

# Welcome to BMA

## Mitsubishi Analysts Site Visit



BHP Billiton Mitsubishi Alliance



12 April 2006

# *Mitsubishi Analysts Site Visit*

## **Disclaimer**



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# ***Agenda***



BHP Billiton Mitsubishi Alliance

**Safety**

*Steve Rae*

**Introduction**

*Soichi Tamaru*

**Overview, Markets**

*John Smith*

**Operations**

*Mike Elliott*

**Growth, Challenges**

*John Smith*

**Peak Downs Mine**

*Steve Rae*

**Lunch**

**Mine Tour**

*Depart for airport 1415h*

# ***BMA Overview***

## ***John Smith - CEO***



BHP Billiton Mitsubishi Alliance



# *The Business (FY05)*



BHP Billiton Mitsubishi Alliance

**7,000**

*People*

**6 o/c & 2 u/g mines & 1 port**

*Operating Assets*

**50.8 Million tonnes**

*Coal Produced*

**1,612 Million tonnes**

*Dirt Moved*

**85 customers in 27 countries**

*The Market*

# ***BMA Ownership Structure***



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**50%**

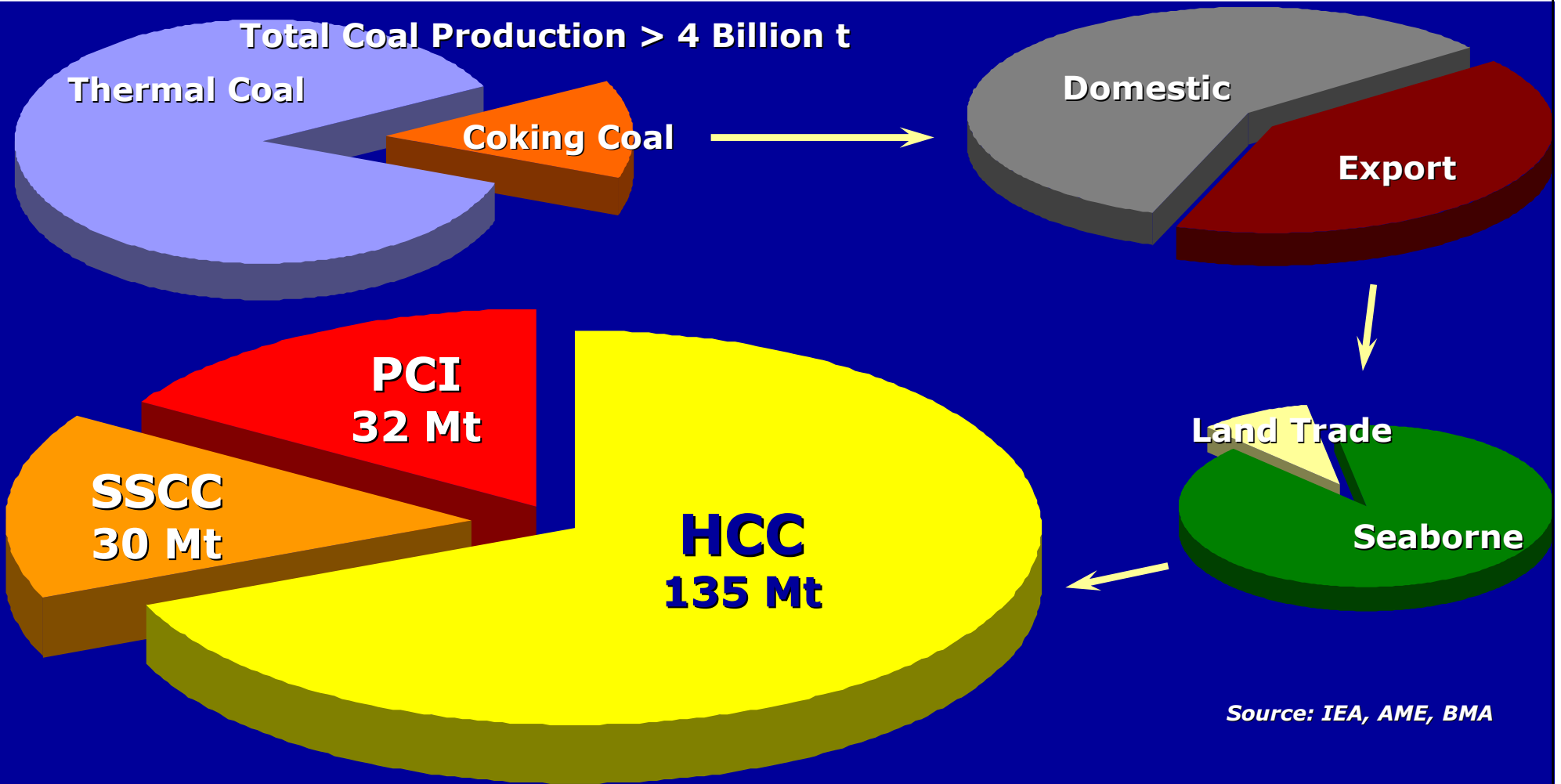
**50%**



**BHP Billiton Mitsubishi Alliance**

# Coal Markets

## 2005 Estimate



Source: IEA, AME, BMA

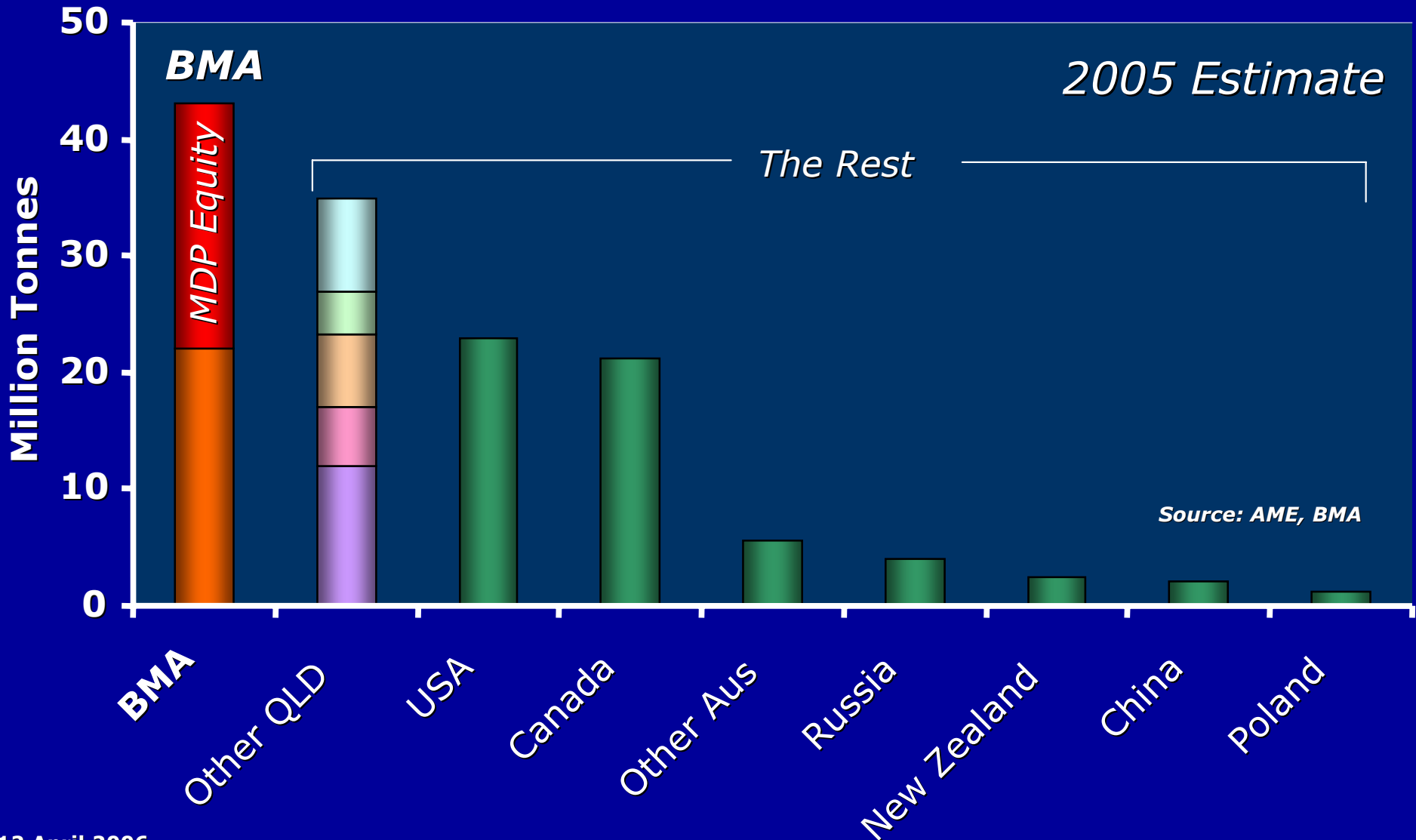
At 2006 Prices > US\$19 Billion Seaborne Met Coal Market

# Coal Markets

## Major Exporters of HCC



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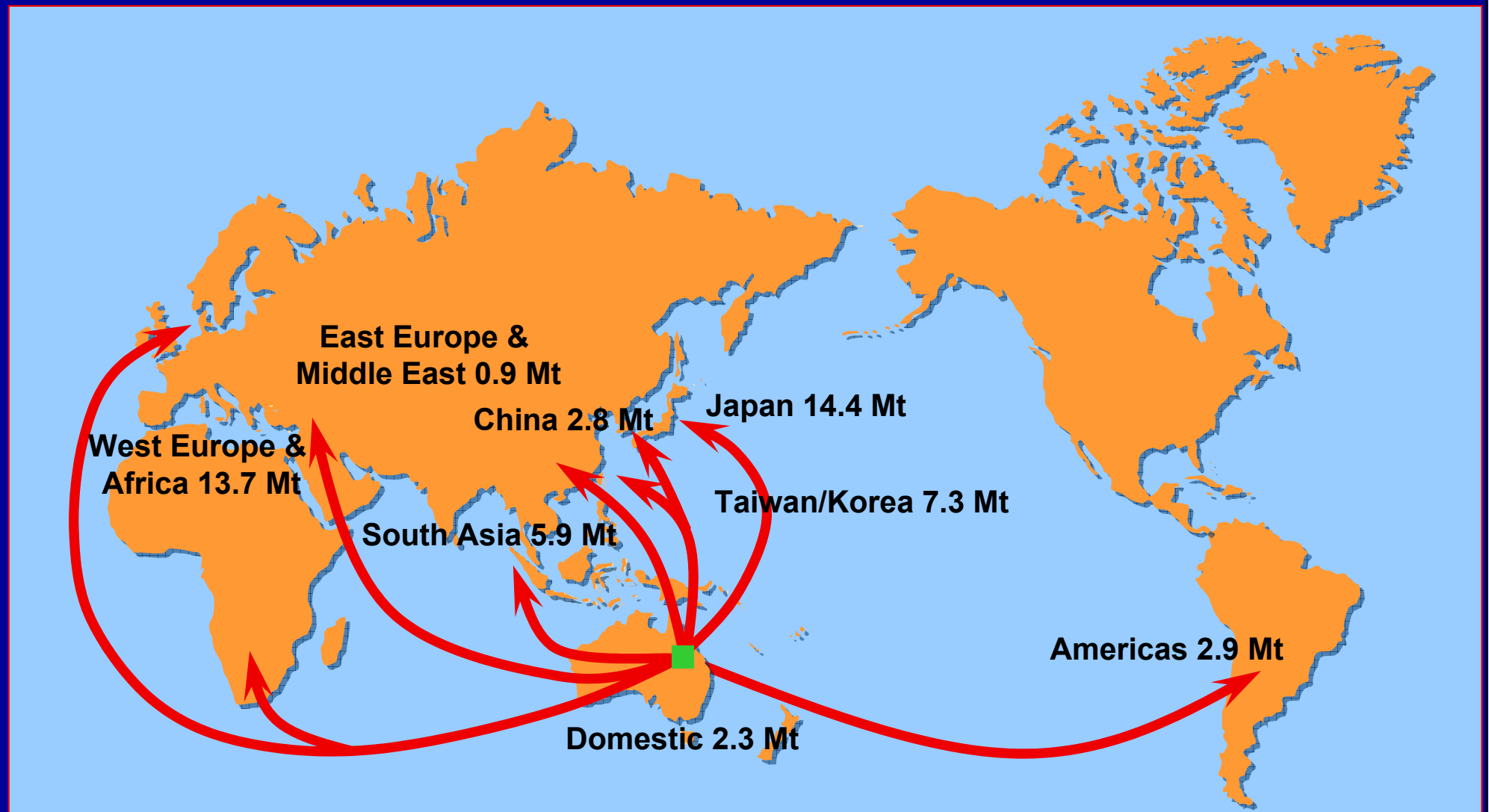


