



*Met Coke Consultants*

# 2012 & BEYOND FORECAST

OVERVIEW OF STEEL INDUSTRY, COKE, AND MET COAL SITUATION -  
SHORT TERM AND LONG TERM OUTLOOK

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At the Premier Steel Industry Annual Convention of USA (AISTech 2012 held during May 7-10, 2012), AIST 2012 President's Award Breakfast started with a cautious optimism with its brochure headline "The Light at the End of the Tunnel." This was further re-emphasized next day at the Town Hall Forum by six executives from Arcelor Mittal, U.S. Steel, Thyssen Steel, Nucor, Gerdau Steel and Deutsche Bank. The buoyancy was attributed to many factors, few amongst them are: Credit inquiries; Inquiries for architectural designs for new buildings; Financial market stability; Economic Growth; Job creation; Housing start; Upward trend in steel, auto, rail car, barge, construction equipment, mining equipment, energy-related equipment's; etc. The executives predicted that because of low energy costs, U.S. will be an important center for further growth potential.

## **PART I. SHORT TERM OUTLOOK:**

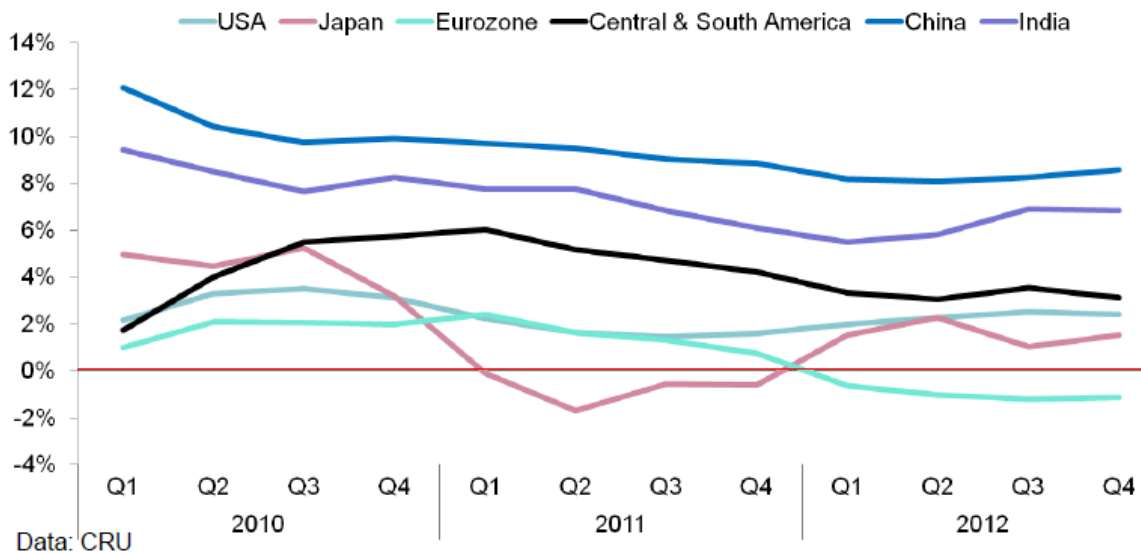
The next six graphs are taken from a presentation that was given at the AIST 2012 conference by Anna Fleming of CRU. The highlights and forecasts from these graphs are as follows:

- ❖ GDP Growth – China, India, USA, Japan show rebound whereas Europe still on downward trend;
- ❖ Steel Production – shows strong growth in 2011 but was concentrated in 1<sup>st</sup> half of 2011;
- ❖ Hot Metal Production – shows gradual rise in 2012;
- ❖ Coke/Met Coal – Hence, coke production will follow the Hot Metal Production trend; hence expect Met coal and coke prices to rise (The increase in met coal price in first half of 2011 was also triggered by flooding in Australian mines whereby US mines took the role of swing supplier, as also happened in previous crisis times. The decline in second half 2011 prices caused production drop and mining cost increase resulting in closures/idling of U.S. met coal mines.) The Credit Suisse report (May 4, 2012) is projecting a bullish outlook in

Met Coal for 2012, estimating an increase in current spot price of 218US\$/t to 230US\$/t for 2<sup>nd</sup> half of 2012. A similar projection is also reported by Bloomberg for quarterly contract prices which states that prices that fell to 206US\$/t for quarter ending June 30, 2012 may rebound to average 225US\$/t this financial year. Bloomberg predicts global coking coal trade may rise 9.6% to 297 MT this year compared to 271 MT (0.7% drop) last year.

