

Medium-term Coal Market Report 2011

**Carlos Fernández Alvarez. Senior Coal Analyst.
Gas, Coal and Power Markets Division**

Madrid, 31 January 2012

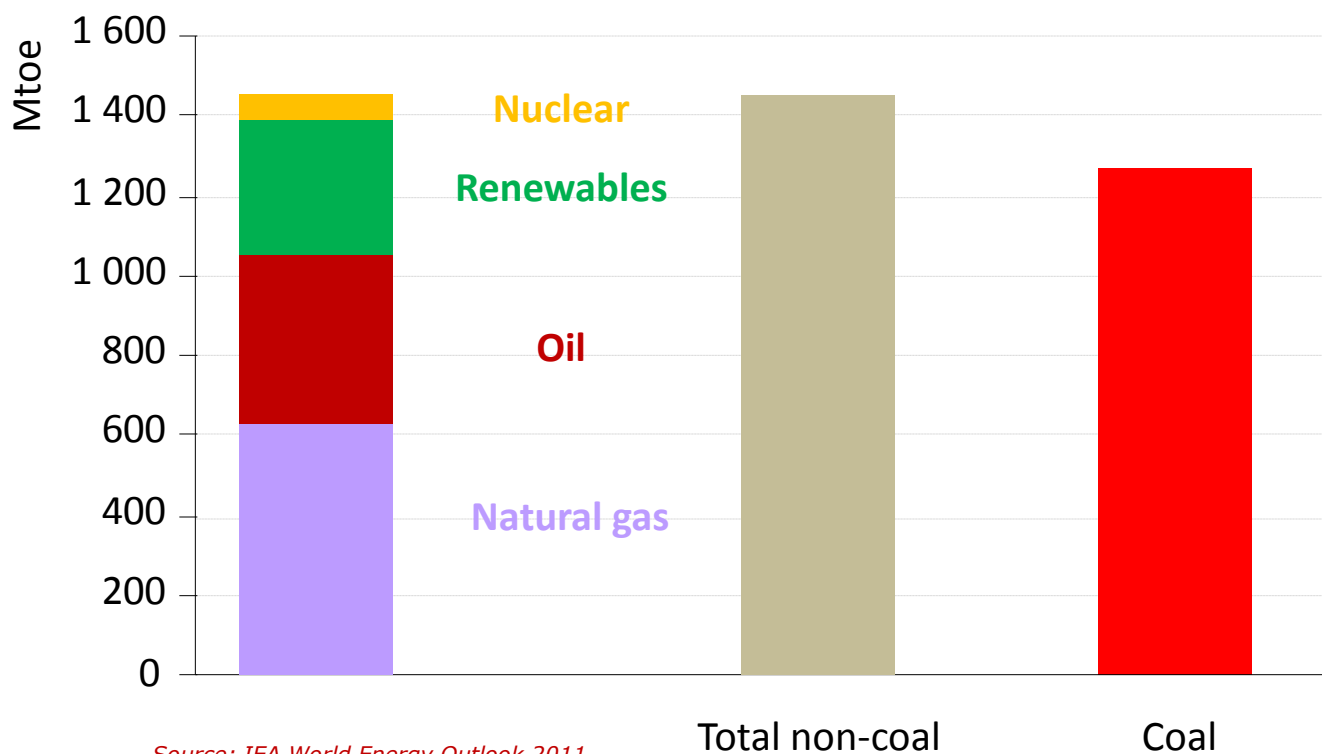


The context

- Uncertainties will fundamentally shape the medium-term outlook for coal including:
 - Economy activity and demand
 - Chinese growth and trade policies
 - Supply shocks - Australian floods
- Longer-term structural changes associated with the nature and rate of decarbonisation