# Coal Shipments FY05

**85 customers in 27 countries**



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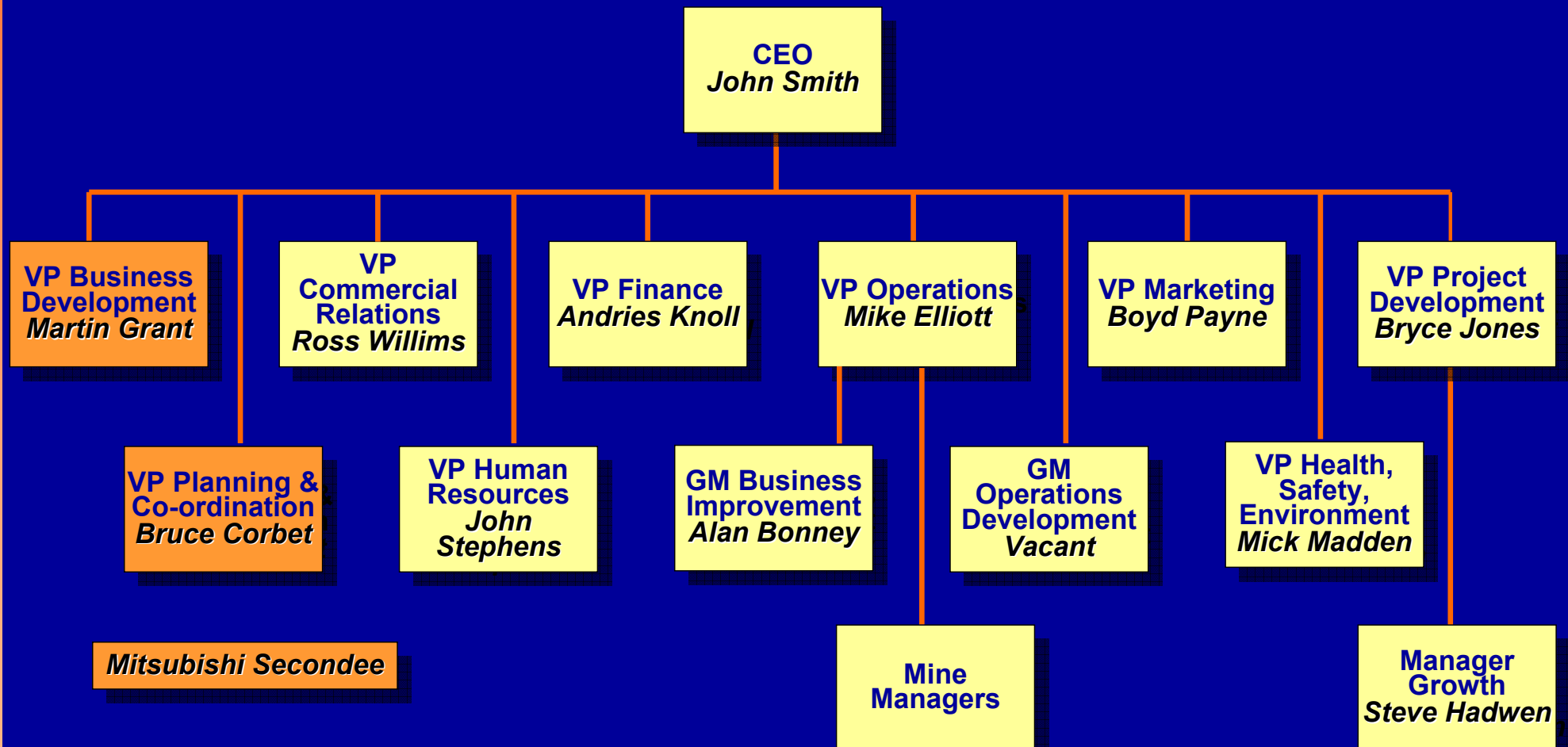


# BMA Leadership Team

## Organisation Chart



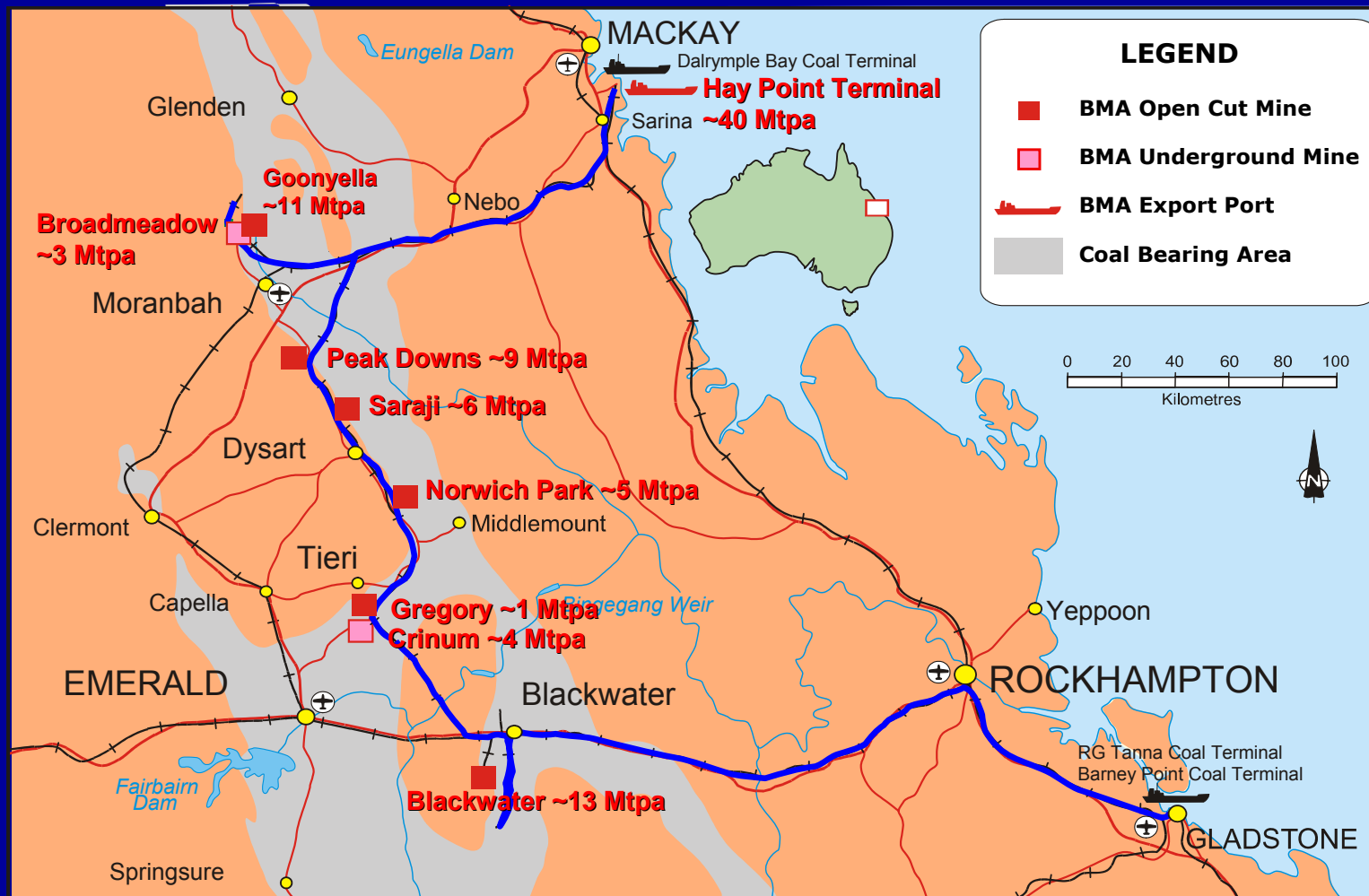
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# BMA Assets



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# BMA Coal Quality



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## Full range of metallurgical coal products

VM	← Lower VM			Higher VM →		
	18%	19%	20%	24%	27%	34%
HCC	5.5	6.5	9.1	10.9	5.1	4.6
WCC					5.0	
PCI						
Thermal	0.3				3.0	0.8

Norwich Park	Saraji	Peak Downs	Goonyella Riverside	Blackwater	Gregory
5.8	6.5	9.1	10.9	13.1	5.4

# Marketable Reserves

**30 June 2005**



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<i>Deposit</i>	<i>Coal Production Mtpa</i>	<i>Marketable Reserve <sup>1,3</sup> Mt</i>	<i>Approx. Mine Life Years</i>	<i>Additional Resource <sup>2,3</sup> Mt</i>
<b>Goonyella/Riverside</b>	<b>10.9</b>	<b>526</b>	<b>48</b>	728
<b>Peak Downs</b>	<b>9.1</b>	<b>479</b>	<b>53</b>	1,175
<b>Saraji</b>	<b>6.5</b>	<b>208</b>	<b>32</b>	457
<b>Norwich Park</b>	<b>5.8</b>	<b>69</b>	<b>12</b>	268
<b>Blackwater/S Blackwater</b>	<b>13.1</b>	<b>334</b>	<b>25</b>	1,554
<b>Gregory Crinum</b>	<b>5.4</b>	<b>32</b>	<b>6</b>	142
<b>TOTAL</b>	<b>50.8</b>	<b>1,648</b>		<b>4,324</b>

1. Competent Person for reserves Brian Cox consents to the publication of these estimates in the form and context as they appear above.
2. Competent Person for resources Doug Dunn consents to the publication of these estimates in the form and context as they appear above.
3. Refer to Mitsubishi Corporation and BHP Billiton annual reports published last year for details on categories of reserves and resources.

# *Safety is Priority #1*



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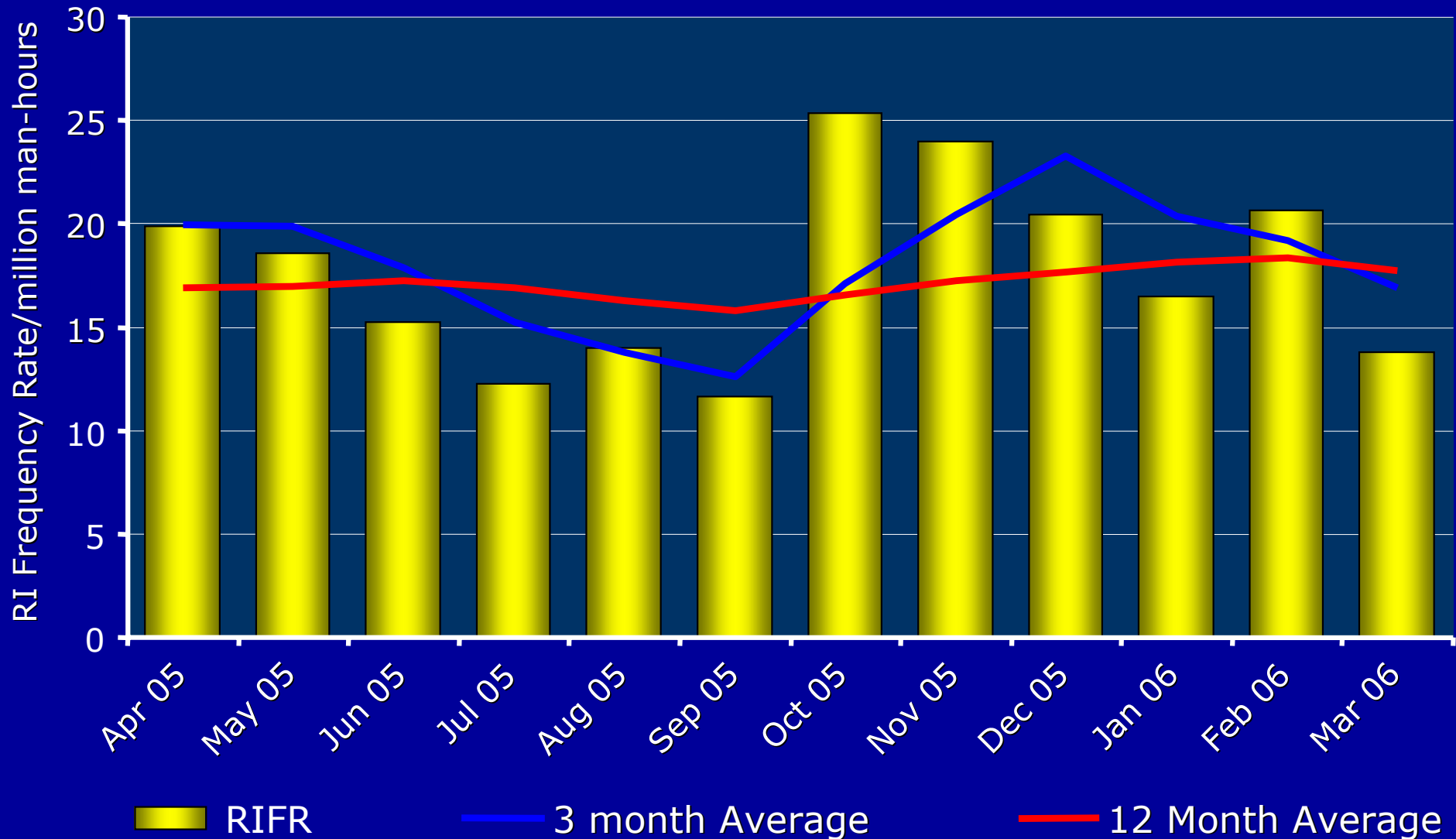
- *Goal is zero harm*
- *We are successful when each employee ends each day safely*

