

# Chinese Iron ore Demand - "Stronger for Longer"

## An update on BHP Billiton's Expansion Plans

Peter Toth – VP Marketing Iron Ore



**China Raw Materials Conference**

**Monday, 24<sup>th</sup> October 2005**

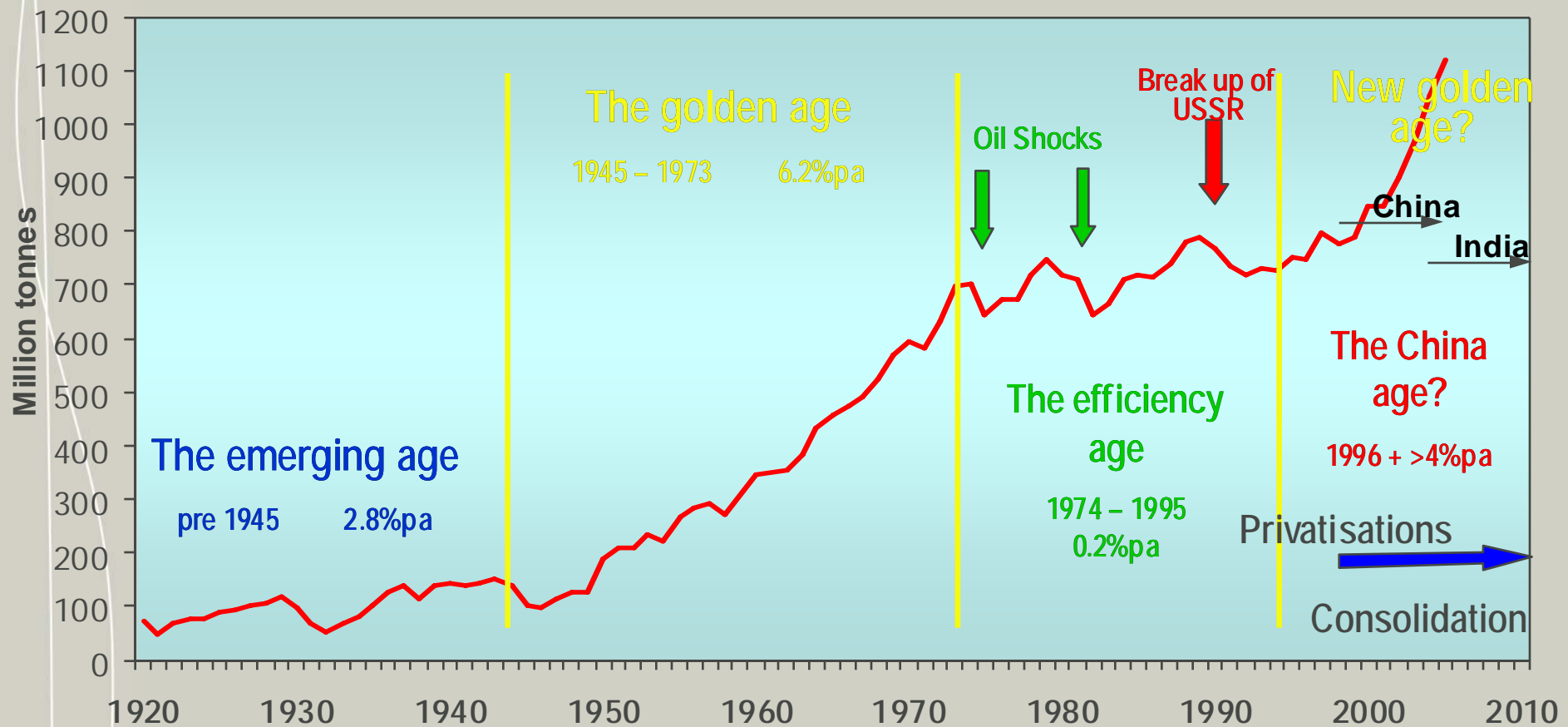


# Disclaimer

The views expressed here contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. Any forward looking information in this presentation has been prepared on the basis of a number of assumptions which may prove to be incorrect. This presentation must not be relied upon as a recommendation or forecast by BHP Billiton.

# Global Steel –the new golden age

*China continues to show strong growth giving more credence to the belief that we have entered a new, prosperous age for steel. Steel companies have recorded record profits and will remain extremely profitable even in light of increased raw material costs.*

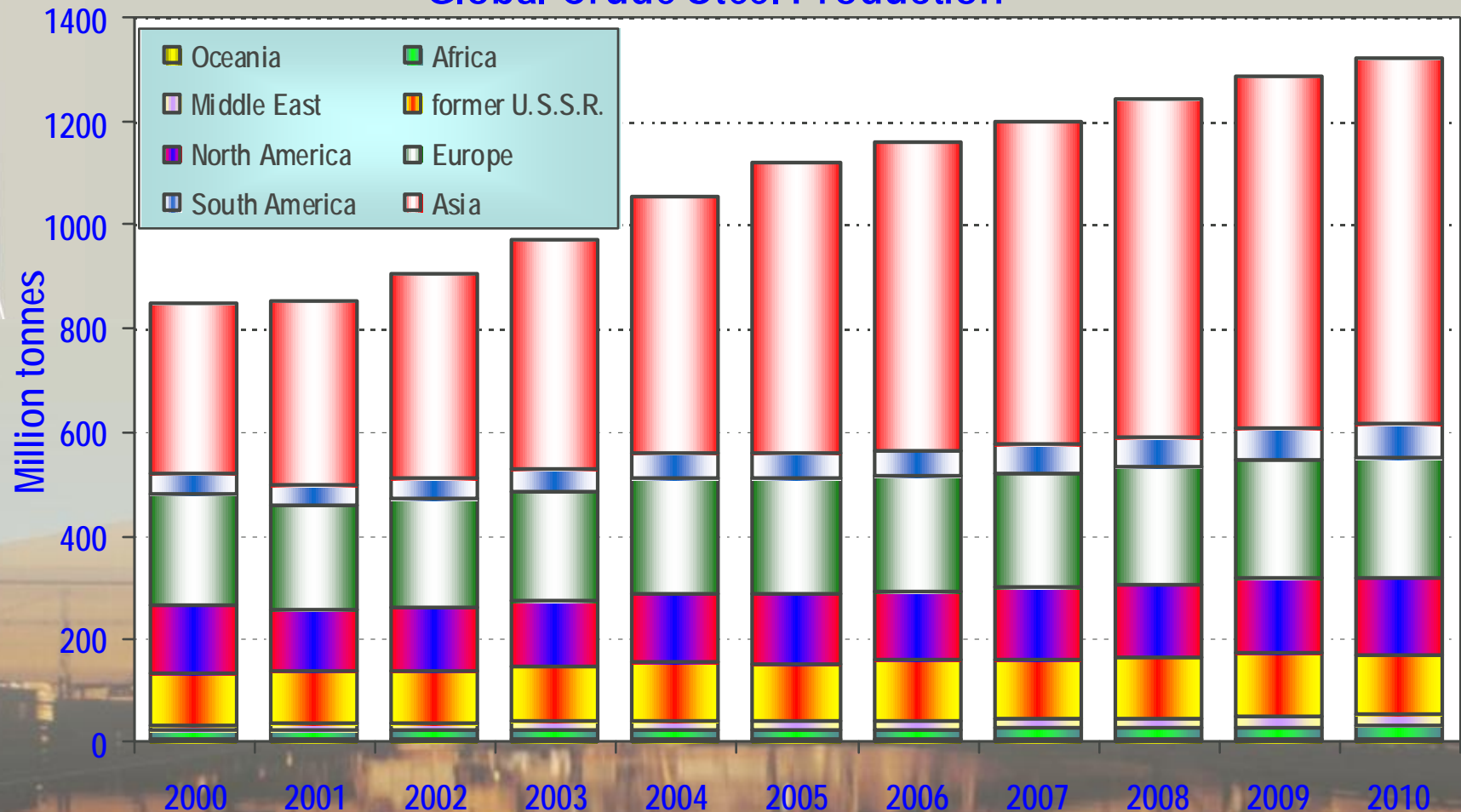


Data source: IISI

# Global steel growth will continue to grow

*Global crude steel production is forecast to grow by another 250 Mt by 2010. This a 25% increase on the 2004 global number. Asia will continue to be the dominant growth region.*