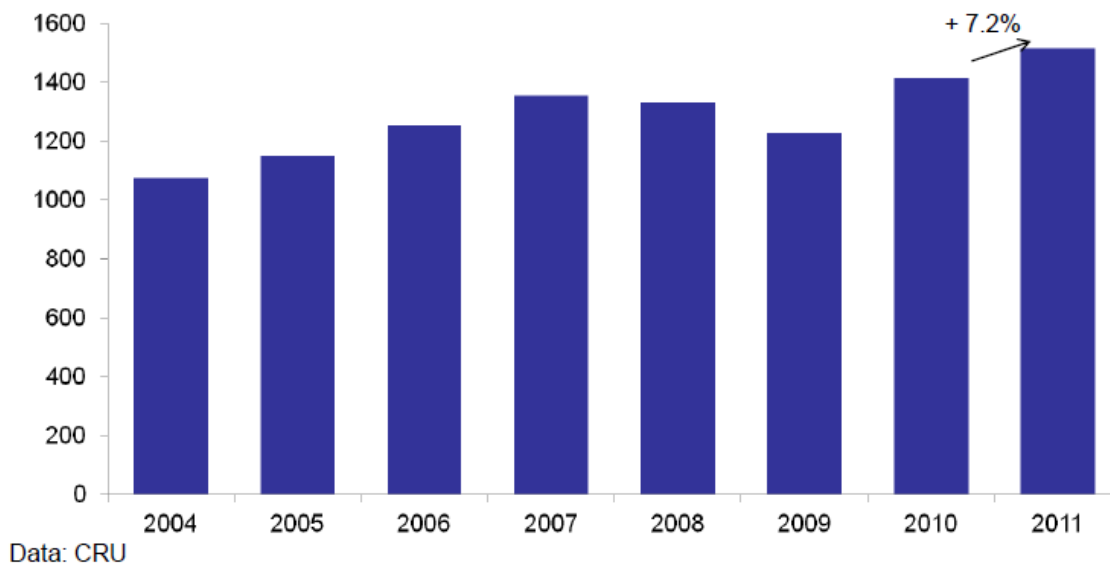
### The economic outlook is mixed: the Eurozone contracts whilst China and India rebound from 'soft landings'

GDP growth by region, % change year-on-year



## Global steel production grew strongly in 2011...

Global crude steel production, 2004-2011, m tonnes



With that cautious optimism for economic growth what is the outlook for Coke, Iron, and Met Coal.

