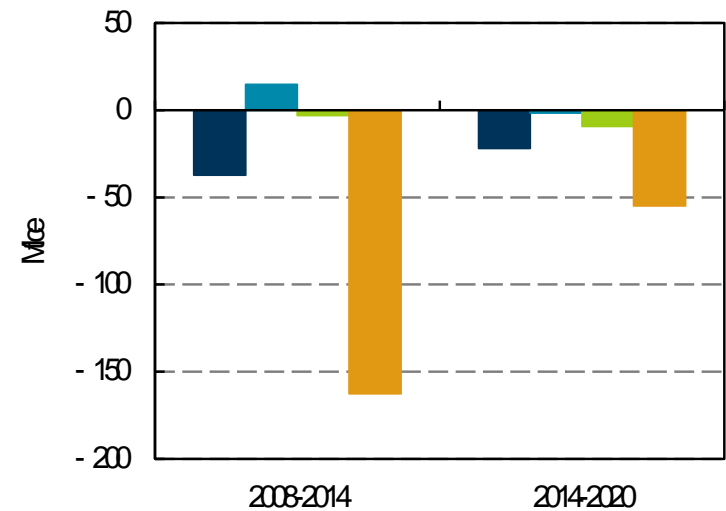
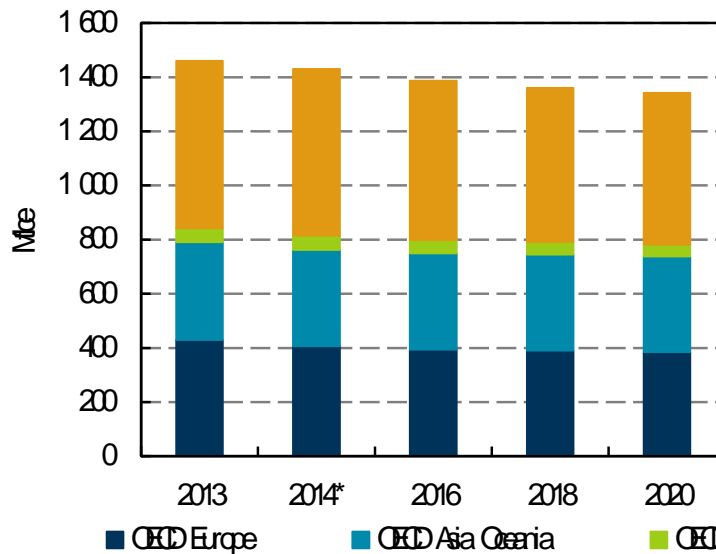
There is no “second” China waiting to drive global coal use

Global coal demand by region (historical and forecast)



Strong growth in coal use in India & Southeast Asia offset declines in the EU & the US, but does not match the rise seen over last decade in China