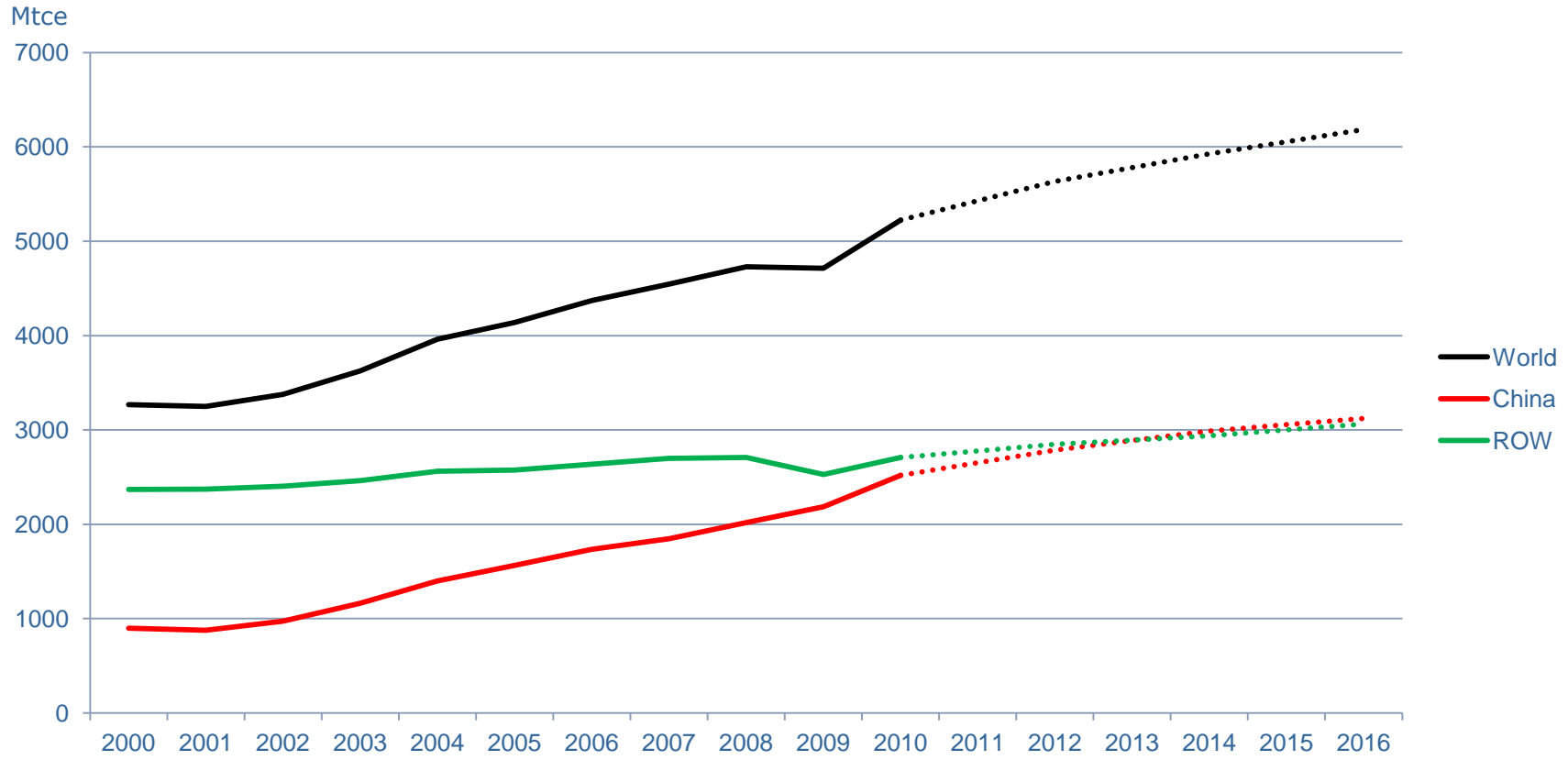
Coal was king over the last decade

Growth in global energy demand, 2000-2010



Source: IEA World Energy Outlook 2011

World coal demand will continue to grow until 2016

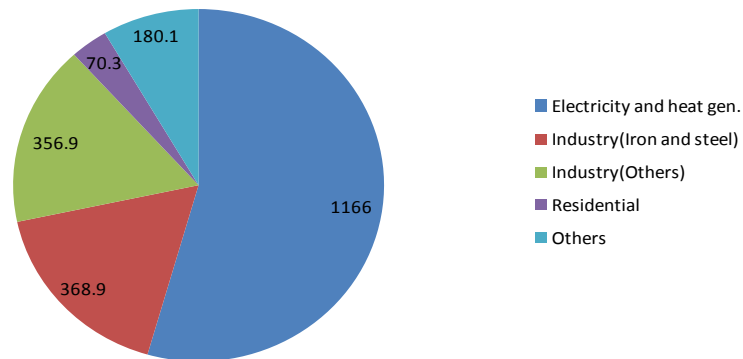


• Coal demand is expected to grow at around 600 000 tonnes a day to 2016

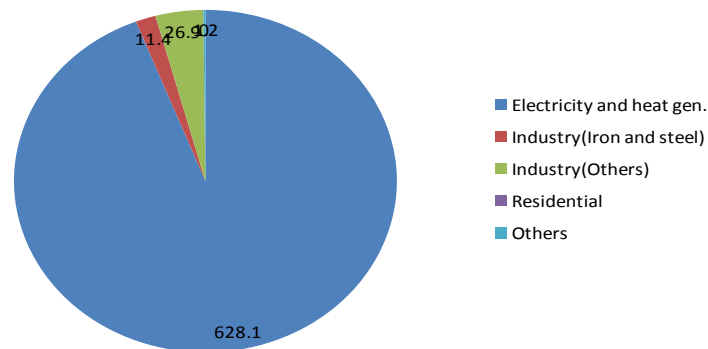


Power dominates coal use, especially in OECD

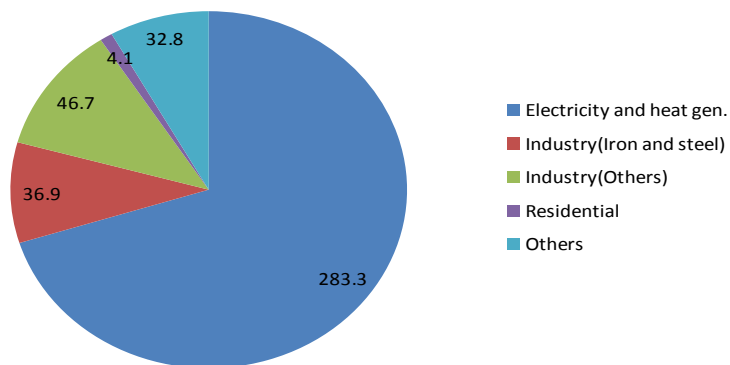
