



# Improving productivity and sustainably lowering costs

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President – Coal  
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# Disclaimer

## Forward-looking statements

This release contains forward-looking statements, including statements regarding: trends in commodity prices and currency exchange rates; demand for commodities; plans, strategies and objectives of management; closure or divestment of certain operations or facilities (including associated costs); anticipated production or construction commencement dates; capital costs and scheduling; operating costs and shortages of materials and skilled employees; anticipated productive lives of projects, mines and facilities; provisions and contingent liabilities; tax and regulatory developments.

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BHP Billiton results are reported under International Financial Reporting Standards (IFRS) including Underlying EBIT and Underlying EBITDA which are used to measure segment performance. This release may also include certain non-IFRS measures including Underlying attributable profit, Underlying basic earnings per share, Underlying EBITDA interest coverage, Adjusted effective tax rate, Underlying EBIT margin, Underlying EBITDA margin, Underlying return on capital, Free cash flow, Net debt and Net operating assets. These measures are used internally by management to assess the performance of our business, make decisions on the allocation of our resources and assess operational management. Non-IFRS measures have not been subject to audit or review and should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.

## No offer of securities

Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell BHP Billiton securities or securities in the new company to be created by the proposed demerger (NewCo) in any jurisdiction.

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# Statement of JORC resources

## Coal Resources

This presentation includes information on Coal Resources (inclusive of Coal Reserves). Coal Resources are compiled by J Field (MAusIMM). J Field is a full time employee of BHP Billiton, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". This is based on Coal Resource information in the BHP Billiton 2010 and 2014 Annual Report for all assets. All reports can be found at [www.bhpbilliton.com](http://www.bhpbilliton.com).

2010 information is reported under 'JORC 2004' and 2014 information is reported under 'JORC 2012'.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Coal Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

Coal Resource classifications (100% basis) for each province, where relevant, are contained in Table 1.

**Table 1**

Asset	Measured Resource (Mt)		Indicated Resource (Mt)		Inferred Resource (Mt)		BHP Billiton interest (%)	
	2010	2014	2010	2014	2010	2014	2010	2014
<b>Metallurgical coal</b>								
CQCA and Gregory JV	2,340	2,770	4,319	4,783	3,966	3,944	50	50
BHP Mitsui	199	273	721	1,797	1,250	368	80	80
Illawarra Coal	278	269	234	477	667	560	100	100
IndoMet Coal	83	83	32	185	658	1,003	75	75
<b>Energy coal</b>								
New Mexico <sup>1</sup>	145	90	42	43	0	1	100	100
South Africa	1,681	2,691	2,350	688	1,784	1,791	95 <sup>2</sup>	90
Australia	1,245	1,582	2,692	2,346	1,869	1,721	100	100
Colombia	1,737	2,885	330	988	127	695	33.3	33.3

1. New Mexico excludes Navajo mine which was sold on 30 December 2013, however BHP Billiton retains control until full consideration is received.

2. Weighted average equity interest.

# Key themes

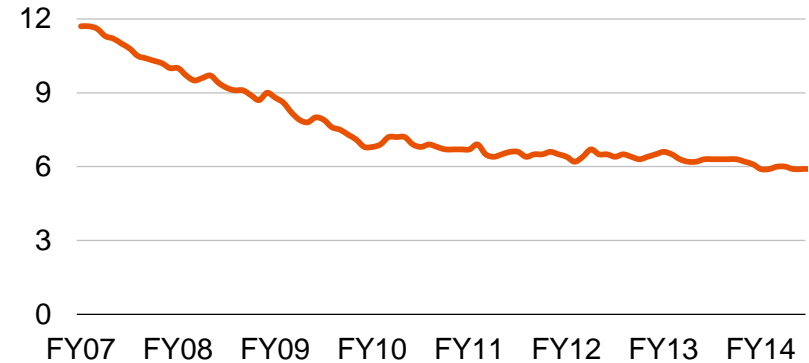
- Driving ongoing improvement in our health, safety, environment and community performance
- Our business is underpinned by a large, high-quality resource base
- We have re-established our competitive advantage by closing high-cost capacity and sustainably reducing costs
- We have a structured approach to productivity
- We will maximise the utilisation of installed capacity
- All our coal operations are cash positive despite the low price environment
- Simplification of the portfolio will provide additional opportunity

