



BHP Billiton Mitsubishi Alliance

Analyst Presentation

June 2002

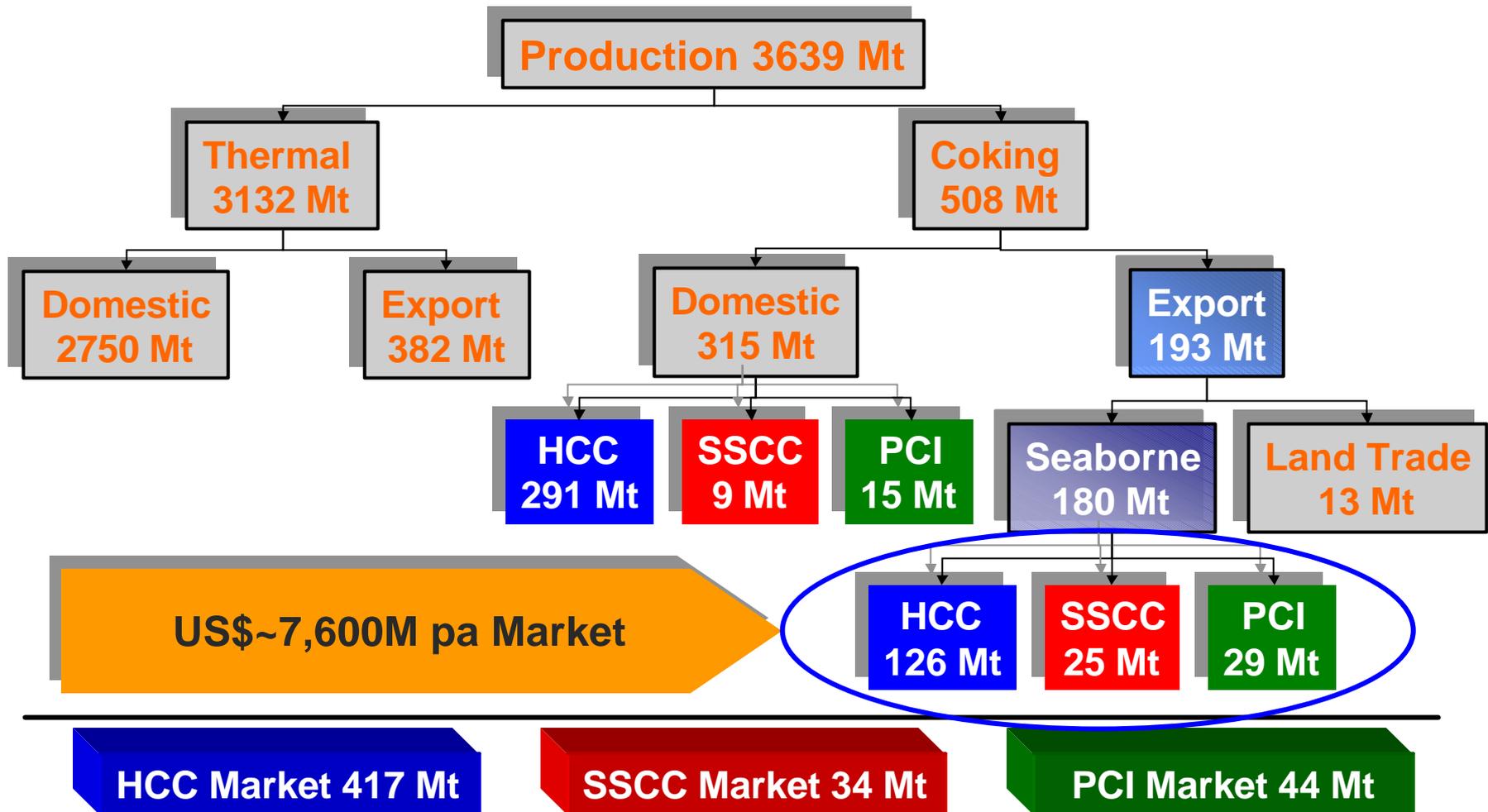


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Industry Background

Coking Coal - Overview

The Hard Coal Market



Coal Properties

Coke Strength (CSR)

- Coke strength is an indicator of physical strength of a coke made from a particular coal
 - Coke needs to be strong to support the iron ore and coke mix above it in the blast furnace
 - The larger the blast furnace the higher the strength required to support the load

Ash (%)

- Ash is unburnt inorganic residue left behind after coal is completely incinerated
 - Increased ash (or more strictly mineral matter) decreases coke yield, increases slag volume in the furnace and consumes more coke in the smelting operation

Plasticity (CSN, Fluidity, Dilation)

- Plasticity refers to the melting and bonding behavior of the coal.
 - Plasticity is an indication of the initial softening, chemical reaction, gas liberation and resolidification process within the coke oven.
 - Plasticity is an important requirement in the coke blend and is required for end product coke strength
 - The fluidity of the plastic stage is a major factor in determining what proportions of a coal is used in a blend

Volatile Matter

- Generally an indicator of Rank, but also an indicator of the amount of volatile matter in the coal that will be gasified and given off during the coking process – impacting coke yield.

Classification of Coking Coal

Hard coking coal and weak/semi-soft coking coal are used in the coke ovens, whereas PCI is used only in the blast furnace as a replacement for coke.

Hard Coking (HCC)

- Hard coking coals are a necessary input in the production of strong coke.
- Hard coking coals trade at a premium to other coals due to their importance in producing strong coke and more limited resources.

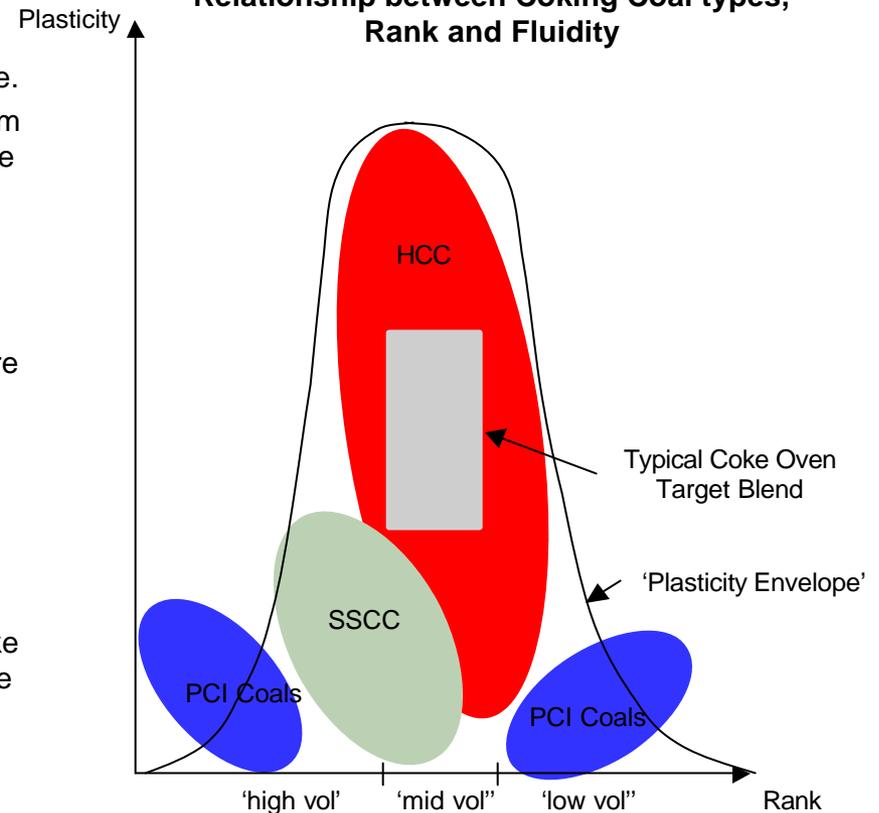
Weak and Semi-soft Coking Coal (SSCC)

- SSCC is used in the coke blend, but results in a low coke quality and more impurities.
- There is scope for interchangeability between thermal coal and SSCC; SSCC prices thus have a high correlation with thermal prices.

Pulverised Coal Injection (PCI) Coal

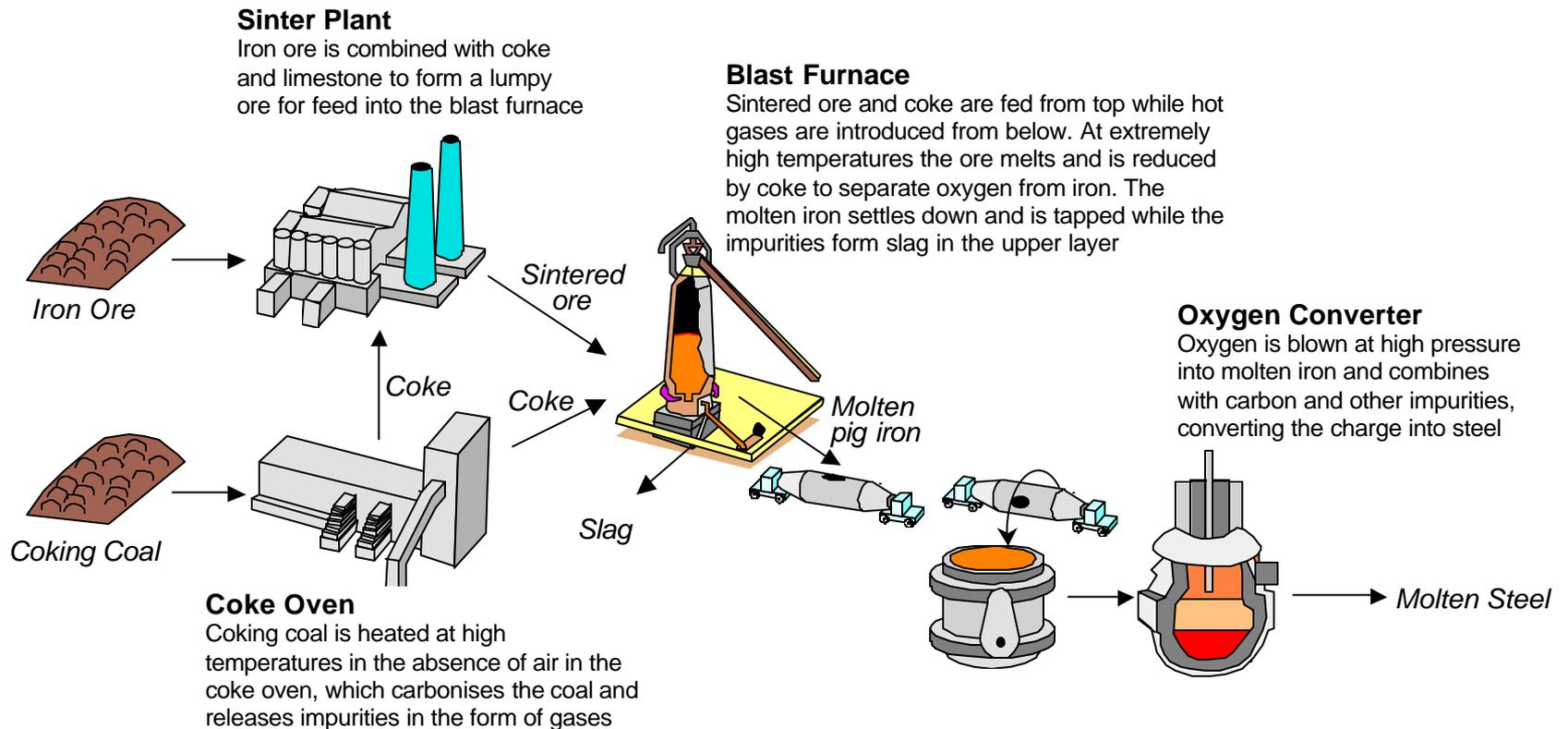
- PCI reduces the consumption of coke per ton of pig iron as it replaces coke as a source of heat.
- PCI coal tends to trade at a slight premium to thermal coal.