PEOPLE'S REPUBLIC OF CHINA



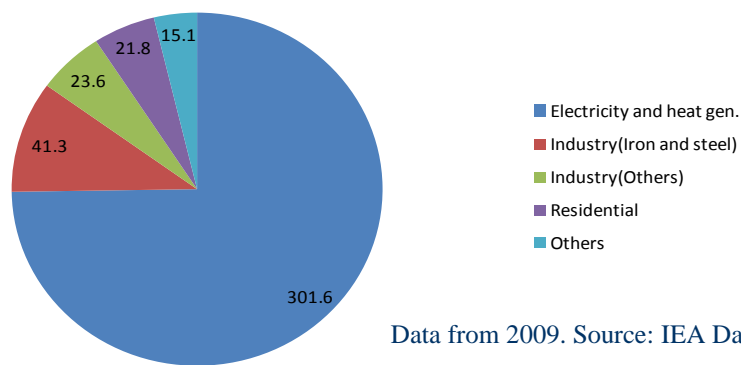
UNITED STATES



INDIA



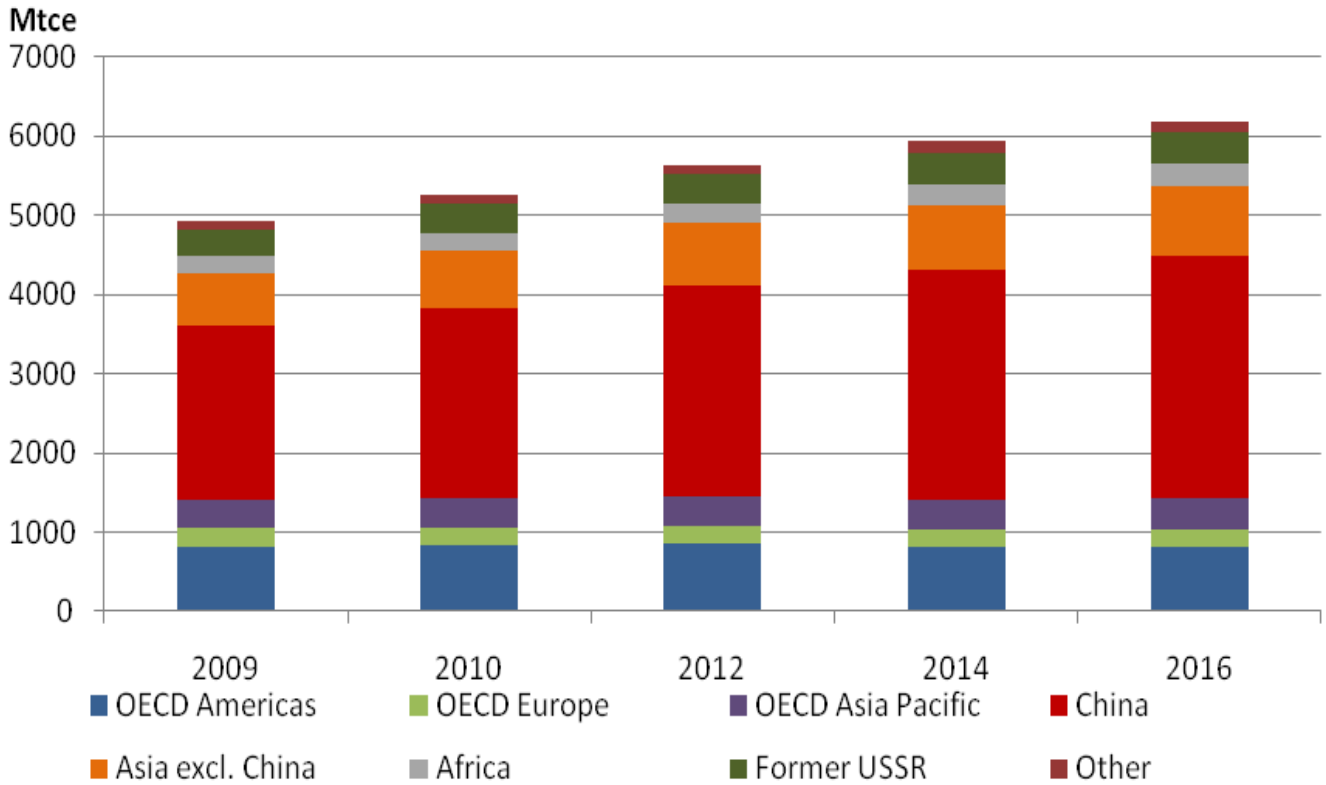
OECD EUROPE



Data from 2009. Source: IEA Database

Industry is the second largest use, with steel as the main consumer.

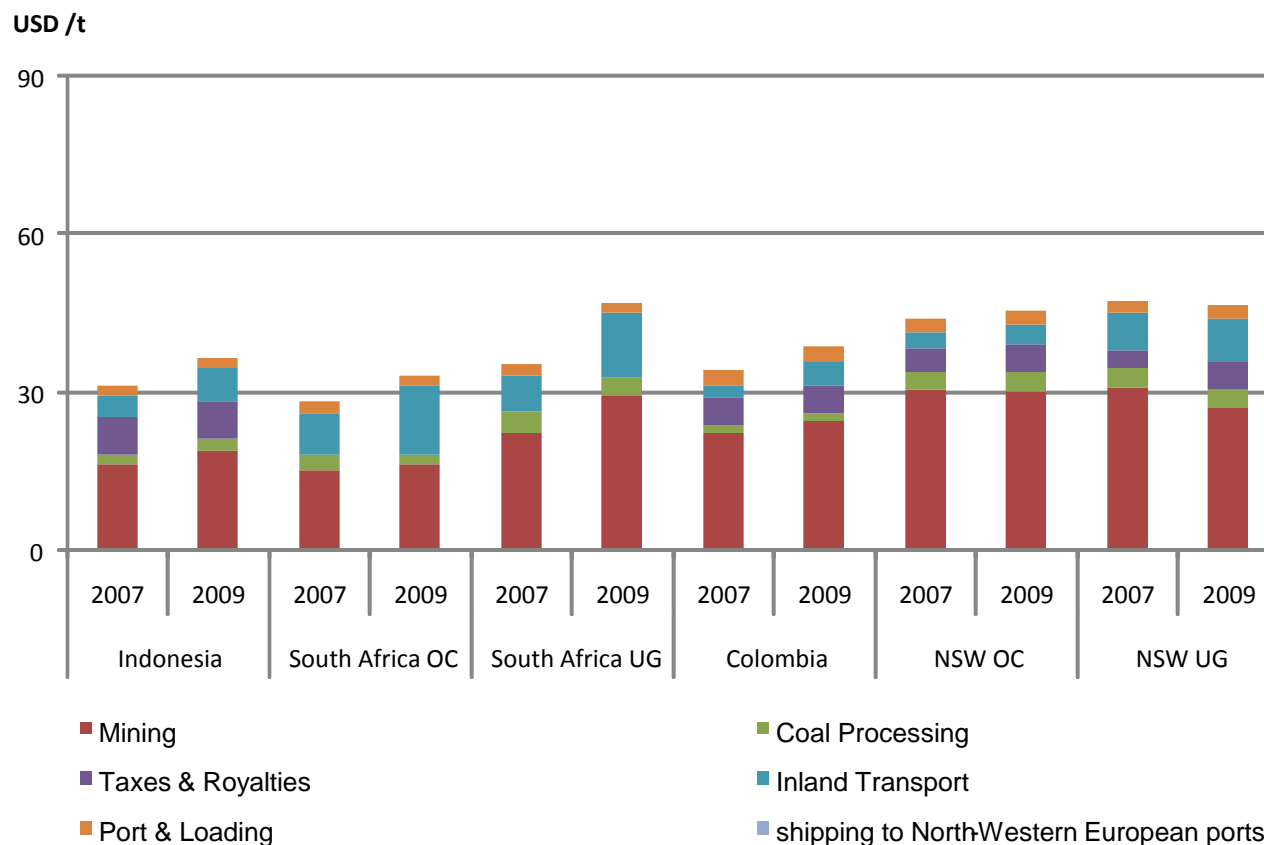
Increase in coal supply concentrates in China



Note that the graph only refers to the high Chinese production (HPS) scenario.