# We value safe and sustainable operations above all else

- We continue to improve TRIF<sup>1</sup> as an indicator of our safety leadership
- Our focus is on elimination of fatalities and serious injuries by rapidly improving our ability to manage material risks
- We are sustainably managing our environmental impacts and making a positive contribution to our local communities
  - US\$10 million of voluntary investments in our communities during FY14
  - local procurement programs such as the Local Buying Program in the Bowen Basin

## Improving our safety performance

(12 month rolling average TRIF per million hours worked)

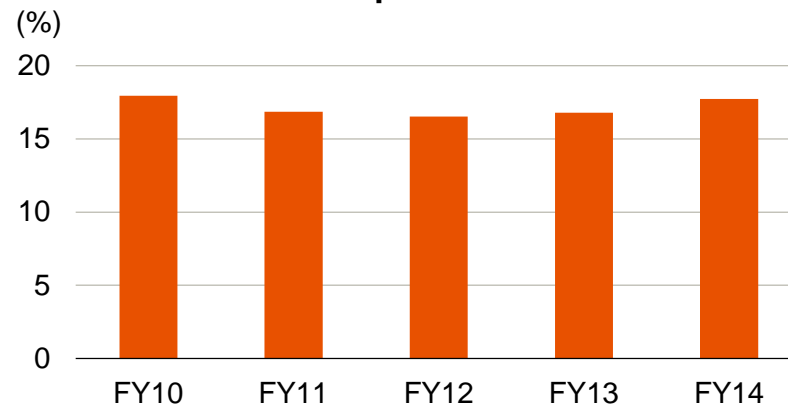


1. Total Recordable Injury Frequency (TRIF).

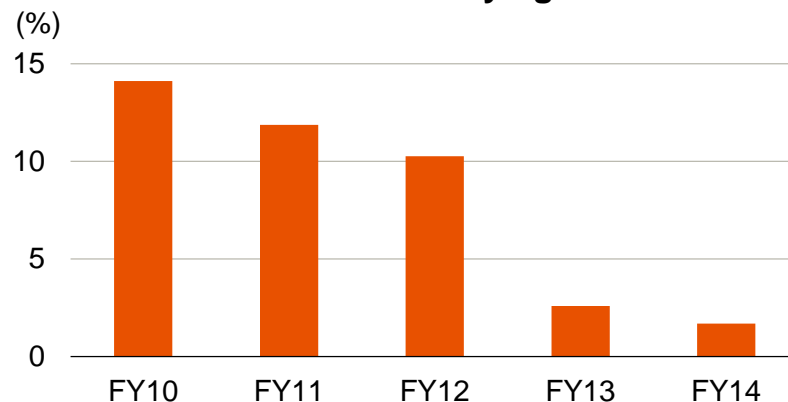
# Coal – a key pillar of BHP Billiton

- Strong performance over the last five years reflects the underlying quality of our coal assets
  - 17% of total BHP Billiton production<sup>1</sup>
  - over US\$10 billion of Underlying EBIT, representing 8% of the Group total
  - over US\$14 billion of cash generated from operations, representing 9% of the Group total
- Our strategy and early focus on costs has delivered significant productivity gains against the backdrop of a challenging external environment
  - US\$2.4 billion in cost and volume efficiencies<sup>2</sup> embedded