Relationship between Coking Coal types, Rank and Fluidity

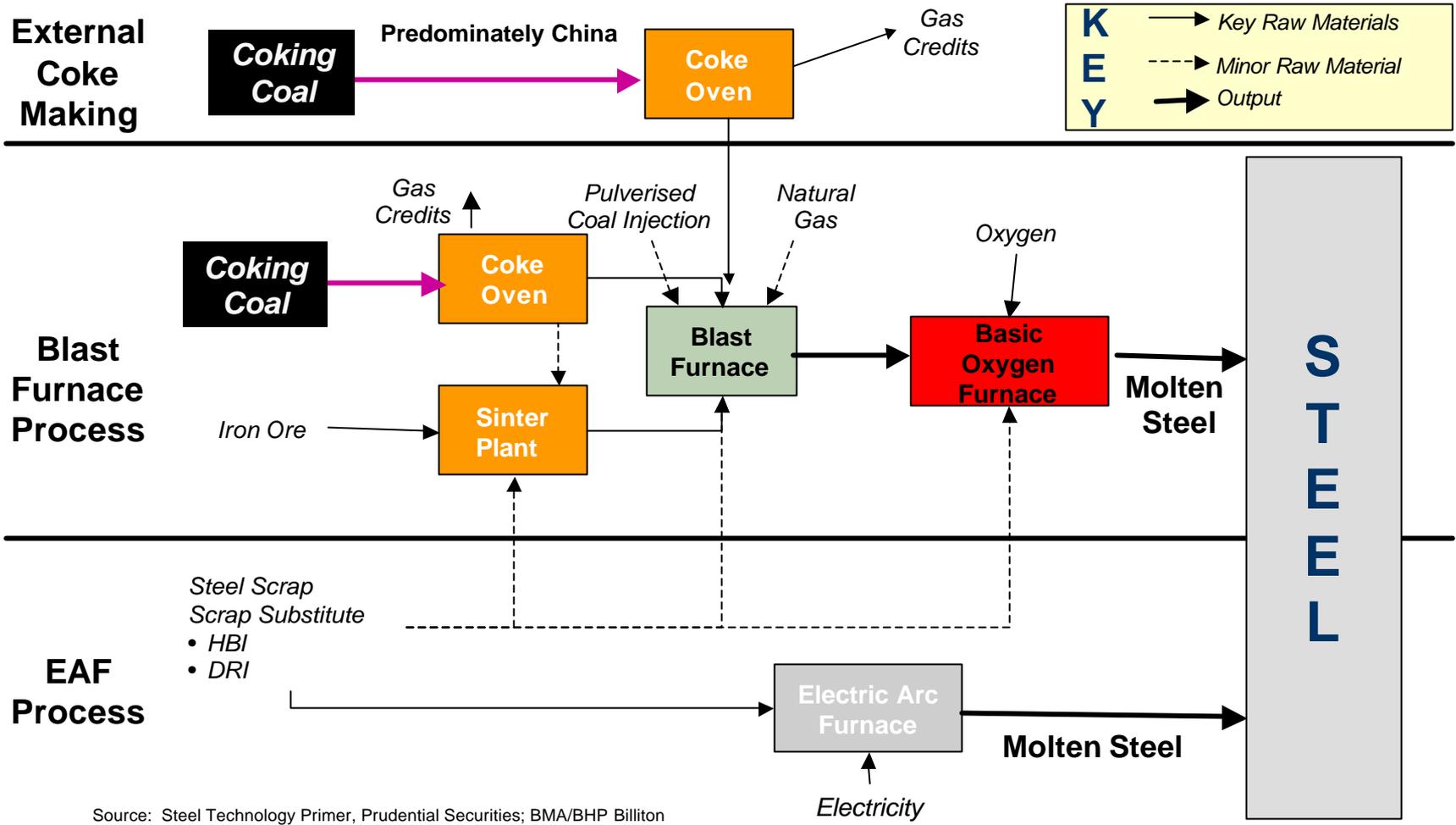


The Blast Furnace Process

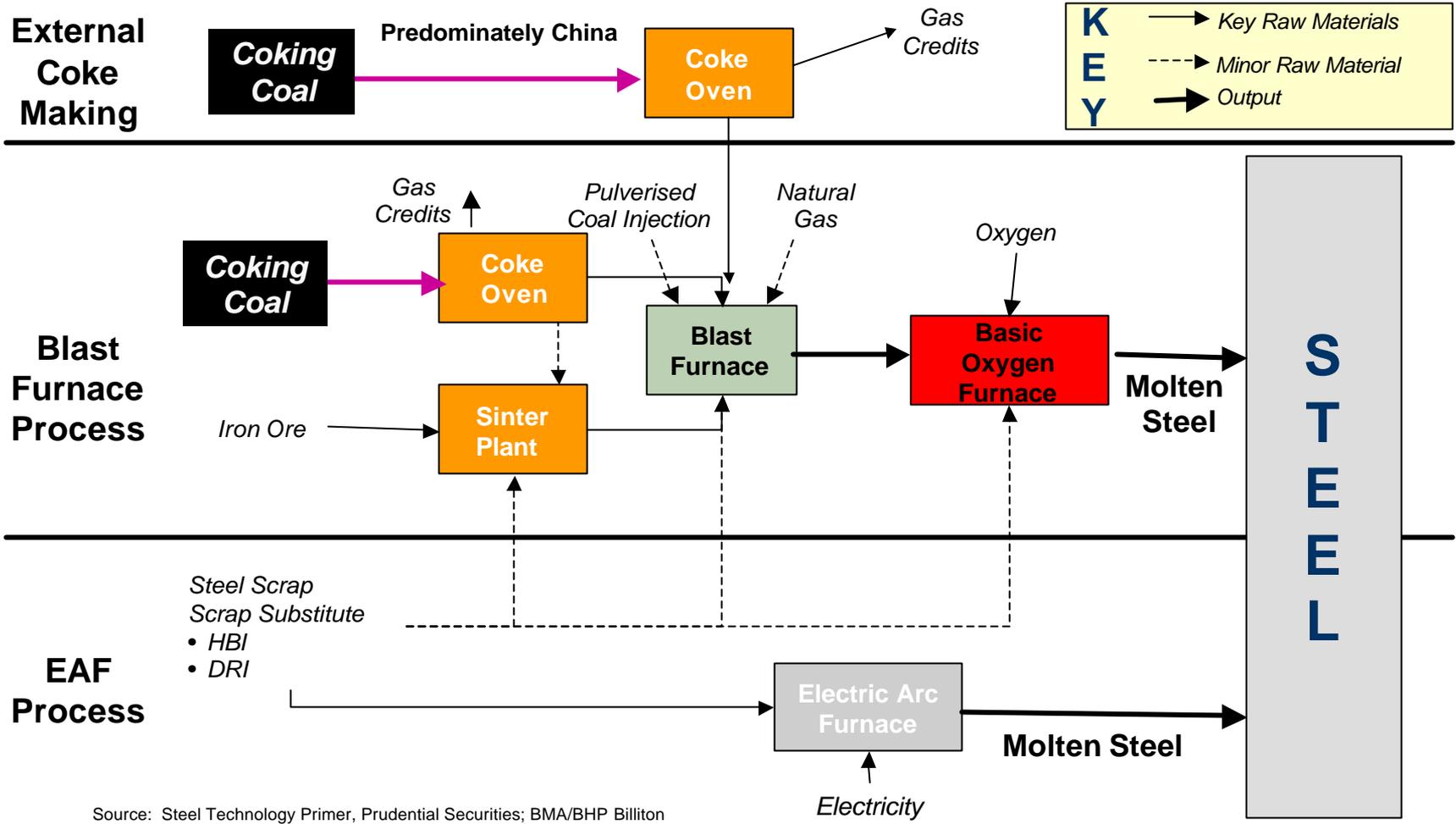
Coke has three key functions in the blast furnace - reducing agent to separate oxygen from iron, energy source to melt the ore and porous material that suspends ore in the furnace while allowing upward passage for hot gases



Coking Coal Demand in the Steel Making Process

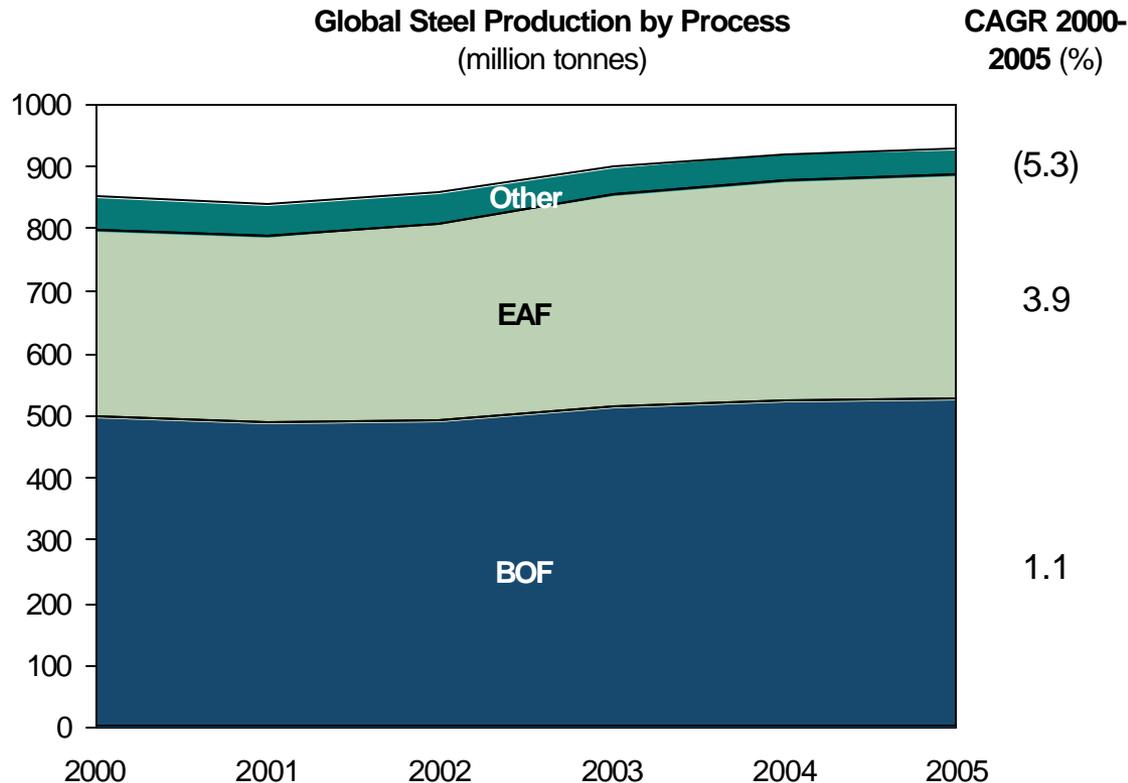


Coking Coal Demand in the Steel Making Process



Source: Steel Technology Primer, Prudential Securities; BMA/BHP Billiton

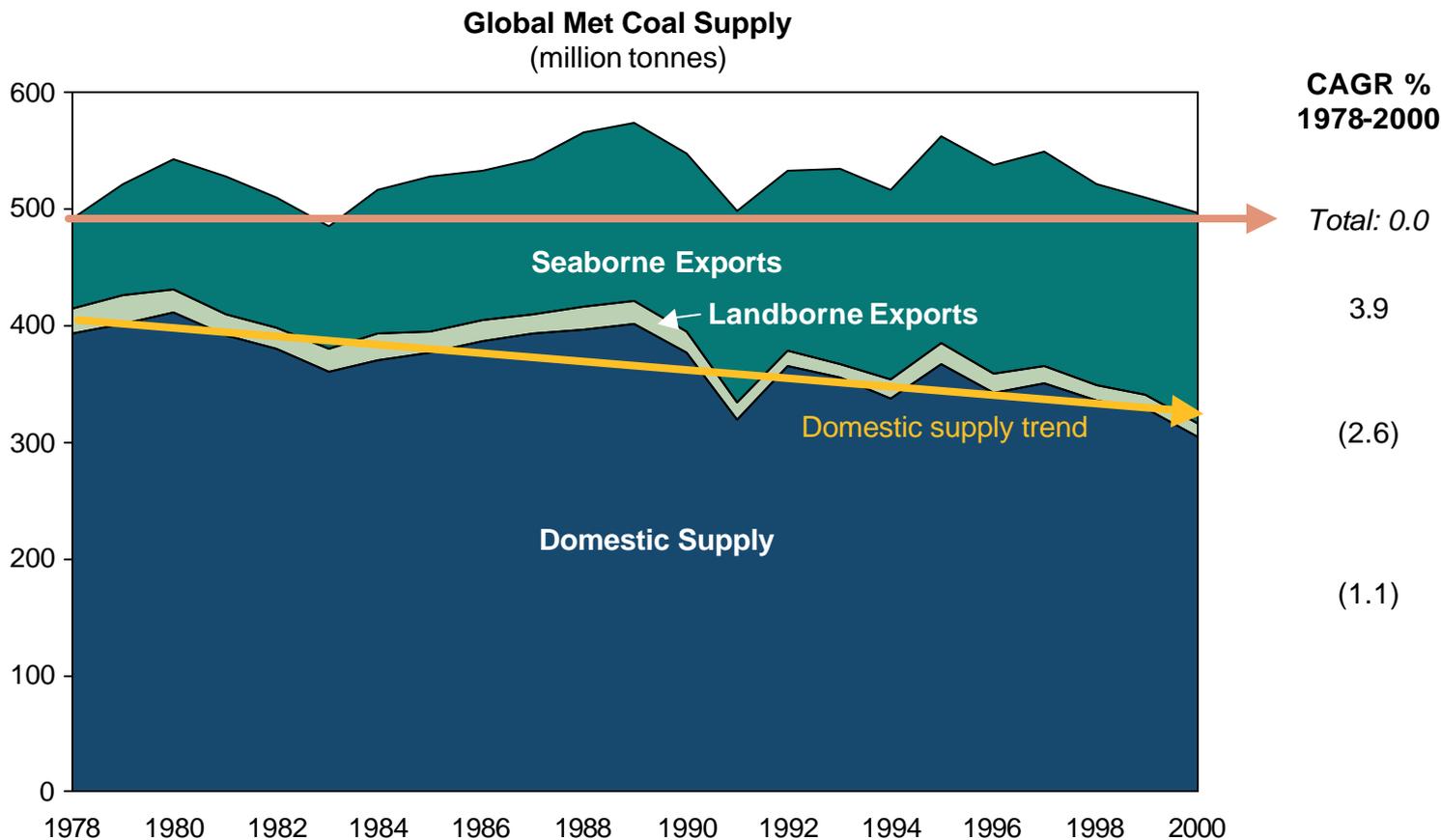
Steel Industry Dynamics



- BOF penetration is expected to fall from 58% in 2000 to 56% in 2005
- However the technology shift is expected to slow as EAF economics come under pressure from rising scrap and energy prices
- New steel making technologies are unlikely to commercialise at a significant pace; some may still use weak met coal as a reducing agent