# Safety Performance

## Recordable Injuries



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# Markets

**John Smith - CEO**



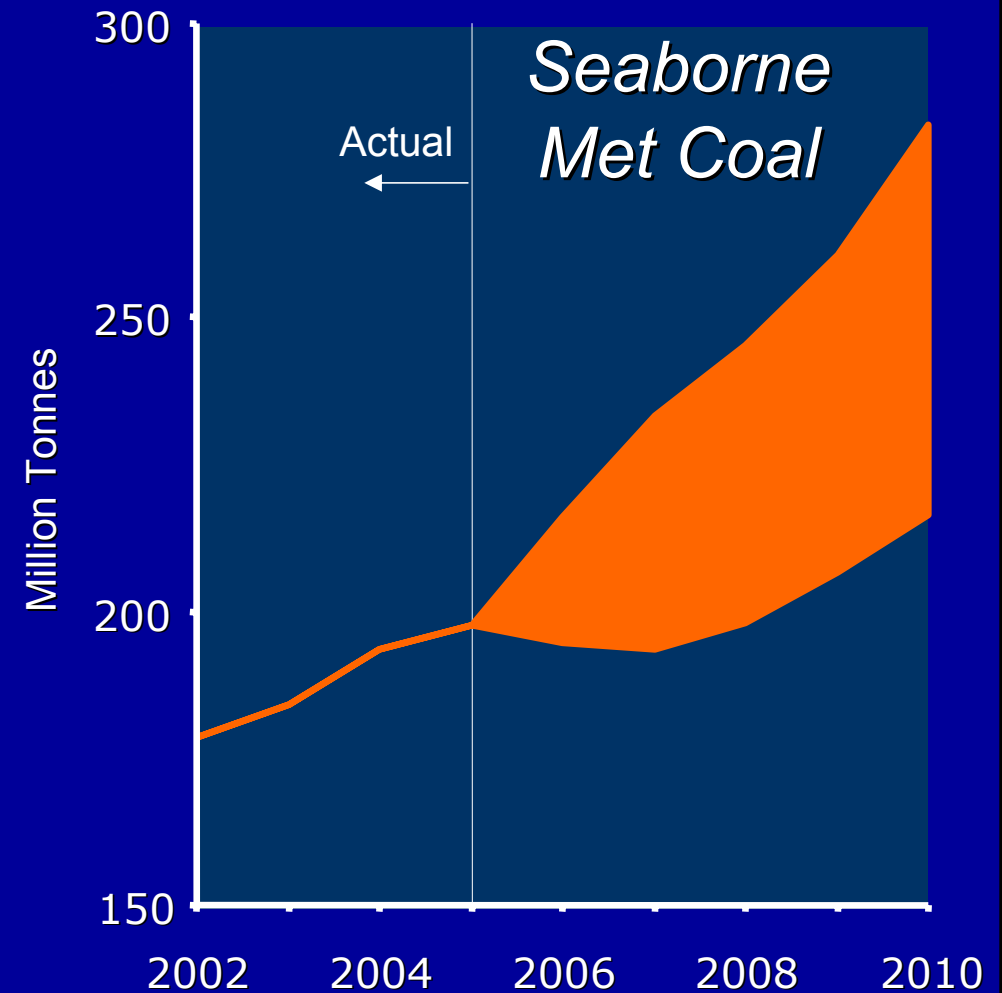
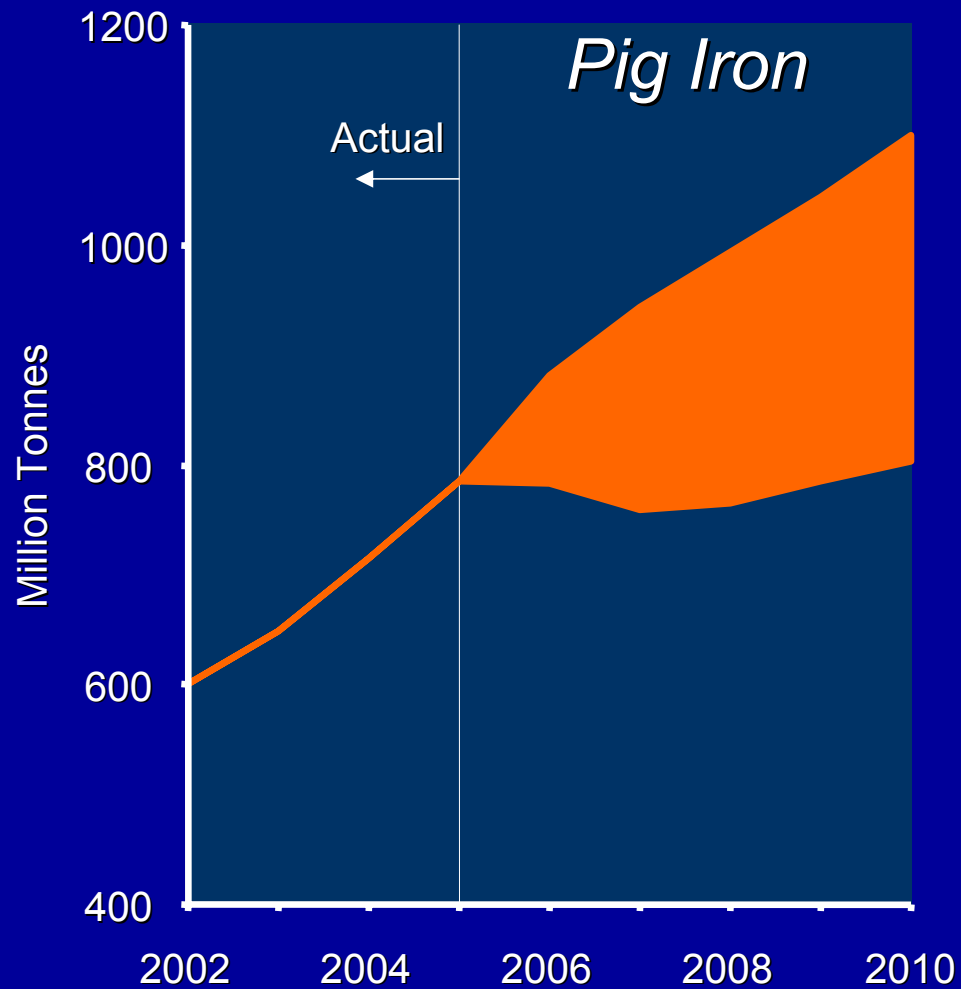
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# Pig Iron and Met Coal Demand



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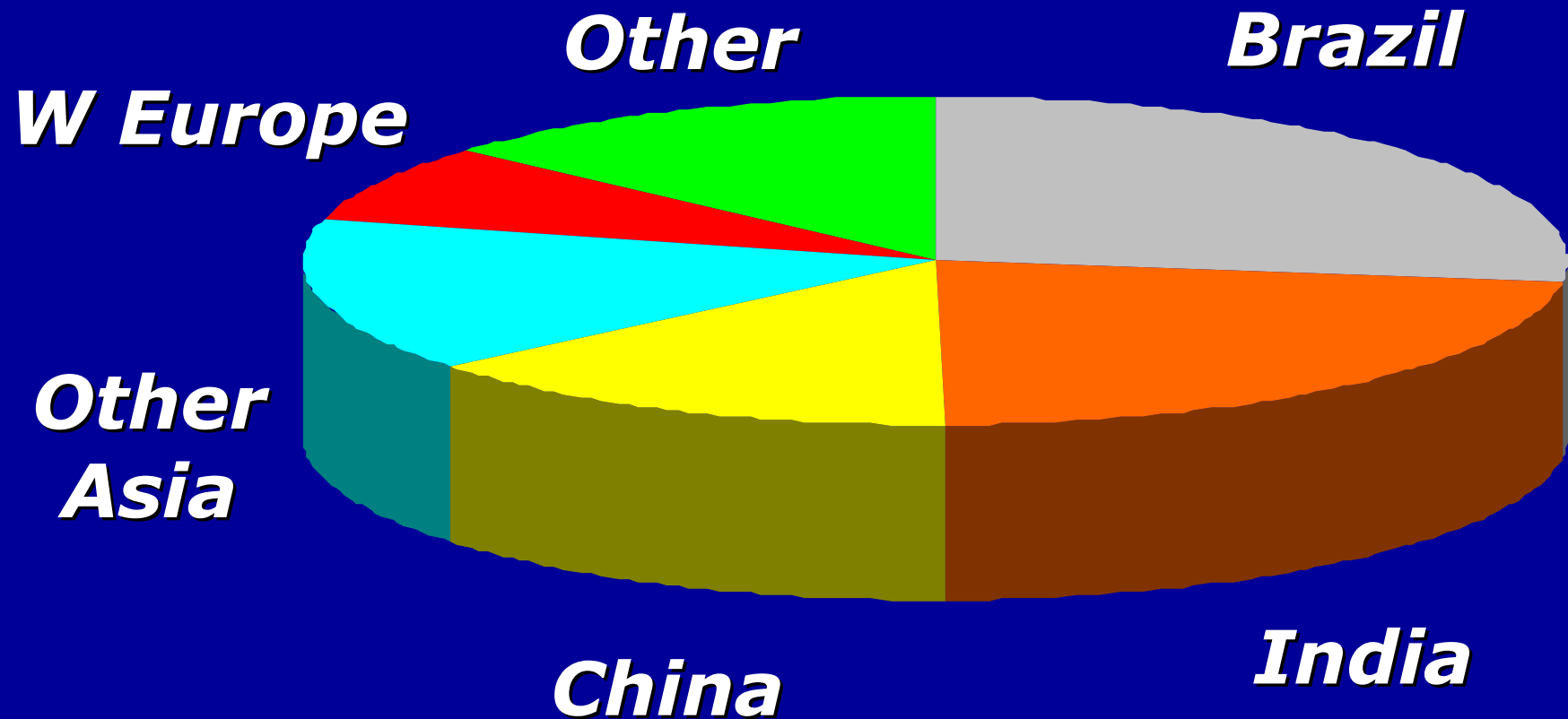


# Metallurgical Coal Demand Growth

2005 - 2012



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## Key drivers



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### Demand

- Steel demand
- Location of pig iron production growth
- Coke oven blends
- International vs. Chinese domestic hard coking coal price

### Supply

- Investors' hard coking coal price expectations
- Queensland's rate of growth
- USA swing supply
- Infrastructure constraints

# ***Metallurgical Coal***

## ***Market Summary***



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- Recent prices have stimulated new supply and dampened some short-term demand growth
- Medium to long-term fundamentals remain strong
- HCC requirements remain strong to maintain coke strength in large blast furnaces and higher PCI injection rates
- BMA has the best and largest HCC reserves in operating mines

# Operations

## Mike Elliott - VP Operations



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# BMA Earth Moving Equipment



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## Draglines



## Electric Shovels



## Haul Trucks



## Coal Haulers



## Dozers



## Other Mobile Equipment

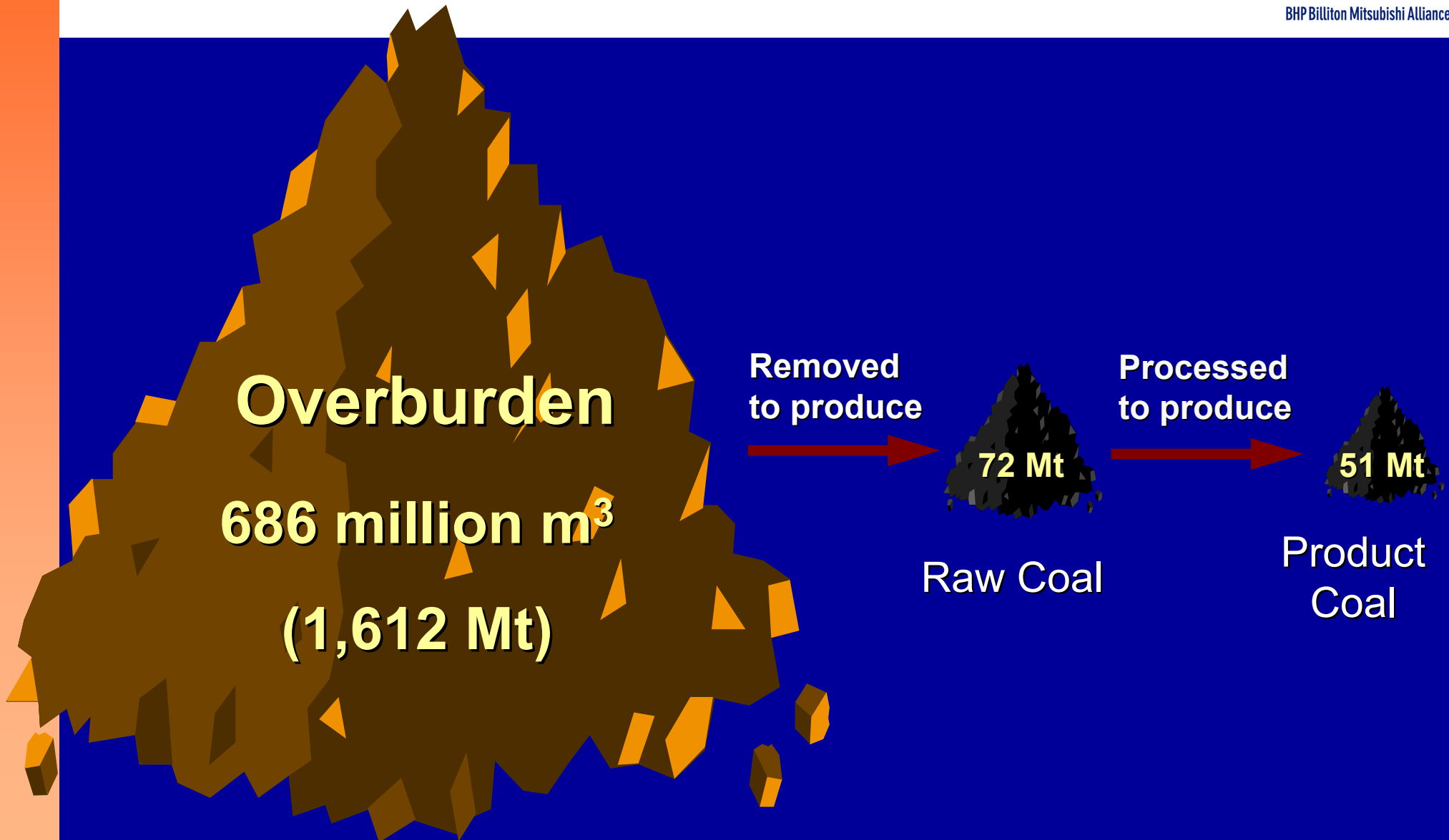


# Open Cut Operations

## How much earth did we move?



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# *The Real Business*

*in FY 2005 we moved*

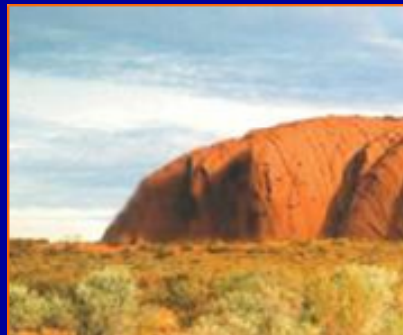


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- **686 million m<sup>3</sup> of overburden**



