Responding to India's Growing Steelmaking Raw Materials Needs

Don Carroll President BHP Billiton India

Global Steel 2005 Conference, Goa

Thursday, 10 March 2005

bhpbilliton

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.

bhpbilliton

Presentation layout

- Introduction to BHP Billiton
  - Global Assets
  - Carbon Steel Materials
- India – Case for Growth
  - Indian Economy
  - Steel Growth in India
  - Constraints
  - Factors for India to reach full potential
  - BHP Billiton commitment to India
- BHP Billiton Expansion plans
  - Coking Coal Expansions
  - Iron Ore Expansions
  - Manganese Expansions
- BHP Billiton Benefits to India
- Concluding remarks

bhpbilliton

Presentation layout

- Introduction to BHP Billiton
  - Global Assets
  - Carbon Steel Materials
- India – Case for Growth
  - Indian Economy
  - Steel Growth in India
  - Constraints
  - Factors for India to reach full potential
  - BHP Billiton commitment to India
- BHP Billiton Expansion plans
  - Coking Coal Expansions
  - Iron Ore Expansions
  - Manganese Expansions
- BHP Billiton Benefits to India
- Concluding remarks

bhpbilliton

The world's largest diversified resources company

Petroleum

Aluminium

Base Metals

Carbon Steel Materials

Diamonds & Spec Prod

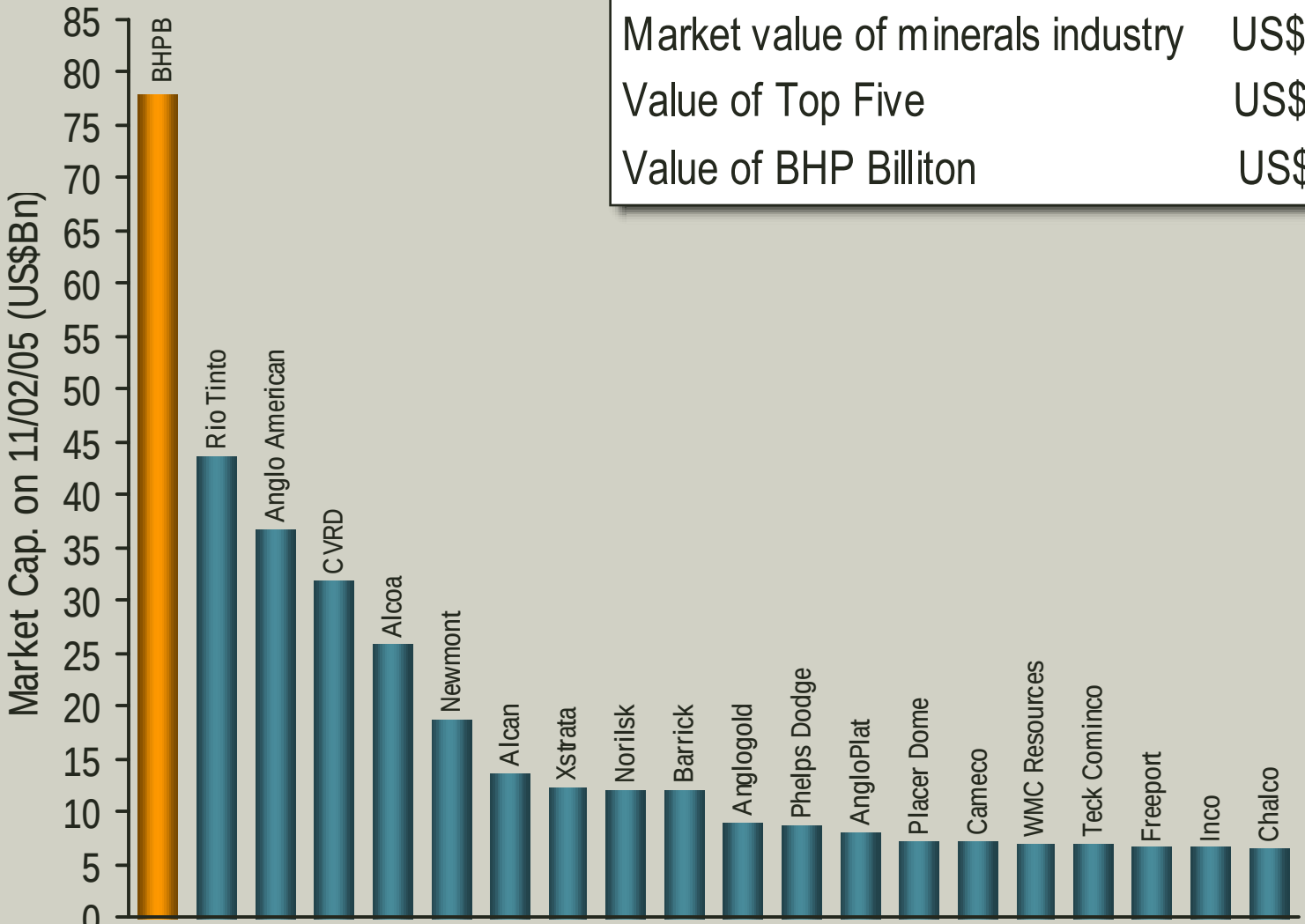
Energy Coal

Stainless Steel Materials

bhpbilliton

The largest company in a consolidating sector

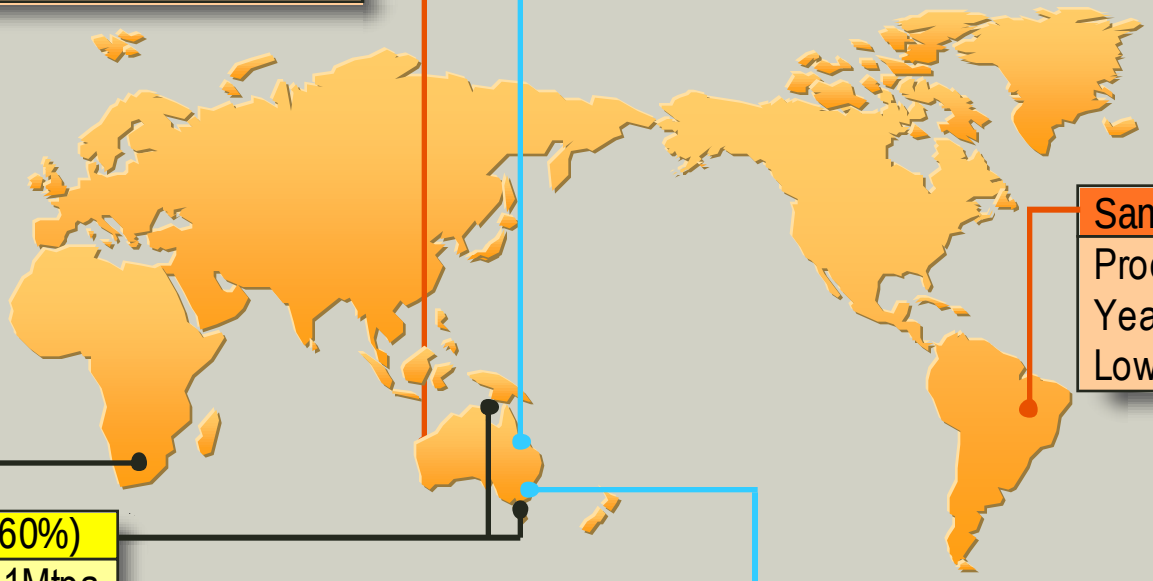
Market value of minerals industry	US$523 bn
Value of Top Five	US$217 bn
Value of BHP Billiton	US$ 78 bn