## Global hot metal production is forecast to rise but at a slowing rate over the coming years.....

LHS: Global hot metal production, m tonnes

RHS: Global growth in hot metal production, % change quarter-on-quarter

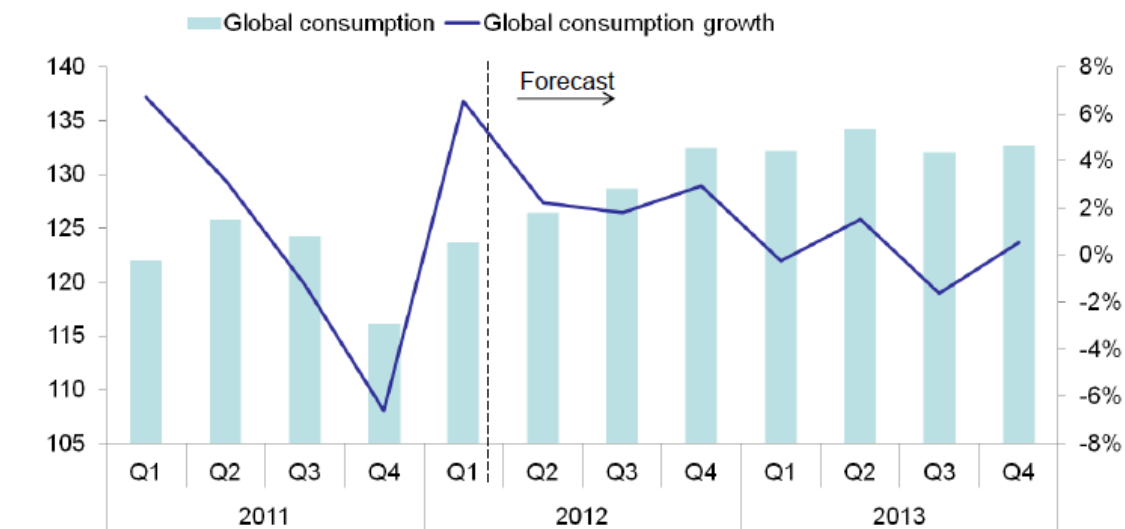


Data: CRU

## Naturally, metallurgical coke demand should post a similar growth trend despite declining coke rates in many regions

RHS: Global consumption of coke in all uses, m tonnes

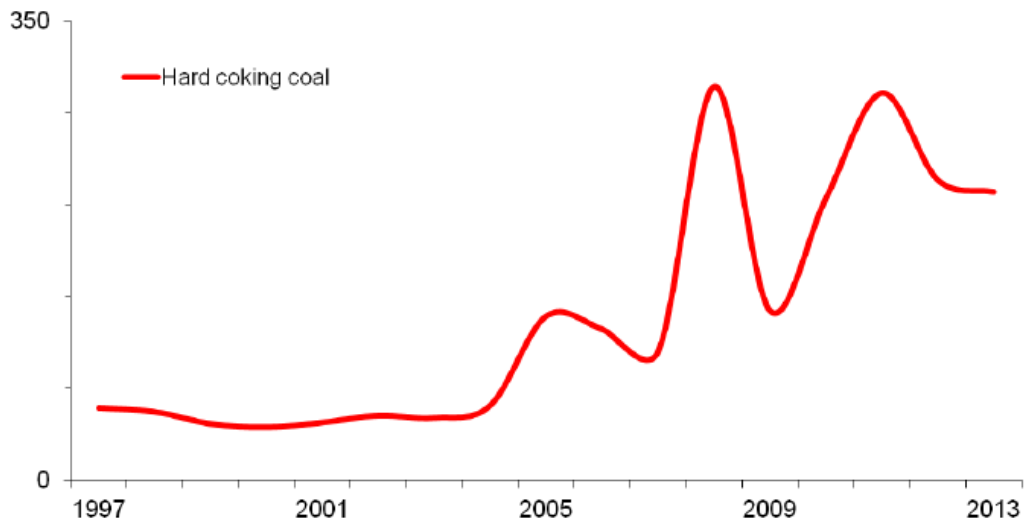
LHS: Growth in global consumption of coke in all uses, % change quarter-on-quarter