Historical Seaborne Demand

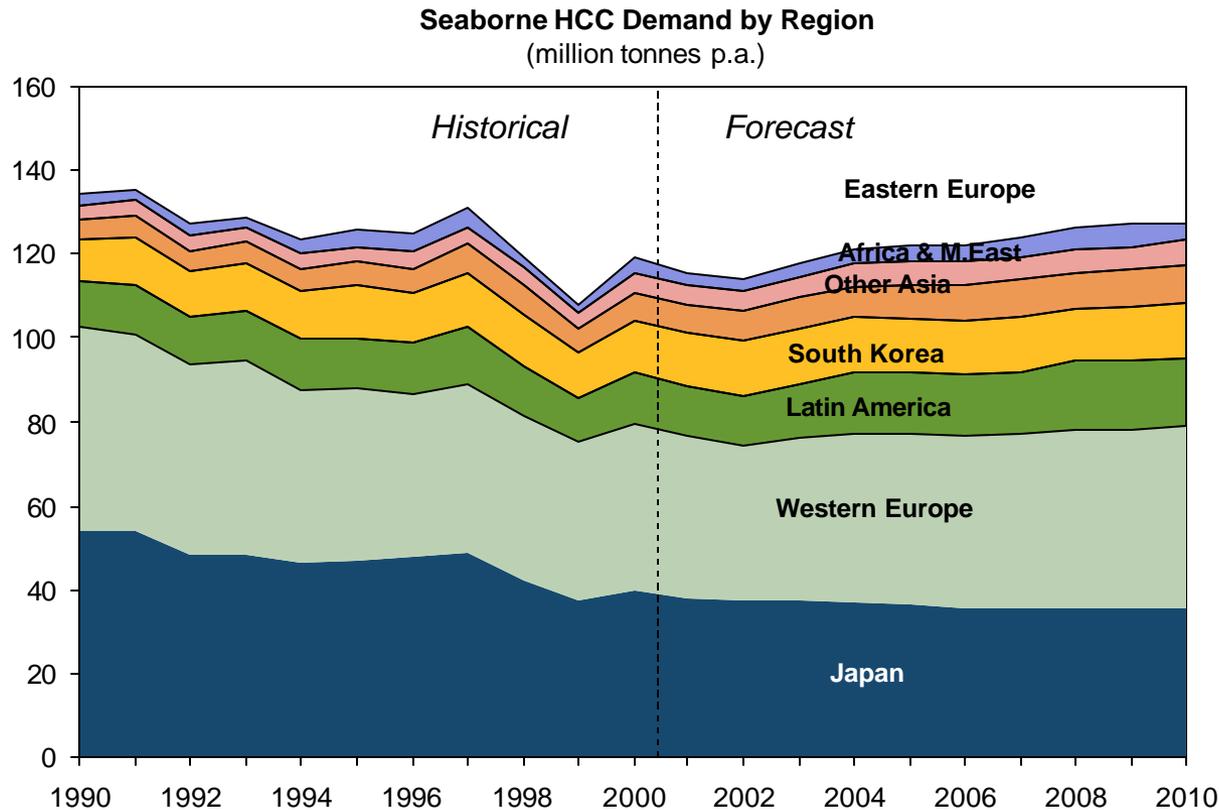


Source: IEA Coal Information 2001

Seaborne HCC Demand by Region



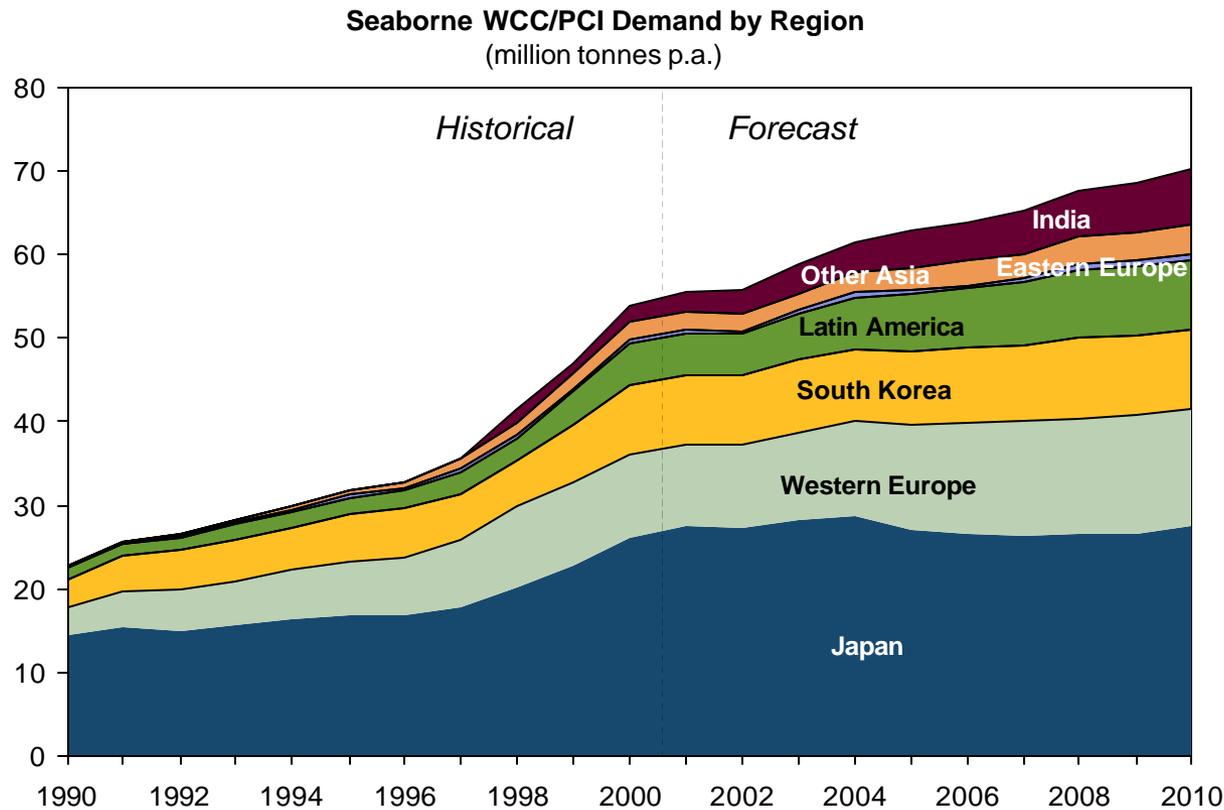
Declining Japanese demand for HCC is expected to be offset by significant growth in India, Western Europe and Latin America



Source: BMA Demand Model - May version

Seaborne WCC / PCI Demand by Region

India, Latin America and Western Europe are expected to drive the demand for WCC/PCI



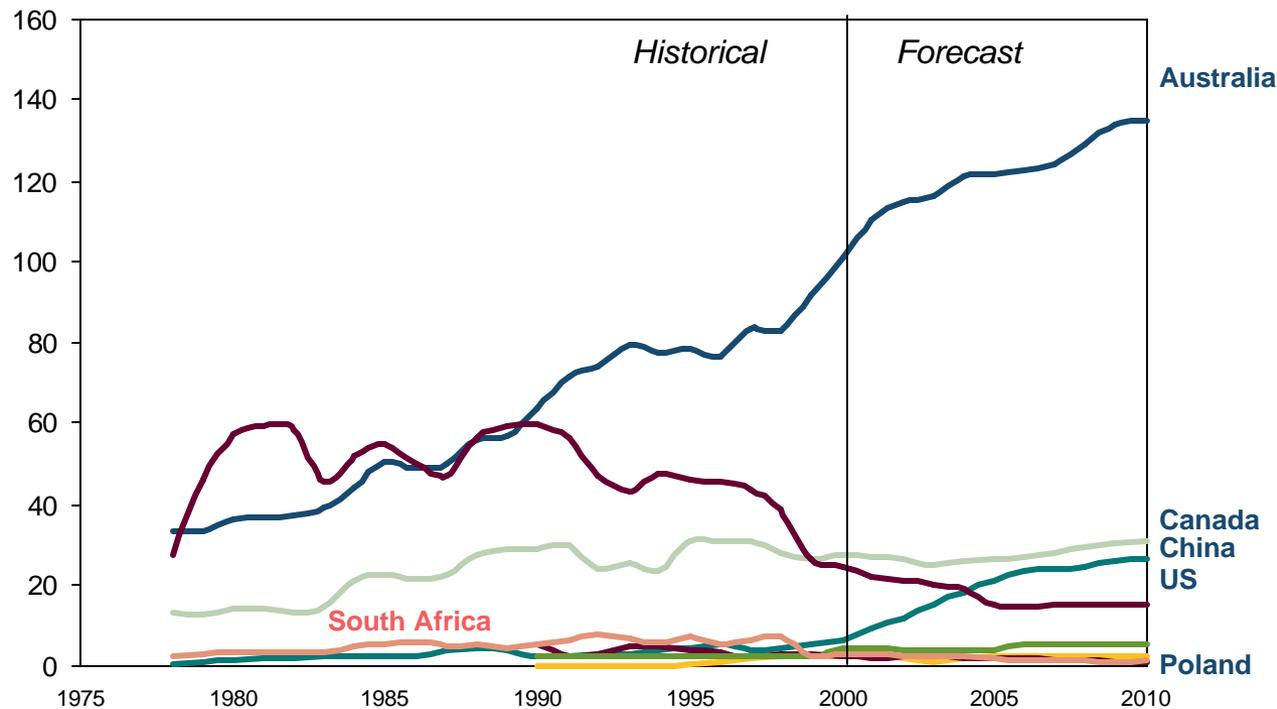
Source: BMA Demand Model - May version

Forecast Met Coal Export by Country



Australia and China are expected to fill the demand-supply gap resulting from higher seaborne demand and decline of US exports

Met Coal Seaborne Exports by Country*
(million tonnes)