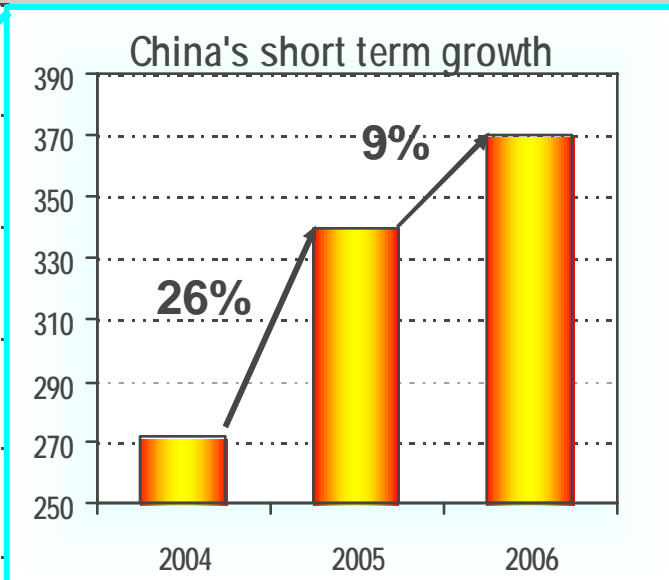
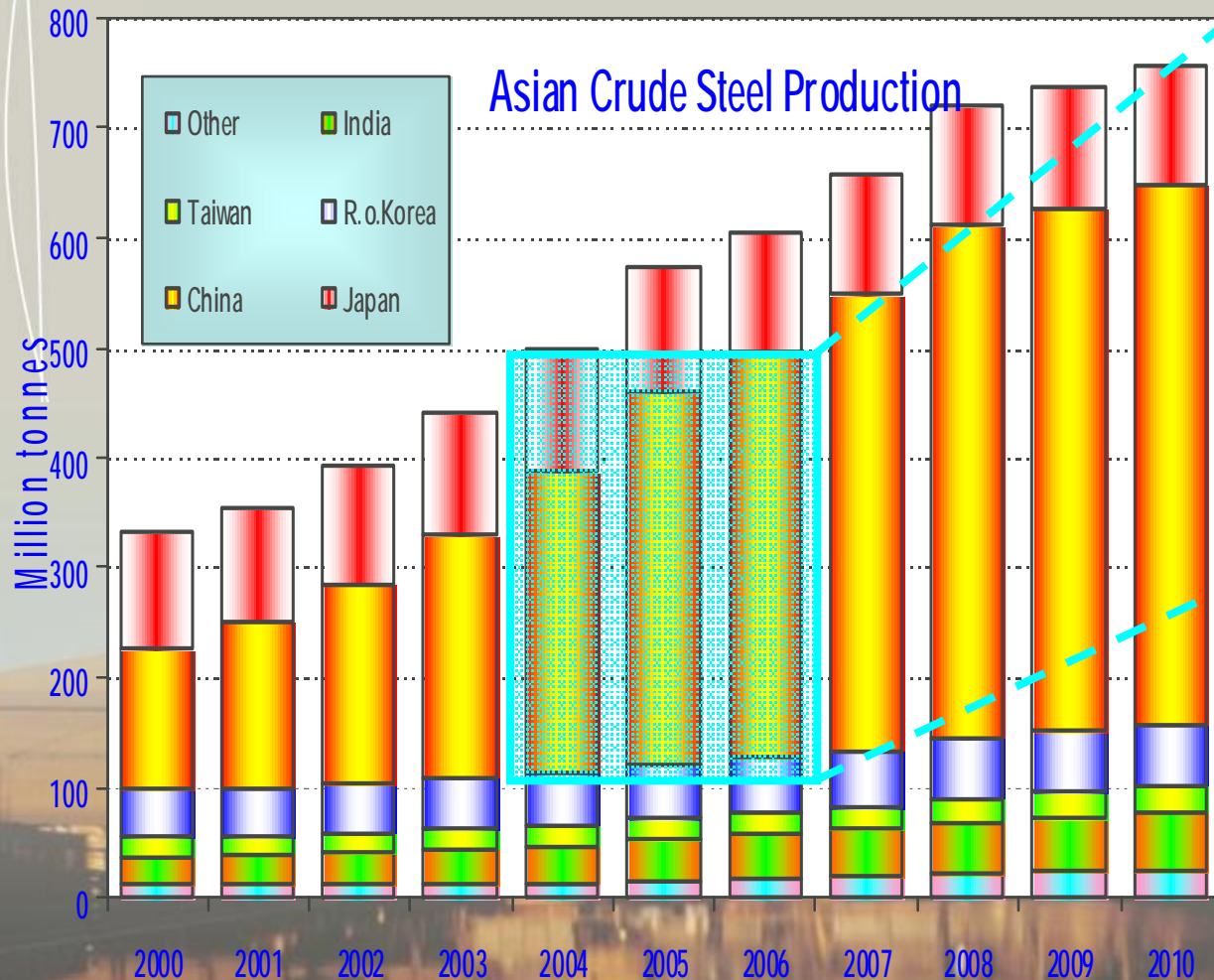
## Global Crude Steel Production



Data source: IISI, AME, CRU, Tex, BHP Billiton forecasts

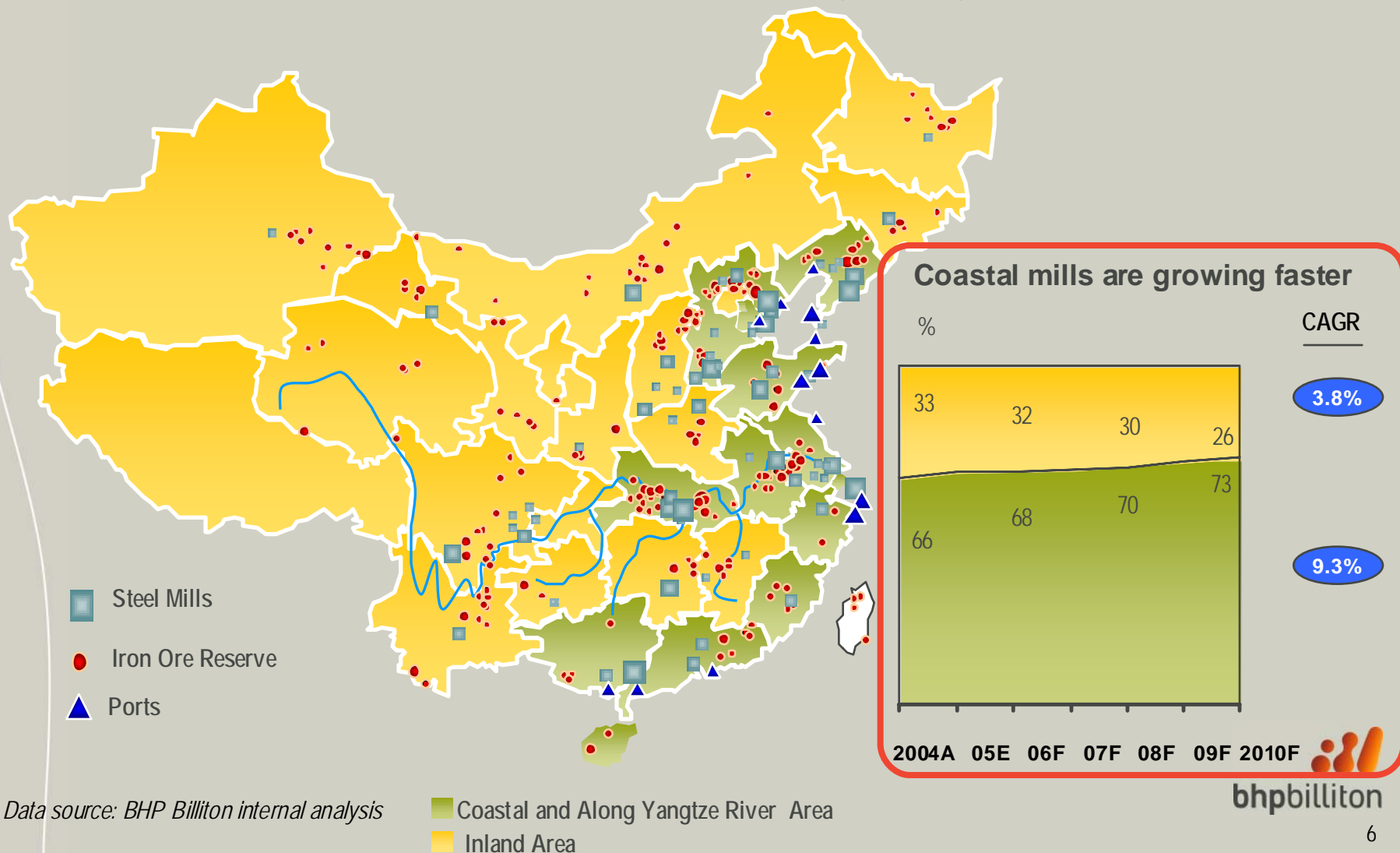
# Asian steel growth will be led by China

*China will however continue to be the growth engine for steel in the region and, consequently, the world.*