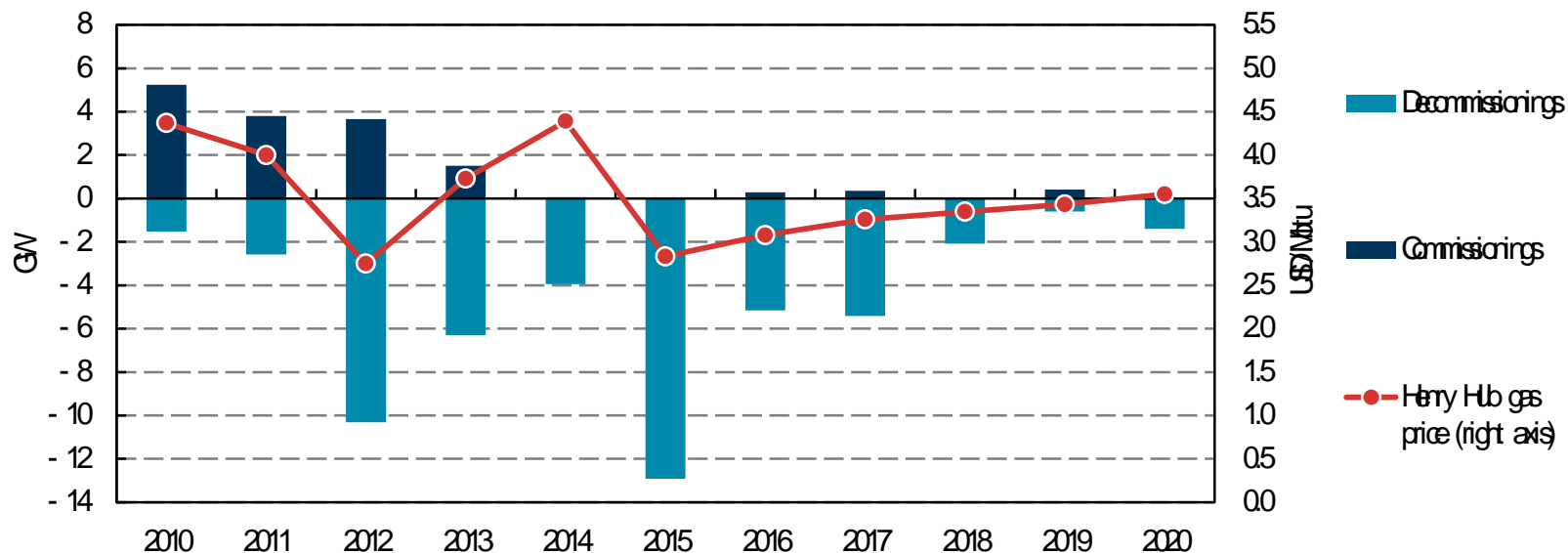
OECD: the long sunset of coal



European coal demand is at structural decline, but cheap US gas has a far more powerful impact than the EU carbon price

No sign of recovery for US coal

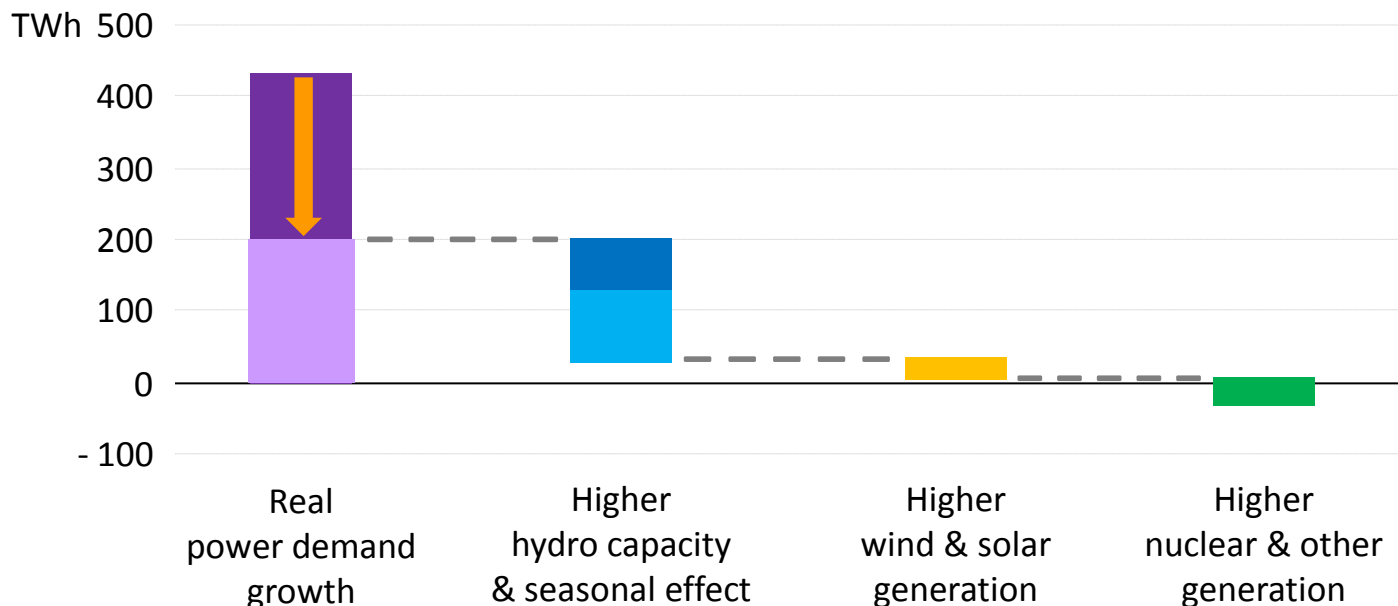
Development of US coal-fired power plant fleet and gas prices