Data: CRU

## Coking coal costs will ease, but are expected to maintain a historically high price floor for coke....

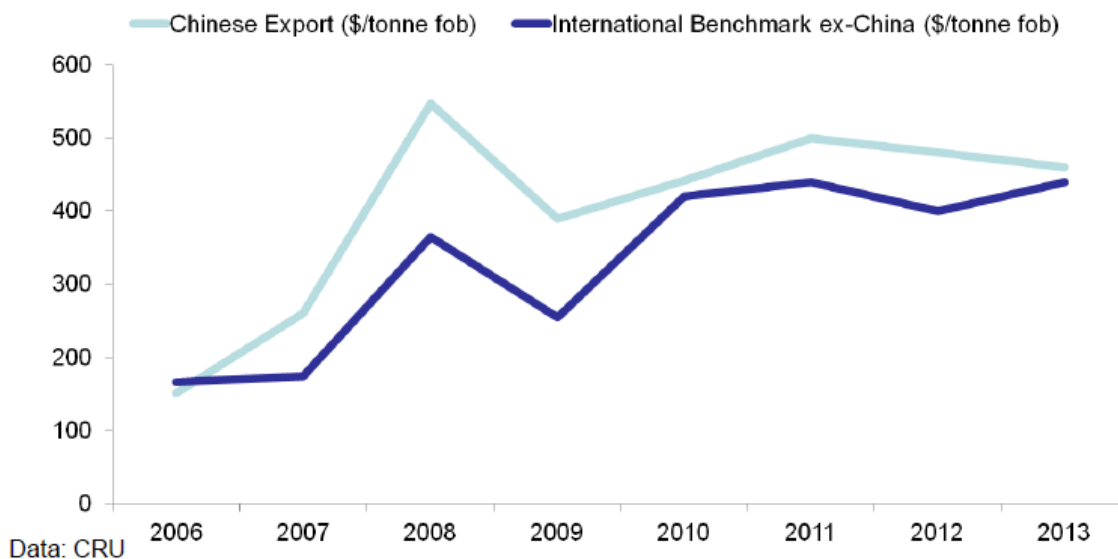
Hard coking coal prices<sup>(1)</sup>, fob Australia, US\$/tonne



Data: CRU Note: (1) Prices are average fiscal year contract values in Real 2011 US\$

## Therefore, international prices are forecast to remain elevated over the coming years

Coke prices, \$/tonne fob



Data: CRU

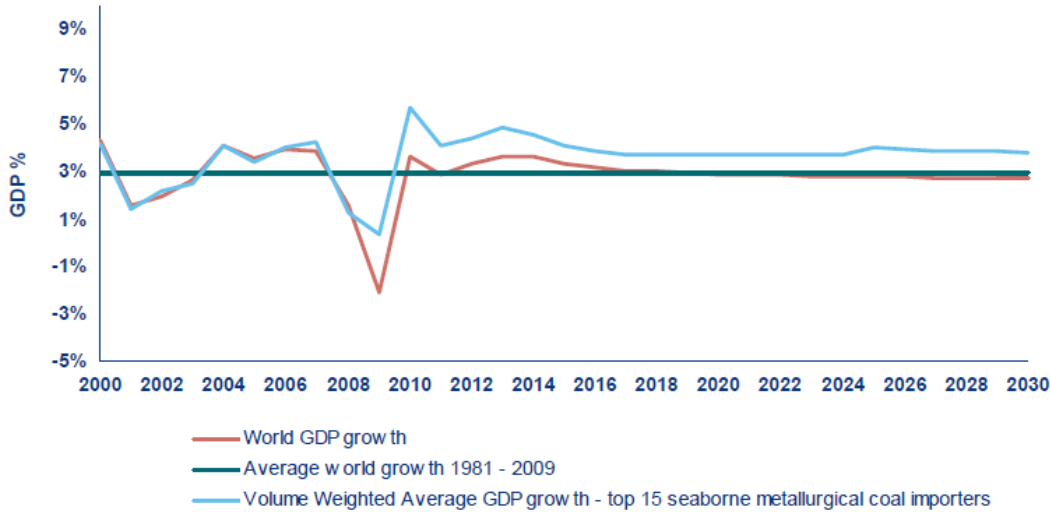
## **PART II. LONG TERM OUTLOOK:**

In terms of long term outlook, coal/coke/steel outlook looks positive mostly because of developing economies of the BRIC and other developing nations. The next five graphs are taken from a presentation that was given at the AIST 2012 conference by Jim Truman of Wood Mackenzie. The highlights and forecasts from these graphs are as follows:

- ❖ GDP Growth – it should average 3% globally but 4% in 15 of the top metallurgical coal importing countries majority of which is to satisfy the appetite of steel demand of China, India, Brazil and few developed as well as developing nations;
- ❖ Steel – because of GDP growth, global steel demand is expected to rise from 1.5bt to 2.5 BT by 2030;
- ❖ Hot Metal – expected to increase from 1.1bt to 1.8bt by 2030;
- ❖ Coal/Coke – consequently expect increase in coal/coke demand; Australia will fulfill most of the met coal demands.