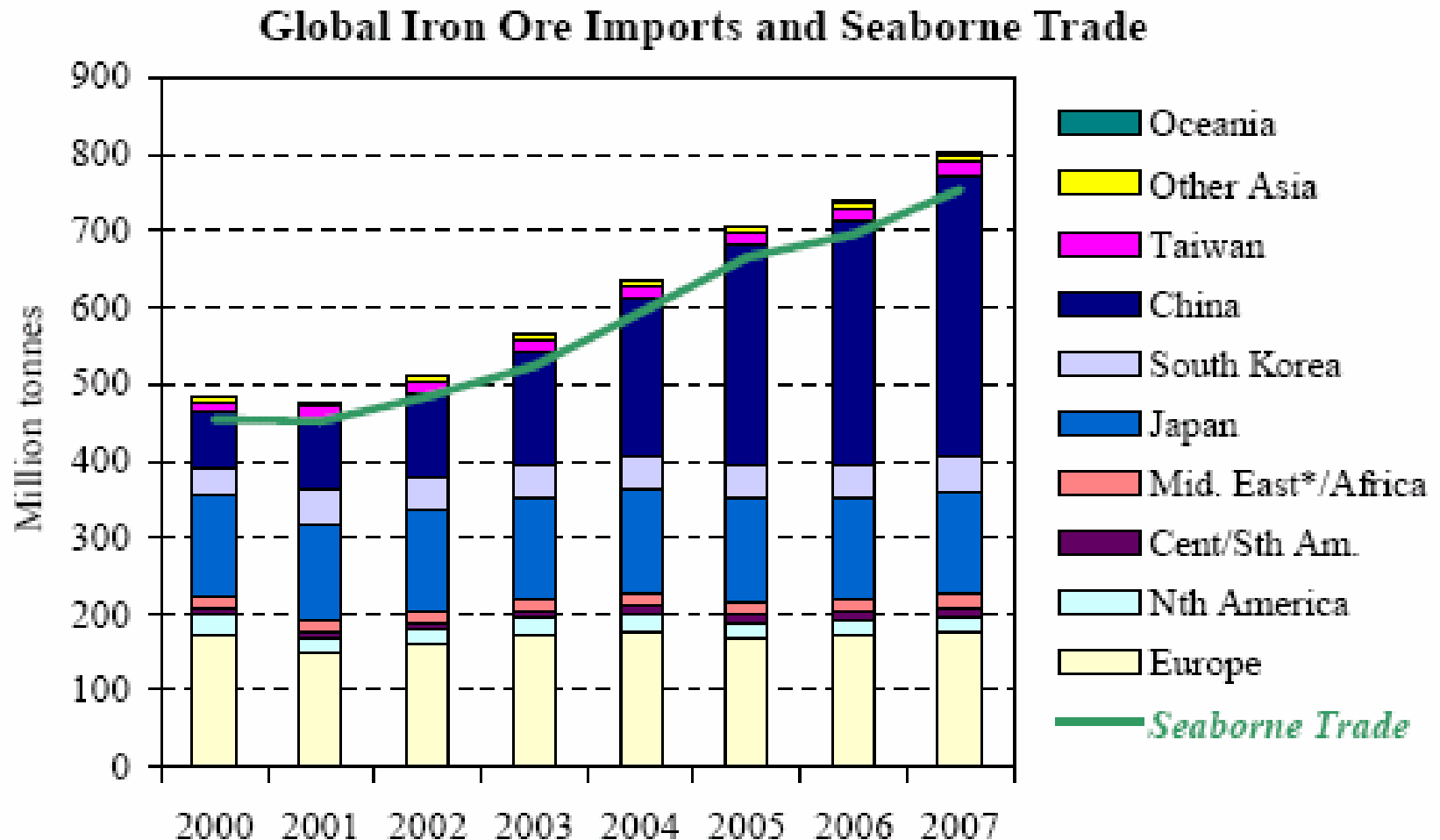
# Chinese steel industry evolution

*China's steel mills are shifting to coastal areas or along the Yangtze river. China's new 5 year steel policy will consolidate the industry and lead to higher usage of imported iron ores*



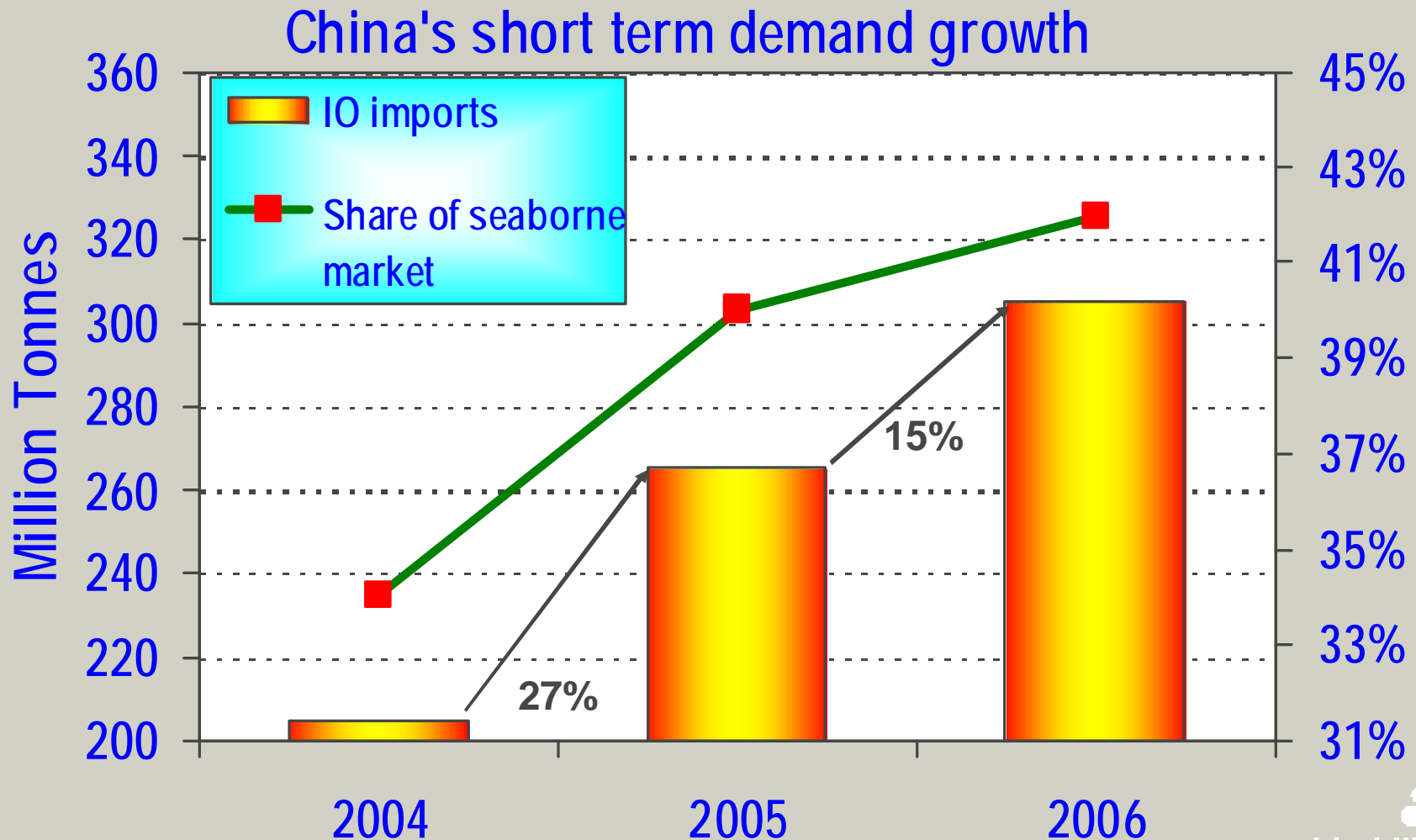
# Global seaborne iron ore demand

*Driven by increasing global crude steel capacity growth seaborne iron ore demand will continue to grow at a rapid rate. Demand is expected to reach around 800 million tonnes by 2007.*



# Demand from Chinese steel sector will lead the way

*China will make up the bulk of the future growth in seaborne iron ore demand, consequently China's share of the seaborne iron ore market is also increasing, from 34% in 2004 to ~40% in 2005.*