Source: Datastream

bhpbilliton

BHP Billiton – Carbon Steel Materials assets



WA Iron Ore (85-100%)
Prod: 110Mtpa
Years of Life: 35
No 3 Seaborne supplier

QLD Coal (50 – 80%)
Prod: 52Mtpa
Years of Life: 50
No 1 Seaborne supplier

Samarco Iron Ore (50%)
Prod: 15Mtpa
Years of Life: 40
Low cost pellet producer

Manganese (60%)
Prod: Ore 4.1Mtpa
Alloy etc 0.7Mtpa
Years of Life:
Aust 25
SA 30
No 1 Supplier

Illawarra Coal (100%)
Prod: 7Mtpa
Years of Life: 45
Niche supplier

100% nominal production capacity

bhpbilliton

BHP Billiton has large Met Coal Assets

BHP Billiton

Mitsubishi 三菱

50%

50%

Managed by BHP Billiton

BMA *Marketing*

CQCA JV:
Peak Downs Mine
Goonyella Mine
Norwich Park Mine
Saraji Mine
Blackwater Mine
Hay Point Terminal

50% BHP Billiton / 50% Mitsubishi

Gregory JV:
Gregory Mine
Crinum Mine

50% BHP Billiton / 50% Mitsubishi

BHP Mitsui Coal P/L:
Riverside Mine
South Walker Creek Mine

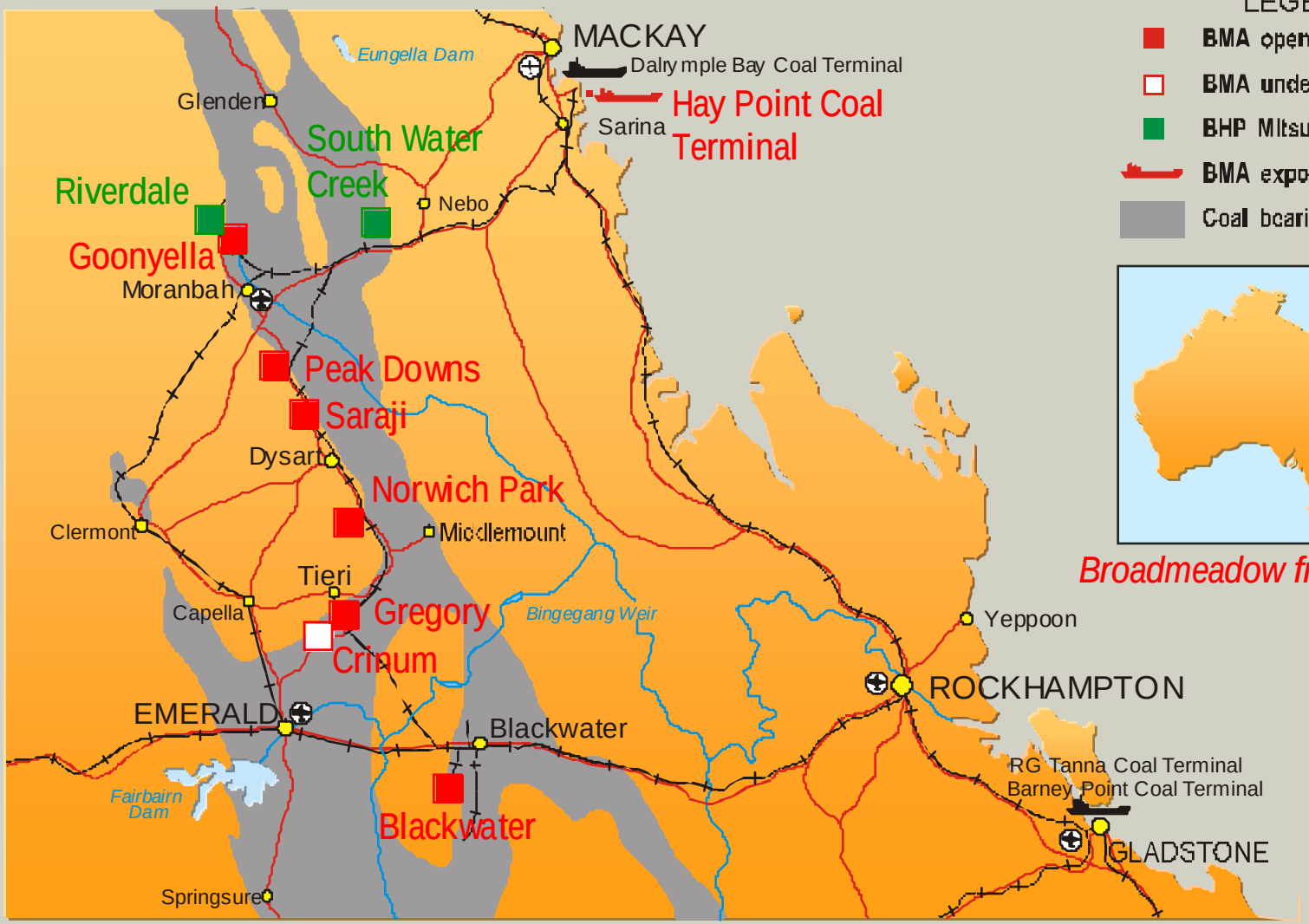
80% BHP Billiton
20% Mitsui & Co

Illawarra :
West Cliff Mine
Appin Mine
Elouera Mine
Dendrobium Mine
(mid 2005)

100% BHP Billiton

bhpbilliton

BHP Billiton Queensland Coal Operations



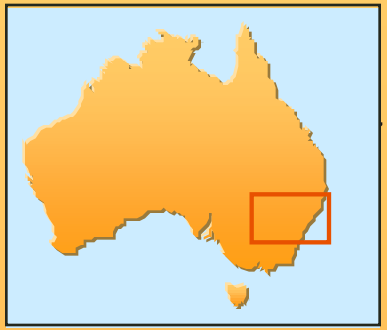
bhpbilliton

BHP Billiton's Coal Transportation

- Coal produced is transported to Hay Point & Dalrymple Bay coal terminals south of Mackay and Clinton & Barney Point terminals in Gladstone by a electric rail system.
- Each train has up to 120 wagons, and carries approx. 9000 tonnes of product coal.
- Ports can handle vessels up to 200,000 tonnes capacity.