+



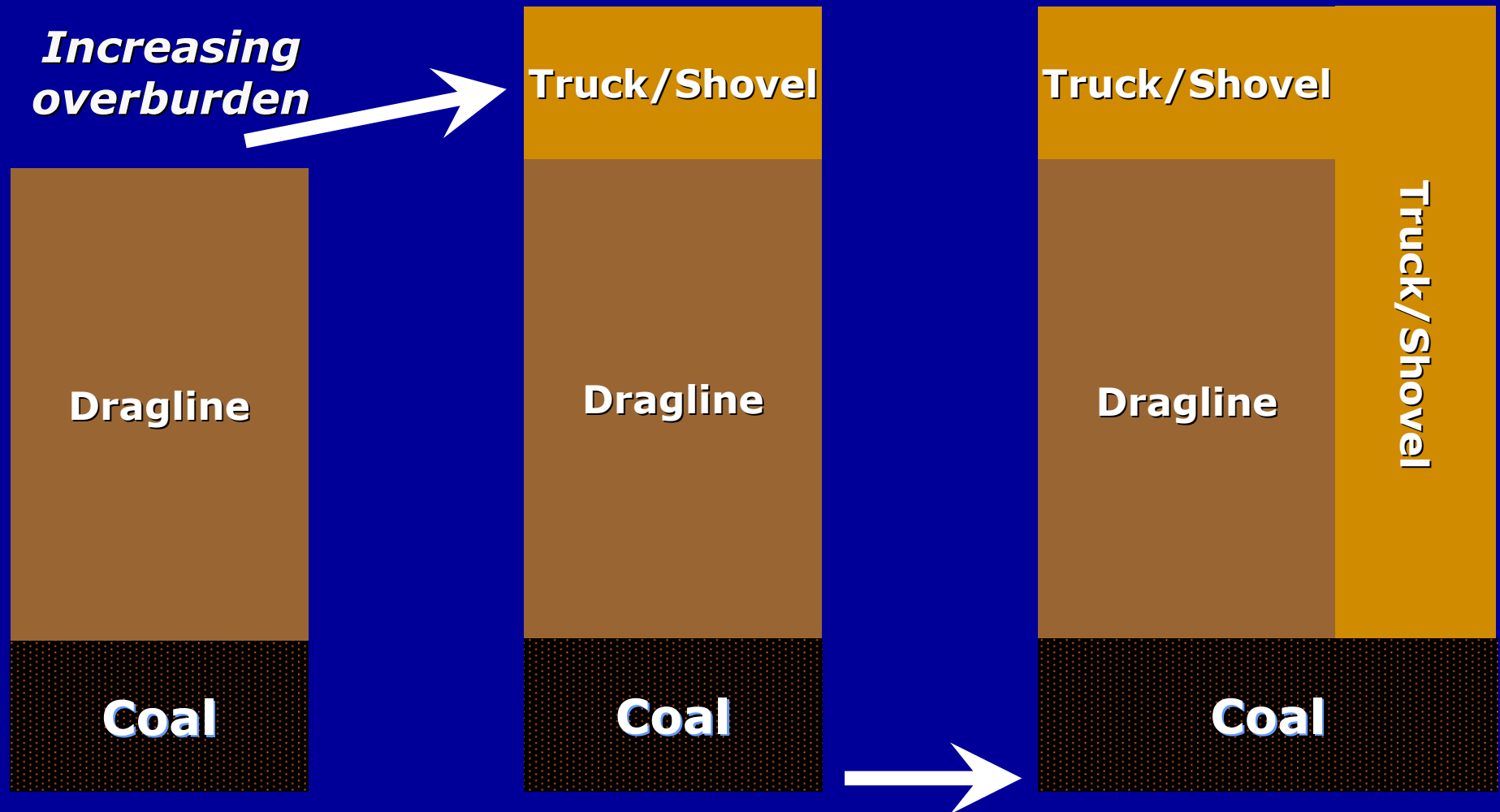
- **equivalent to 1.3 times the size of Uluru**

# Growing the Business

## Added Stripping Costs More



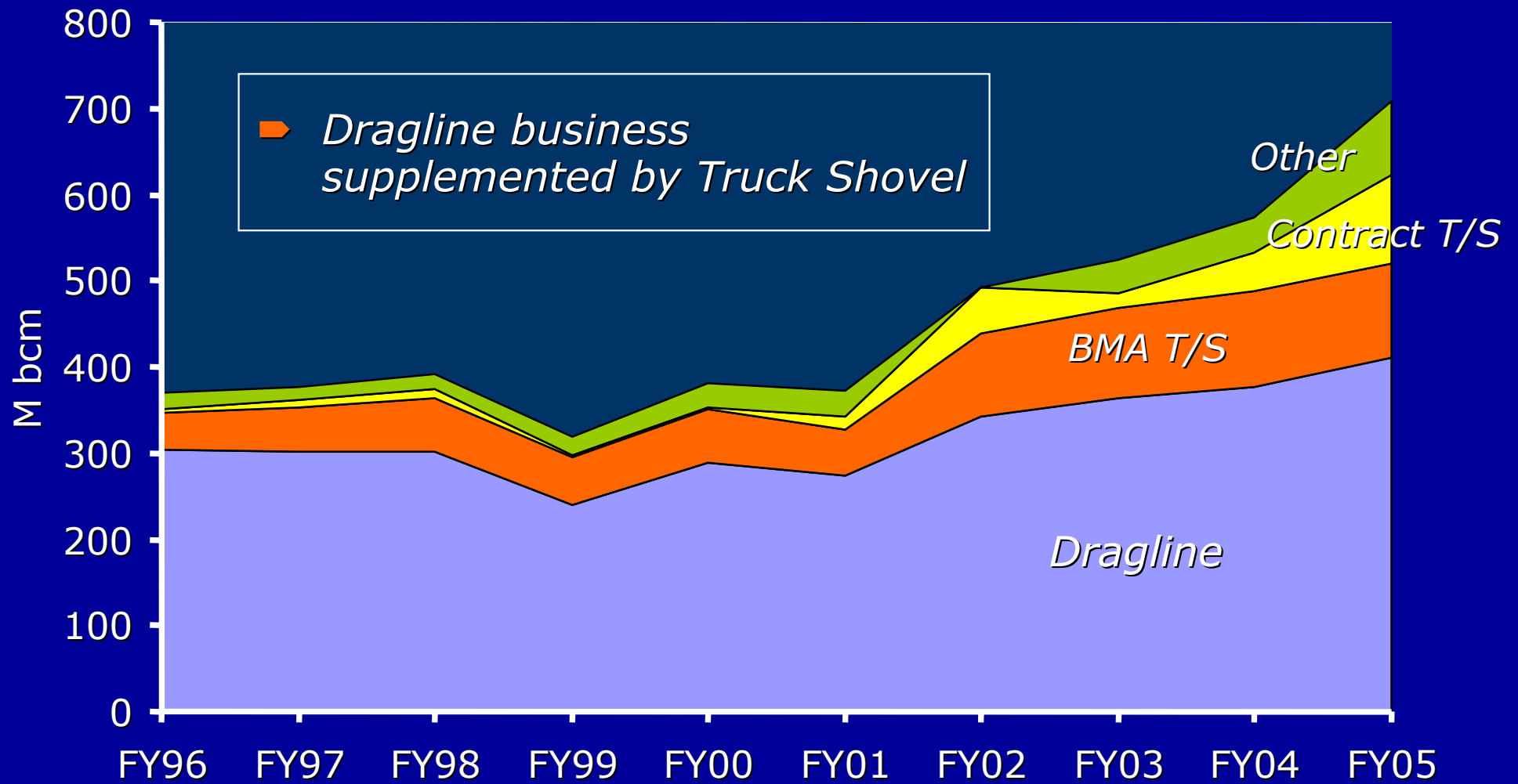
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# Mining Philosophy



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# ***Business Improvement***