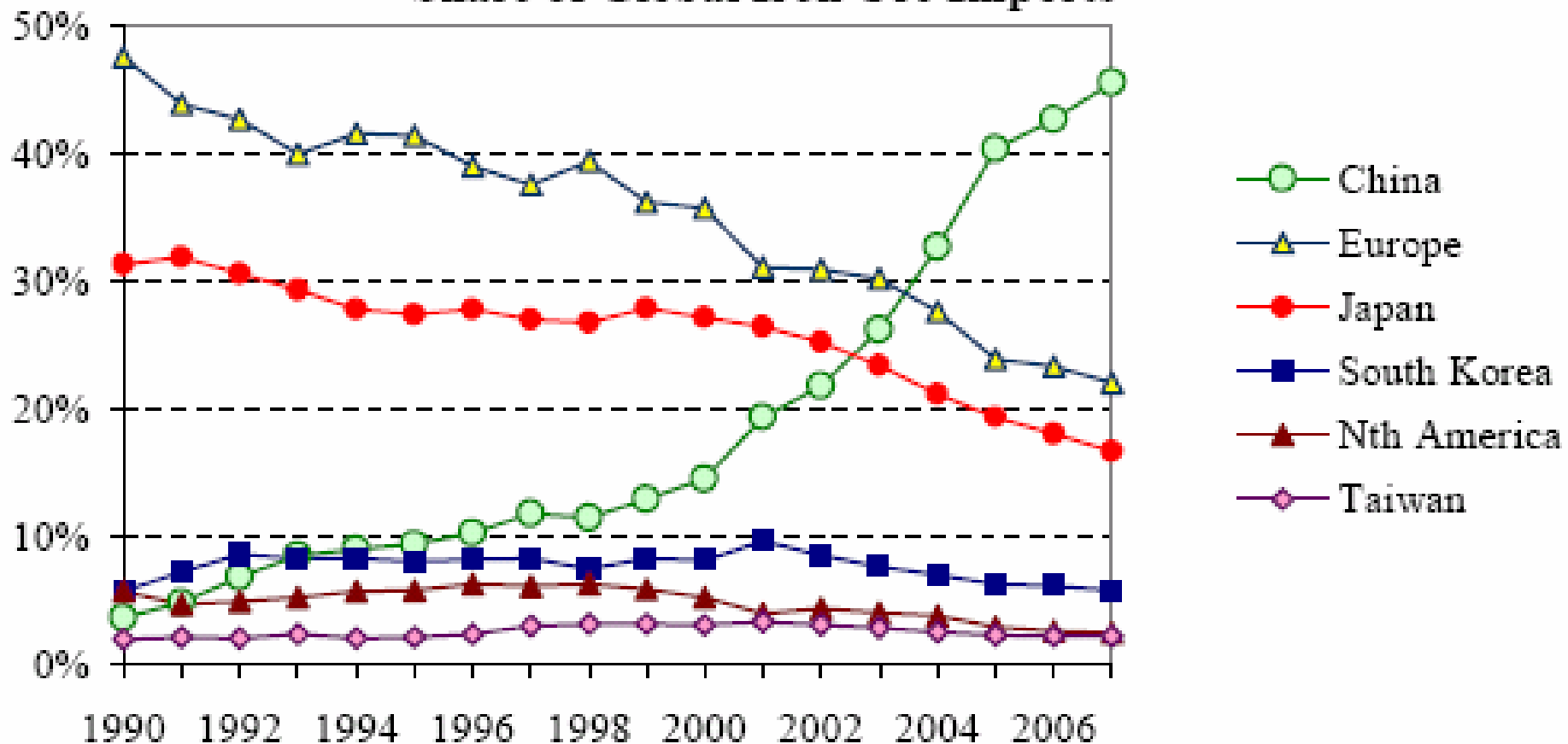




# China's share of seaborne iron ore demand is growing

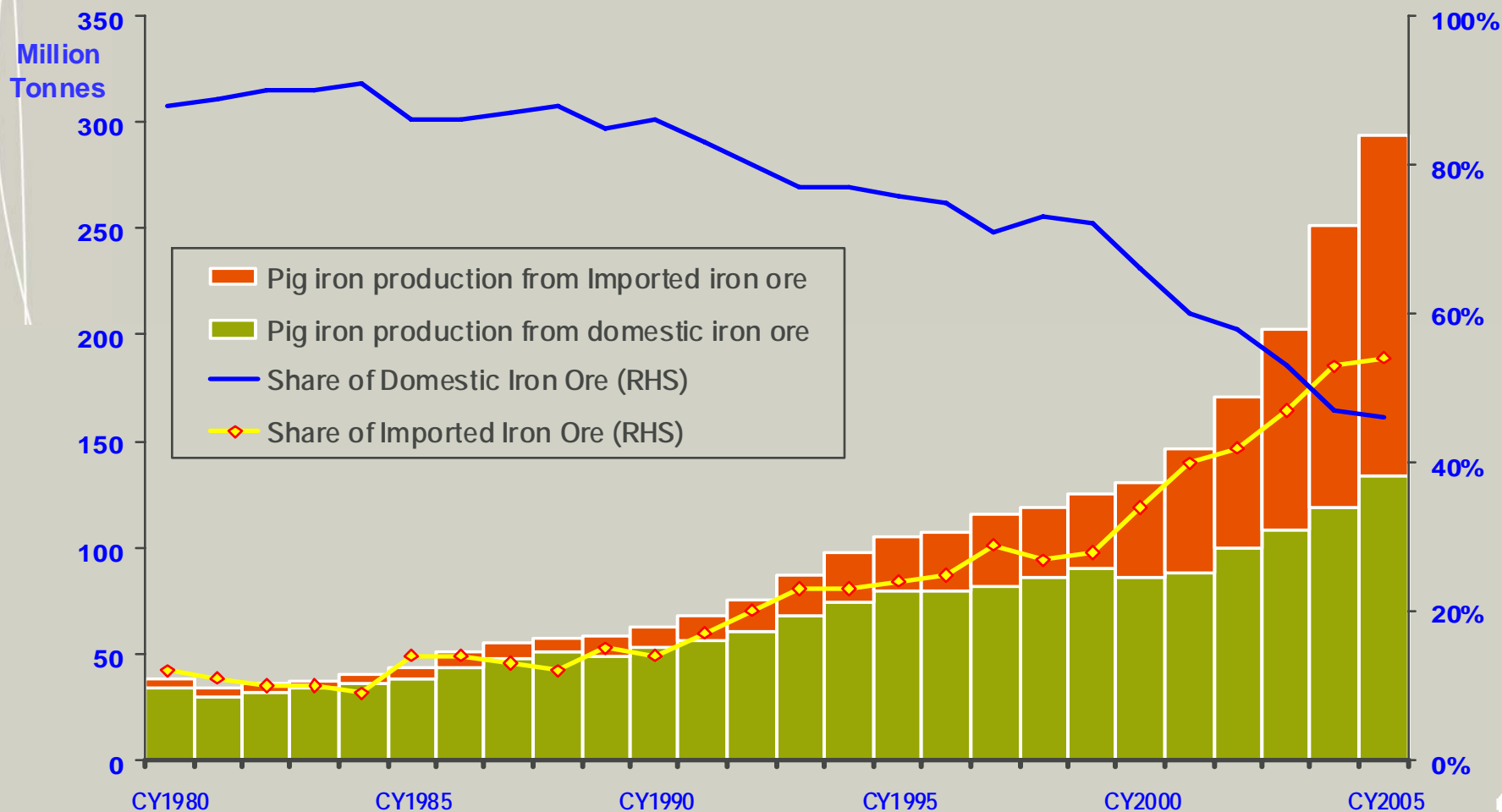
*China's share of the global seaborne market has grown strongly and will exceed 45% in 2007*

Share of Global Iron Ore Imports



# Chinese domestic iron ore production

*BHP Billiton's detailed study of the expansion potential of China's domestic iron ore mines indicates that they will not be able to meet the demand of China's steel industry. This has been proven by the results that more than 50% of the iron units consumed in 2004 were imported*