bhpbilliton

BHP Billiton Illawarra Coal Operations



bhpbilliton

Location of Iron Ore Mines

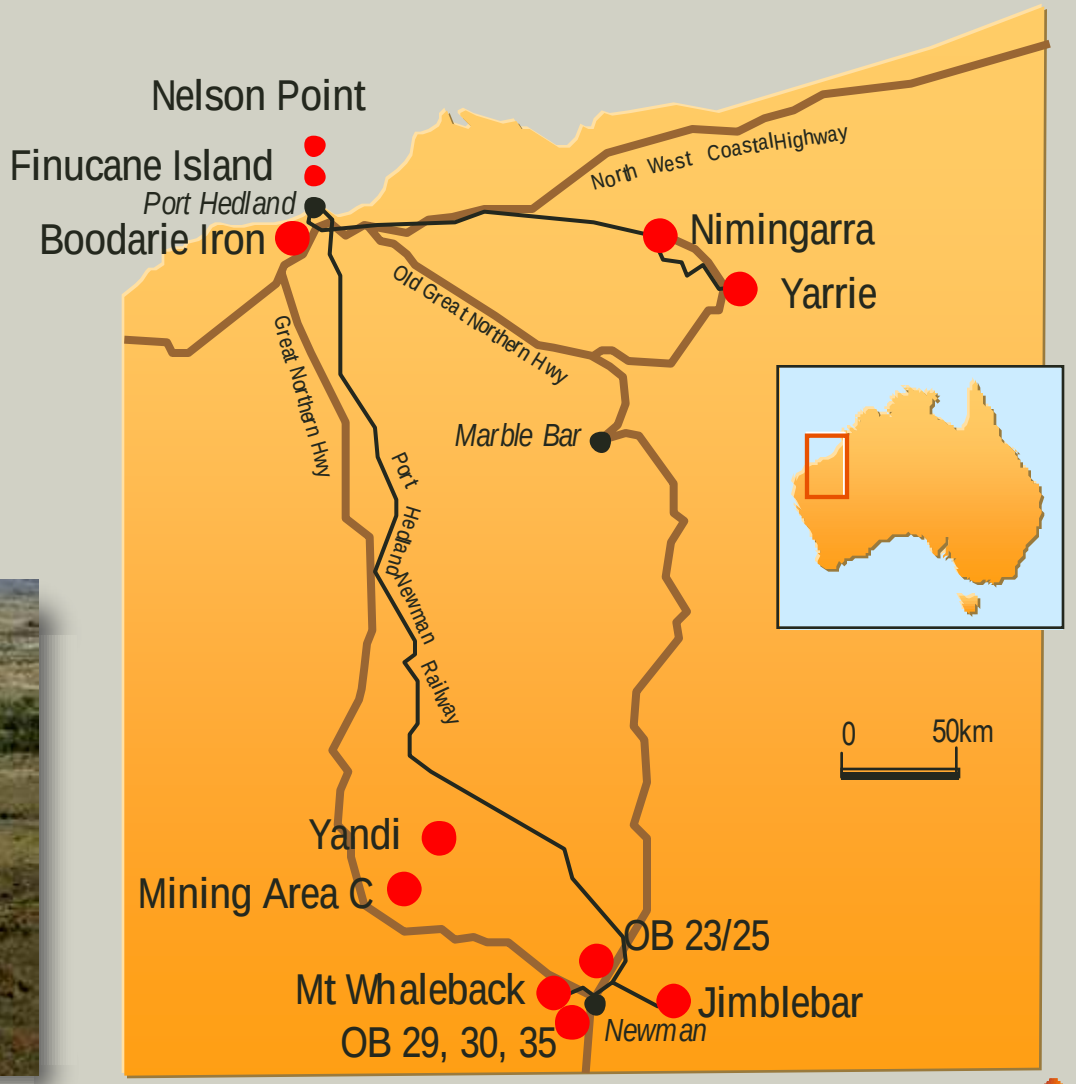
Newman to Nelson Point - 426km

- Jimblebar spur line is 32km

Yandi to Nelson Point - 310 km

- Yandi spur line is 30km
- Area C spur line extension from Yandi is 38km

Yarrie to Finucane Island - 208km



bhpbilliton

BHP Billiton Western Australian Iron Ore's Joint Ventures

Mt. Newman JV (≈38Mwmt/a)

- 85 per cent BHP Billiton Minerals Pty. Ltd.
- 10 per cent Mitsui - Itochu Iron Pty. Ltd.
- 5 per cent CI Minerals Australia Pty. Ltd.

Note : Jimblebar is 100% owned by BHP Billiton Minerals Pty Ltd

- Wheelara Joint Venture (Sub Lease of Jimblebar) (12Mt/a)
  - 51 per cent BHP Billiton Minerals Pty Ltd
  - 10 per cent Maanshan Iron & Steel Co
  - 10 per cent Tangshan Iron & Steel (Group) Co
  - 10 per cent Wuhan Iron & Steel Corporation
  - 10 per cent Jiangsu Shagang
  - 4.8 per cent Itochu Minerals & Energy of Australia
  - 4.2 per cent Mitsui Iron Ore Corporation Pty Ltd

BHPBIO is the operator and marketer for each of the Joint Ventures

bhpbilliton

BHP Billiton Western Australian Iron Ore's Joint Ventures

Mt. Goldsworthy Mining Associates JV (≈7.5Mwmt/a)

- 85 per cent BHP Billiton Minerals Pty. Ltd.
- 7 per cent Mitsui Iron Ore Corporation Pty. Ltd.
- 8 per cent CI Minerals Australia Pty. Ltd.

• POSMAC JV
(Sublease of Mt. Goldsworthy JV's 'C deposit') (~15Mt/a)

- 65 per cent BHP Billiton Minerals Pty. Ltd.
- 20 per cent POSCO
- 7 per cent Mitsui Iron Ore Corporation Pty. Ltd.
- 8 per cent CI Minerals Australia Pty. Ltd.

Yandi JV (≈42Mwmt/a)

- 85 per cent BHP Billiton Minerals Pty. Ltd.
- 7 per cent Mitsui Iron Ore Corporation Pty. Ltd.
- 8 per cent CI Minerals Australia Pty. Ltd.

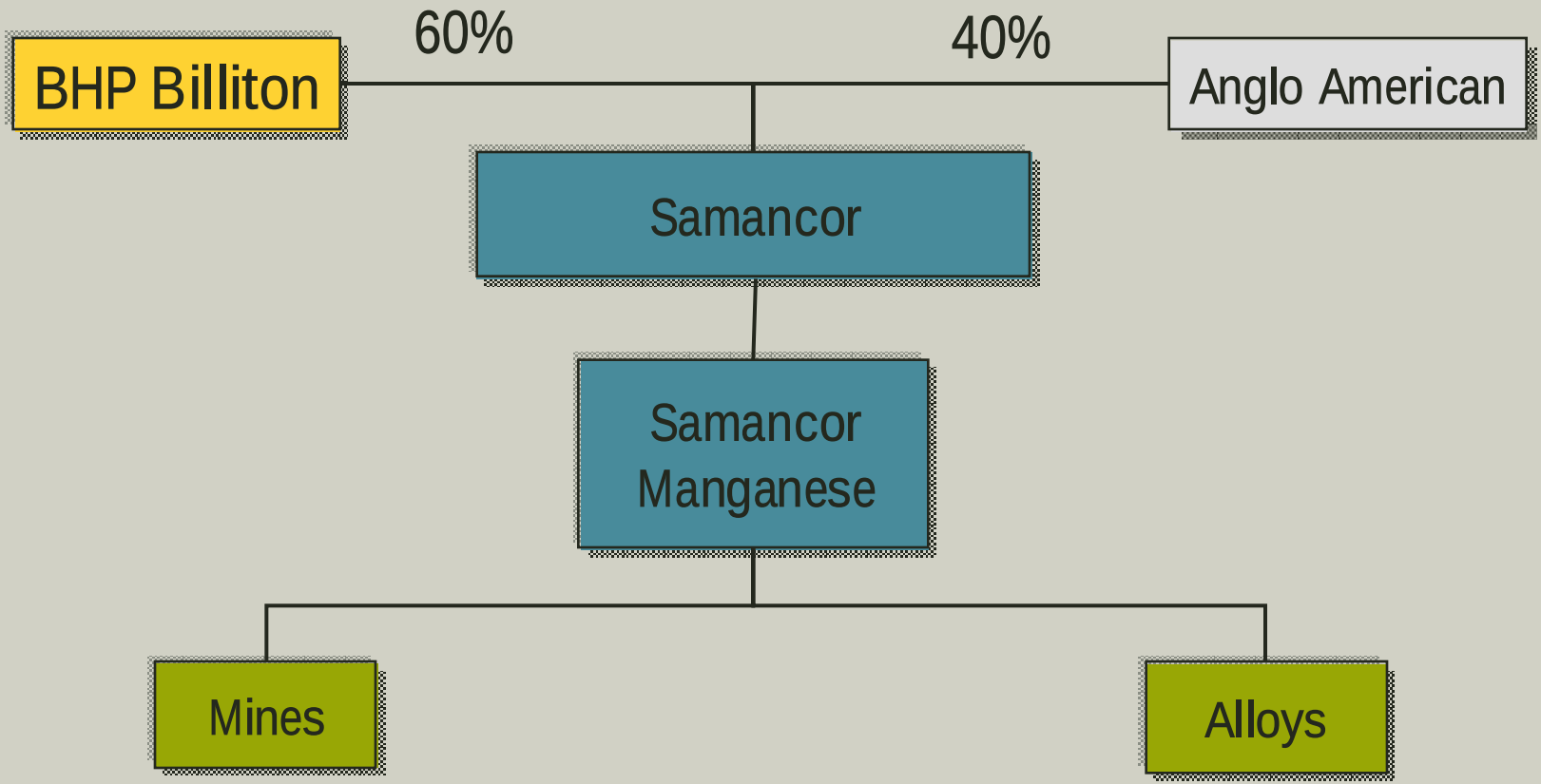
BHPBIO is the operator and marketer for each of the Joint Ventures