Practically no new investment into coal: new environmental regulations lead to closures rather than to upgrades

Has coal use in China already peaked?

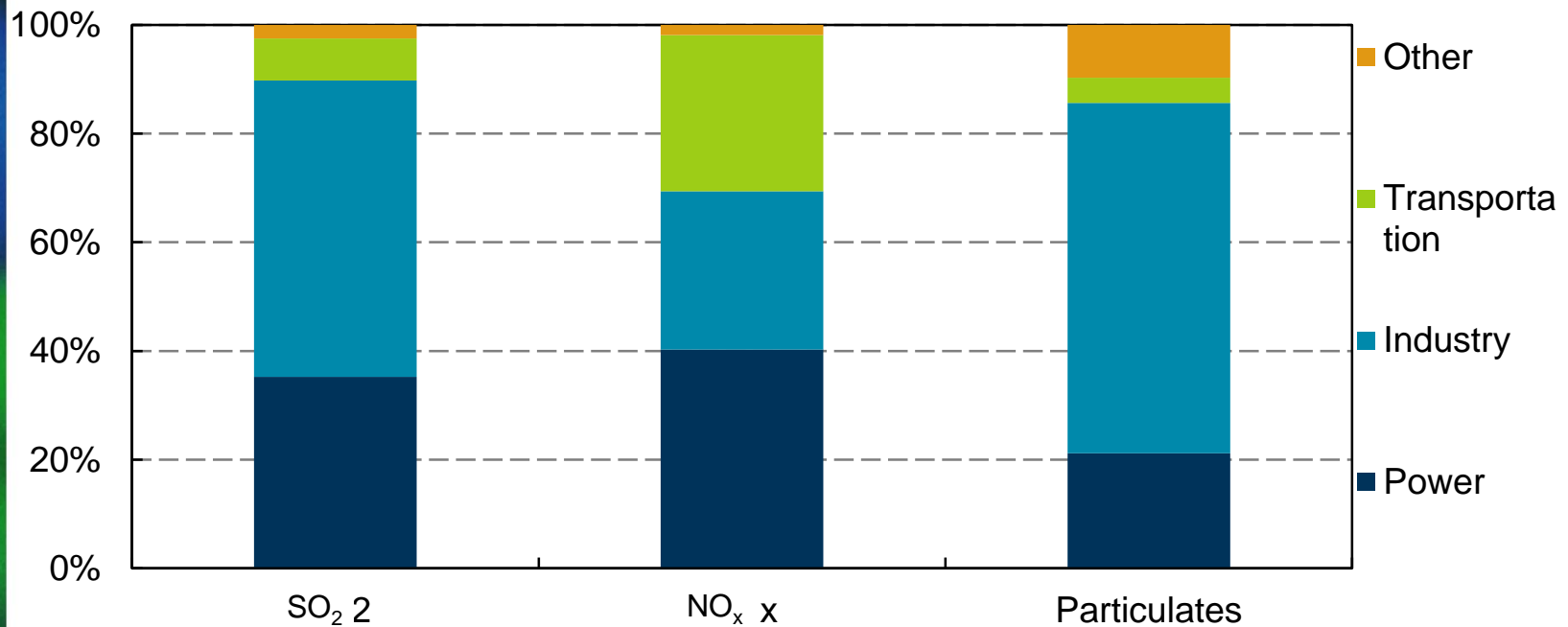
Drivers for Chinese coal-based power generation decline in 2014



China's coal use may have already peaked, reflecting the gradual economic rebalancing & further growth in low-carbon sources of power