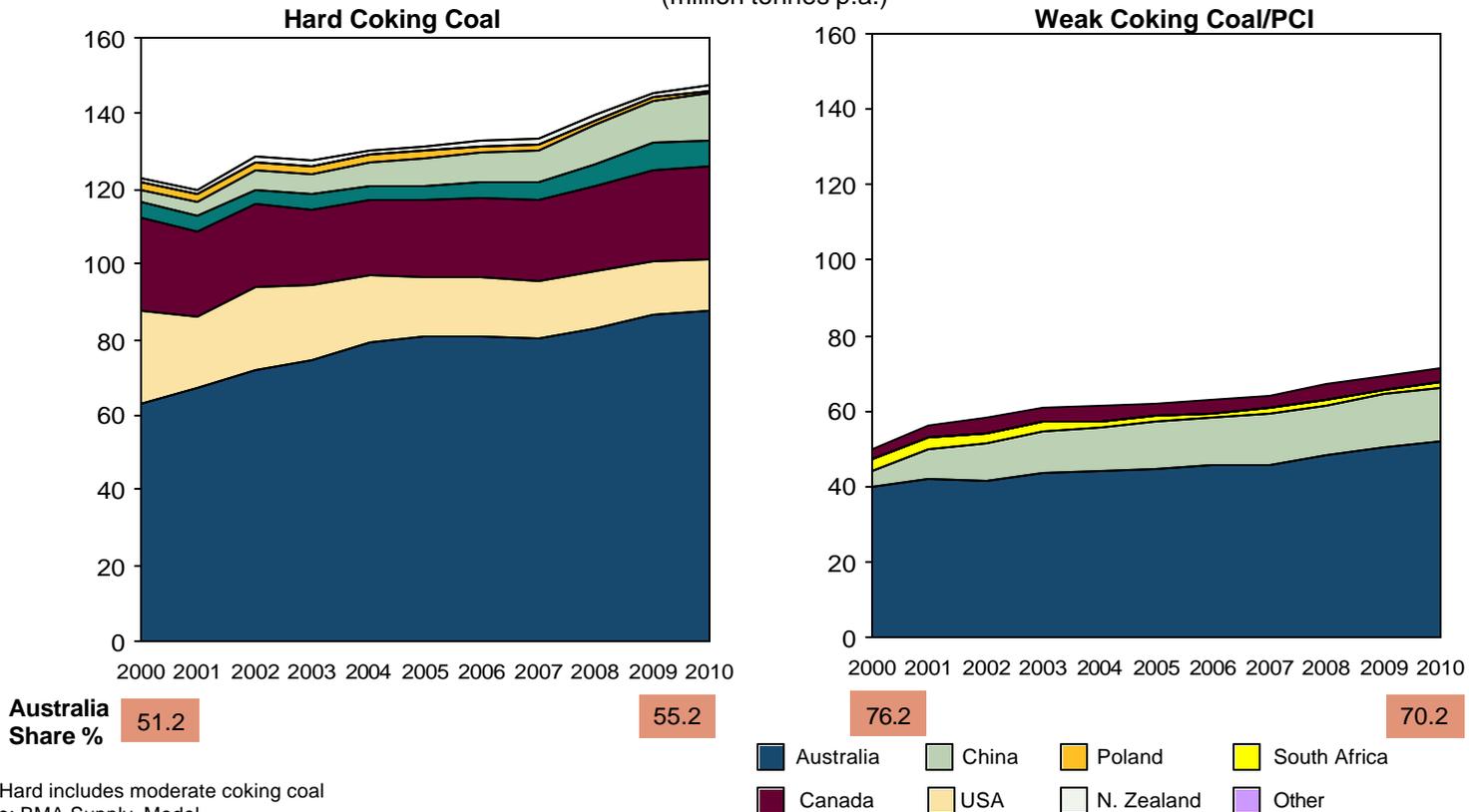


* Although experts have differing views with respect to exports by US and China, the forecast for Australian exports do not change substantially.
Source: IEA; BMA Supply Model

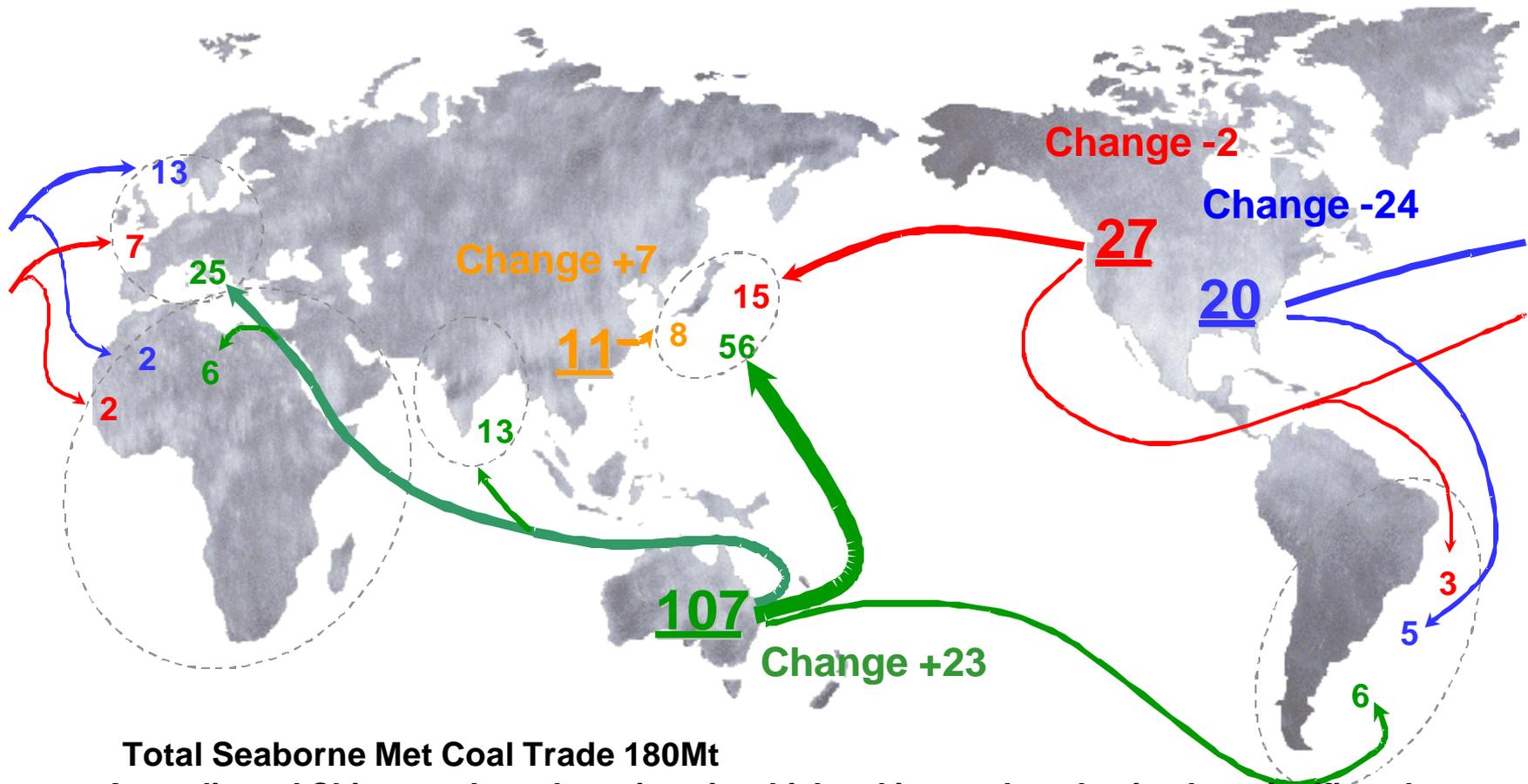
Forecast Regional Supply by Product Type

Australia is expected to grow tonnage and share in HCC yet loose share in WCC/PCI, despite an increased absolute volume

Projected Export Volumes by Product Type
(million tonnes p.a.)

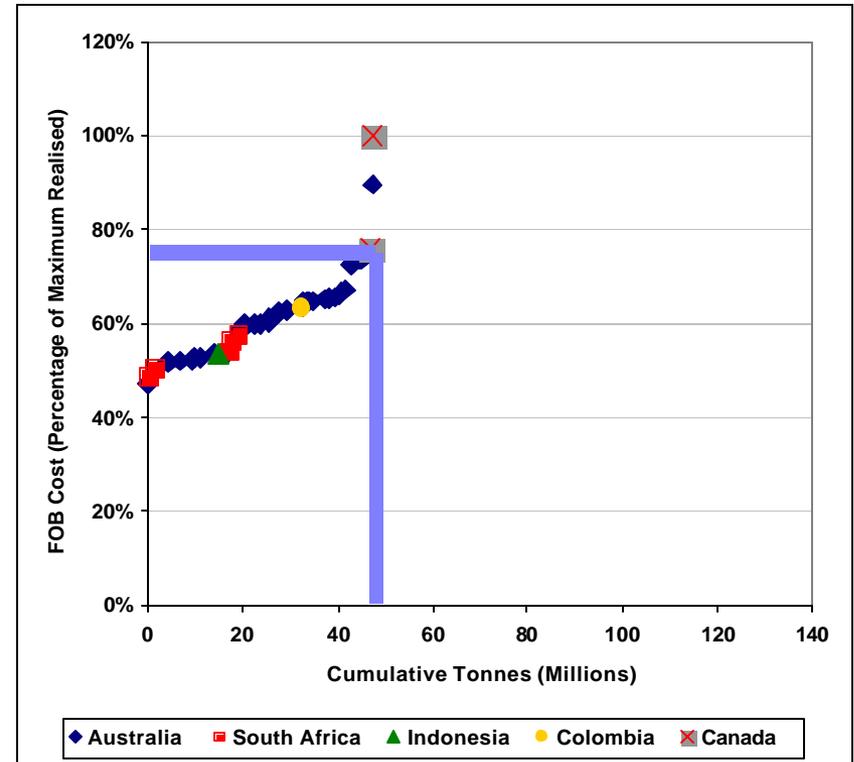
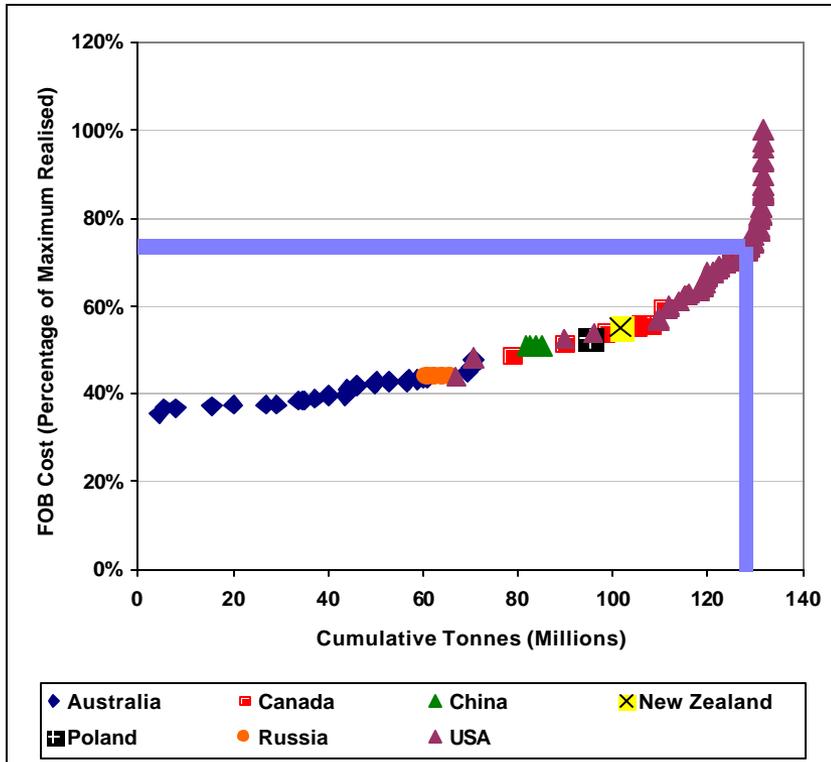


Major Seaborne Trade Flows Met Coal – 1997 to 2001



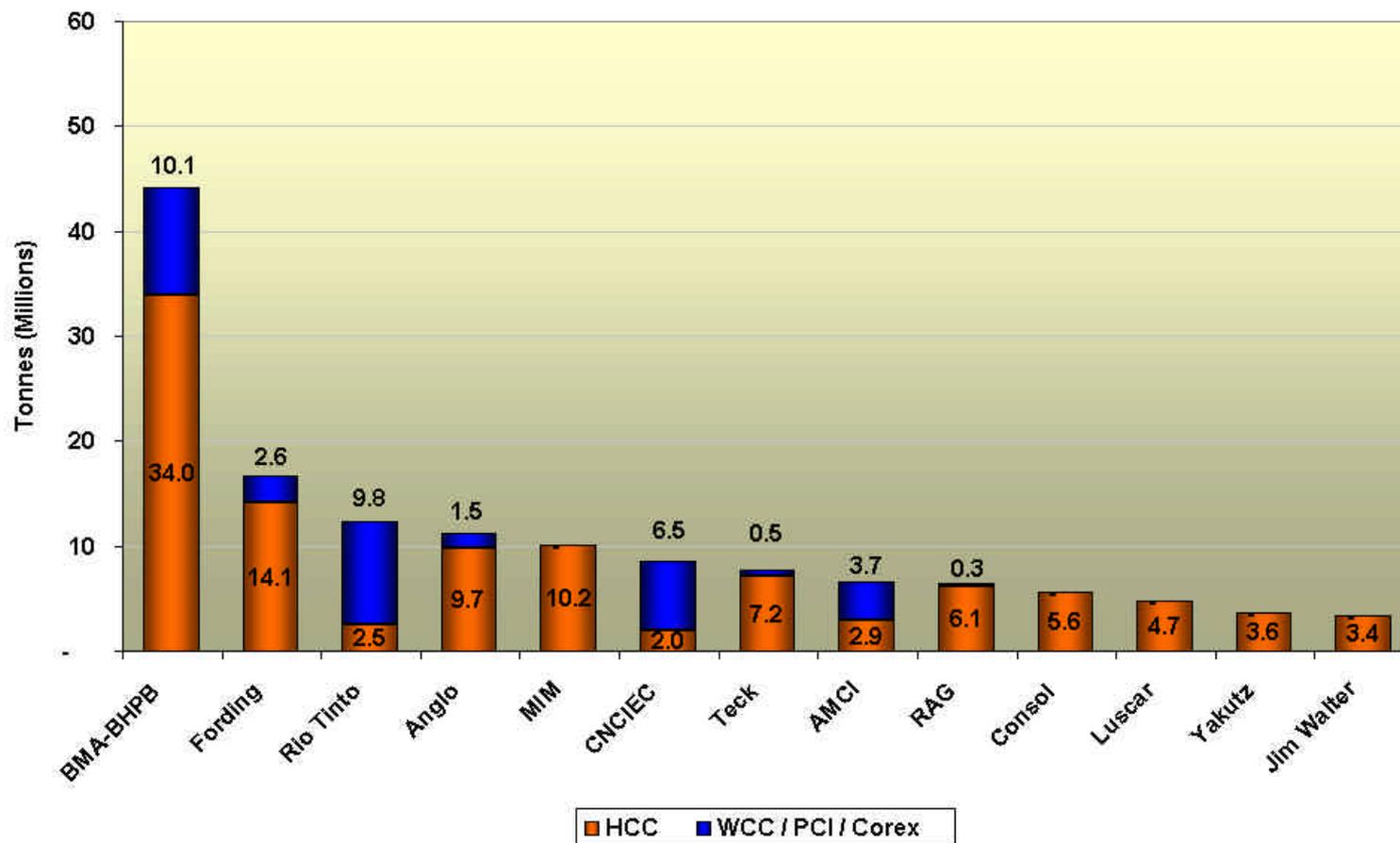
Total Seaborne Met Coal Trade 180Mt
Australia and China are the only regions in which coking coal production has significantly increased over the last 20 years