bhpbilliton

BHP Billiton Iron Ore Ports

bhpbilliton

BHP Billiton Manganese



BHP Billiton Manganese Operations

Mamatwan (open pit)
ROM 2.3 million tpa
Sinter plant + 800 Ktpa

Metalloys - Capacity
397,000tpa FeMn
104,000tpa SiMn
75,000tpa MCFeMn

Wessels (underground)
ROM 1.2 million tpa
Beneficiation plant 900 Ktpa

Temco - Capacity
130,000tpa FeMn
120,000tpa SiMn
330,000tpa Sinter

Gemco - Capacity
ROM >6.5 million tpa

bhpbilliton

Presentation layout

- Introduction to BHP Billiton
  - Global Assets
  - Carbon Steel Materials
- India – Case for Growth
  - Indian Economy
  - Steel Growth in India
  - Constraints
  - Factors for India to reach full potential
  - BHP Billiton commitment to India
- BHP Billiton Expansion plans
  - Coking Coal Expansions
  - Iron Ore Expansions
  - Manganese Expansions
- BHP Billiton Benefits to India
- Concluding remarks

bhpbilliton

Over time, India's traditionally controlled economy has been reformed to give way to liberalisation

State controlled industrialisation

Green revolution

Nationalisation

Entry barriers lowered for many sectors

Fiscal profligacy

De-regulation and de-licensing

Lowering of tariffs and taxes

FDI allowed

Reduced real interest rates

Further reduction in taxes and tariffs

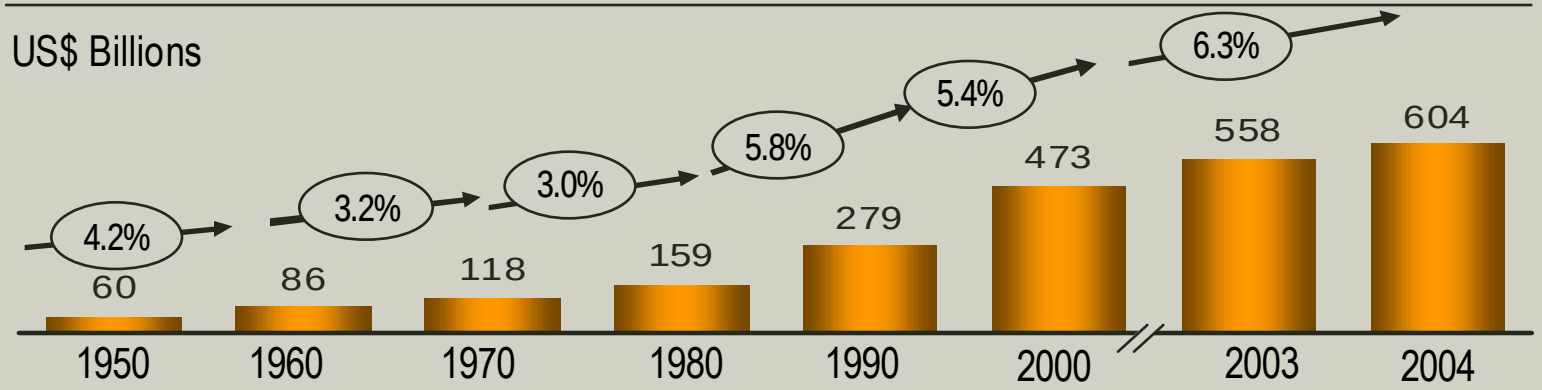
Privatisation

Infrastructure creation

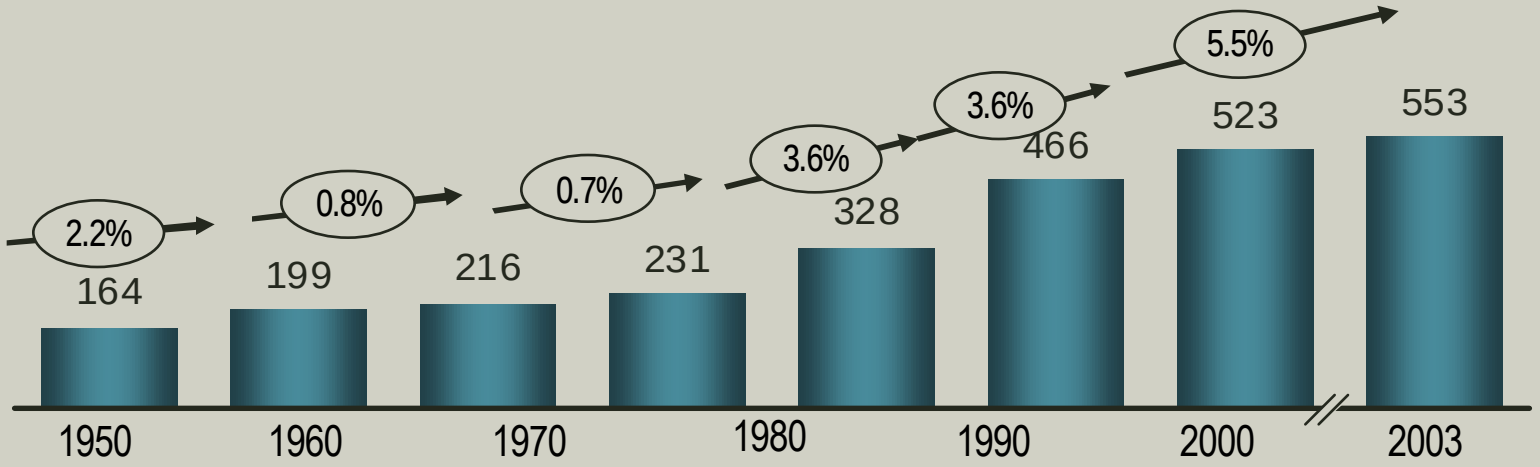
bhpbilliton

As a result India's GDP growth has been accelerating

Real GDP*



Real GDP*/capita

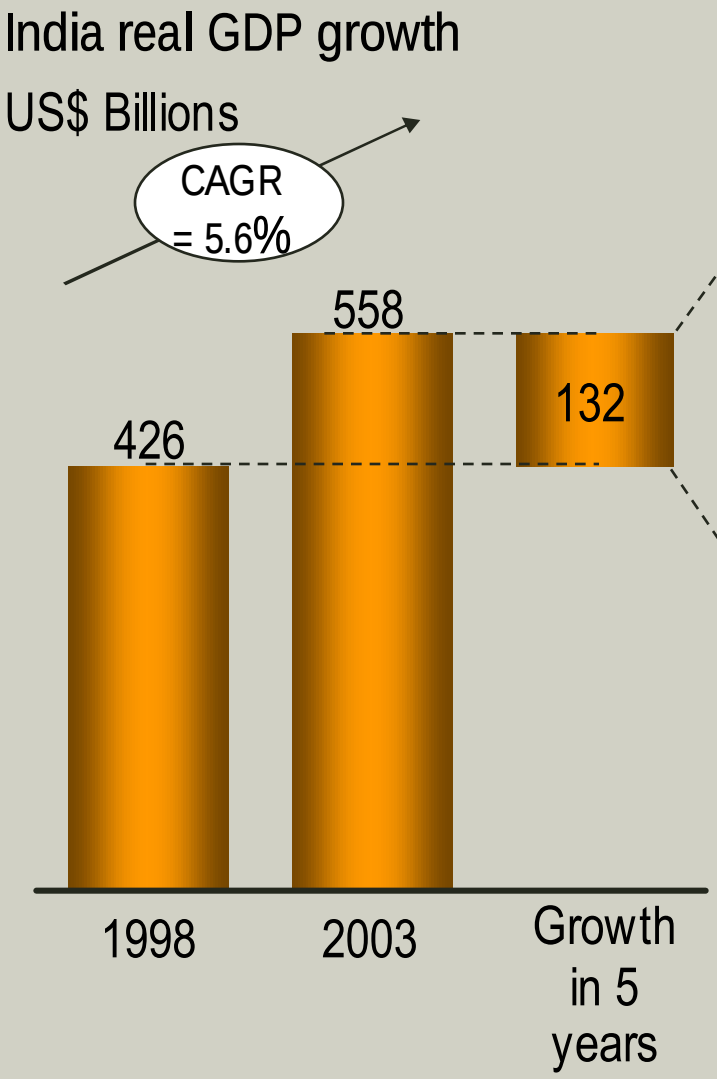


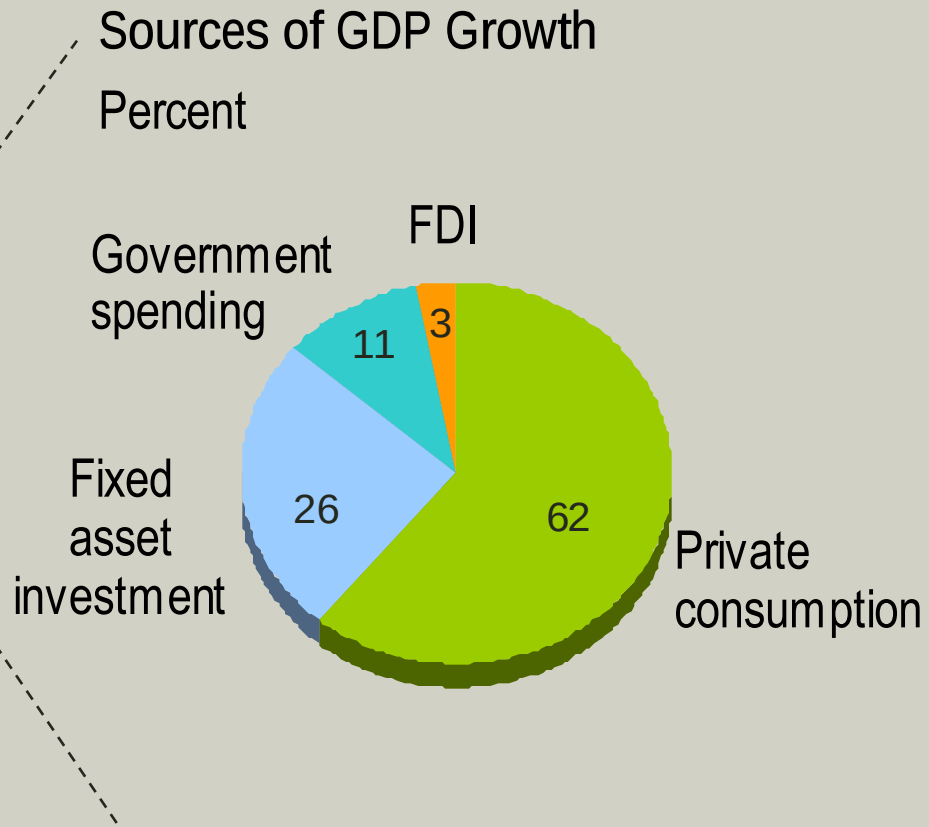
* Base year = 2002

Source: WEFA-WMM

bhpbilliton

India's GDP growth has been consumption driven





* Net trade contribution –2%

Source: EIU

bhpbilliton

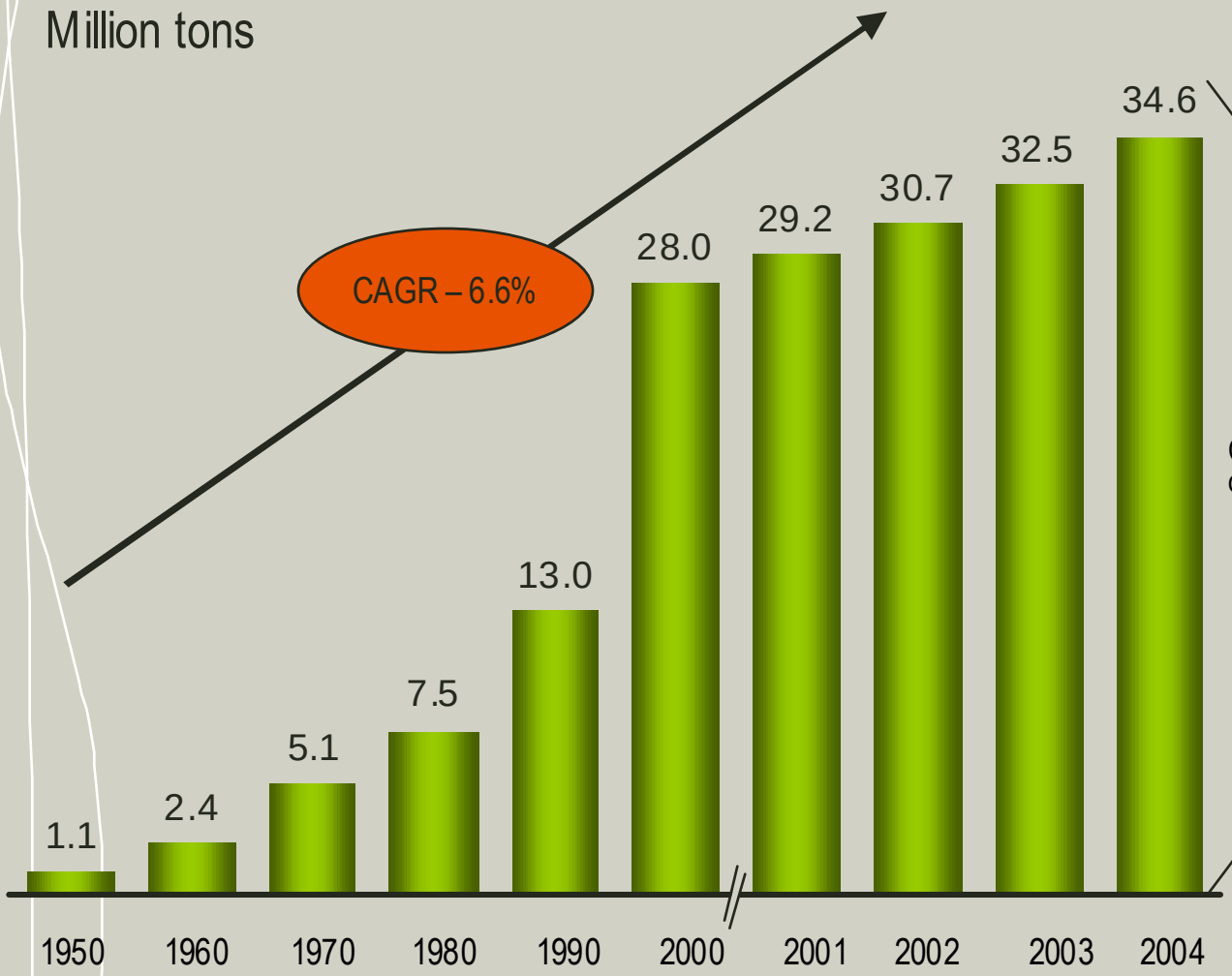
Critical measures that could enhance economic growth