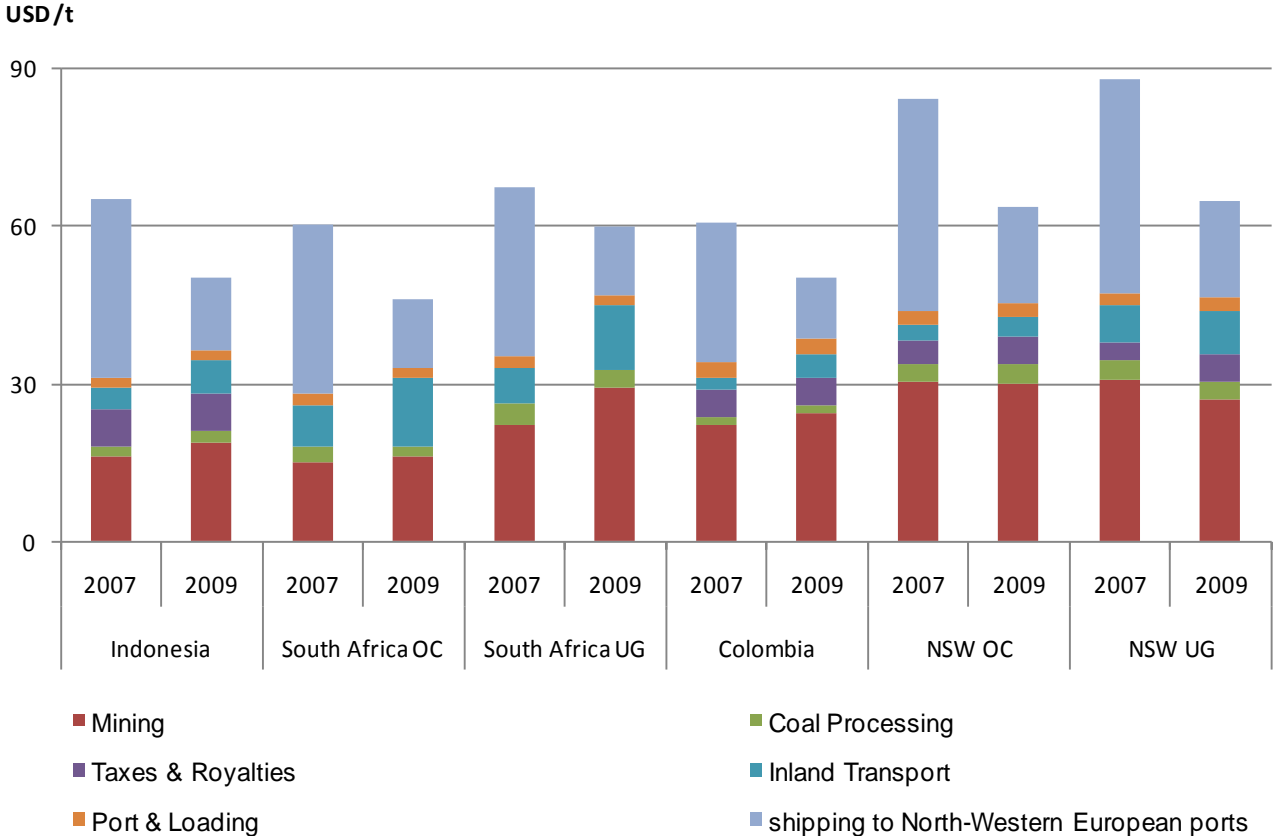


Mining costs increasing moderately



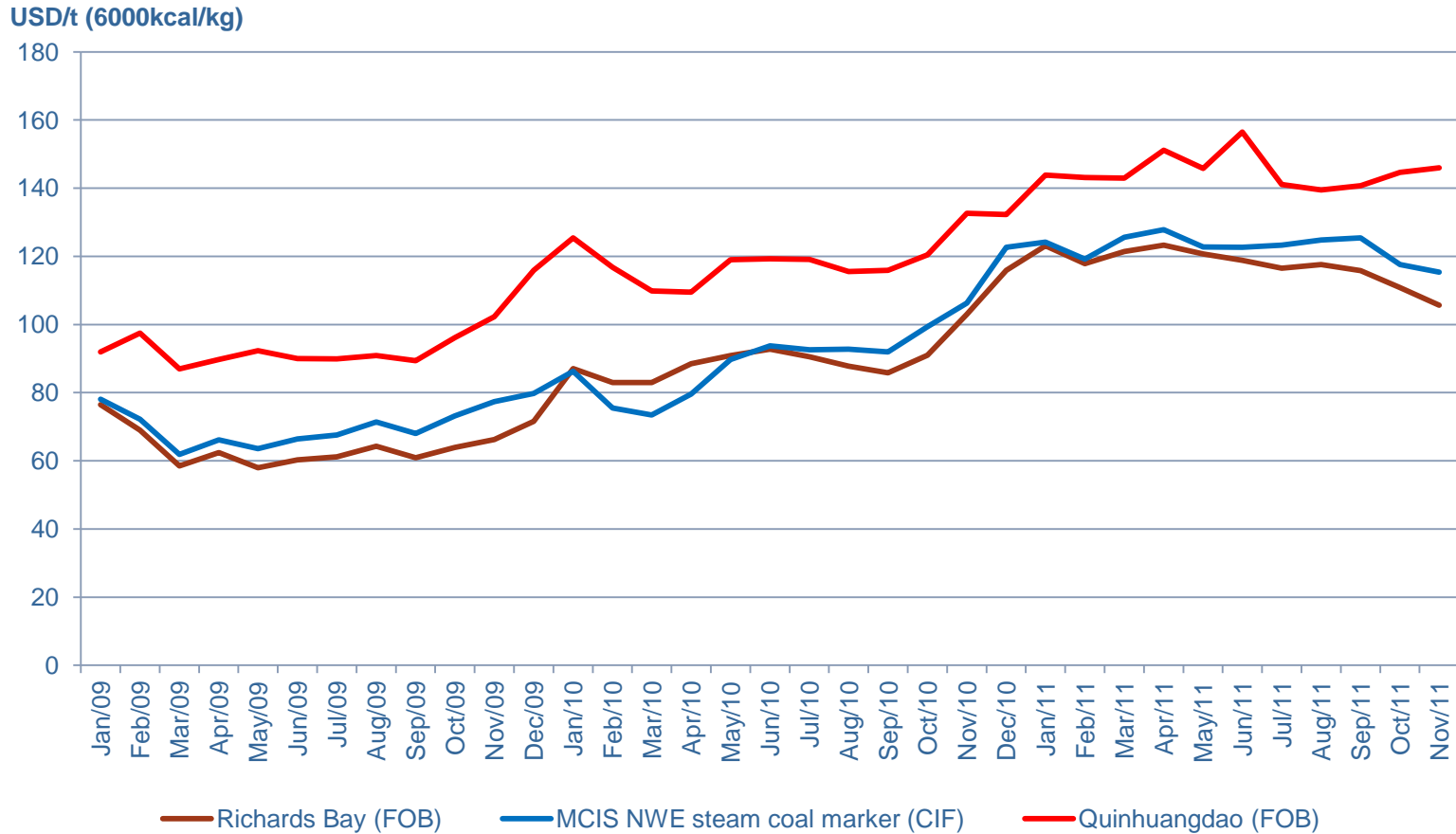
Source: IEA Clean Coal Centre analysis based on data from Marston Associates, McCloskey, IEA Analysis.