Coking Coal Industry Cost Curve



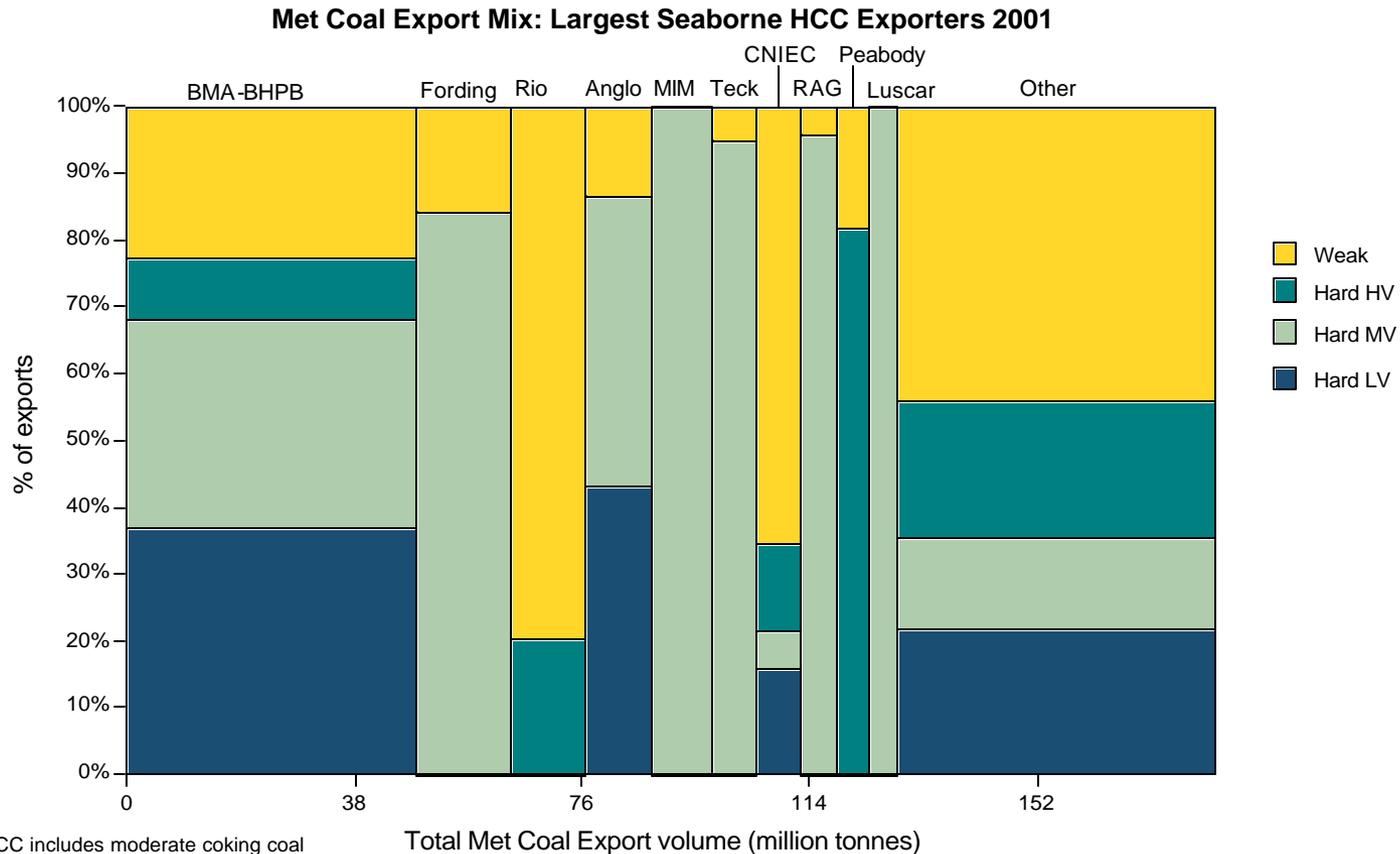


Coking Coal - Industry Structure



Seaborne Exporter Product Mix

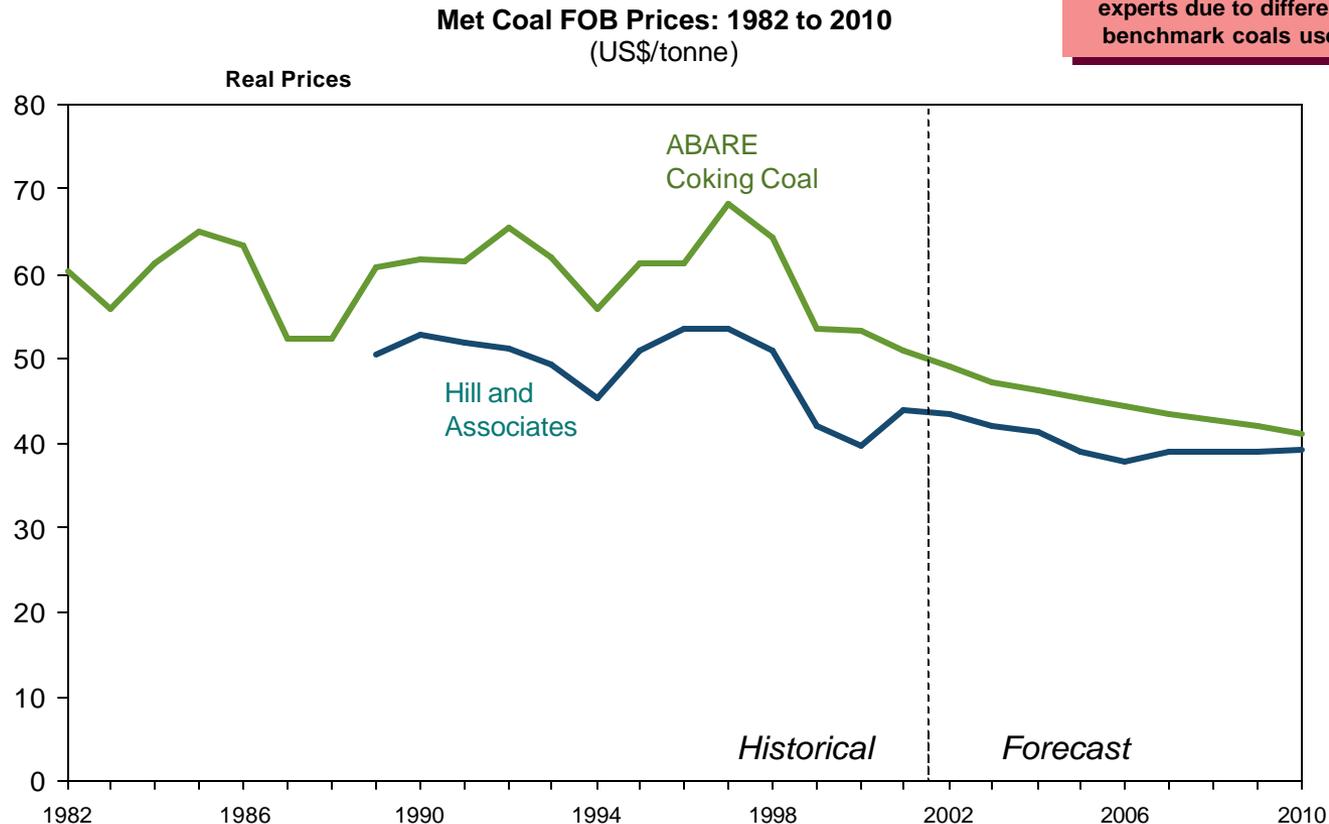
BMA-BHPB is well positioned in all product segments, especially the low vol market



Price Trends: Historical and Forecast Pricing

Real prices of met coal are forecasted to decline slowly

Historical (and forecast) numbers differ between experts due to different benchmark coals used



Note: Hill - FOB Australia, using QLD mines as benchmark
Source: Hill & Associates; Barlow Jonker, IEA; ABARE; BMA

Seaborne Met Coal Market and BMA Outlook: Overview



BMA enjoys a strong position in an attractive industry which is expected to see some medium term trade flow changes

Market

- Continued growth in HCC and WCC/PCI, on the order of 1 to 2% p.a., driven by increased steel output and declining domestic metallurgical coal production
- Over the next decade shift in demand to growth markets of Western Europe, Brazil and India, and to supply from Australia and China
- HCC more consolidated than WCC/PCI with greater Australian share and fewer high quality undeveloped resources
- Threat from China predominantly in the WCC/PCI segment
- Steel industry consolidation expected to facilitate the long-term financial health of the steel industry and may lead to upside HCC demand as blast furnace productivities are increased in some markets

BMA Position

- BMA well positioned on the cost curve and in terms of its asset base to capture some of the growth
- BMA's position particularly strong in the HCC segment where there are limited remaining undeveloped high quality assets globally