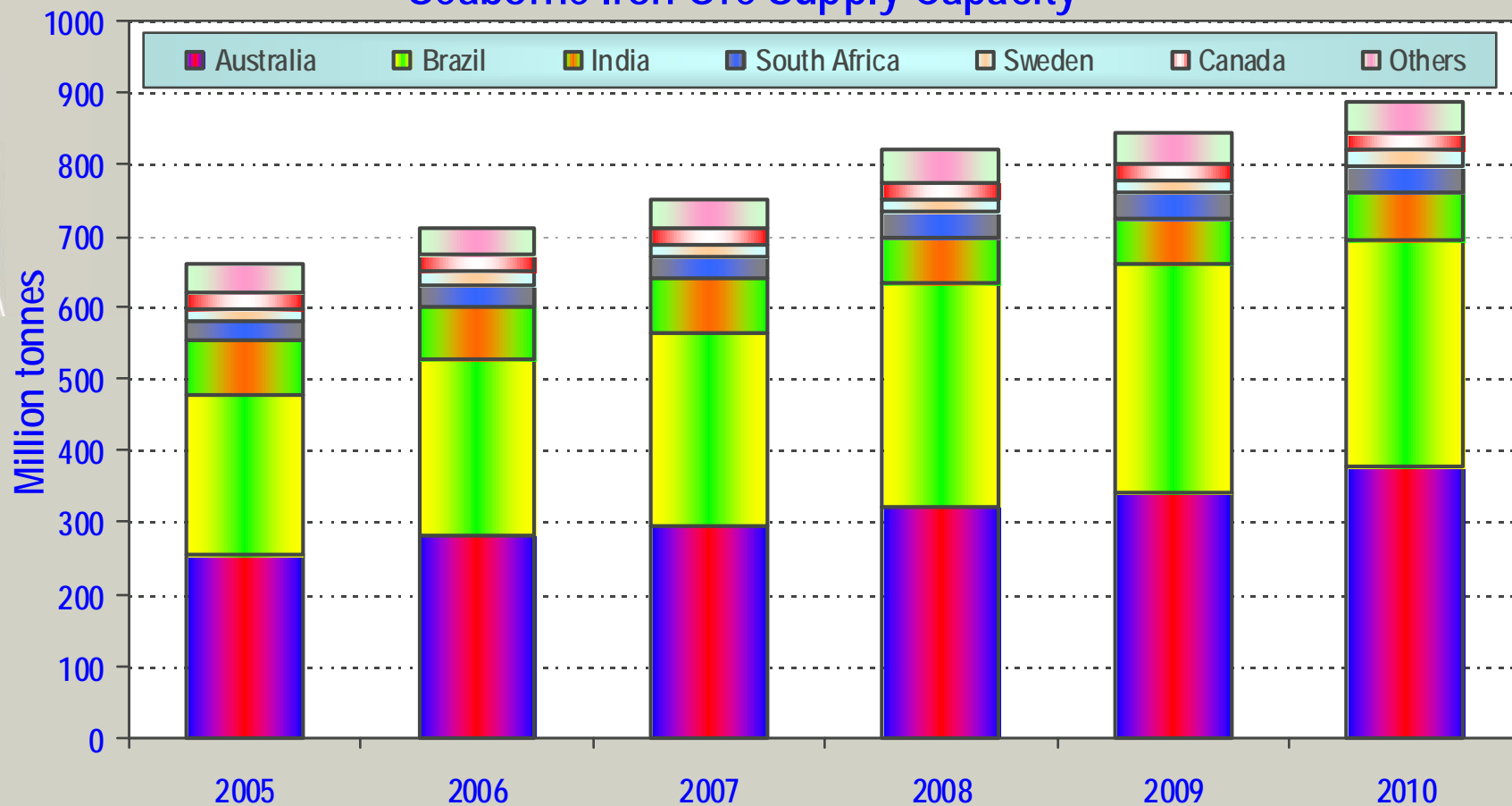


Data source: CMMA, NBS, BHP Billiton

# Seaborne iron ore supply

*Supply growth to meet the demand of the expanding global steel industry will come from the traditional supply basins of Australia and Brazil (>90%). While India has met some of the shortfall its own future demand will mean that their exports will stabilise or even begin to reduce.*

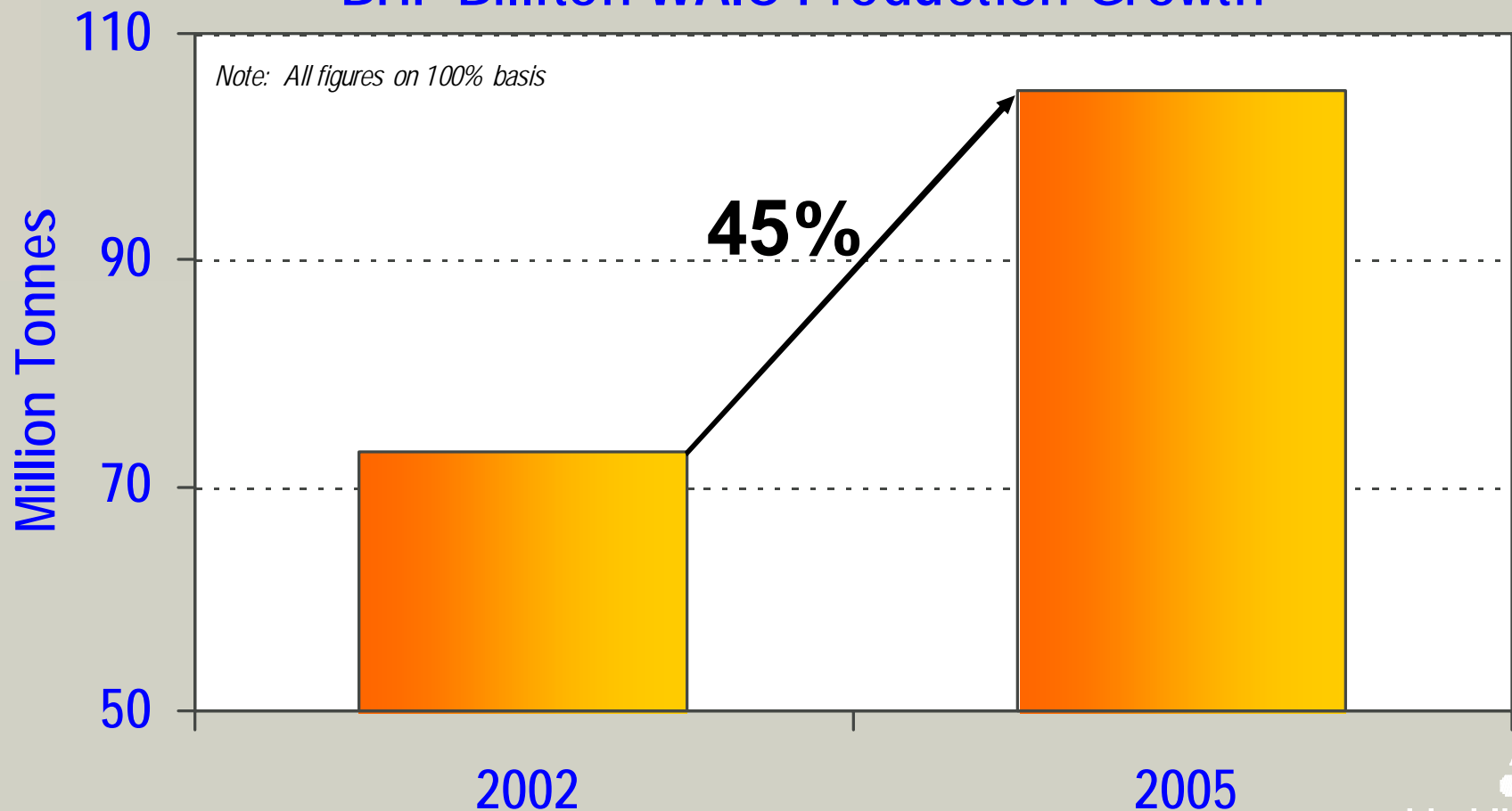
## Seaborne Iron Ore Supply Capacity



# BHP Billiton's production response to demand growth

*Most parties have acknowledged that China's surge in steel production capacity and subsequent iron ore demand were both unprecedented and unpredictable. Since the start of this surge in 2002 BHP Billiton has increased production by 45% in just three years to meet demand.*