## ***Incremental and Step Change***



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### **Stripping Study**

Evaluation of cost reduction alternatives

### **Universal Dig and Dump (UDD)**

5 completed, 1 underway; measured 13+% productivity improvement

### **Last Drop**

Redesign coal uncover process to improve all aspects of coal mining

### **125% Rated Suspended Load (RSL)**

Upgrade dragline capacity from 115% to 125%; +40 Mbcm/yr for fleet

### **Processing Improvements**

BW CHPP, debottlenecking, fines recovery, component upgrades

### **Additional Equipment**

Larger trucks, Blackwater dragline

### **Project Improvement Process**

Consistent management of small capital projects

### **Leadership Training**

800+ in foundation course, higher level courses

### **Commodities**

Optimise use of tyres, fuel, explosives

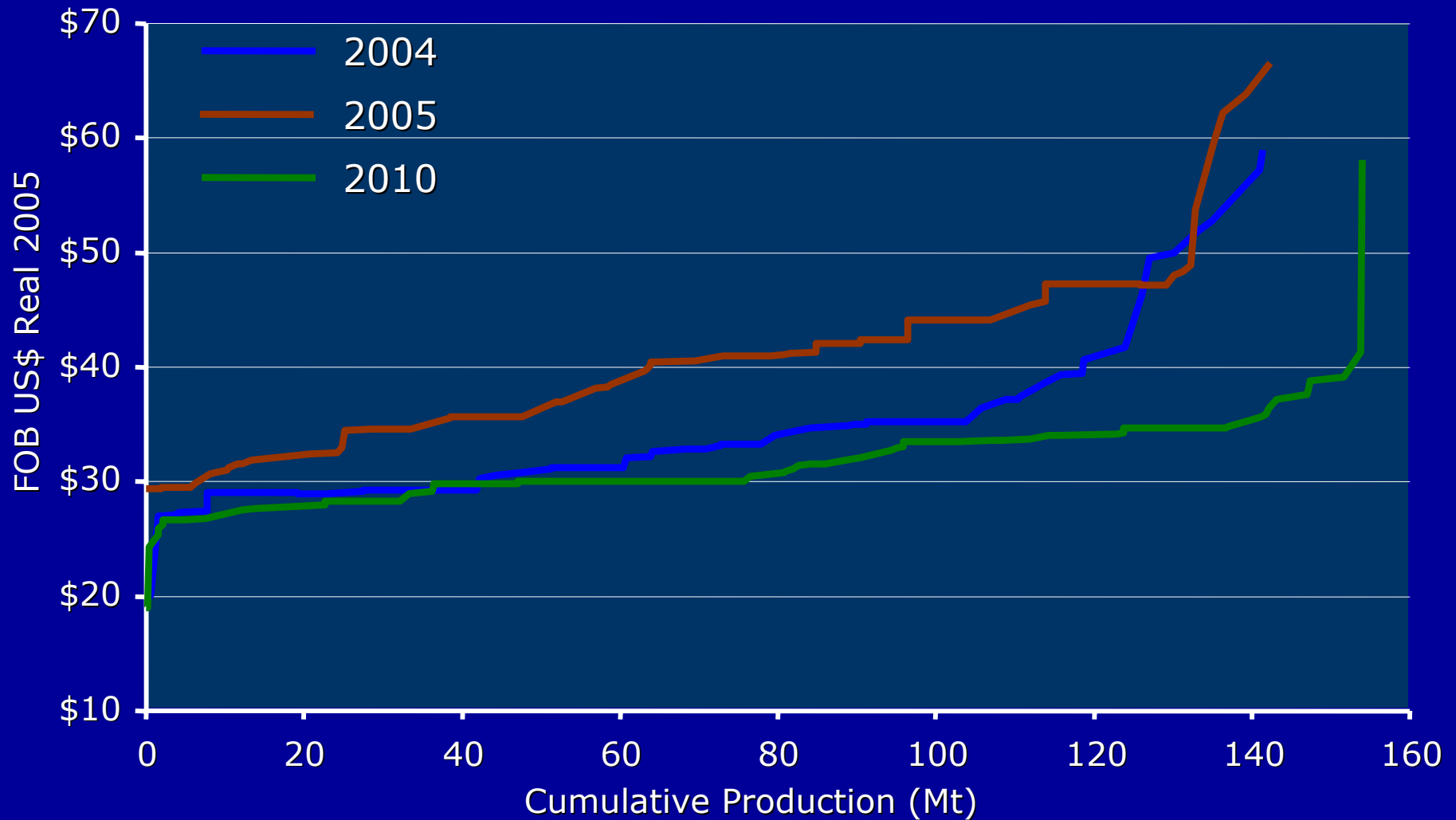


# Increasing Cost Pressures

## Australian Cost Curves



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Source: Barlow Jonker

# Key Operating Statistics

## Annual Coal Sales (Mt)



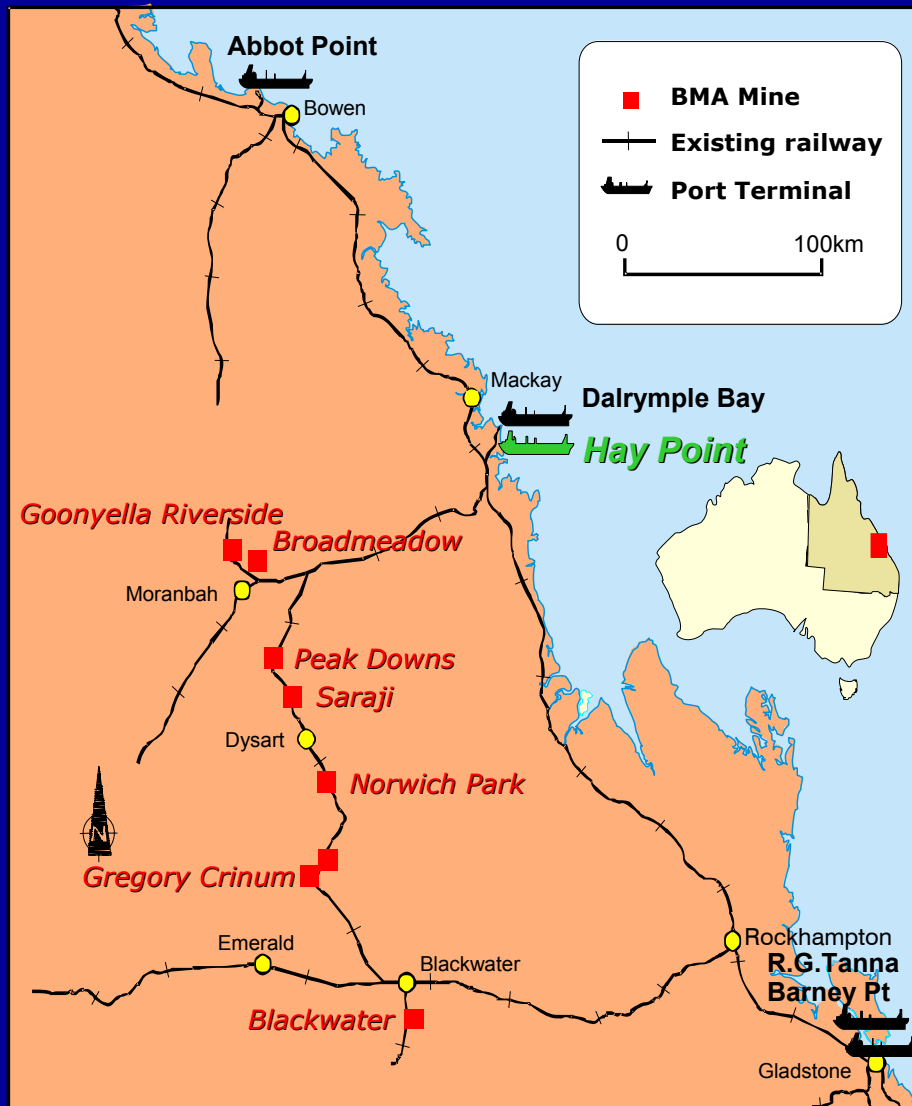
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	<b>FY04</b>	<b>FY05</b>	<b>1<sup>st</sup> Half FY06</b>
HCC	33.4	38.8	19.7
WCC	6.2	6.4	2.9
Thermal	5.4	4.9	1.5
<b>TOTAL</b>	<b>45.0</b>	<b>50.1</b>	<b>24.1</b>

# BMA Coal Logistics



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Exports	FY04	FY05	1 <sup>st</sup> Half FY06
<b><i>BMA Owned</i></b>			
Hay Point	27.8	30.0	14.6
<b><i>Common</i></b>			
DBCT	1.2	3.3	1.9
RG Tanna	12.8	13.8	6.2
Barney Pt	1.1	0.7	0.4
<b>Total Exp.</b>	<b>42.9</b>	<b>47.8</b>	<b>23.1</b>
<b>Domestic</b>	<b>2.4</b>	<b>2.3</b>	<b>1.4</b>

# Growth

## John Smith - CEO



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# Broadmeadow Project



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- ▶ Punch longwall underground mine
- ▶ 3.6 Mtpa production capacity
- ▶ Goonyella Middle Seam
- ▶ 200m longwall face
- ▶ New high capacity roof supports
- ▶ Infrastructure independent of Goonyella Mine
- ▶ Completed Q1 FY06



# Stage 1 Growth Project

- ▶ Increases production capacity by 5 Mtpa.
- ▶ De-bottleneck mine production capacity:
  - ▶ stripping contracts
  - ▶ purchase of EME
  - ▶ dragline upgrade
  - ▶ Saraji CPP upgrade
  - ▶ housing
- ▶ Scheduled Completion Q1 FY07\*

\* Production increase already achieved



**Raw Coal Sizing Station**



**Housing**

# Stage 2 Growth Project



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- Increases annual production capacity by 2 Mtpa
- Achieved by:
  - Expansion of onshore facilities at Hay Point
  - Additional overburden stripping at Saraji
  - New EME at Goonyella and Saraji Mines
- Scheduled Completion Q2 FY07



# Blackwater CHPP Project



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- ▶ Cost reduction initiative:
  - no increase in mine capacity
    - ▶ Replaces 3 existing plants
    - ▶ 14 Mtpa capacity plant
- ▶ Contractor performance has improved significantly
- ▶ Revised completion Q2 FY07



# Growth Plan

## Project Portfolio



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Project	Capacity Mtpa
Goonyella	Up to 8
Isaac River/Peak Downs	Up to 6
Hay Point Port Expansion	Up to 55

- Projects developed in prudent response to market
- Match production growth with infrastructure capacity - port, rail, water
- Continue to provide customers with reliable supply and consistent, high quality

# Business Challenges

**John Smith - CEO**



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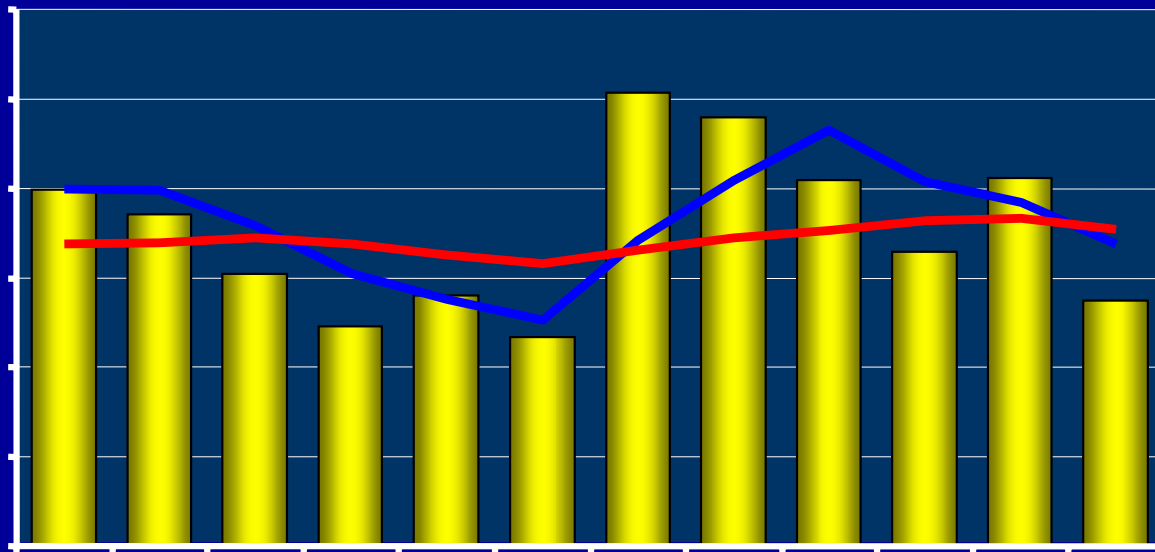
12 April 2006

# Business Challenges

## Safety Performance



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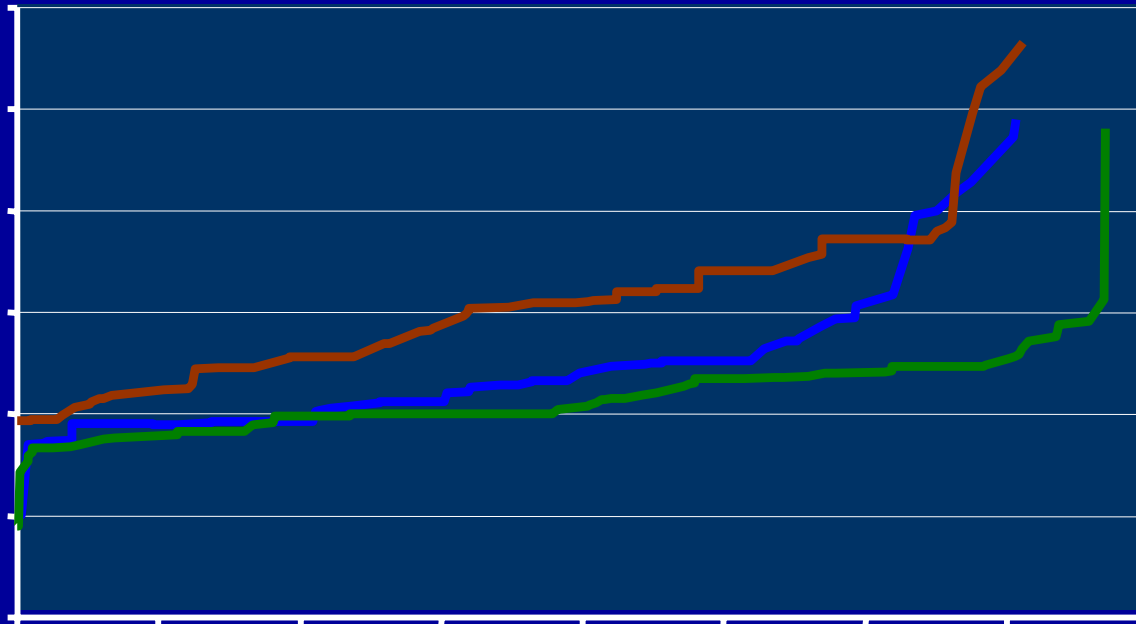
- *Continued vision of zero harm*
- *Site specific and BMA-wide initiatives*
- *Address high contractor employee turnover*

# Business Challenges



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## Cost Pressures



- *Improve operating efficiencies*
- *Pursue and develop step-changes*
- *Strategic alliances*

# Business Challenges

## Operations



### Ports

- ▶ *Hay Point Shiploader Incident*
  - ▶ *SL1 damaged December 2005*
  - ▶ *Weather-related delays to repairs*
  - ▶ *Partially mitigated via DBCT*
  - ▶ *Scheduled completion mid-April 2006*
- ▶ *Gladstone Port*
  - ▶ *Port congestion*
  - ▶ *Terminal upgrades*

### Production

- ▶ *Equipment & accident slowdowns at Broadmeadow U/G*

# ***Business Challenges***

## ***Skills Shortages***



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- *Skills for Growth*
- *Strategic recruitment*
- *Provide range of housing solutions*

# ***BMA Summary***

## ***Position***

- *World's leading HCC supplier with the best reserves*
- *Multiple products and operations*
- *Single marketing channel*
- *Owned port infrastructure*

## ***Focus***

- *Maintain industry leading position*
- *Complete Stages 1 & 2 expansion in FY07*
- *Position future growth options in response to market*