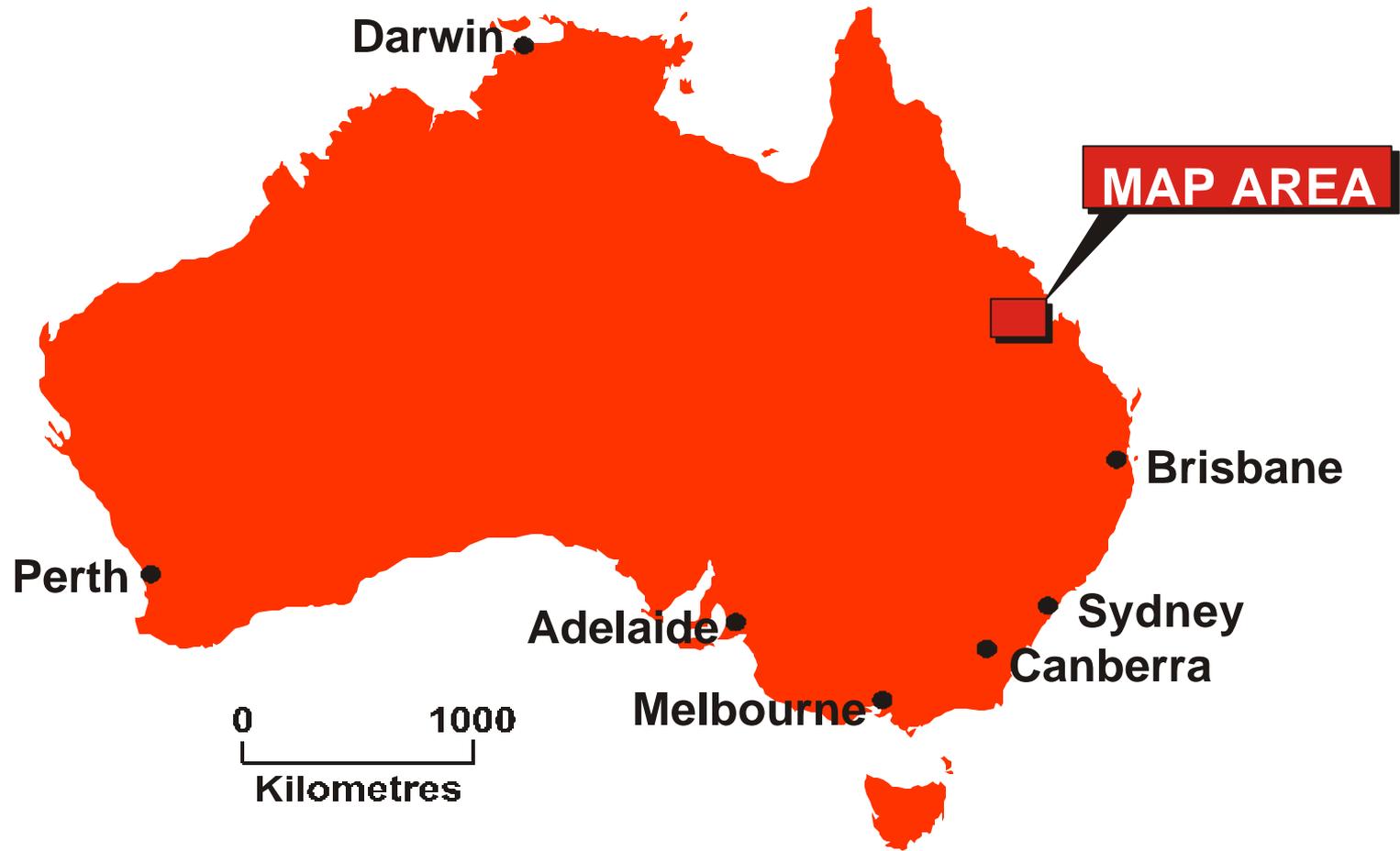
BMA



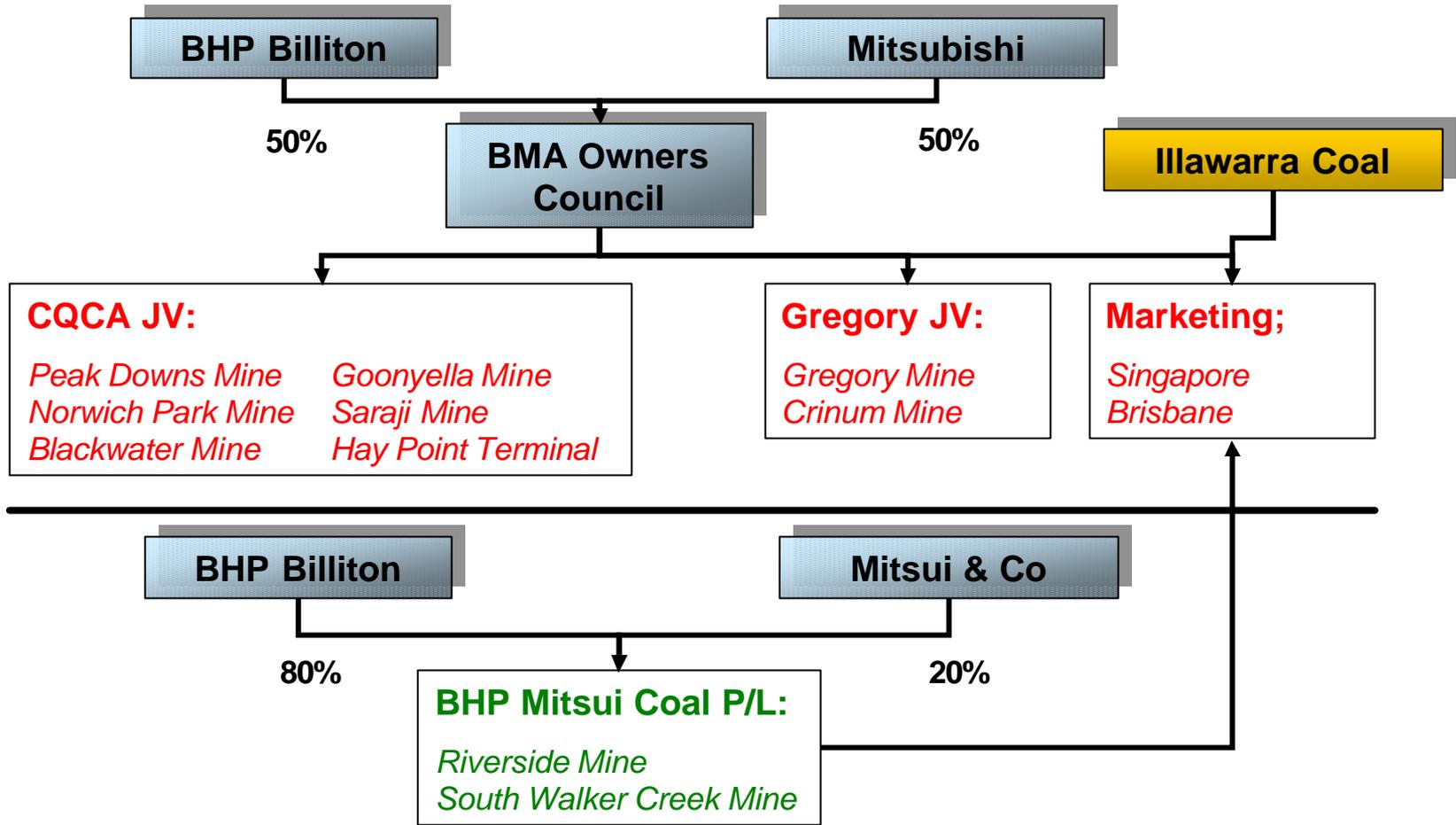
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BMA Business

Location of Assets



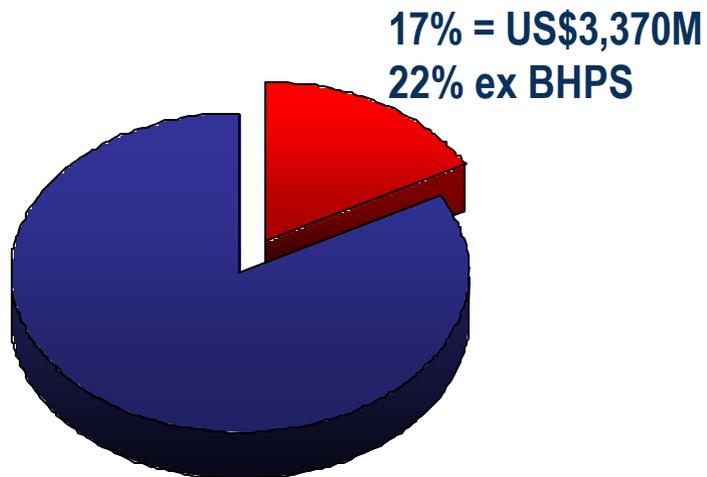
BHP Billiton Met Coal Business



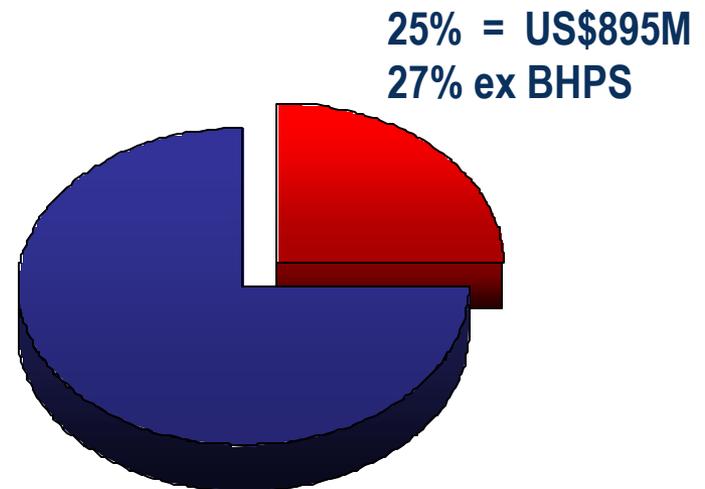
Carbon Steel Materials - BHP Billiton Context

FY2001

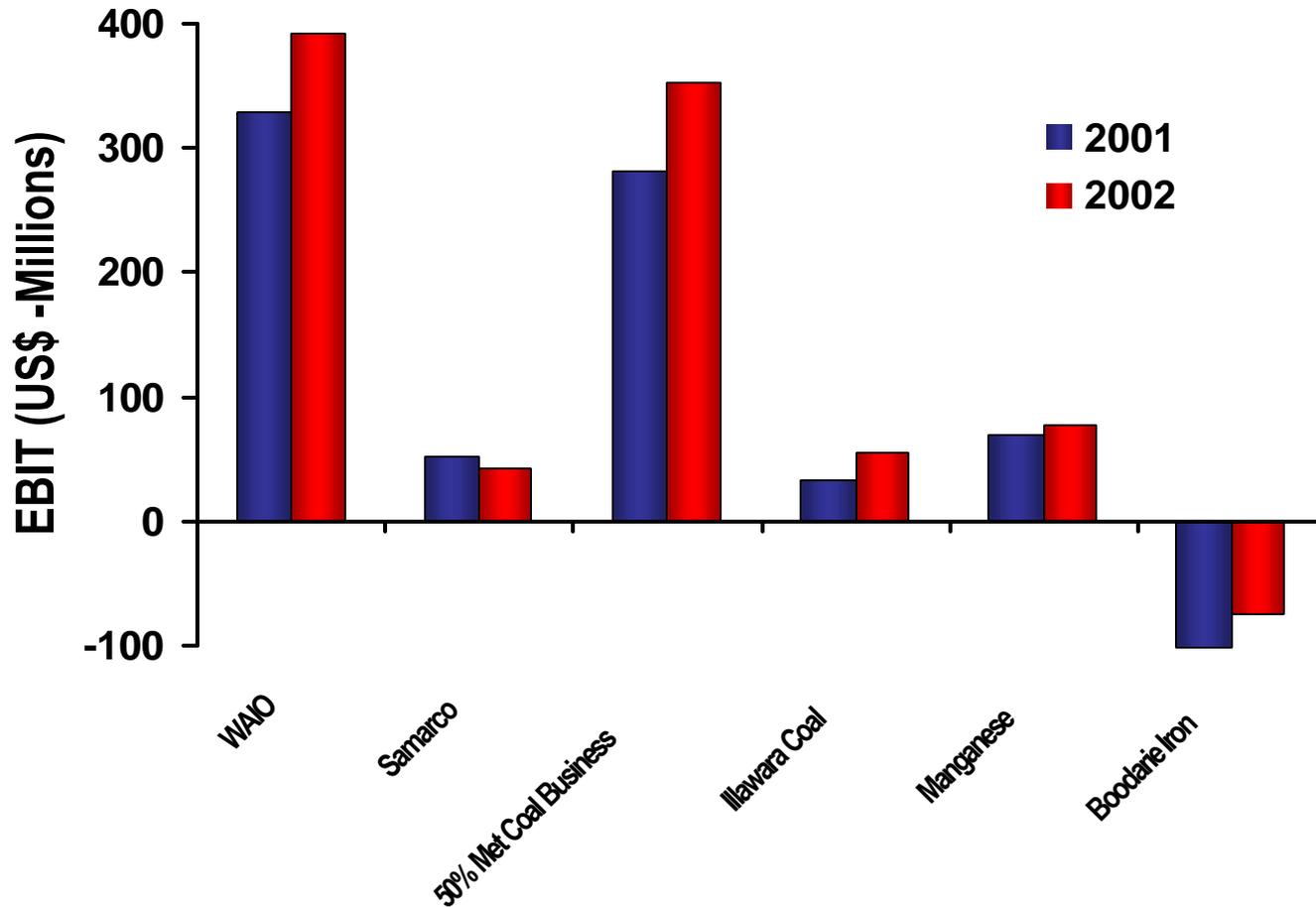
% of Group **Sales**



% of Group **EBIT**



Contribution to BHP Billiton - Carbon Steel Materials earnings (ytd)