Costs at destination declined due to lower freights



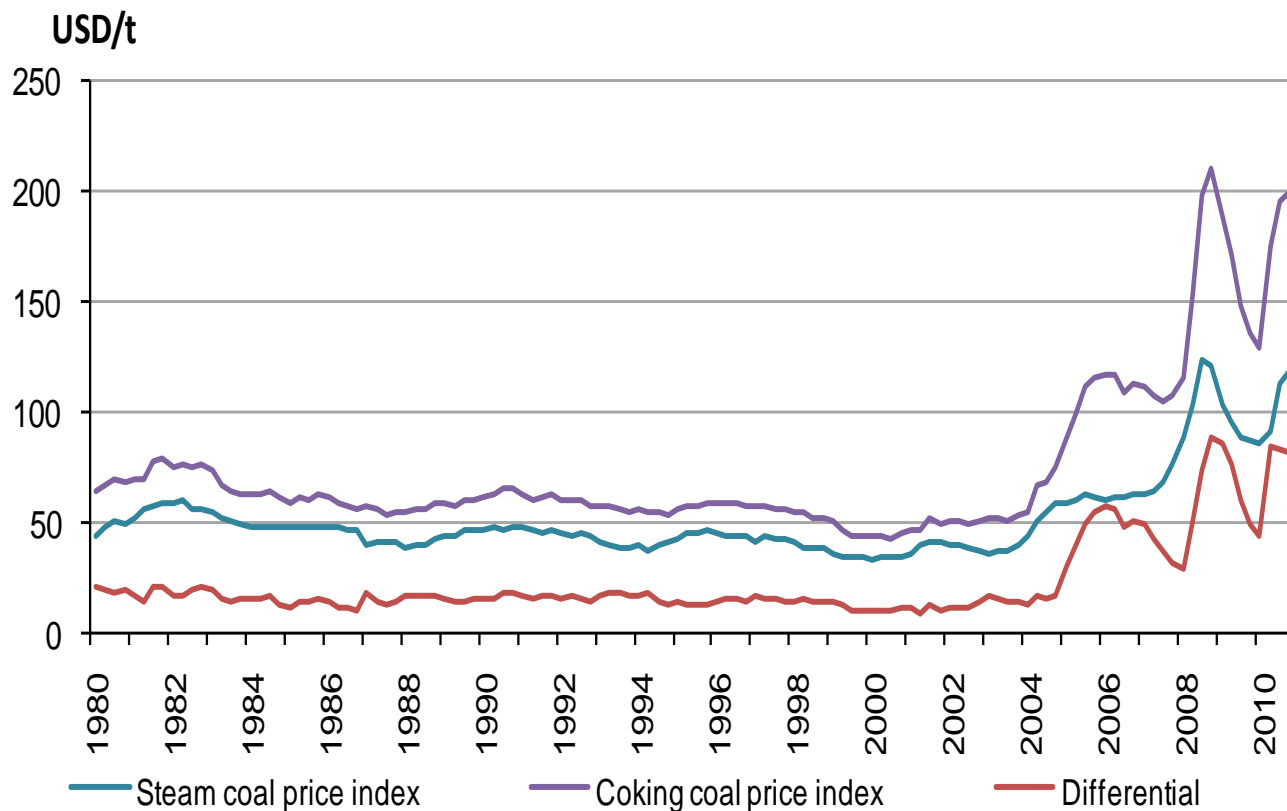
Source: IEA Clean Coal Centre analysis based on data from Marston Associates, McCloskey, IEA Analysis.

Prices on the rise since 2009



Source: McCloskey.

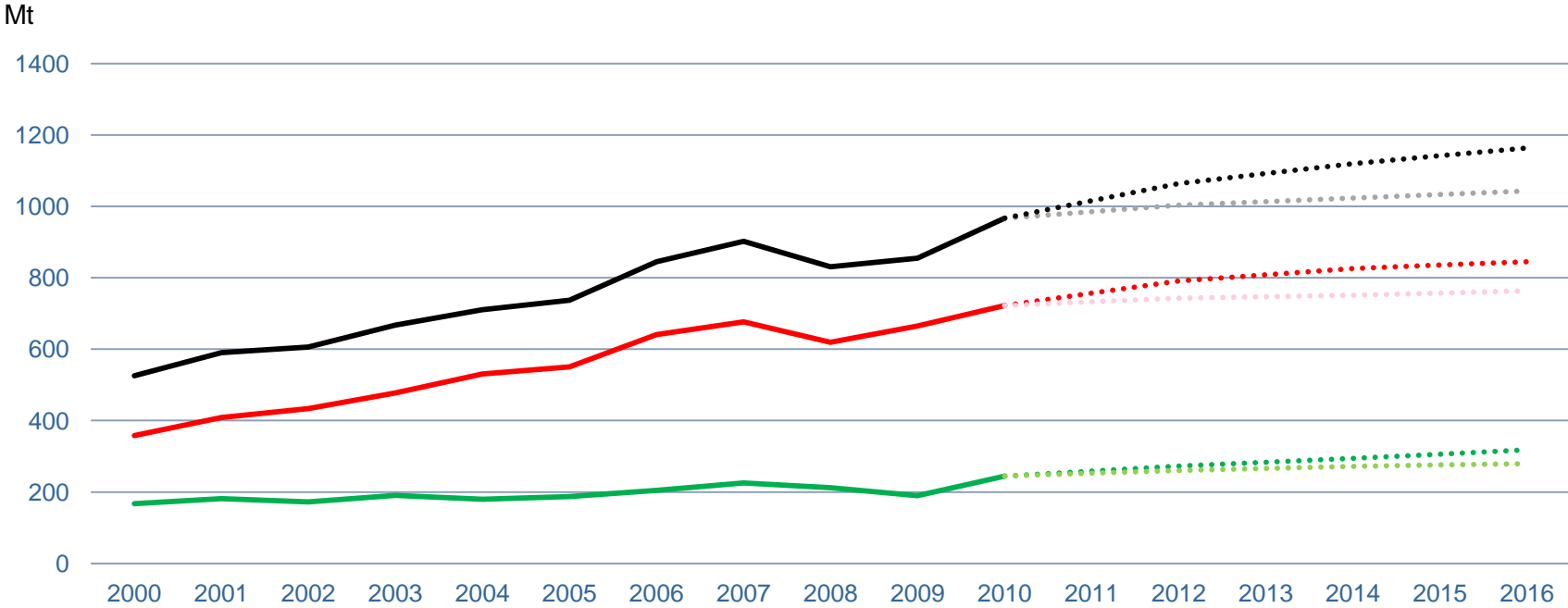
Are steam and coking coal prices decoupling?



Note: Index derived from imported prices in OECD countries (in nominal USD).

Coal trade increases, but most production remains to be consumed locally

Seaborne hard coal trade



Hard coal
 Hard coal HPS
 Coking
 Coking LPS
 Coking HPS
 Thermal
 Thermal LPS
 Thermal HPS
 Hard coal LPS

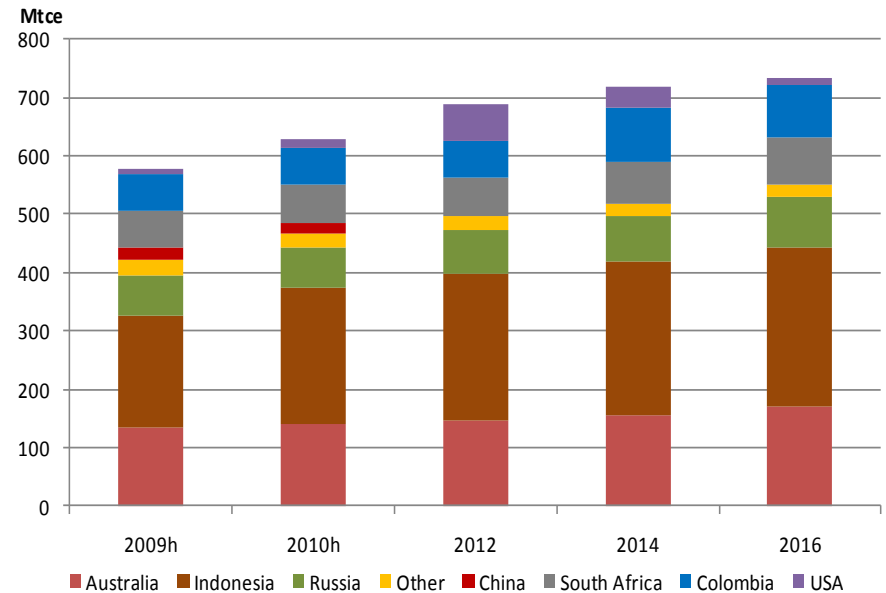
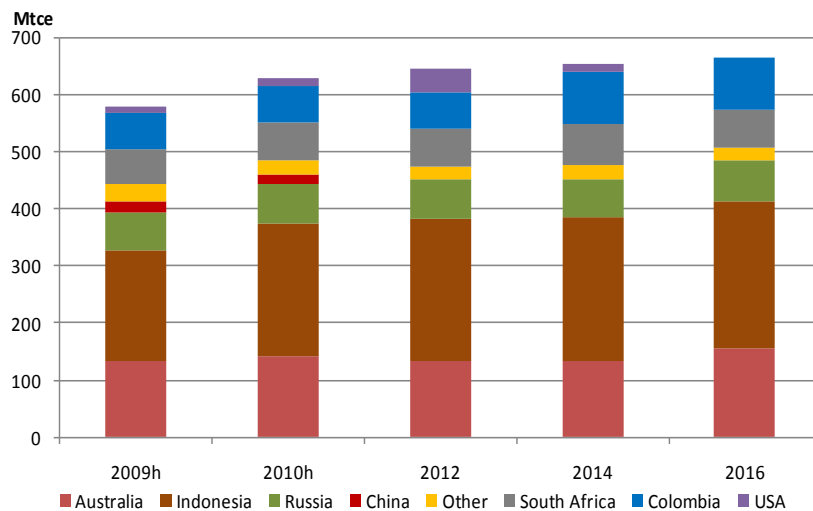