***Safe, well-run  
business***



***Prudent growth***

# *Peak Downs Mine*

***Steve Rae - Senior Site Executive***



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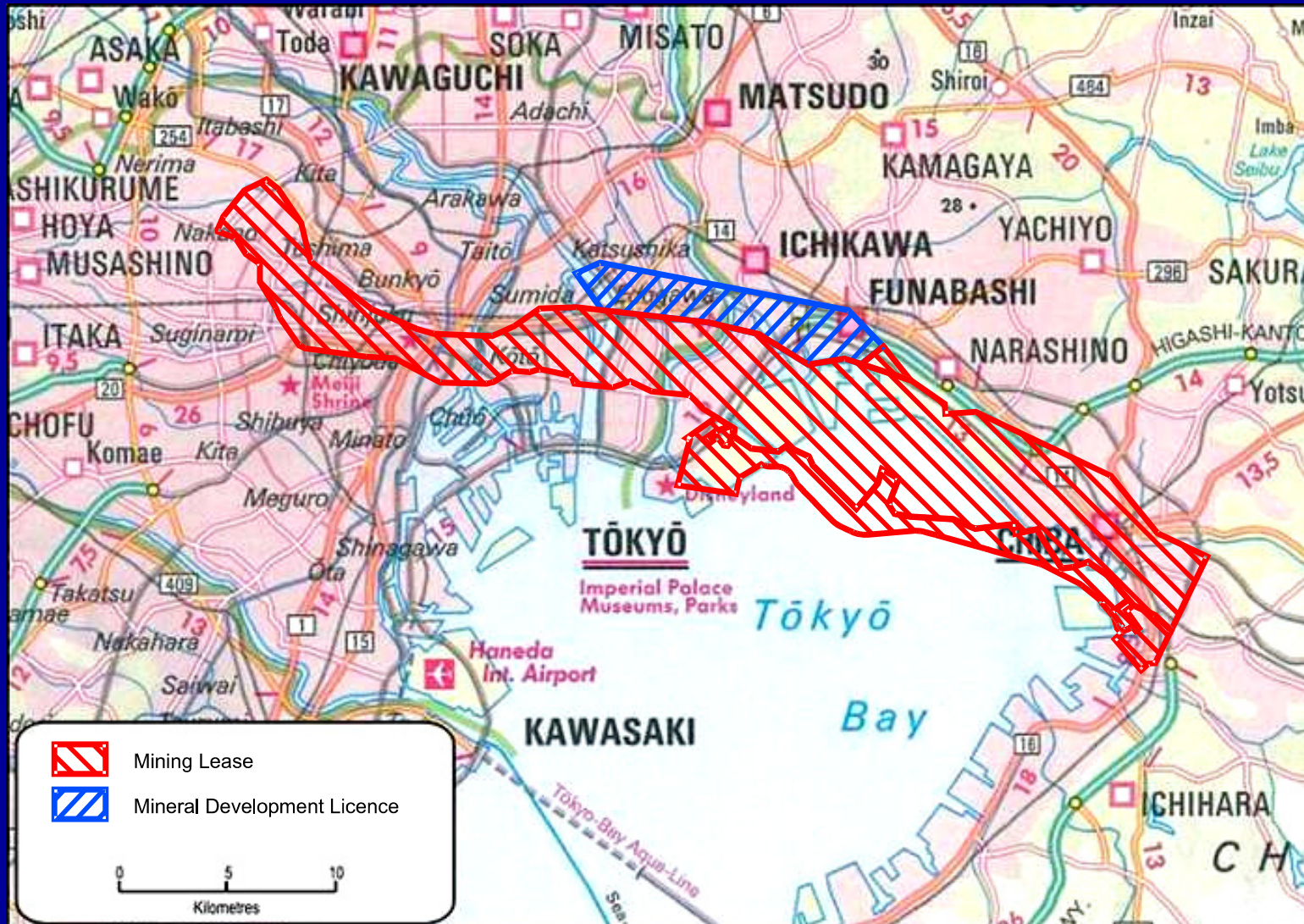


# Peak Downs Mine

## Mining Lease



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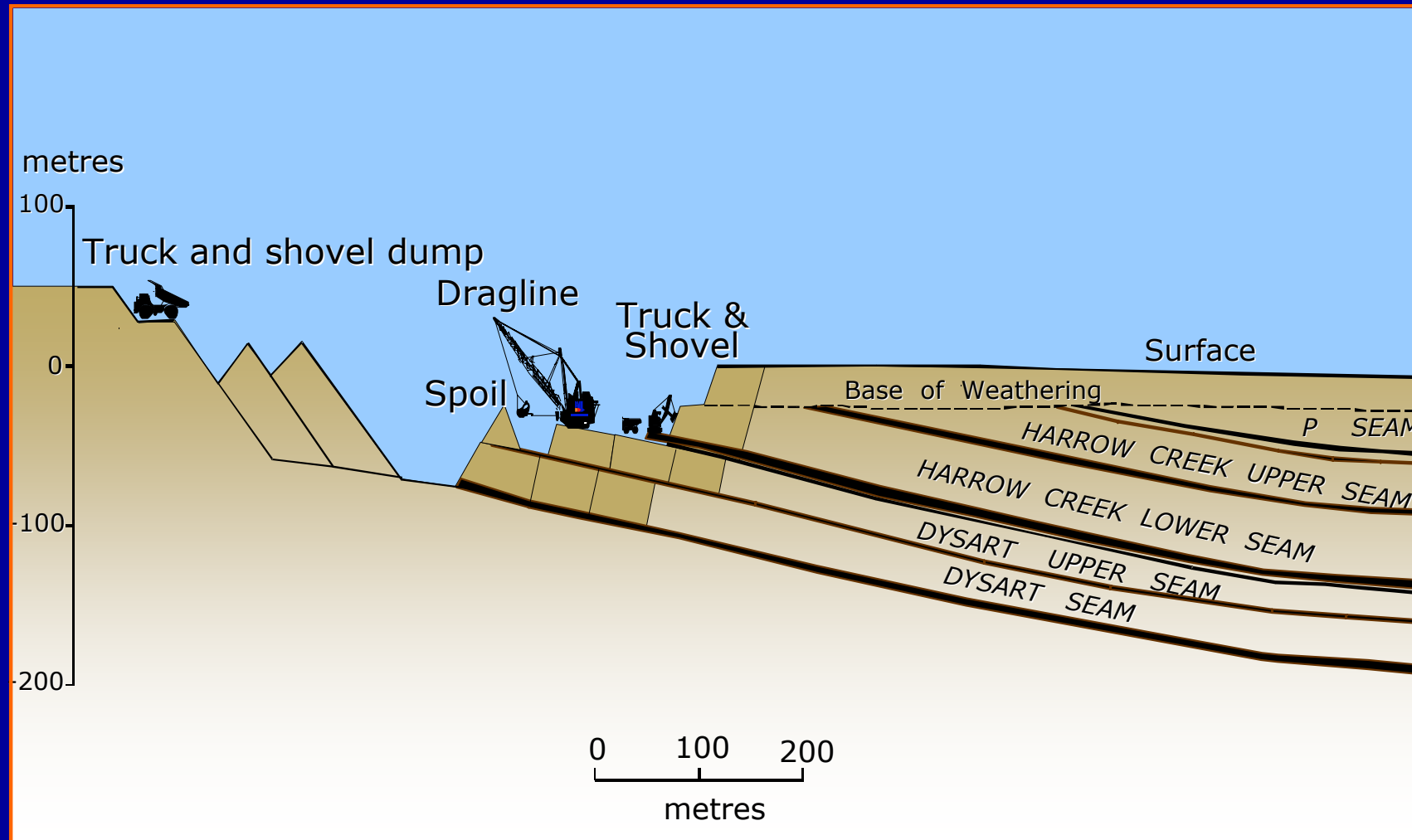


# Peak Downs Mine

## Typical Mine Cross Section



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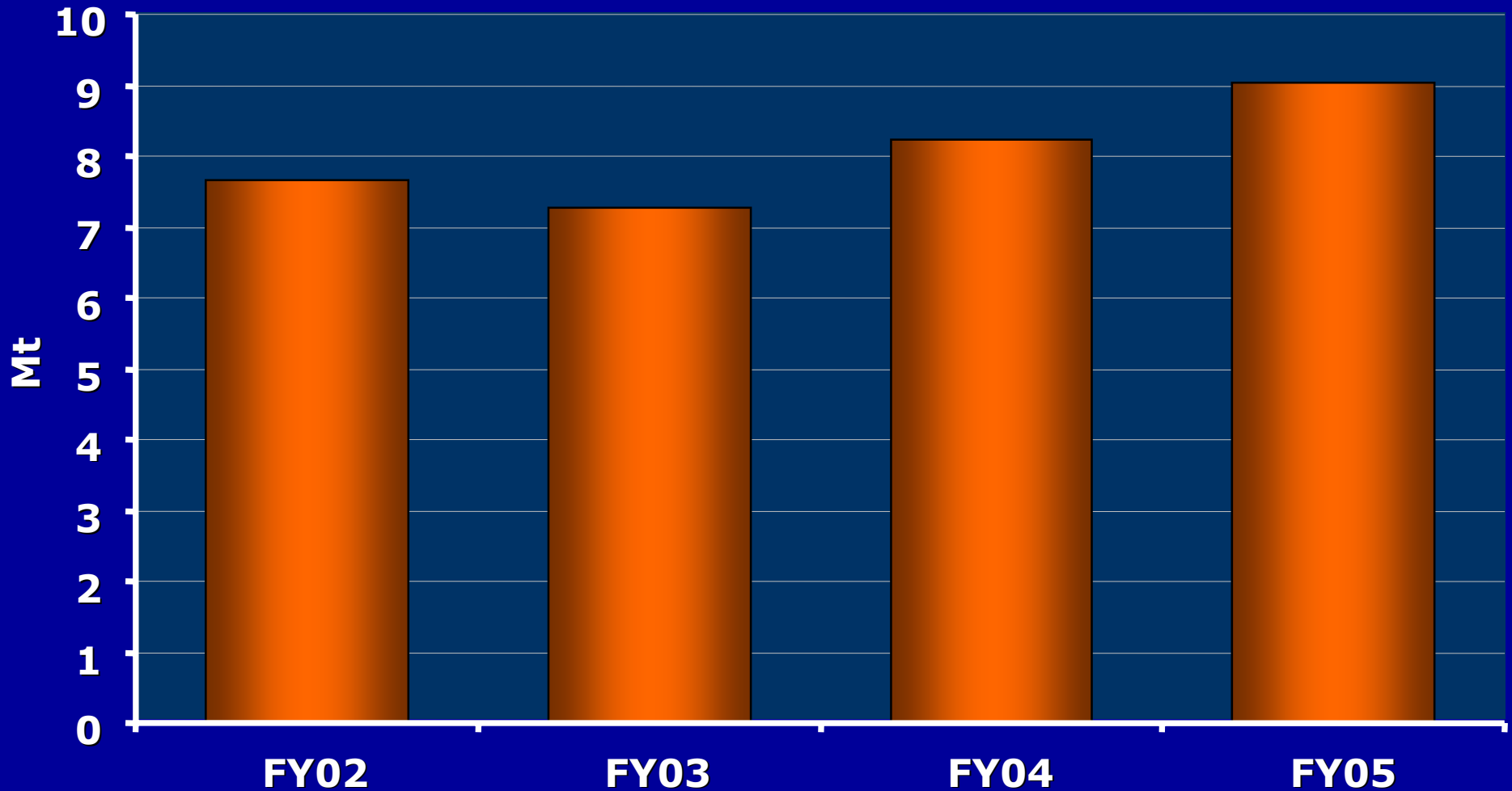


# Peak Downs Mine

## Annual Production



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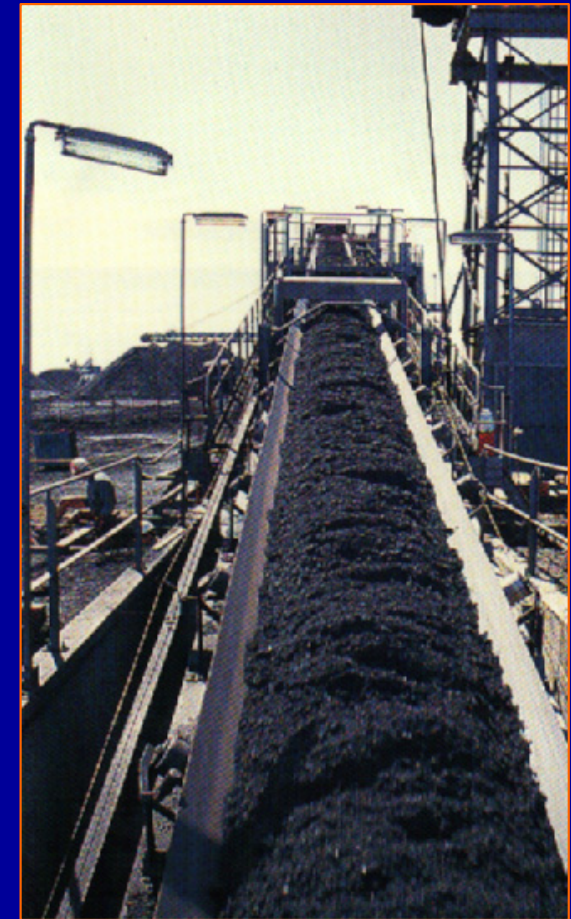


# Hay Point Coal Terminal

## Sam Bonanno - Port Manager



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# Summary of Current Operations



- 8 mines producing 52+ Mtpa
- 17 products, 22 blends
- 85 customers in 27 countries
- Hay Point – 24hr x 365 days
  - Inloading ~ 4,000 trains
  - Outloading ~ 900 parcels on 400 ships
- “Quality Terminal”