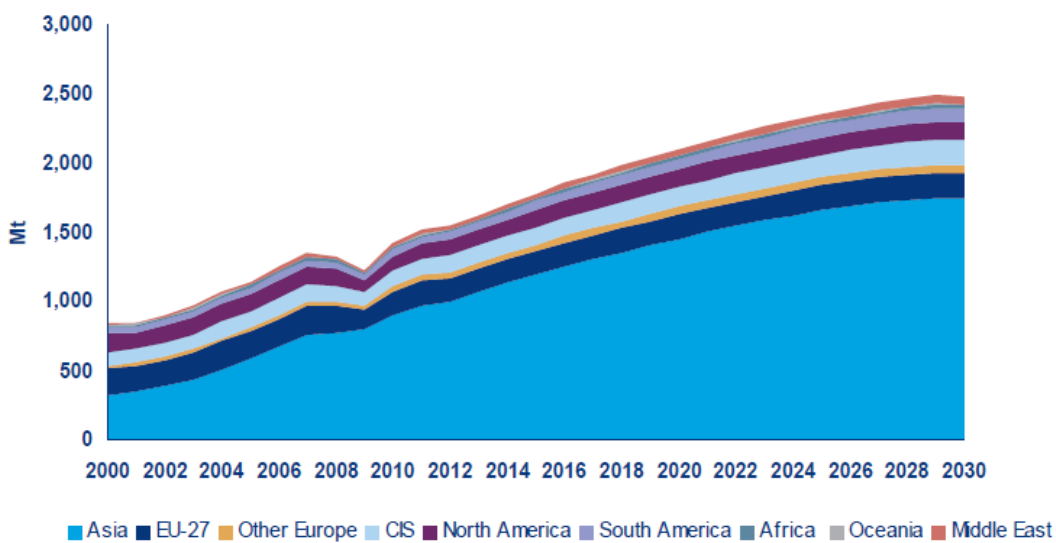


**Global GDP growth should average 3% per year and about 4% in 15 of the top metallurgical coal importing countries**



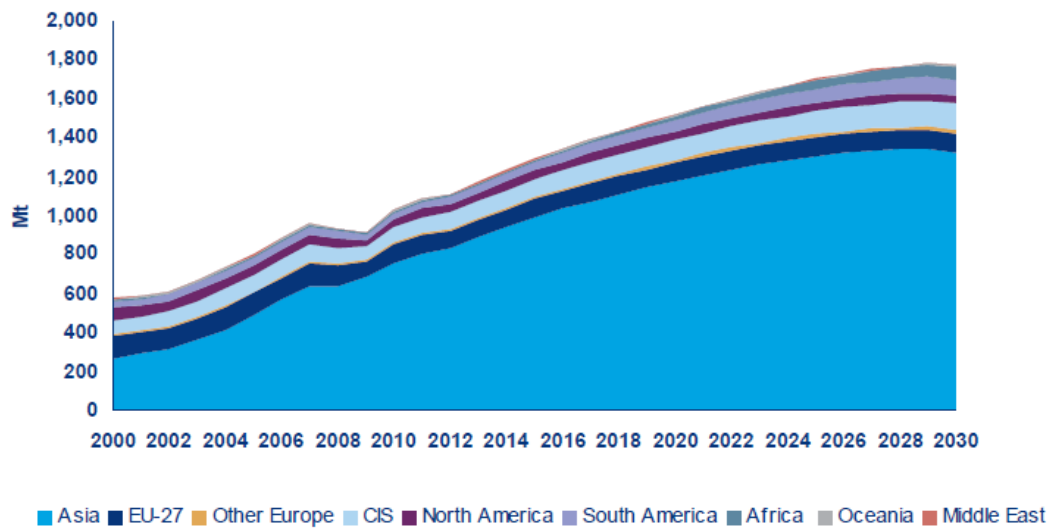
Source: Wood Mackenzie Energy Markets Service