There are 4 major areas for boosting economic growth

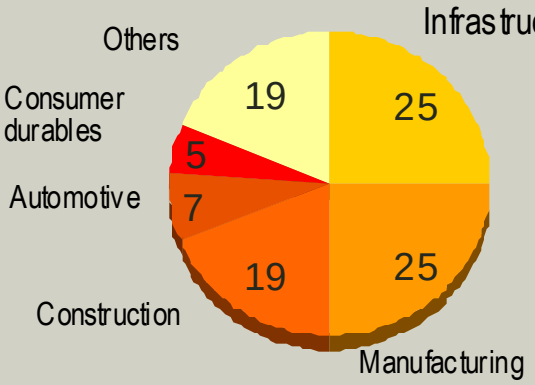
- Encourage FDI (adopt some of China's techniques)
  - e.g. establish Special Economic Zones
- Development of infrastructure
  - Roads, rail, ports, airports
- Free up the Private sector
  - especially in Mining and Resources
- Streamline bureaucracy and procedures
  - Permitting, resource allocation

bhpbilliton

India's domestic steel demand has shown moderate growth



Current demand break-up

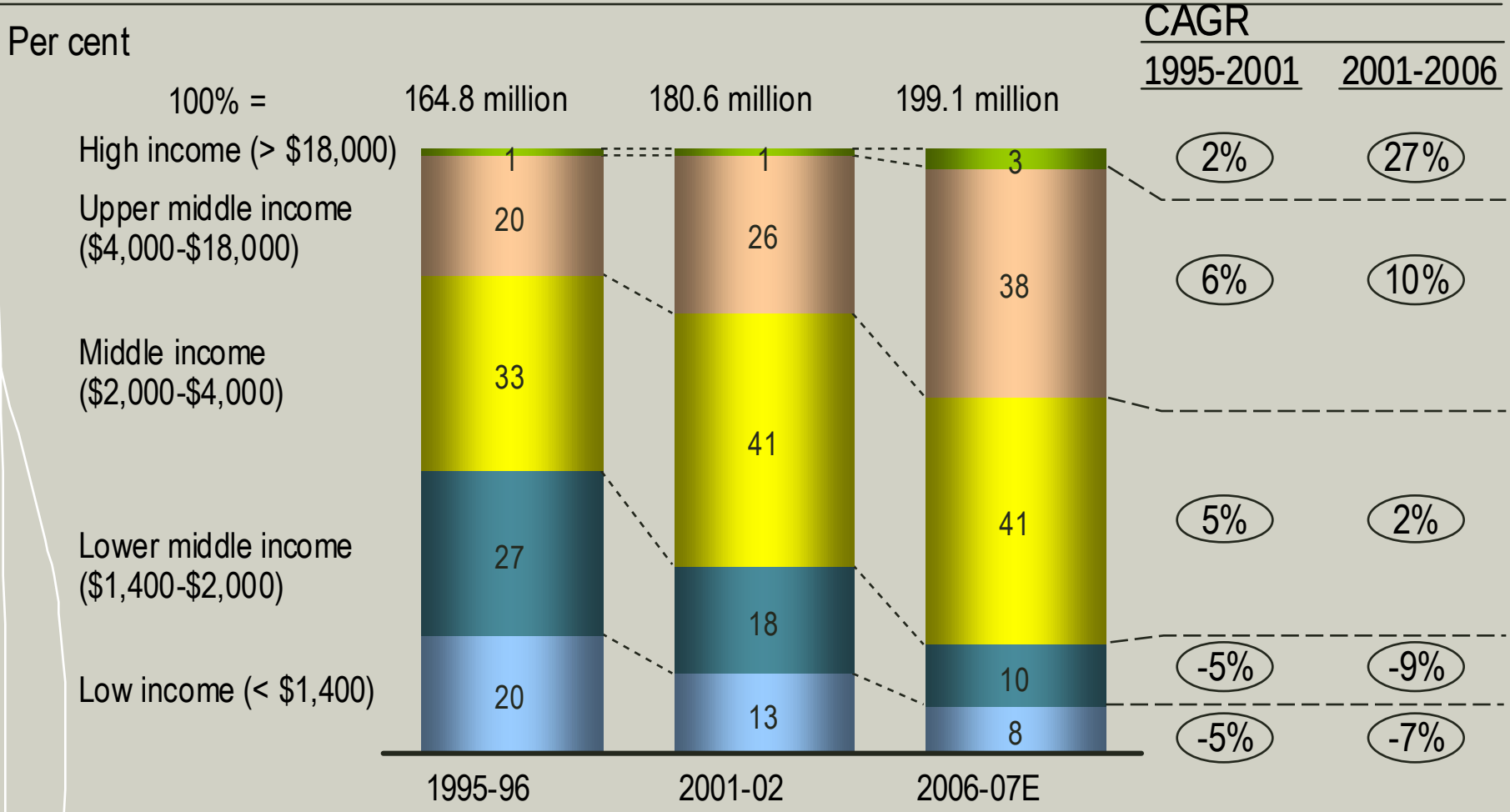


Source: Ministry of Steel

bhpbilliton

Supported by a growing middle class

Household income* distribution



* Annual Income at PPP levels (PPP = Purchasing Power Parity); Average size of a household 5.8 people

Source: NCAER

bhpbilliton

But the Indian steel industry faces barriers to fulfil potential

Key issues	Description	Impact on industry
Logistics infrastructure	• High rail freight tariffs • Port/Shipping bottlenecks	• Higher costs • Reduced steel exports competitiveness
Coking coal and coke availability and cost	• Indian coal has high ash • Exposure to availability and prices of coking coal in international markets • Competition for seaborne hard coking coal	• Higher costs • Lower quality coke negatively impacting steel production • Coal shortages could impact industry growth • Need to develop import facilities
Iron ore availability	• Huge in country reserves • Captive resource policy • Sub-optimal mining • Insufficient investment and development	• Tight iron ore supply situation for domestic steel makers • Higher domestic prices • Possible Iron Ore Imports?