Responses to air pollution will shape coal's future

Breakdown of local air pollutants in China

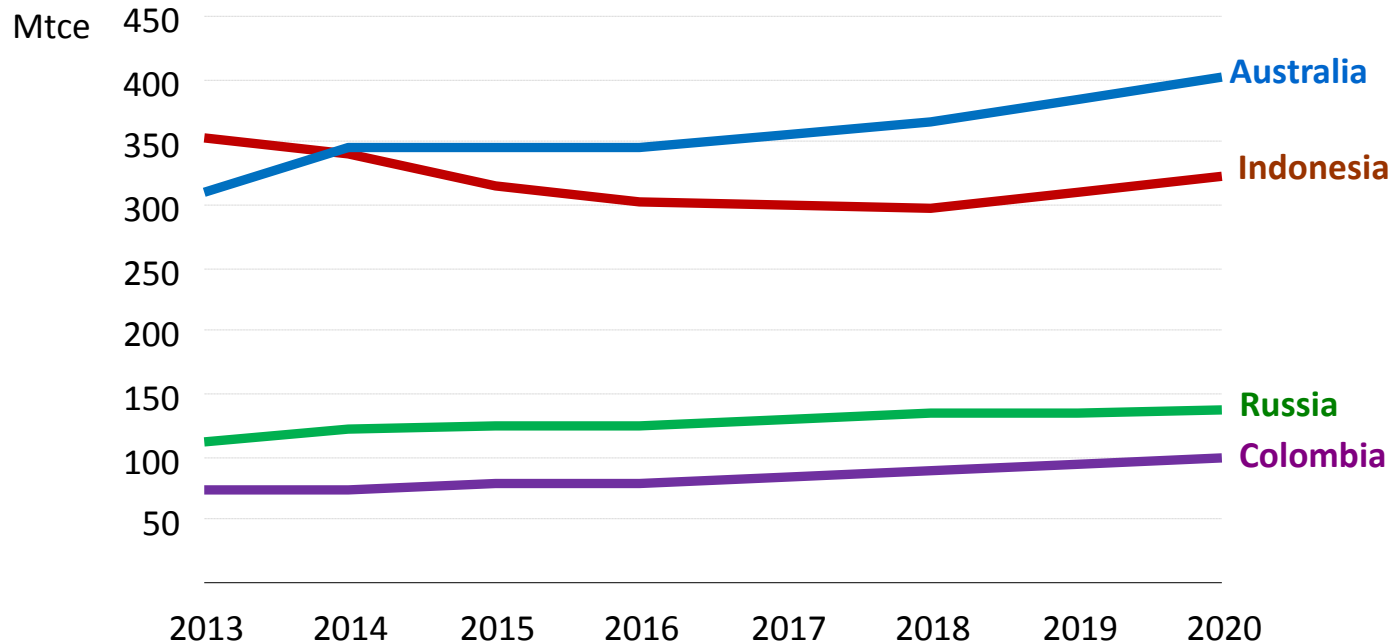


Data from 2013

While China is taking commendable steps to tackle the problem, burning coal remains the major source of local air pollution in the country

Australia pushes ahead as the world's largest exporter

Coal exports from key countries



The four largest exporters represent more than 80% of seaborne coal trade; India overtakes China to become the world's largest importer

Conclusions

- **Coal will remain an important part of the global energy mix through 2020, but faces big challenges:**
 - *Shifts in the policy landscape post COP-21*
 - *Rising concerns over pollution*
- **Coal demand in China might have already peaked, with major implications for global energy & climate trends**
- **India & Southeast Asia are the new drivers of global coal demand, as the fuel plays a role in their economic & social development**
- **The long-term viability of the coal industry hinges on the widespread uptake of clean technologies:**
 - *Urgent need to phase-out inefficient subcritical coal plants*
 - *Carbon capture & storage is a vital asset protection strategy*



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http://www.iea.org/bookshop/712-Medium-Term_Coal_Market_Report_2015

Comments and suggestions are welcome , and should be addressed to:

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