Importers continue to rely on existing major exporters

High Production Scenario.

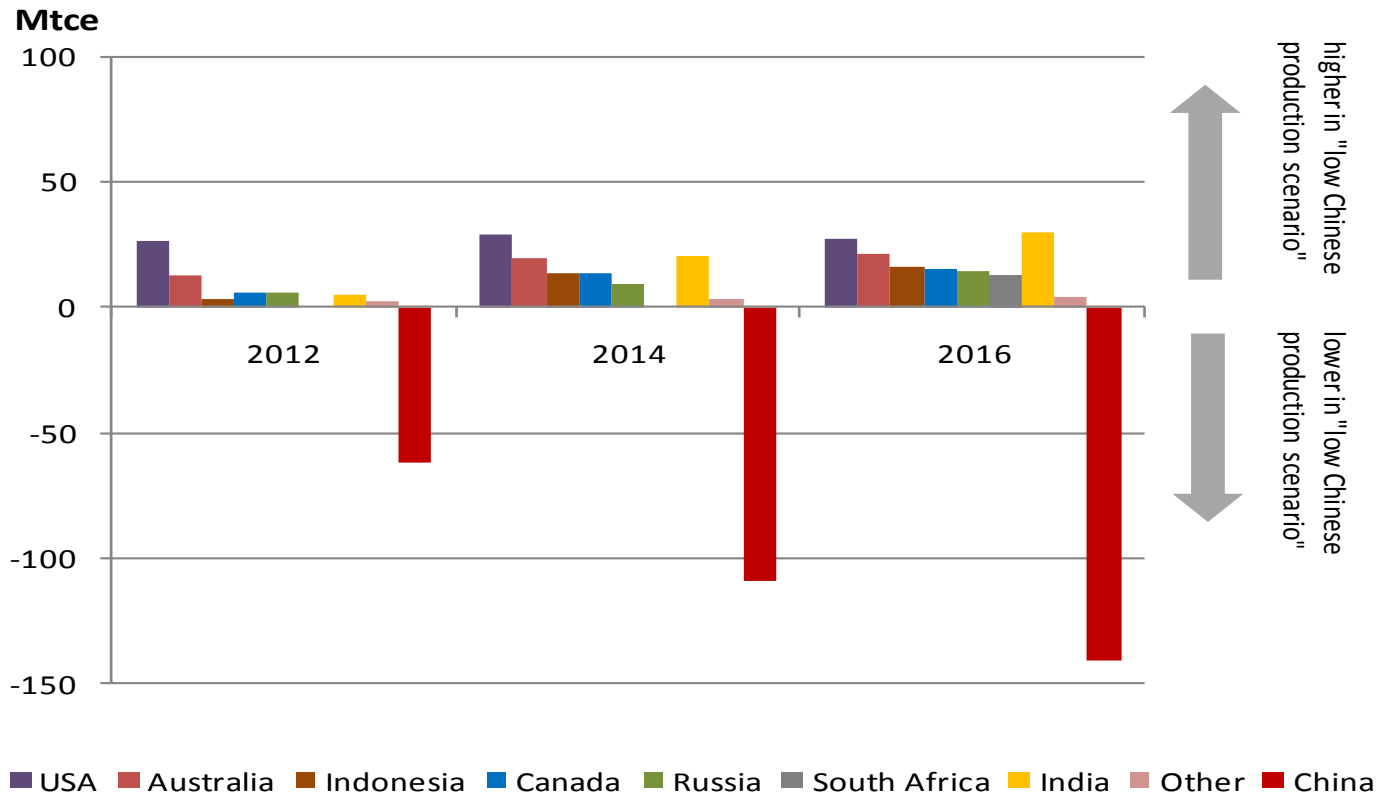
Steam coal exports outlook

Low Production Scenario

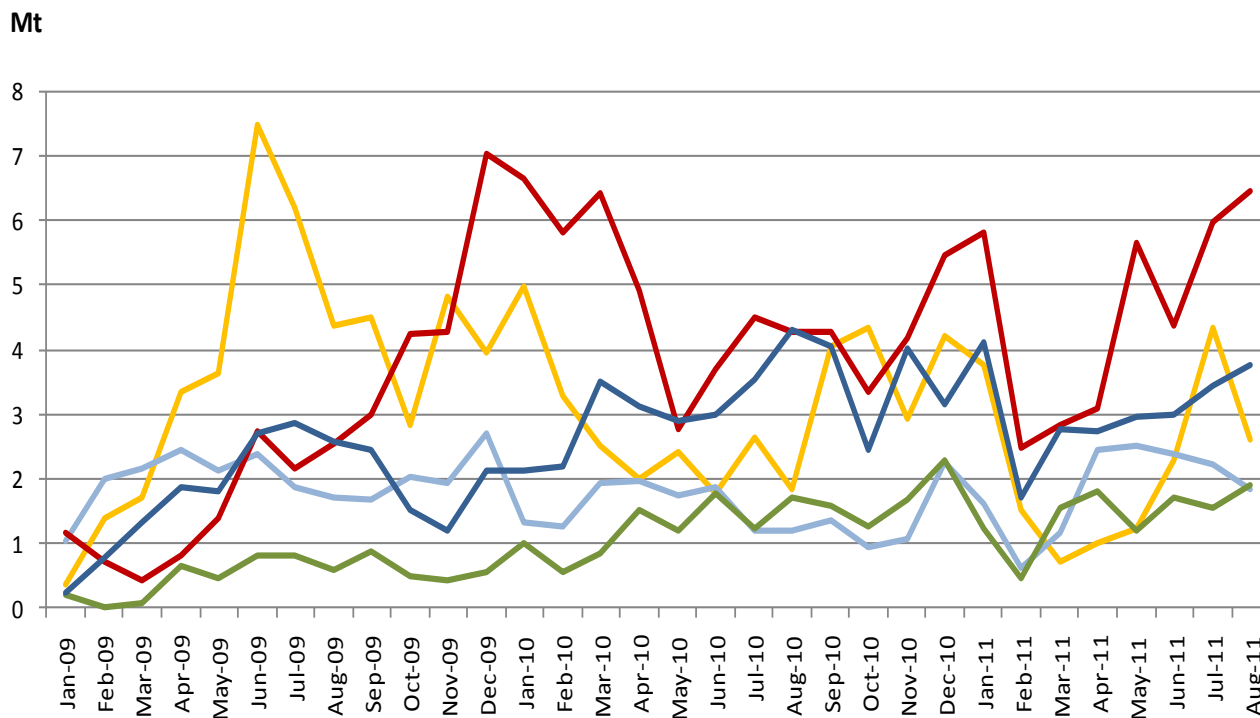


Indonesia and Australia will continue to be the main suppliers of steam coal