**Which will drive global crude steel demand from 1.5 Bt to 2.5 Bt by 2030**



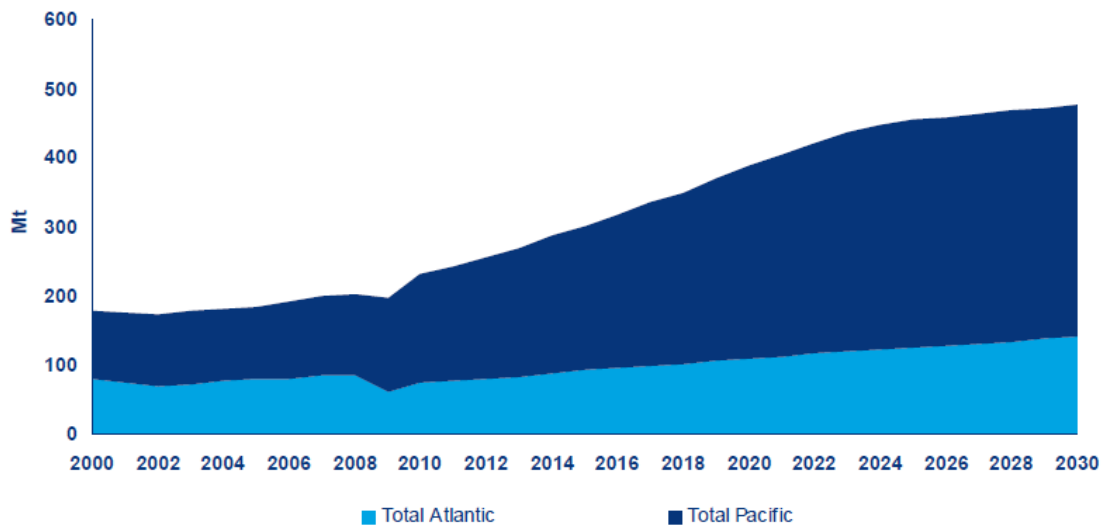
Source: Wood Mackenzie Steel Market Service

**Requiring an increase in hot metal demand from 1.1 Bt to 1.8 Bt by 2030**



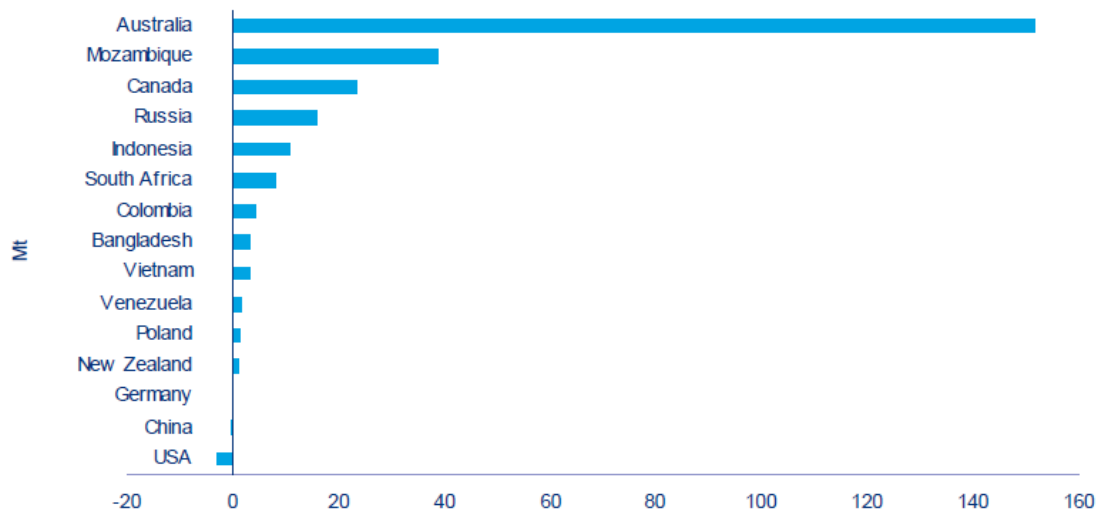
Source: Wood Mackenzie Steel Market Service