bhpbilliton

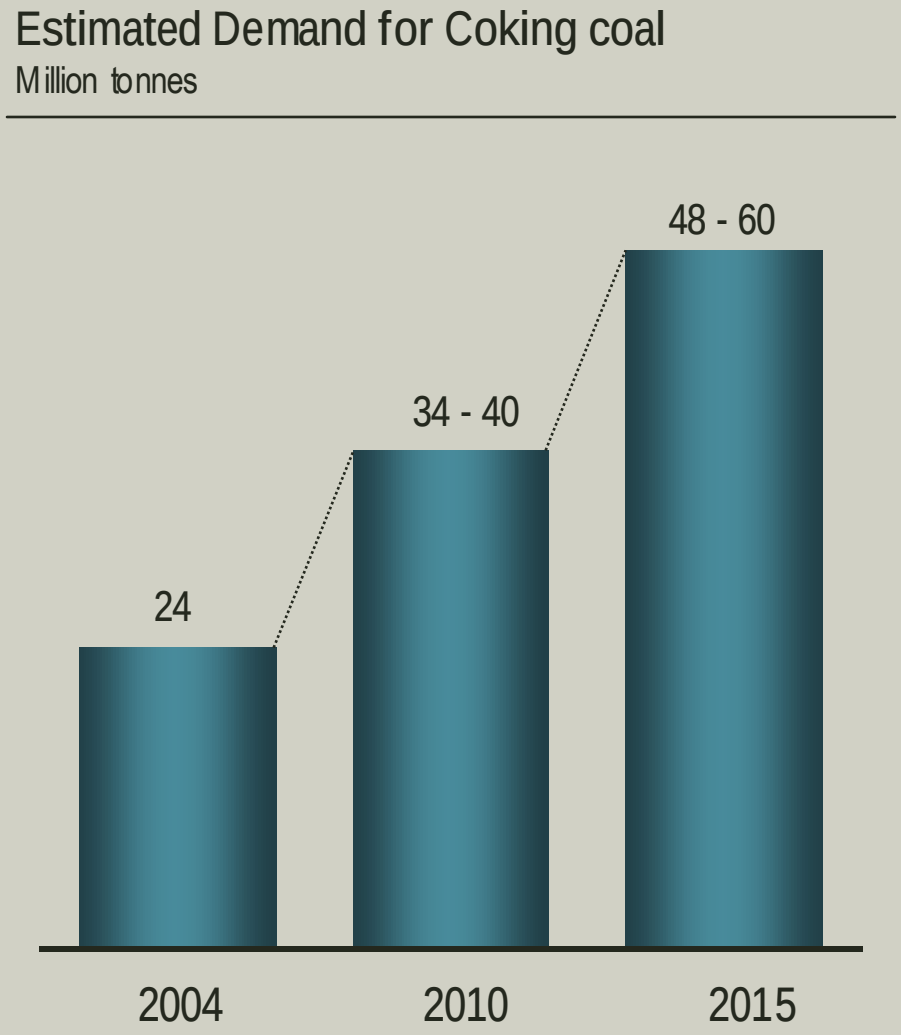
Existing barriers/constraints faced by the Indian iron ore industry

Key issues	Description	Impact on industry
Sub-scale mining	• 225 mines with only 10 producing more than 2 million tons annually • High grading of reserves • Environmental degradation	• Higher costs on — Mining/processing — Shipping • Lack of investment and technology • Sterilization of low grade resources
Lack of logistics infrastructure	• Railway network shared with passengers leading to congestion and delays • High rail freight tariffs • Lack of availability of rakes • Ports have insufficient capacity to handle increasing volume of exports	• Higher inland/port handling cost reducing competitiveness of exports • Longer lead times and uncertainty on delivery dates
Regulatory hurdles/ delays	• Delays in obtaining approvals for mining i.e., PLs, MLs, forest and environment clearances etc • However, encouraging signs of change in the air	• Potential to create shortfall
Absence of merchant iron ore market	• Captive mining • Spot sales where surplus available	• Uncertainty of supply and prices • Need for structured merchant mining

bhpbilliton

And there is shortage of Coking Coal in India

- Indian coking coal requirement is likely to grow going forward driven by increasing production of finished steel by the BF-BOF route.
- However domestic supply likely to remain static at 8 million tones making India heavily dependent on imports



Source: Industry Reports; Press Clippings

bhpbilliton

Summary - Factors for India to reach full potential

- Indian steel demand has great potential for strong growth
- India has significant iron ore reserves
- India needs significant improvements to reach its potential
  - Accelerated infrastructure developments
    - Rail:- further upgrading and improved connectivity
    - Ports:- development of new ports, expansions of existing ports
  - Continued expansion and development of domestic steel industry
    - Improved BF operations – lower fuel rates, higher PCI rates and high productivity
    - Higher coke quality via improved technology and superior hard coking coals
    - Increased imports and use of imported high quality, low ash coking coals
  - Mining improvements – iron ore
    - Accelerated exploration and resource development
    - Adoption of state of the art mining and beneficiation methods and techniques
    - Resource optimization

bhpbilliton

BHP Billiton's commitment to India

1. Major supplier to steel industry; coking coal, >6 million tonnes pa and growing, new supplier of high grade manganese ore
2. Expansion of Corporate presence Delhi office to 25+, new office in Orissa
3. Various exploration activities, iron ore, diamonds, bauxite etc

Potential future developments:-

- SAIL – BHP Billiton Strategic Alliance
  - MOU with Steel Authority of India (SAIL) for potential joint development of Iron Ore Mines in India and Coking coal mines in other countries
  - Strategic alliance to maximize resource utilization while exploiting the finite natural resources in an economic and environment-friendly manner
- POSCO India steel plant
  - Assessing involvement in possible JV with Posco for proposed 10mtpa steel plant in Orissa, where BHP Billiton would supply raw materials and infrastructure to the project and the local steel industry
- Assessing other opportunities

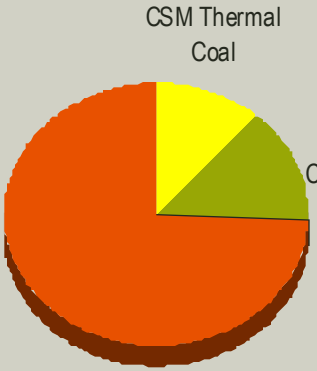
bhpbilliton

Presentation layout

- Introduction to BHP Billiton
  - Global Assets
  - Carbon Steel Materials
- India – Case for Growth
  - Indian Economy
  - Steel Growth in India
  - Constraints
  - Factors for India to reach full potential
  - BHP Billiton commitment to India
- BHP Billiton Expansion plans
  - Coking Coal Expansions
  - Iron Ore Expansions
  - Manganese Expansions
- BHP Billiton Benefits to India
- Concluding remarks

bhpbilliton

High value incremental growth to ~100Mtpa capacity



Expansion: 42 mtpa
- 70% hard coking coal
- 15% semi soft coking coal
- 15% thermal coal

- Majority brownfields

58 Mtpa*

Approved
~10 Mtpa
Dendrobium
Q Coal 52-57Mtpa
(inc. Broadmeadow)
Q Coal 57-59Mtpa

Pre Feas
~14 Mtpa
Maruwai
Illawarra Expn.
Q Coal (BMA & BMC, ie: Poitrel)

Concept
~18 Mtpa
Various Q Coal Projects (BMA & BMC)

~100 Mtpa

Other
Illawarra
Q Coal

FY04

FY10

*All production figures are quoted on a 100% equity basis

bhpbilliton

Queensland Coal: 52Mtpa to 57Mtpa expansion for mid 2005

- Capital cost US$94 million (100%)
- 132Mbcm of contract stripping – additional operating cost over ~ 2 years
- Additional mobile mining equipment - Norwich Park, Peak Downs, Saraji and Goonyella
- Improvements to Saraji, Peak Downs Prep plants
- Broadmeadow (3.6mtpa) - start-up mid 2005, capex further US$68M (100%)
- Queensland Rail - +8Mtpa capacity contracted + a further 8Mtpa for continued growth

Producing coal at Broadmeadow June 2004

Peak Downs mobile mining equipment

Note: All numbers are 100% equity basis, unless otherwise specified

bhpbilliton

Further expansions underway

Queensland Coal: 57Mtpa to 59Mtpa for 2nd half 2006

- Hay Point Coal Terminal Expansion + 6Mtpa (34Mtpa - 40Mtpa)
- 32Mbcm contract stripping at Saraji –
- Capital cost US$175M (100%)
- ~US$100 million of the capital cost to allow further expansions of the Hay Point port


Coal loading at Hay Point

Illawarra Coal: 7Mtpa to 14Mtpa

- Dendrobium – Start up mid 2005 (3.6Mtpa). Considering incremental expansion + 0.6Mtpa
- New West Cliff longwall in production
- Future growth will focus initially on de-bottlenecking at Appin & West Cliff
- Possible investment in an additional longwall unit