 US, as high cost supplier and swing exporter, is most affected by Chinese imports

Global coal trade impacted by China production assumptions



Uncertainty of imports from major users drives price volatility and investment risk

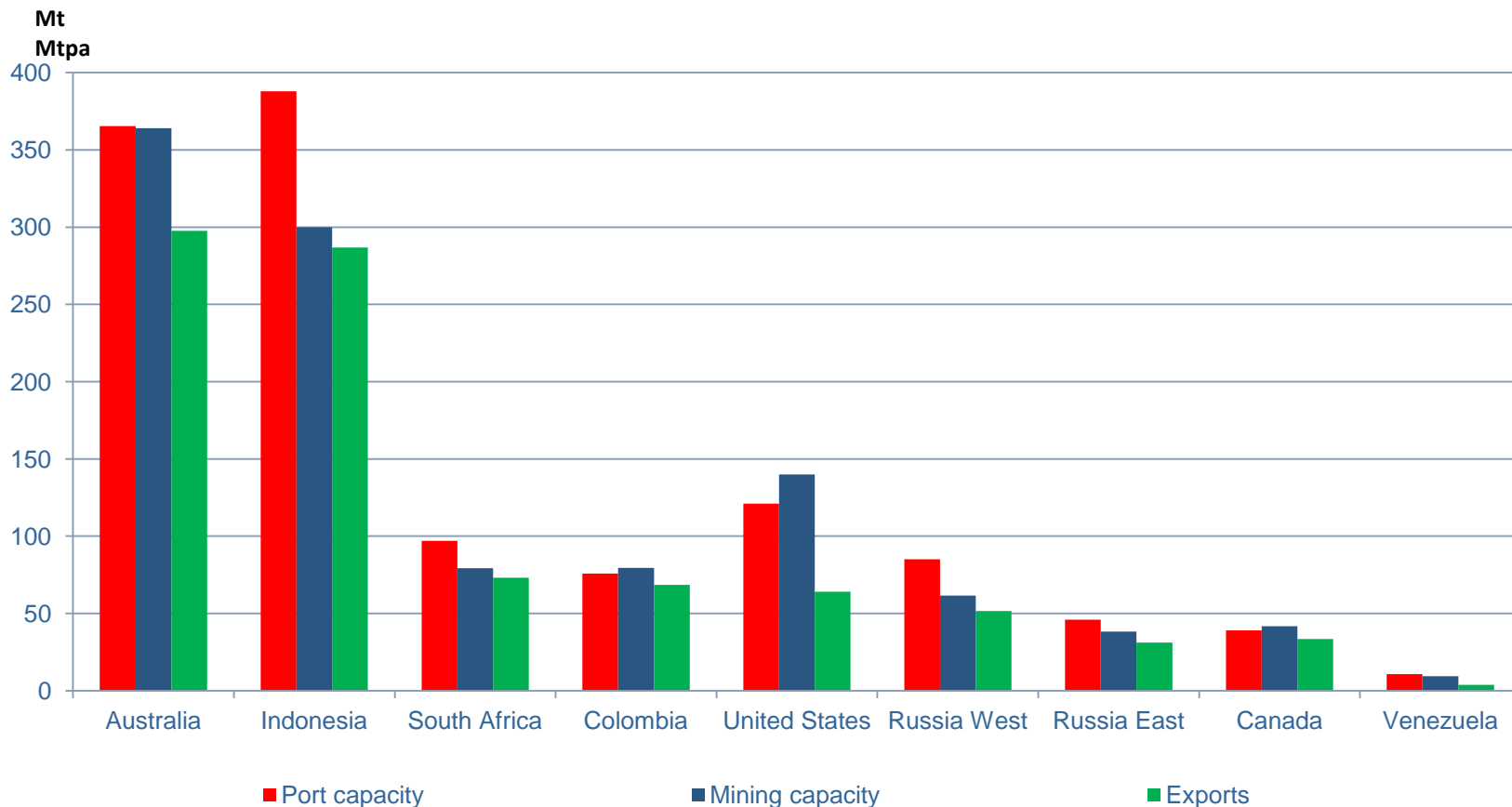


Source: McCloskey.