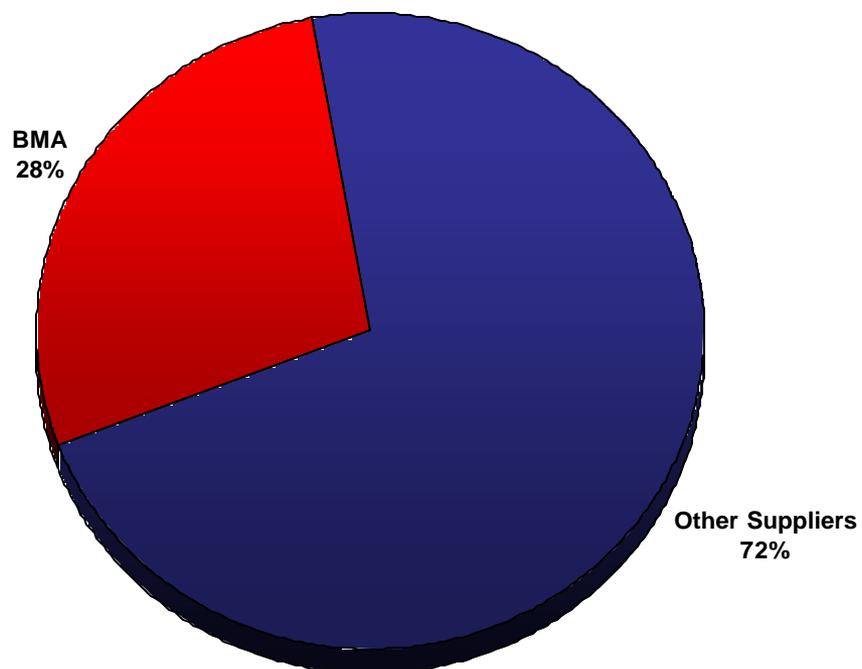




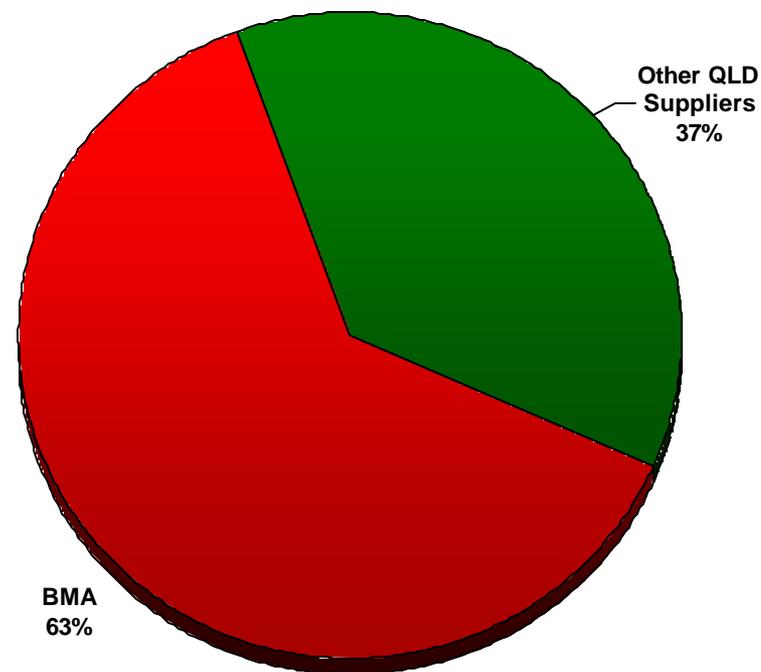
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Hard Coking Coal Market

World Seaborne HCC Market



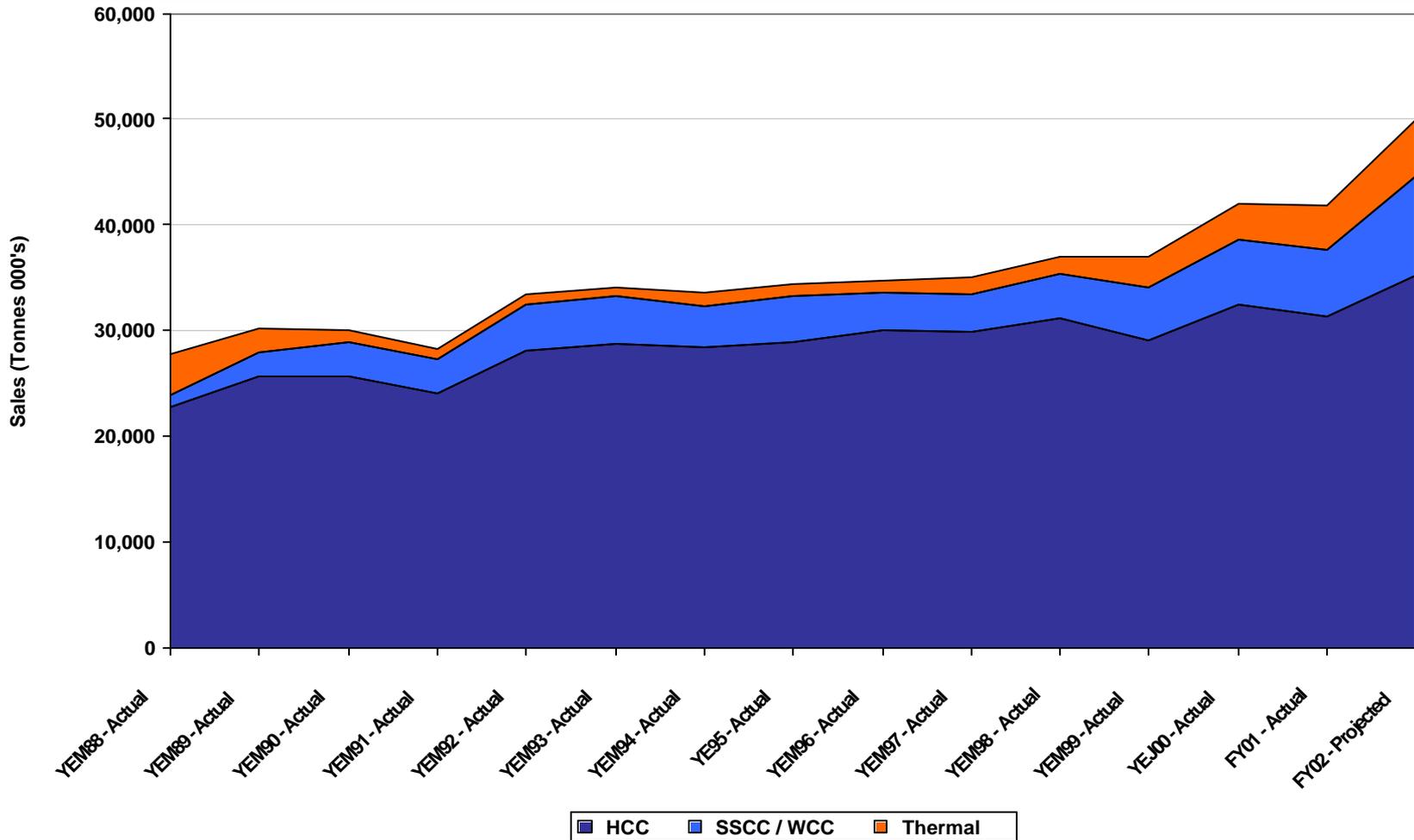
Queensland HCC Exports



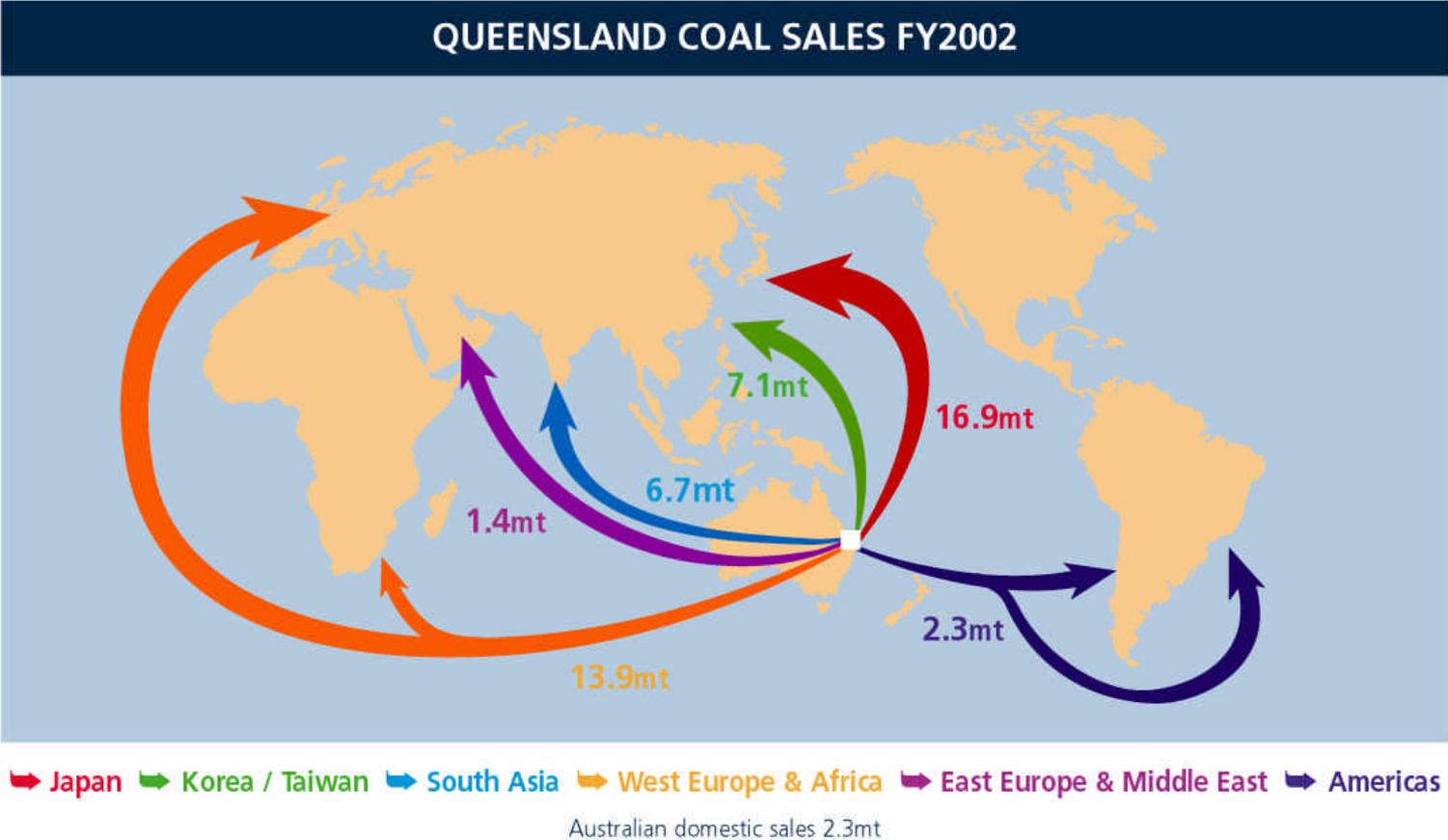


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Group Historical Sales by Type



BMA Coal Sales



BMA Business – Key Statistics

<ul style="list-style-type: none"> • Annual Sales <ul style="list-style-type: none"> • HCC • WCC • Thermal • Total 	<p>YEM90</p> <p>25.7Mt</p> <p>3.1Mt</p> <p>1.2Mt</p> <p>30.0Mt</p>	<p>(FY02 – Projected)</p> <p>35.2Mt</p> <p>9.5Mt</p> <p>5.3Mt</p> <p>50.0Mt</p>
<ul style="list-style-type: none"> • Employees (FY02) 	<p>8,629</p>	<p>3,012</p>
<ul style="list-style-type: none"> • Marketable Reserves <ul style="list-style-type: none"> • Operating • 1,860Mt 		<p>Undeveloped</p> <p>151Mt</p>
<ul style="list-style-type: none"> • Equipment 		



Draglines Electric Shovels Haul Trucks Coal Haulers Dozers Other Mobile Equipment



33

8

75

52

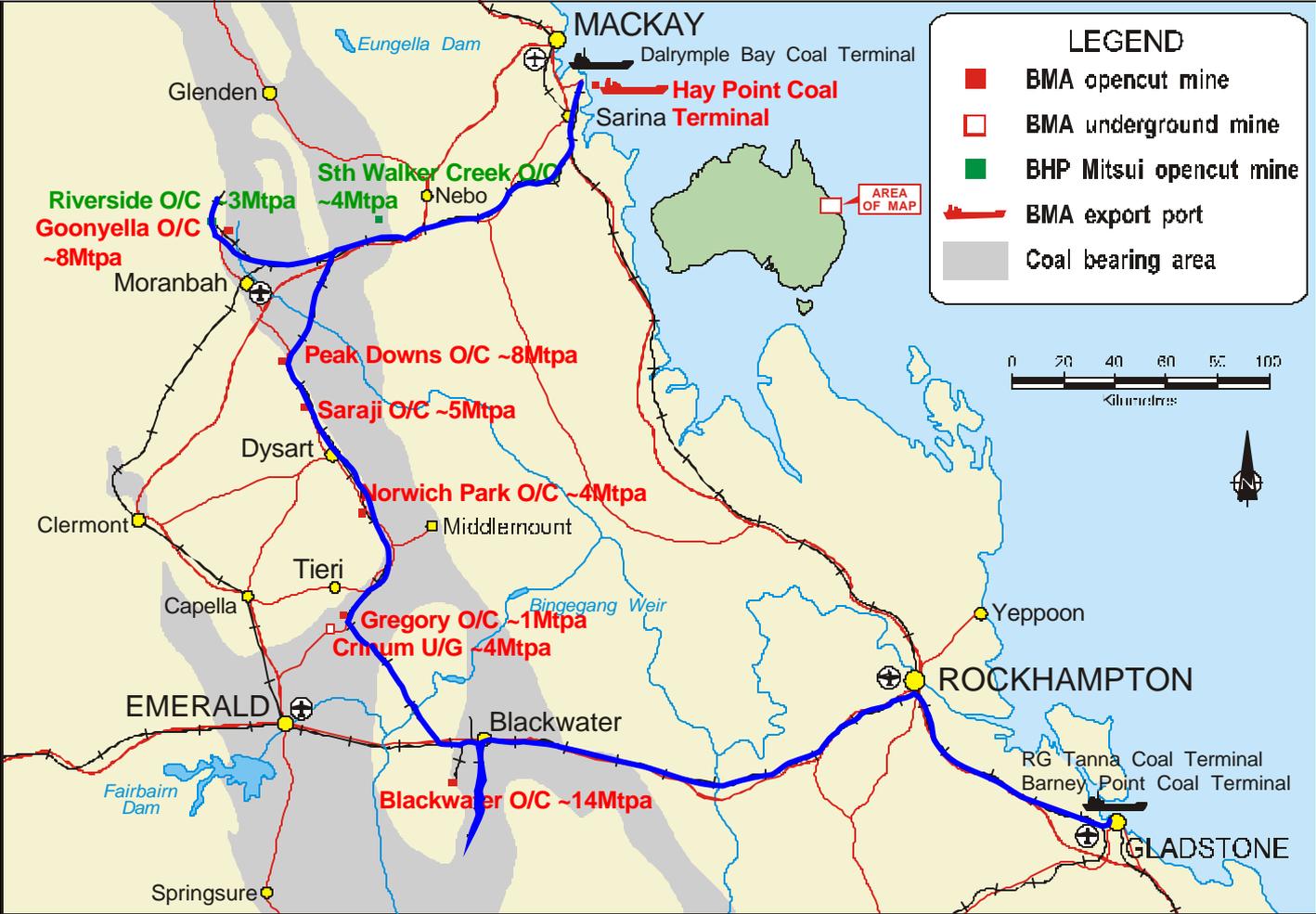
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BMA Business