.... and seaborne coal imports to nearly double to 477 Mt in 2030



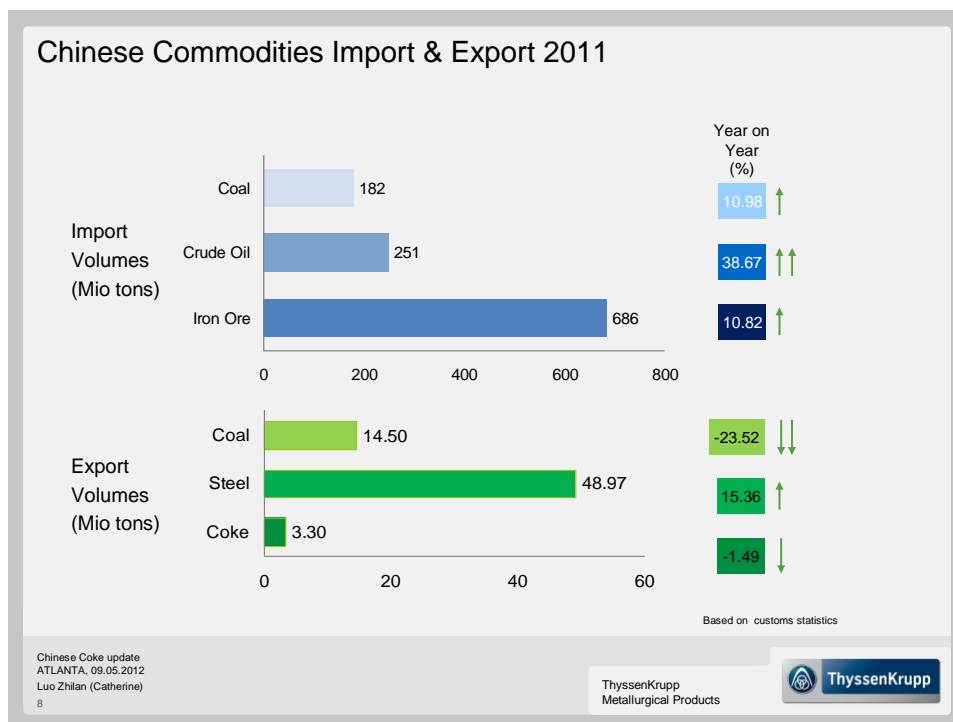
Source: Wood Mackenzie Coal Market Service

Australia is expected to supply most of the increased seaborne market between 2011 and 2030



Source: Wood Mackenzie Coal Market Service

The validity to these graphs is further confirmed if one closely looks at only China and India latest figures (see two graphs presented below). The first graph below is from C. L. Zhilan of Thyssen Krupp China (May 2012) which clearly shows large increase in steel-plant related commodity imports in 2011. The import of coal, iron ore, and oil was 182 MT, 686 MT, and 251 MT which amounts to year to year increase of 10.98%, 10.82%, and 38.67% respectively. The second graph is from J. Nanda of Essar (November 2011) which according to him with current growth and taking in to account a conservative growth of 12%, India shall reach 200 MT steel productions by 2020. The economies of China, India, and other BRIC and few other developing nations are the real catalyst of long term steel demand, consequently, the Met Coal and Coke demand.





## Indian Steel Going Forward – a drilling down



An estimation of Growth Rates and Steel Production of India by 2020

	2010	2012	2015	2020	2025
8% pa	66.8	78	98	144	212
10%pa	66.8	81	108	173	279
12%pa	66.8	84	118	207	366
15%pa	66.8	88	134	270	544
20%pa	66.8	96	166	414	1029

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# NOTES