# ***Safety, Environment and Community***



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## ***SAFETY*** - *Drive for Zero Harm*

- Very High Safety Performance
- NOSA Safety Excellence Award in 2001, finalists in 2003 "MINEX" Safety Awards

## ***ENVIRONMENT***

- Extensive Dust and Noise Monitoring and Minimisation Programs
- World Class Water management program
- Six Monthly Community Environmental Audit of the terminal
- ISO14001 Accreditation (the first coal loading port in Australia)
- EPA Clean Beach "Beach Spirit Award" for 2 successive years

## ***COMMUNITY***

- Celebrated 30 years of operation on 5 November 2001
- Integral part of the local community, contributor to local projects

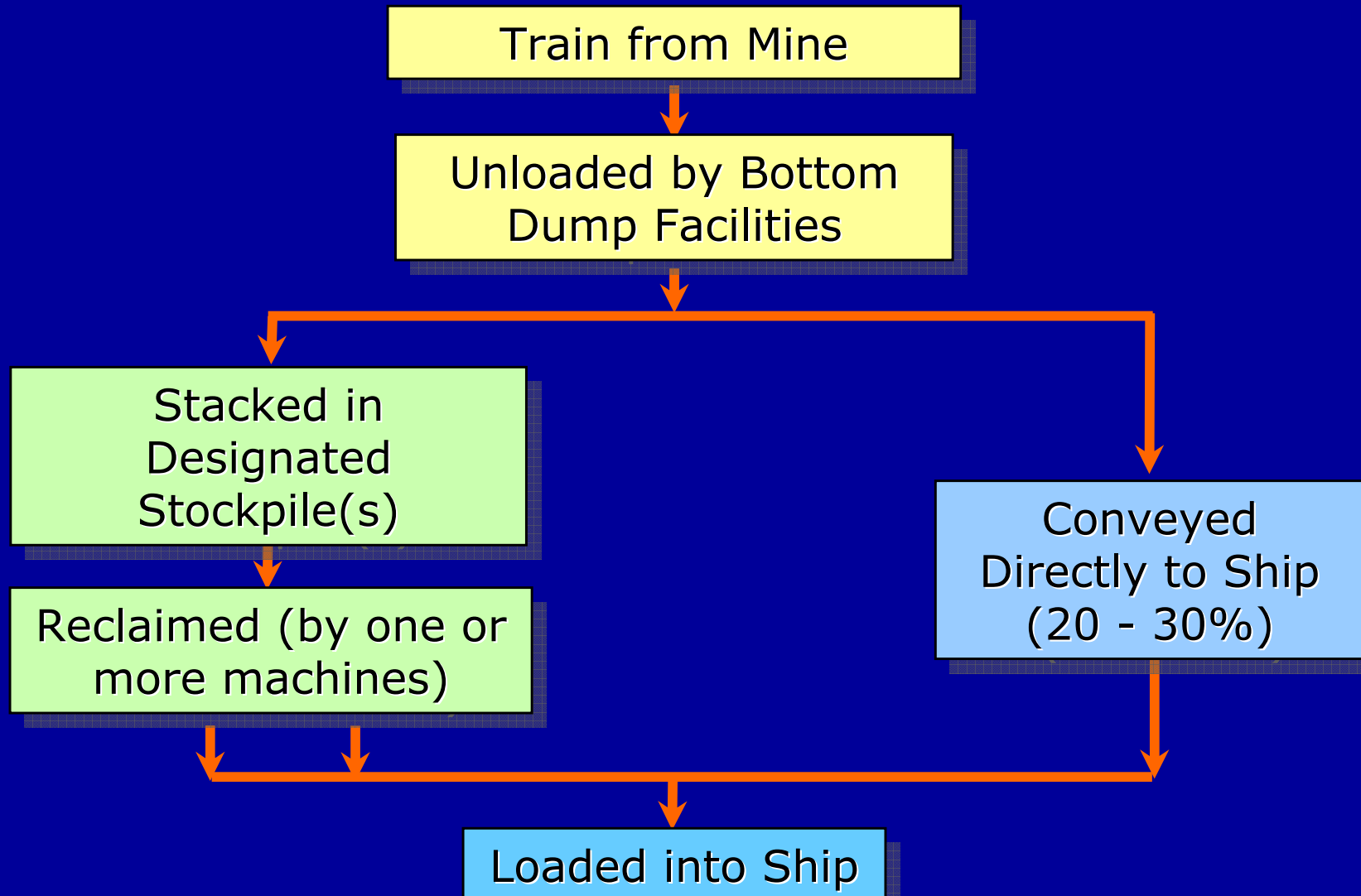
# Hay Point Site Schematic



# Process Diagram



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# Coal Receival



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# *Stacking and Reclaiming*



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# *Stockyard*



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# Coal Tracking System - Yard View



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Facility View [ Wednesday, 19 February 2003 7:28:29 AM ] - coalhpp-web - Microsoft Internet Explorer

Next model transaction: Up to date. History count: 177090

Refresh Facility View View Selected Area 3D View Quality View Help Toggle Grid Print Screen

SR0

SK1

SR1

SR2

900 800 700 600 500 400 300 200 100 0

100 200 300 400 500

View Console	Empty Selected Area	Equipment	Last Command Time	Last Action
View Quality Report	Manual Stack	SR1	04:34:58 19-Feb-03	RECLAIM
	Manual Move	SR2	07:27:13 19-Feb-03	RECLAIM
	Manual Reclaim	SR0	07:27:13 19-Feb-03	RECLAIM
	Undo Action	DOZ1	00:07:01 19-Feb-03	DOZER_MOVE
		SK1	23:28:01 18-Feb-03	STACK

Stockpile: BL62 1A Get Selected Area Tonnes

Min X: Max X:  
Min Y: Max Y:  
Tonnes: Rem. Capac.:

X-Axis: 500  
Y-Axis: 691  
Z-Axis: 330

Done Local intranet



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# ***Coal Tracking System***

## ***Business benefits***

- ▶ High level of traceability from train to stockpile to ship.
- ▶ Definitive action on non-conforming product
- ▶ Selective reclaim plans can be set to consistently allow the target specification to be met
- ▶ Virtual elimination of penalties

## ***Customer benefits***

- ▶ Product always meets Customer's specifications (reliability)
- ▶ Tighter quality control and reduced variability in coal quality

# Shiploading



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# Shiploading Capability

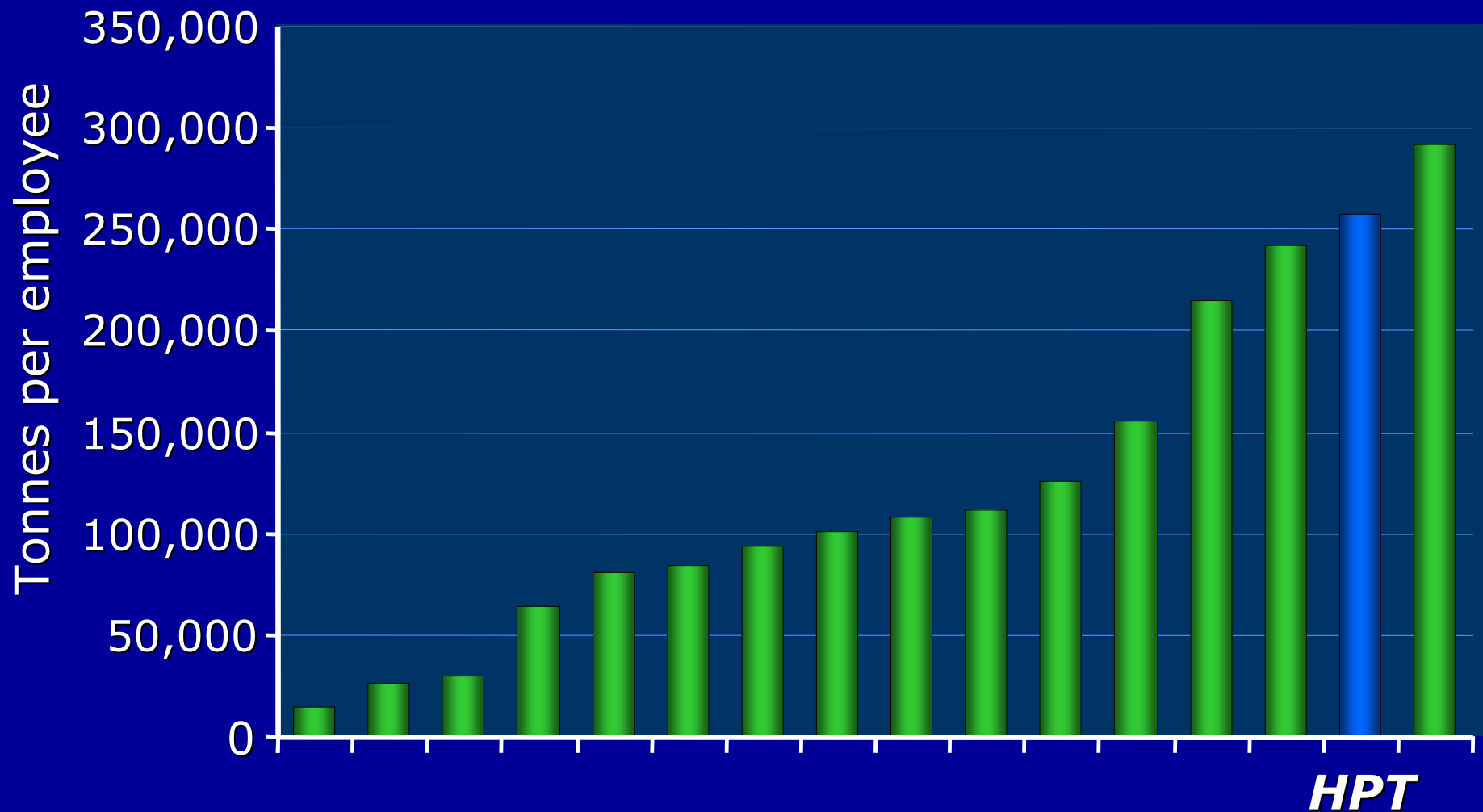
- Berth 1: up to 175,000 DWT – pocket depth 16.5 m
- Berth 2: +200,000 DWT – pocket depth 16.7 m
- Largest ship loaded: “Iron Pacific” (230,000 DWT)
- Largest cargo : 207,769 t on “Iron Pacific”
- Average Cargo Size : Approx 90,000 t
- Average Parcel Size : Approx 40,000 t



# Hay Point Productivity



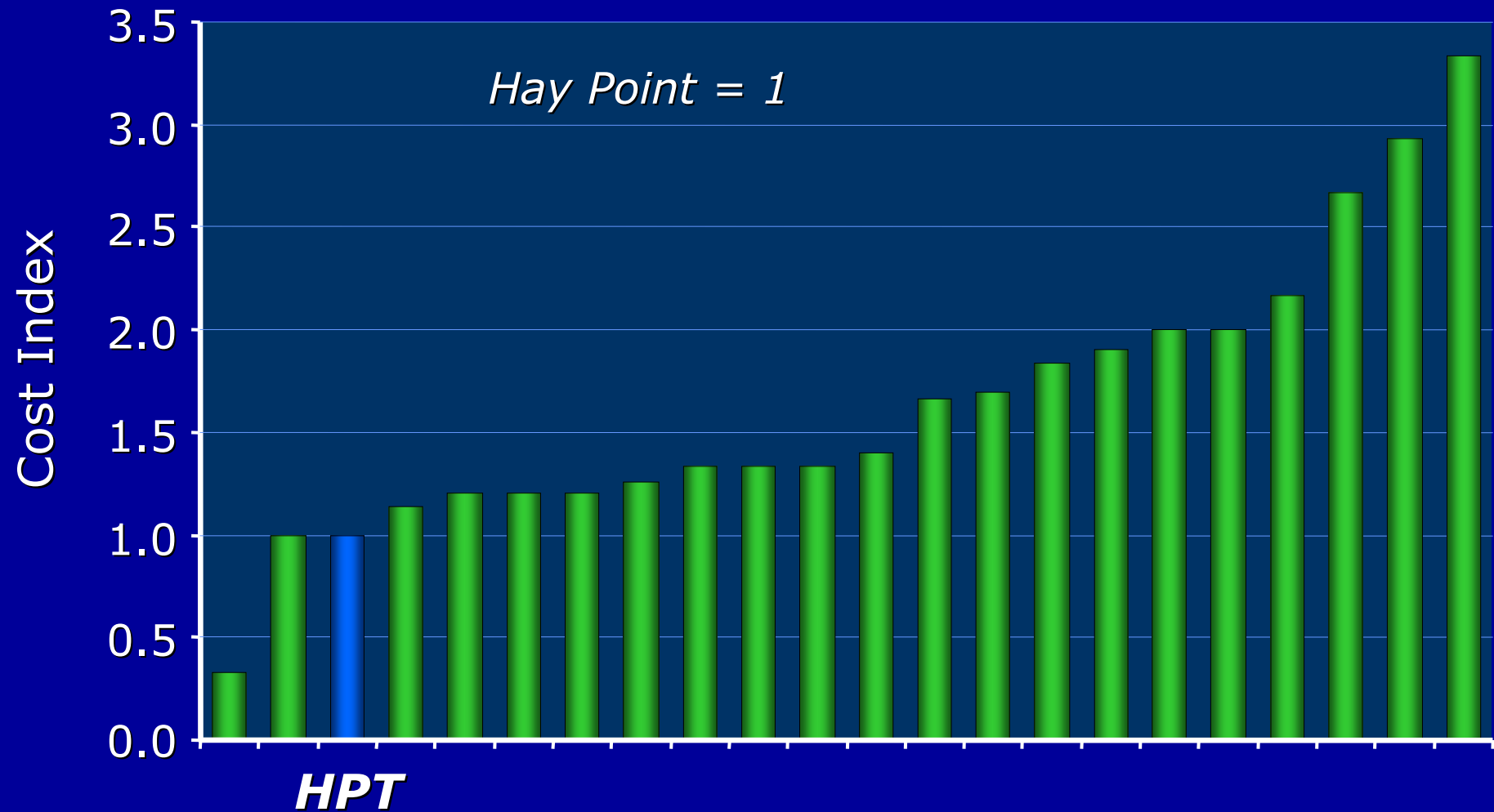
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# Hay Point Terminal Cost