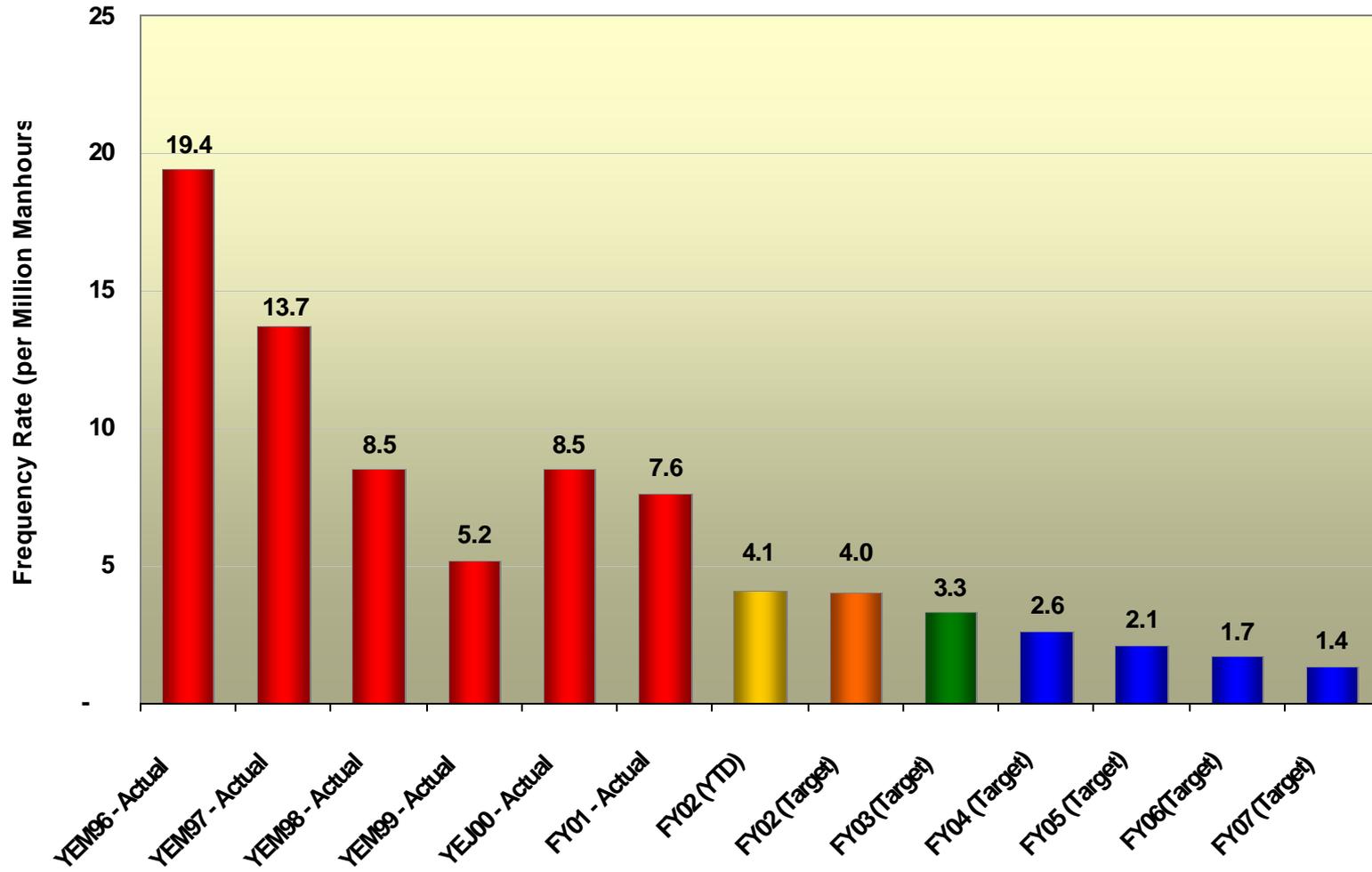


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Safety - LTIFR

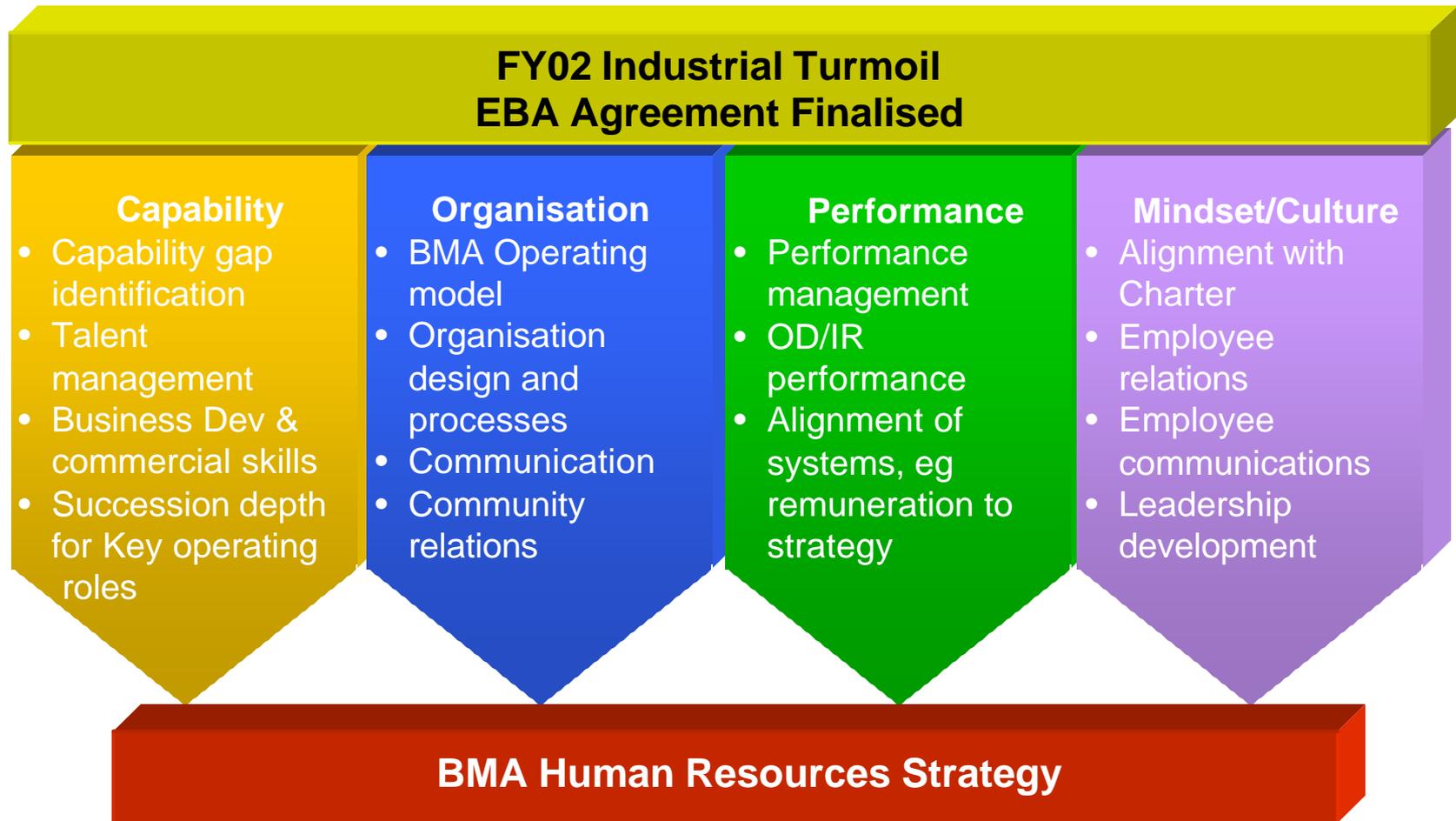


Environment

- **Water Management**
 - Downstream quality focus
 - Examining technology to remove salt for re-use
- **Mine Re-hab / Closure Planning**
 - Long term focus to minimise impact
 - Change in re-hab from grazing to bushland
- **Dust Suppression at Port**
 - Sampling program to initiate real time controls
- **Waste Management**
 - Focus on minimisation and recycling
- **New Systems**
 - Upgrading to BHP Billiton Standards



Human Resources



Universal Dragline (UDD)

- 32 Draglines
 - ~70% of total material movement
- Current Dragline Movement
 - 330 Million BCM's pa
 - ~ 700 Million tonnes pa
- Projected 20% productivity improvement
- Potential Improvement
 - Equivalent to 6 additional draglines
- **Equivalent to new 10Mtpa mine at 1/3 capital cost**



STEP CHANGE IN PRODUCTIVITY

Success from Operating Excellence

YEJ01 – 4 completed projects

(Increased plant yield, drill improvement (2 projects), dragline rope life projects)

	Actual	Annualised
Savings	US\$0.57M	US\$0.87M
Revenue Increase	US\$1.08M	US\$4.34M

FY02 – 11 completed projects,

(Overburden drills, coal blasting, pre-strip improvement, automated stacker, dump station, increased ship loading, train loading (5) projects)

	Actual	Annualised
Savings/Revenue Increase	US\$1.24M	US\$2.68M

FY02 – 31 active projects,

(Train loadout and rail rebate optimisation ~US\$3.25M pa)

	Projected
Savings/Revenue Increase	US\$8.75M



Full Time Coaches	6	Total Actual Savings/Revenue Increases = US\$9.9M
Part Time Coaches	13	

Projects

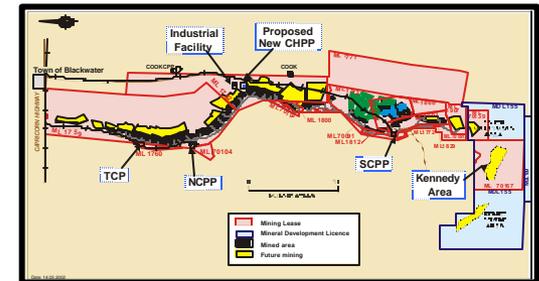
•Goonyella Underground

- Development of low-capital, low-risk punch longwall in GMS
- Equipment ex:Kenmare (3,000 tph)
- Flexible production – “Coal on Tap”
- Gain experience in north Bowen Basin longwall mining



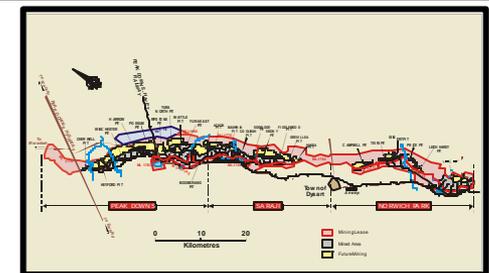
•Blackwater Project

- New Central Coal Processing Plant
- Expand production developing Kennedy area or additional tonnages for existing pits



•Optimisation

- Examination of resources based on cost to recover
- Balance production from NP/SJ/PD to maximise returns





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Summary

- **BMA enjoys a premier position in an attractive, growing met coal industry**
- **BMA's position is particularly strong in HCC given its superior asset base and the limited remaining undeveloped high quality assets globally**
- **Continuing strong focus on operational efficiency, innovation and excellence throughout the business**
- **Growth projects in the pipeline**

BMA



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End of Presentation

Thank you