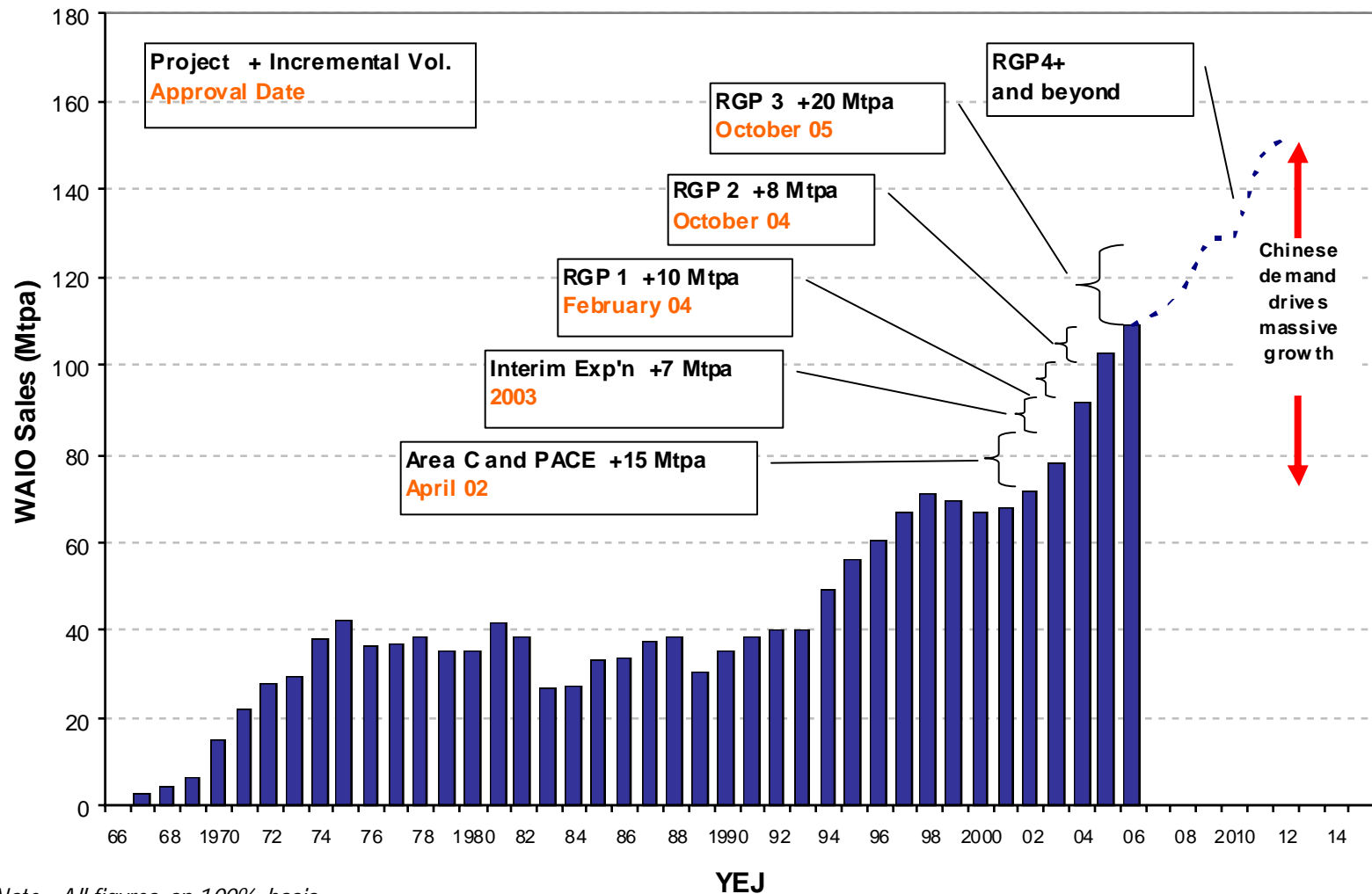
## BHP Billiton WAO Production Growth



Data source: BHP Billiton

# BHP Billiton's production response to demand growth

*BHP Billiton has progressively expanded production to meet market demand. Further expansions to over 152Mt are under study.*



Note: All figures on 100% basis

Data source: BHP Billiton

# Managing key issues – maintaining expansion growth

*BHP Billiton has decided to stage expansion projects, but the growth target remains*



- Large increase in external costs due to overheated West Australian construction market
  - Numerous projects competing for limited construction resources
  - Decision taken to proceed via incremental expansion steps
  - Rapid Growth Projects (RGP)

# Phased expansions to >152 million tonnes

*Staged expansions RGP 3 and RGP4 will take capacity to >152Mtpa, further studies are underway to go beyond this should market demand warrant it*

Project	Target Completion Date (CY)	Capacity Increase Mtpa (wet) (100% basis)	Capital 85% Terms US\$M
MAC/PACE	Q3 2003/Q1 2004	13	437
Accelerated Expansion Project	Q2 2004	8	80
RGP1	Q4 2004	10	101
RGP2	H2 2006	8	489
RPG3	End 2007	20	1,300
<i>RGP4+ *</i>	<i>H1 2010</i>	<i>~152 Mtpa system total</i>	<i>~1,400</i>
<i>Beyond 152 Mtpa**</i>	<i>TBA</i>	<i>TBA</i>	<i>TBA</i>

*\*Currently under feasibility study*

*\*\* Also under study*

- RGP's - Series of phased, modular expansion steps
- Disciplined approach to capital expenditure while increasing supply to customers
- Substantial capital commitments required



# Examples of current activities under RGP 2

*Earthworks for construction of car dumper #4 on Finucane Island, scheduled for completion by H2 2006*





# Examples of current activities under RGP 2 - II

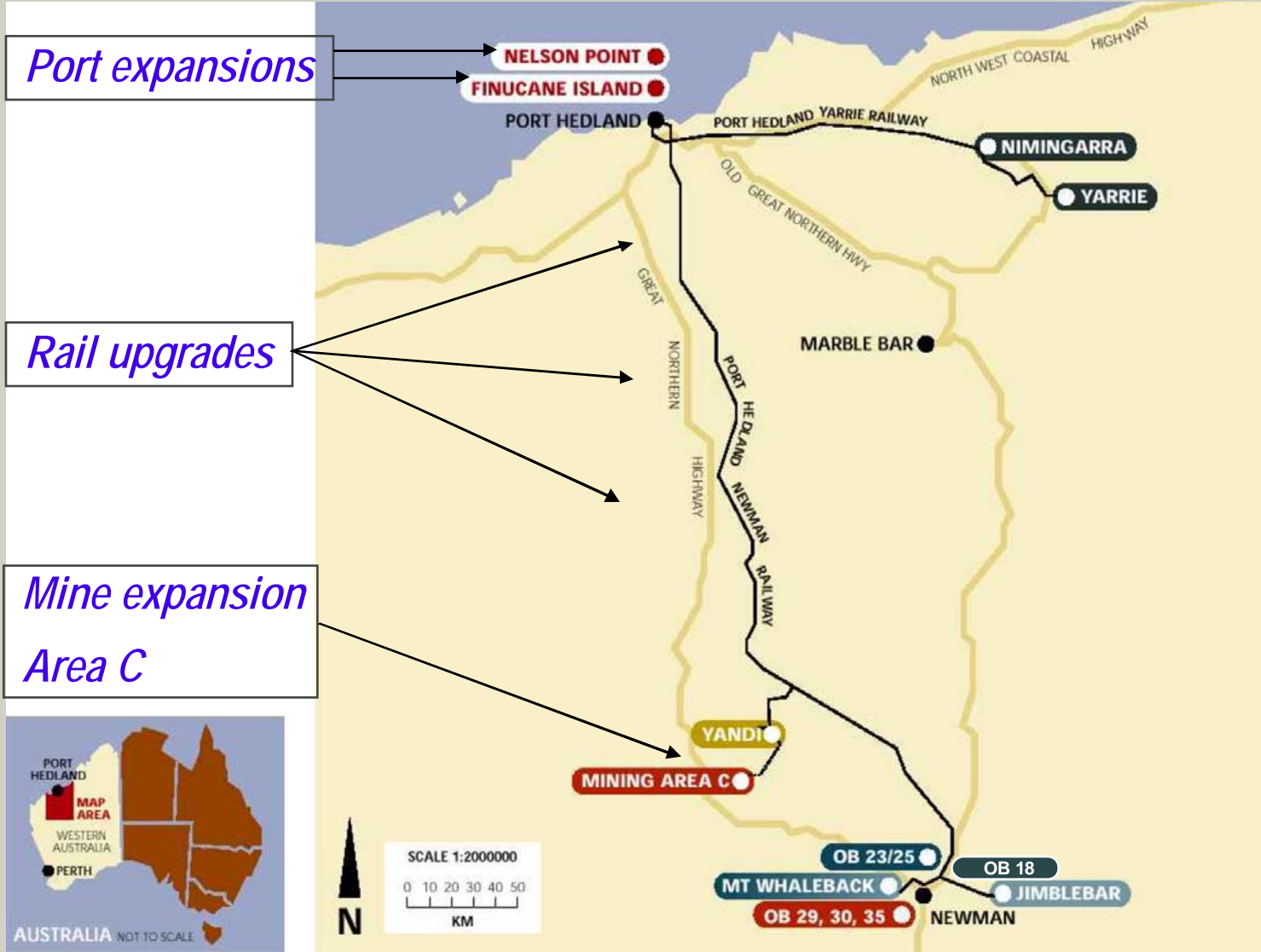
*Ore body 18 development progressing on schedule and will form part of the Newman ore blend*



bhpbilliton

# RGP 3 – boosting capacity by 20 Mtpa to 129Mt

*RGP 3 will involve major expenditure on port, rail and mine expansions to Area C, boosting capacity to ~129Mtpa with first production by end of Q4 2007*





# Also expanding port capacity to meet demand

## Nelson Point

RGP2 – CD1 & CD3 to direct dump to berths A & B

- Upgrade OHP#2 conveyors.

RGP3 – Car dumper upgrades

- Conveyor upgrades

## Finucane Island

RGP2 – Installation of Car Dumper 4

RGP3 – Upgrades to C Berth

- Increase C & D berth flexibility
- Shiploaders 3 & 4 flexibility
- East Yard.