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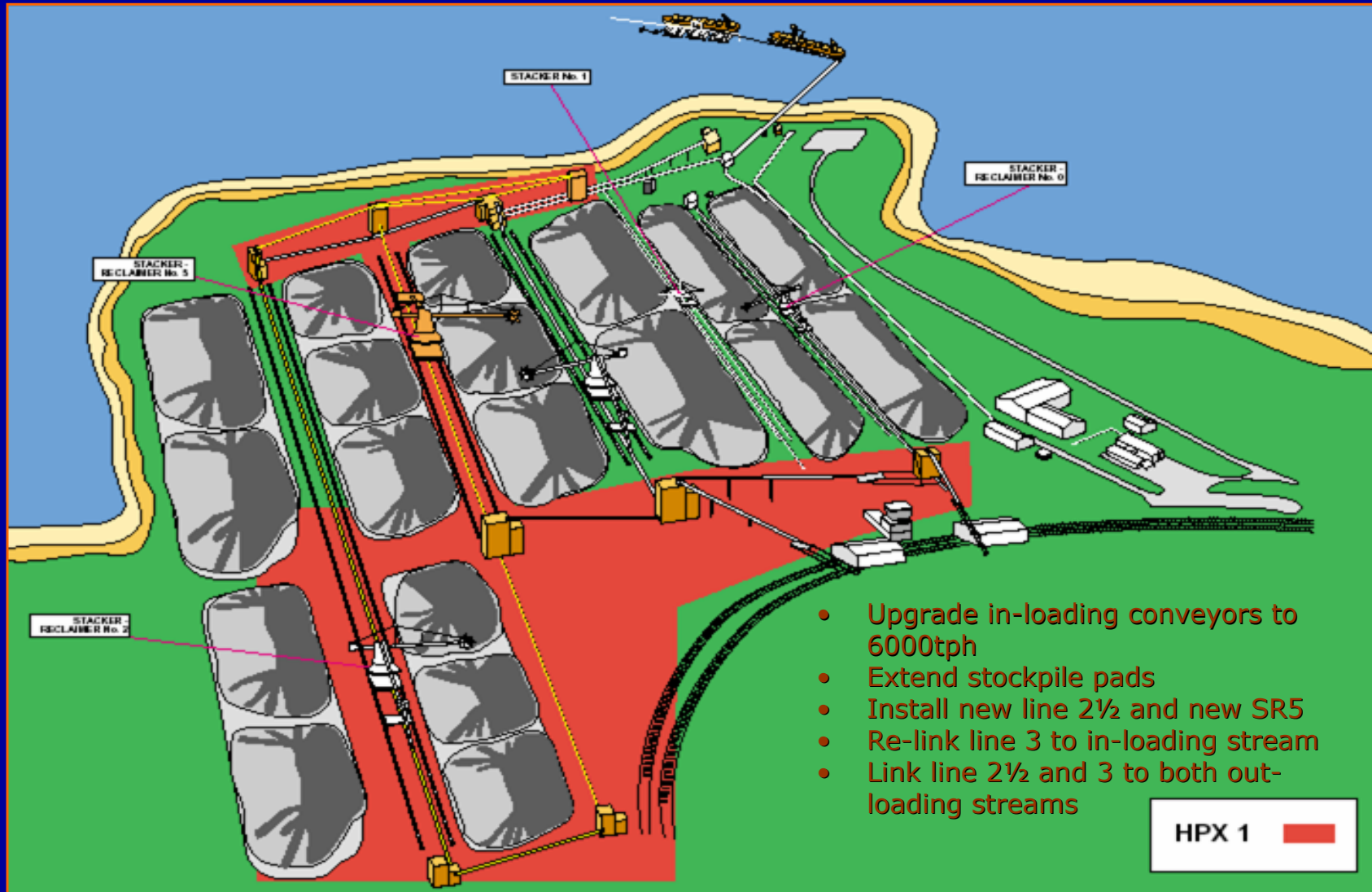


# Hay Point Expansion

## HPX1



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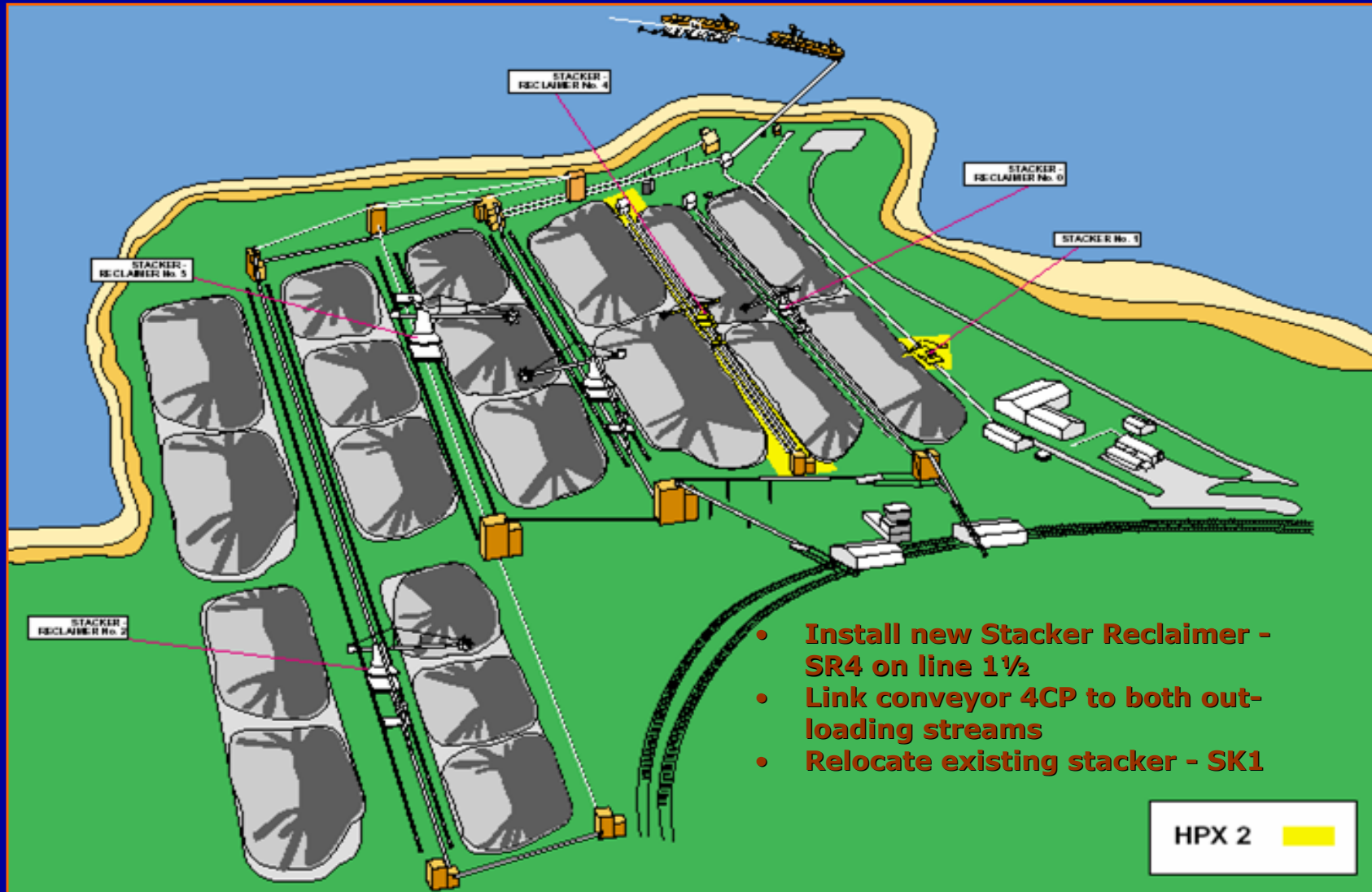


# Hay Point Expansion

## HPX2



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- Install new Stacker Reclaimer - SR4 on line 1½
- Link conveyor 4CP to both out-loading streams
- Relocate existing stacker - SK1

# Hay Point Expansion

## HPX3



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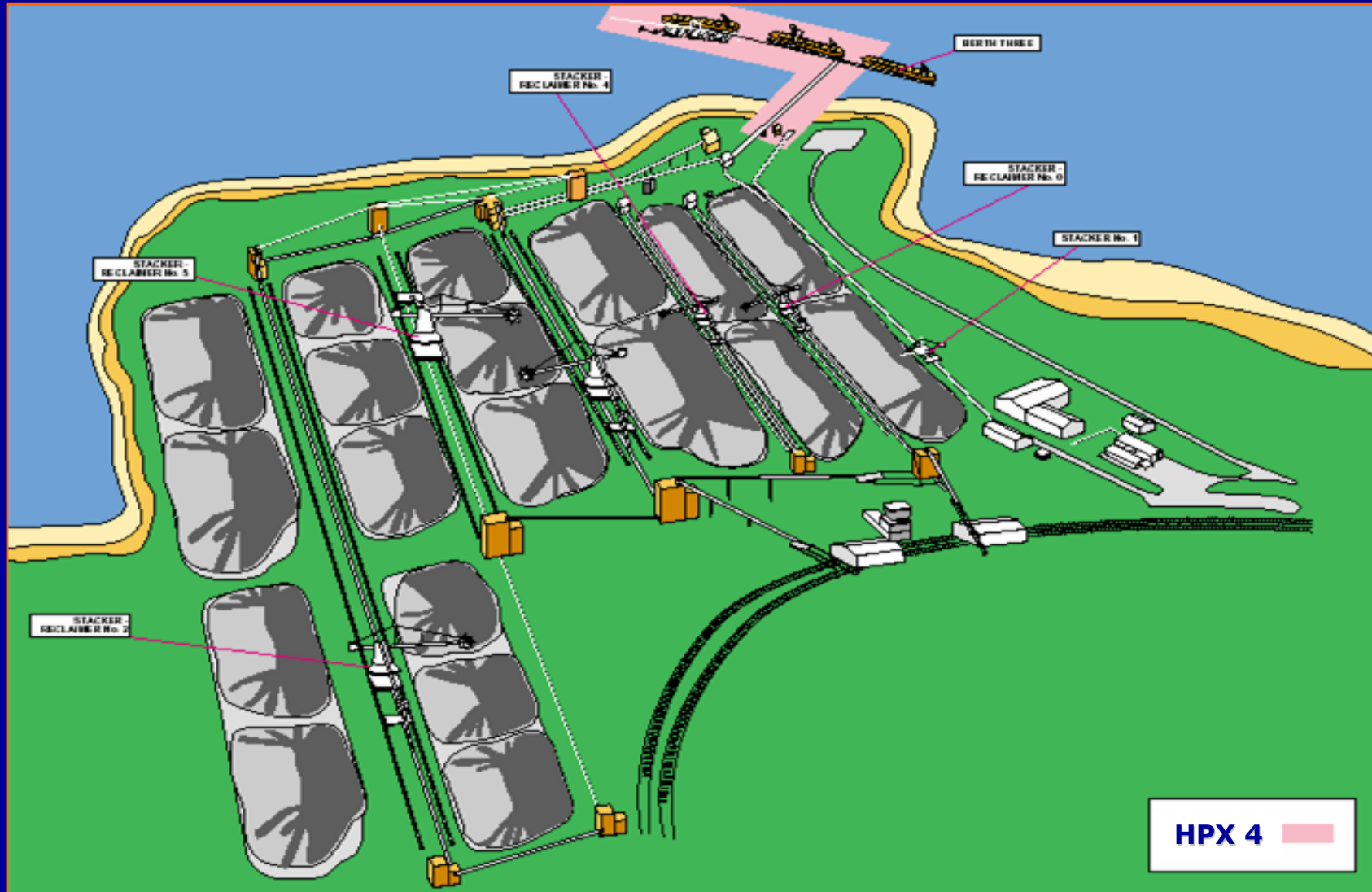


# Hay Point Expansion

## HPX4



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# *Hay Point Summary*



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- *A strategic asset owned and controlled by BMA*
- *Integral part of BMA logistics chain*
- *Low cost, high productivity, quality focussed and reliability - all World Class*
- *Capacity to expand and continue to grow when we need to*