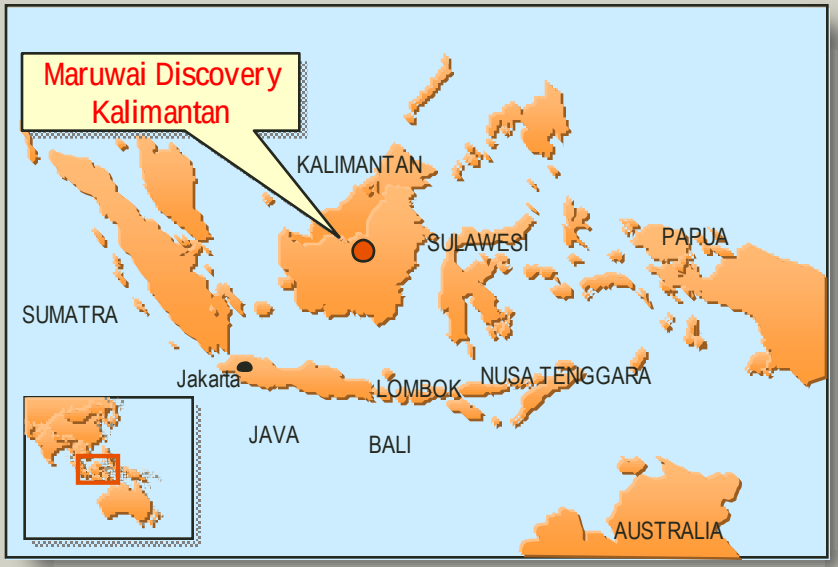
1st Dendrobium coal train June 2003

Note: All numbers are 100% equity basis, unless otherwise specified

bhpbilliton

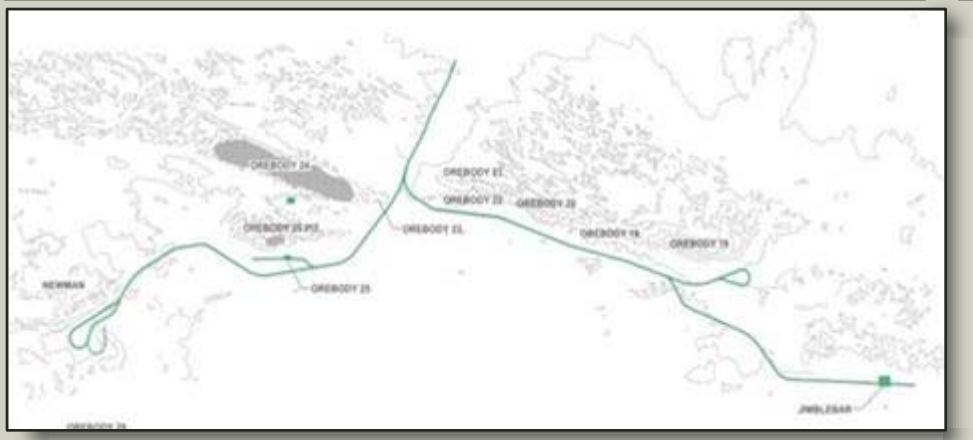
Maruwai discovery: potential coking coal province

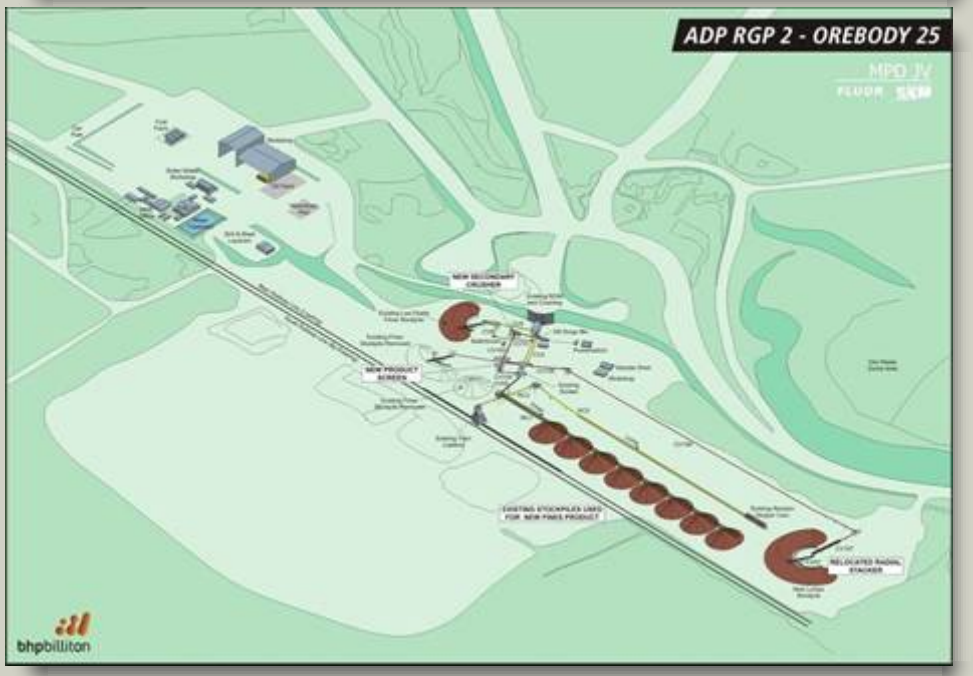
- The Maruwai discovery is located in Central/East Kalimantan and contains a range of coals
- Our vision is for a long term integrated basin development
- Expect to start with high quality HCC development of up to 5Mtpa and grow
- River barging likely transport option
- Contractor operation likely
- Pre-Feasibility Study near completion
- Expect to complete Feasibility Study end 2005



bhpbilliton

BHP Billiton iron ore expansions to 118Mt; studying further expansion to beyond 150Mt





- Expansion to 118 million tonnes total cost US$575M (100%)
- 118 million tonnes by H2 2006
- Mining
  - Newman to 45 Mtpa
  - Development of OB18 for blending
  - Plant modifications at OB 25
- Rail
  - Procurement of more rolling stock
  - Increased rail flexibility
  - Additional track
- Port
  - New car dumper

bhpbilliton

BHP Billiton Manganese – Capturing market opportunities

Producing to meet unprecedented demand

- Operations running at record rates to capture market opportunities especially in China
- Reliable supplier of choice
- Operating Excellence continuing to deliver benefits
- Good HSEC progress

Low cost, low risk expansions

- Increased mine output at no/low additional capital cost

Challenges

- BEE in RSA

bhpbilliton

BHP Billiton's value to India

- BHP Billiton can offer:-
  - Complete suite of steelmaking raw materials, esp. coking coal
  - Long term proven resources of high quality coking coal in demand by global steelmakers
  - Demonstrated willingness to invest in major mine and infrastructure developments
  - Proven ability to manage high capacity ports and rail infrastructure
  - Ability to manage complex joint ventures for mutual benefits
  - Full commitment and "partnership" to expanding business to meet the future needs of India and the growing Indian steel industry
  - Excellent track record of supporting local communities and the highest standards of environmental and safety performance

bhpbilliton

Summary

- The outlook for future India steel demand is very robust
  - With high demand for raw materials, coking coal, manganese even iron ore
- India has potential to meet this growth if constraints can be overcome
  - Infrastructure, streamline complex development processes
  - Critical to promote mining development and resource utilisation
- BHP Billiton and its partners are very well placed to meet India's needs
  - Only supplier with complete suite of steelmaking raw materials
- Coal expansions to 100Mtpa will be brought on line incrementally – in line with customer demand
- Expansions in other businesses actively advanced to meet global need
- New steel capacity in India can benefit from utilising BHP Billiton raw materials and expertise in coking coal, iron ore and manganese ore

bhpbilliton