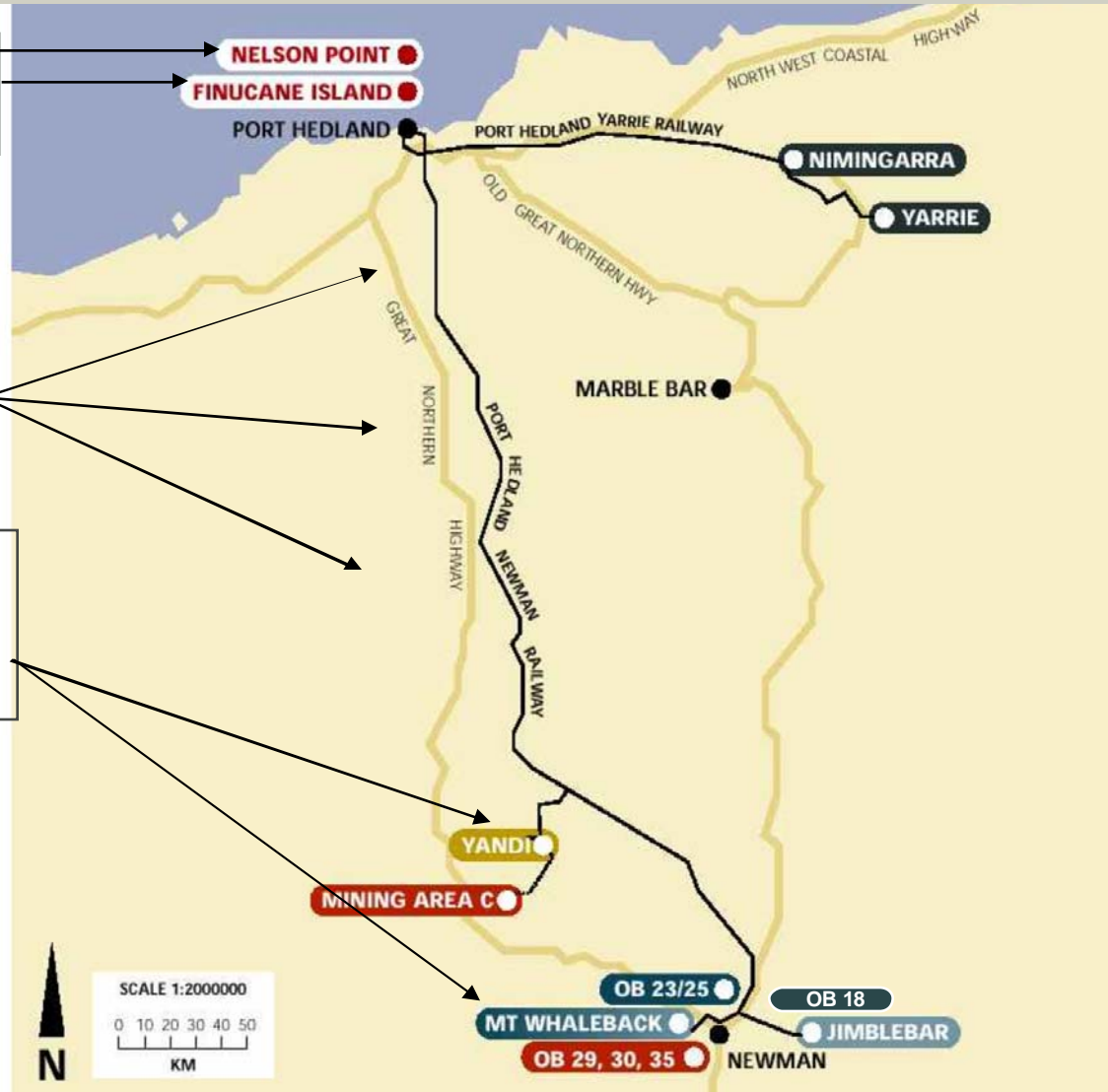
# RGP4+ - Proposed Expansion to ~152 Mtpa

*RGP 4 and other possible staged expansions are aimed to taking capacity to around 152Mtpa*

*Minor Port expansions*

*Further Rail upgrades*

*Newman Hub Incremental Yandi*





# Beyond 152Mtpa, large resources to support further growth

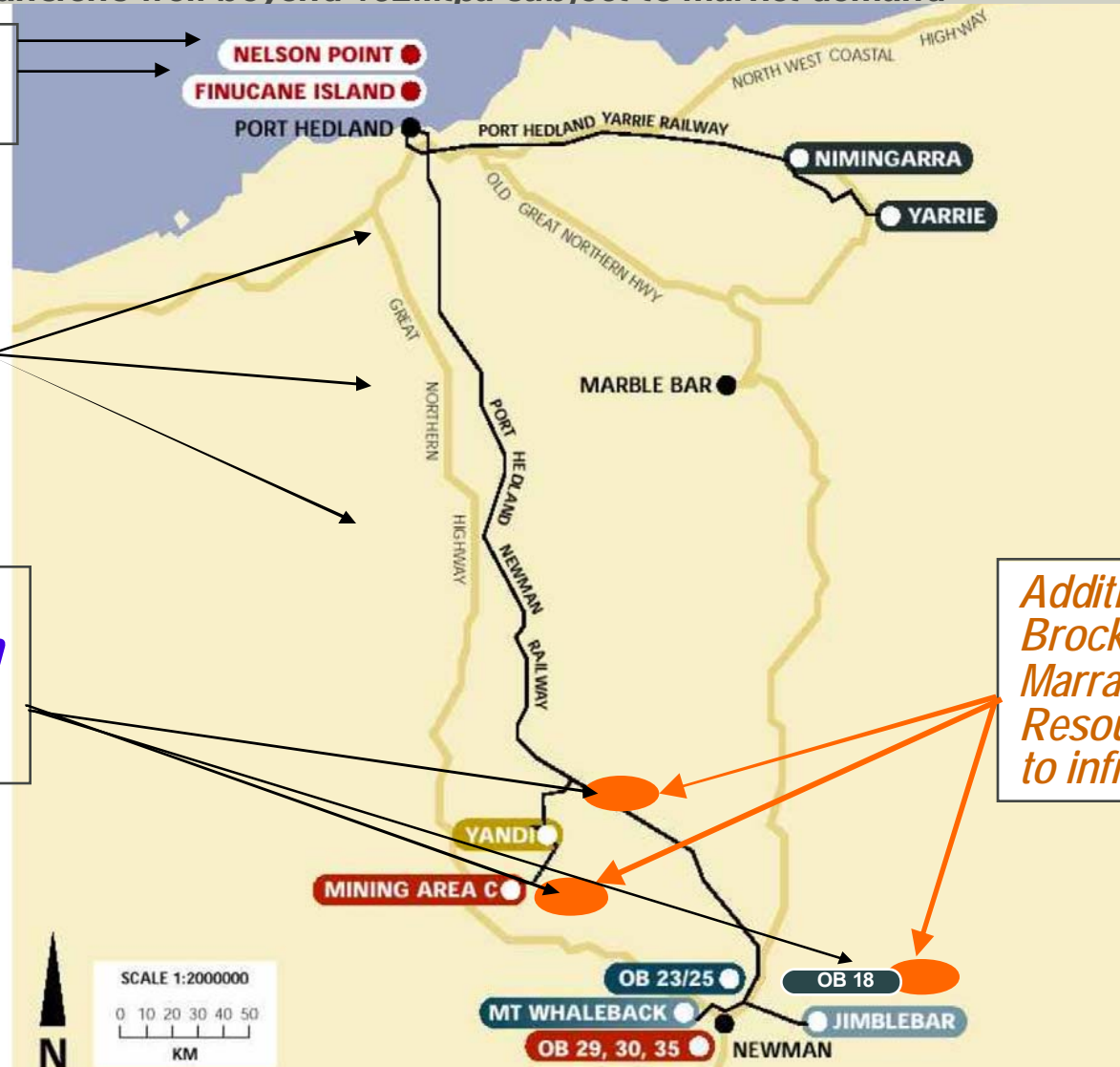
*BHP Billiton has vast further resources close to existing and expanding infrastructure that will enable further expansions well beyond 152Mtpa subject to market demand*