— Australia — Vietnam — Mongolia — Indonesia — other

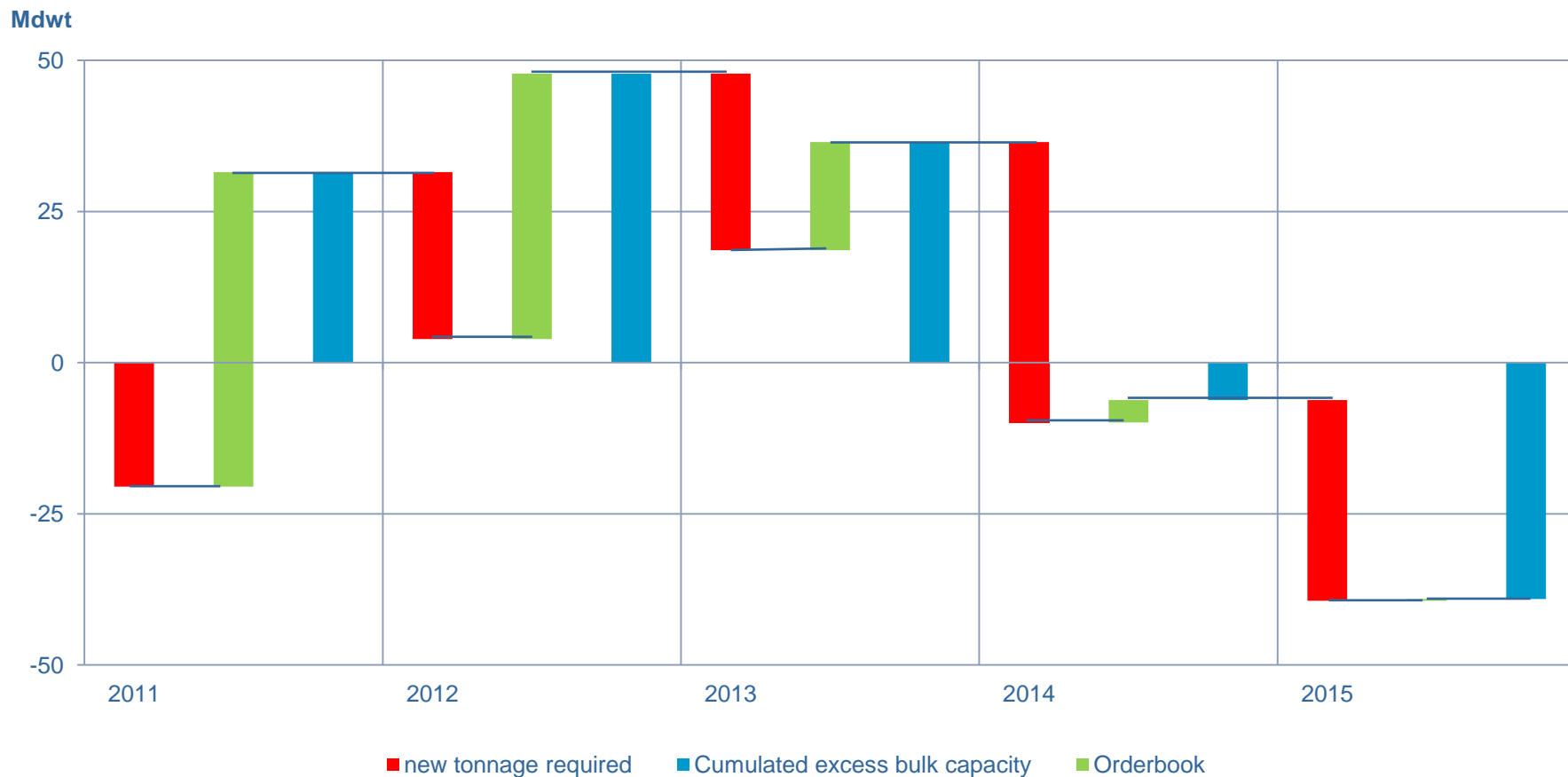
Monthly imports to China from different origins show the high volatility of Chinese purchases

As can very high utilization of export infrastructure



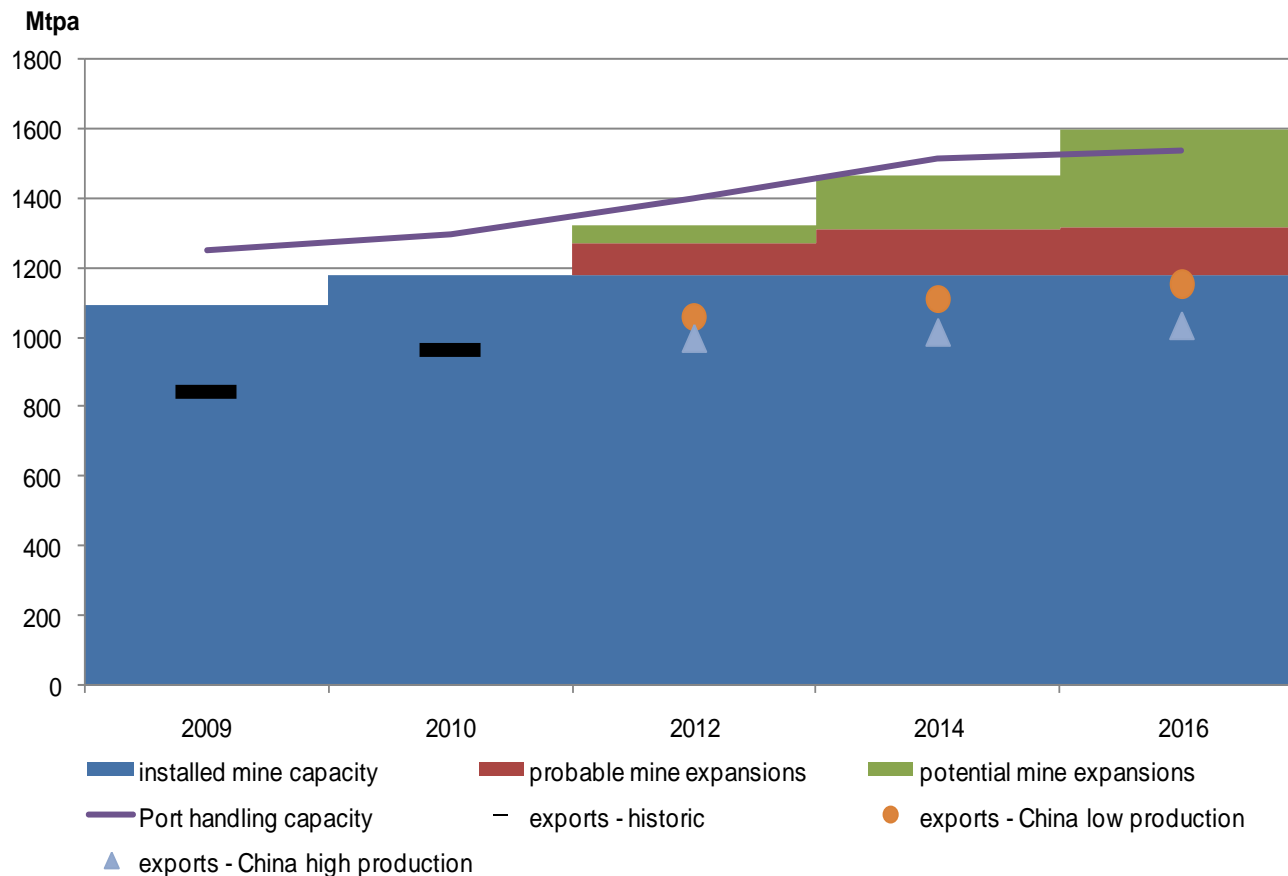
Among the big exporters, only US and Australia provides market with significant spare capacity

Plentyful bulk freight capacity continues



Source: Barry Rogliano Salles, DnB NOR; IEA analysis

Outlook for global export capacity utilisation for seaborne hard coal trade until 2016



KEY MESSAGES

- Coal demand will make a substantial contribution to the global energy mix to 2016
- Key economic uncertainties will largely shape global coal supply, demand, investment and trade over the period
- Coal demand and trade is projected to grow over the next 5 years, although more slowly than in the last decade
- China will continue to dominate global coal consumption and trade outcomes, with Indian influence growing
- Investments in supply capacity and handling infrastructure should be sufficient to meet incremental demand growth over the outlook period
- However, delays and cancelation of projects as well as weather-related events may tighten the market occasionally

Thanks for your attention



International
Energy Agency