*Further Port expansions*

*Further Rail upgrades*

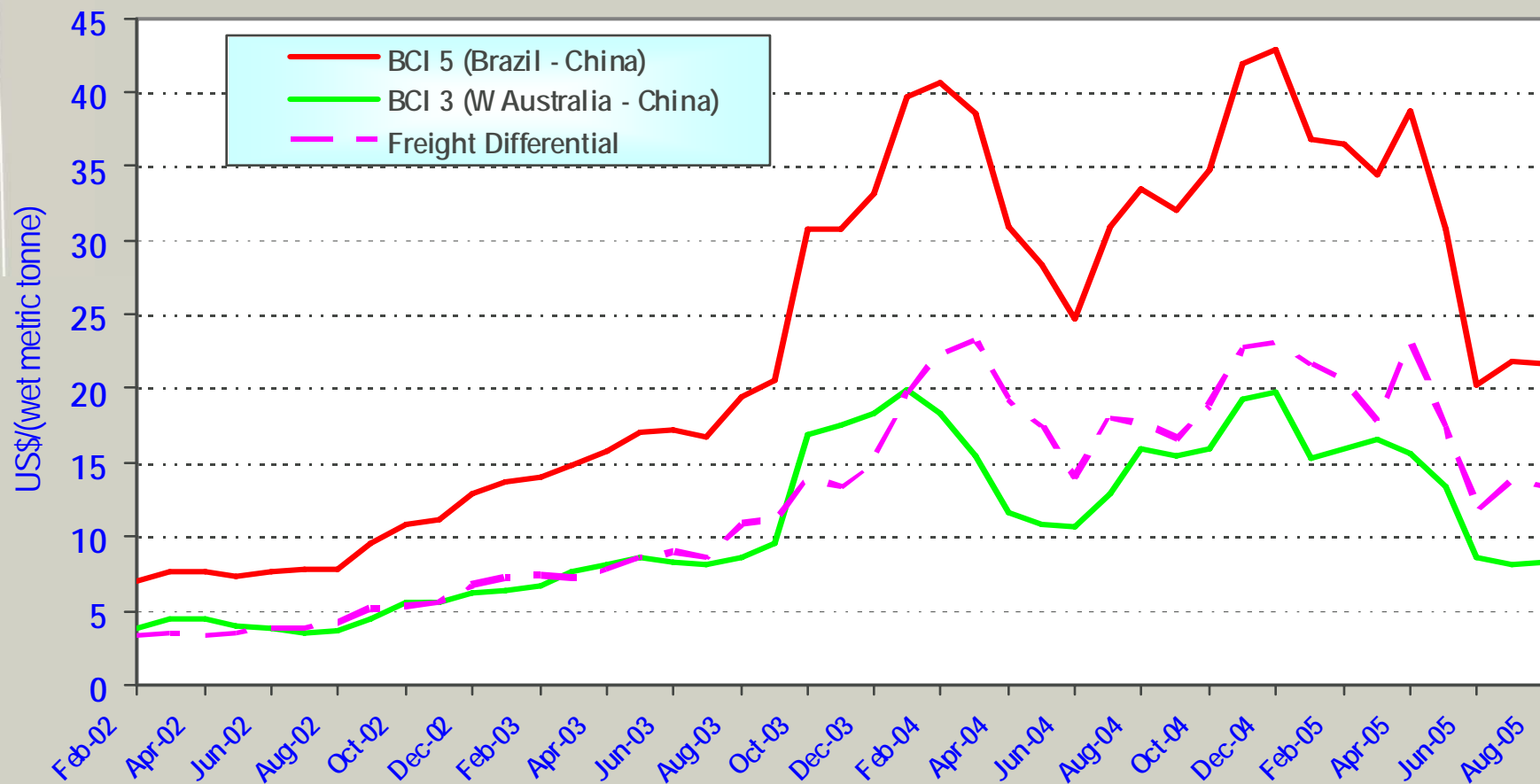
*Location of New Brockman Hub under study*

*Additional Brockman & Marra Mamba Resources close to infrastructure*



# Freight differential remains substantial

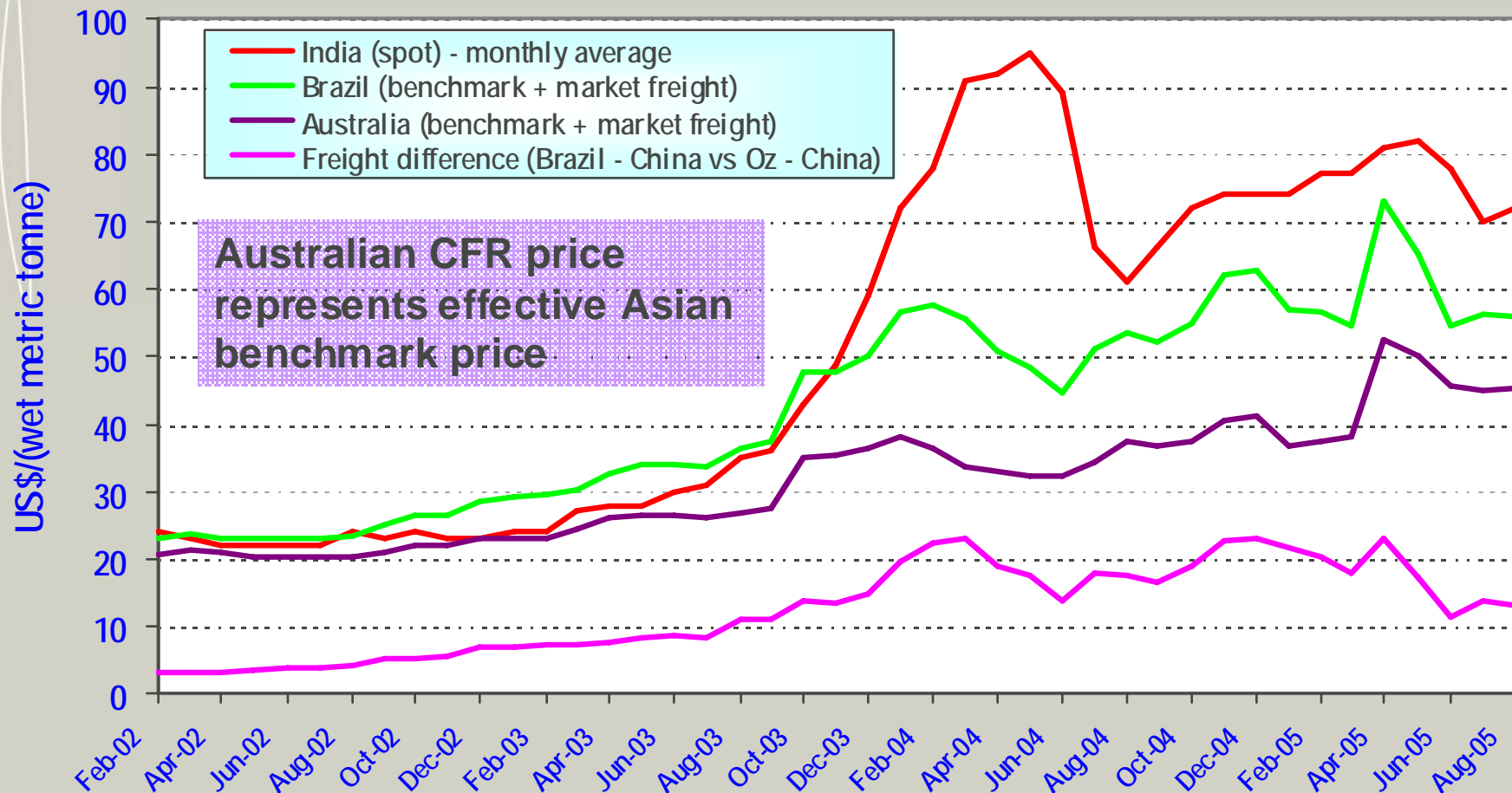
*Freight rates have fallen, however, the freight differential has only closed marginally. There is consensus in the market that the freight differential will not return to the <\$5 rate of three years ago due to (1) the volume of iron ore moving from Brazil into Asia which isn't matched by off-setting volume back to the Atlantic and (2) the escalated cost of new ship buildings.*



Data source: Baltic Indices

# Indication of spot market prices in China (CFR)

*Indian prices remain well above the landed cost of Australian iron ores. Chinese government measures during 2005 initially drove spot prices down but these have rebounded due to demand which is unable to be fulfilled by domestic iron ore producers.*



Data source: China Customs, Baltic Indices, BHP Billiton

## Summary

- Seaborne iron ore demand continues to show substantial growth
- Chinese domestic producers unable to meet Chinese demand meaning increased demand for seaborne iron ore
- Traditional producers Australia and Brazil will provide the majority of new supply but markets will remain tight in the near to medium term
- Current gap-filling Indian exports will decrease as they aggressively expand their own steel industry
- BHP Billiton has staged expansions RGP2, 3, 4 in the pipeline to raise capacity to 152Mtpa and beyond
- Significant additional resources exist and drilling is underway to seek further resource definition to enable expansions well above 152Mtpa
- Despite changes to freight markets the landed cost of Australian ores remains well below Brazilian benchmark equivalent & Indian spot ores



**Thank you for  
your attention**