Share of BHP Billiton production<sup>1</sup>



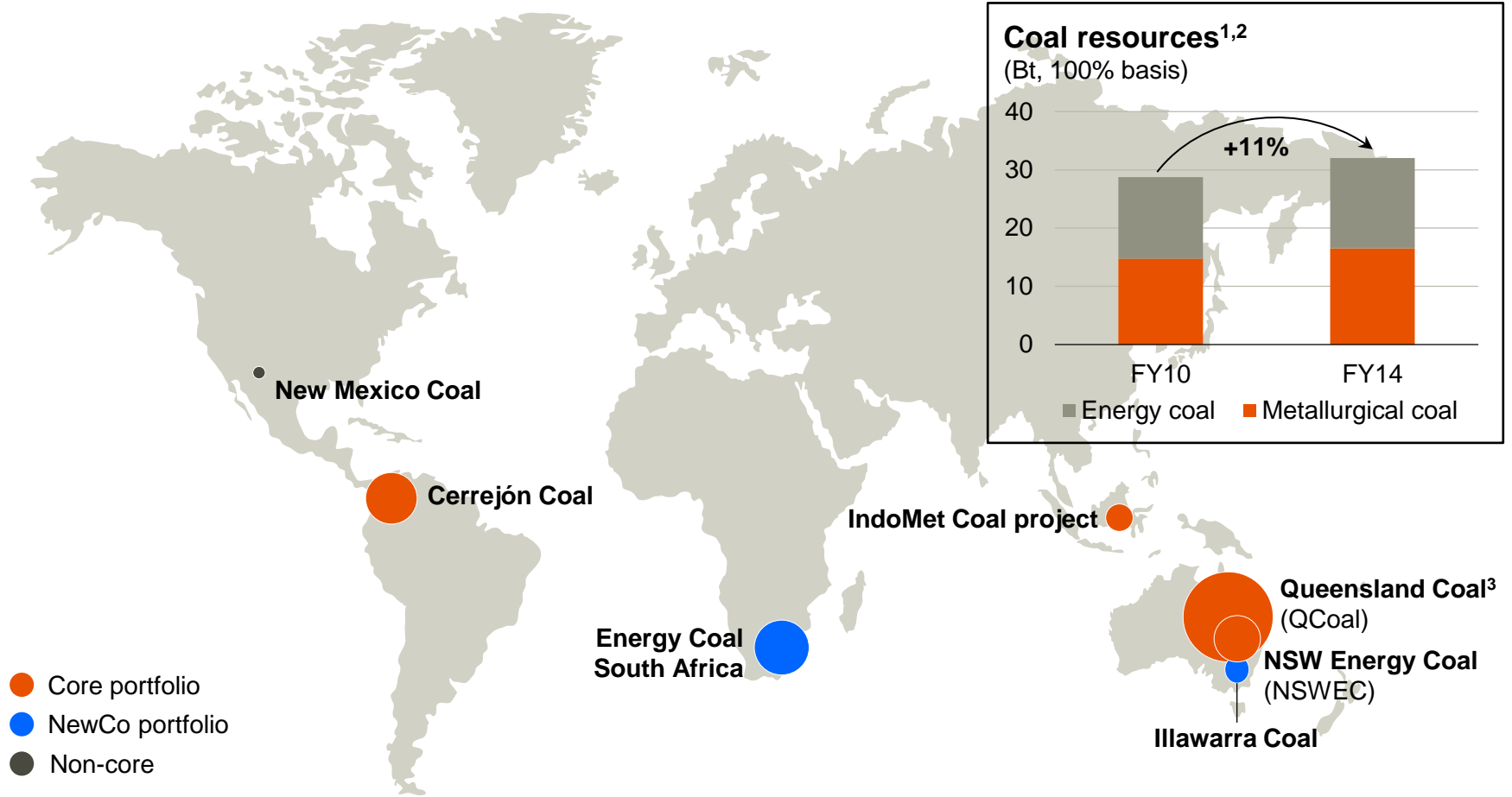
Share of BHP Billiton Underlying EBIT



1. Based on copper equivalent production calculated using FY10 average prices.

2. Represents annualised volume and/or cash cost productivity efficiencies embedded within the FY14 result relative to the FY12 baseline.

# Our business is underpinned by a high-quality resource base



Note: Bubble size in the legend represents a resource of one billion tonnes as at 30 June 2014.

1. Resource and Reserve confidence classification and grades are tabulated in Table 1 on slide 3.

2. Excludes Navajo mine which was sold on 30 December 2013, however BHP Billiton retains control until full consideration is received.

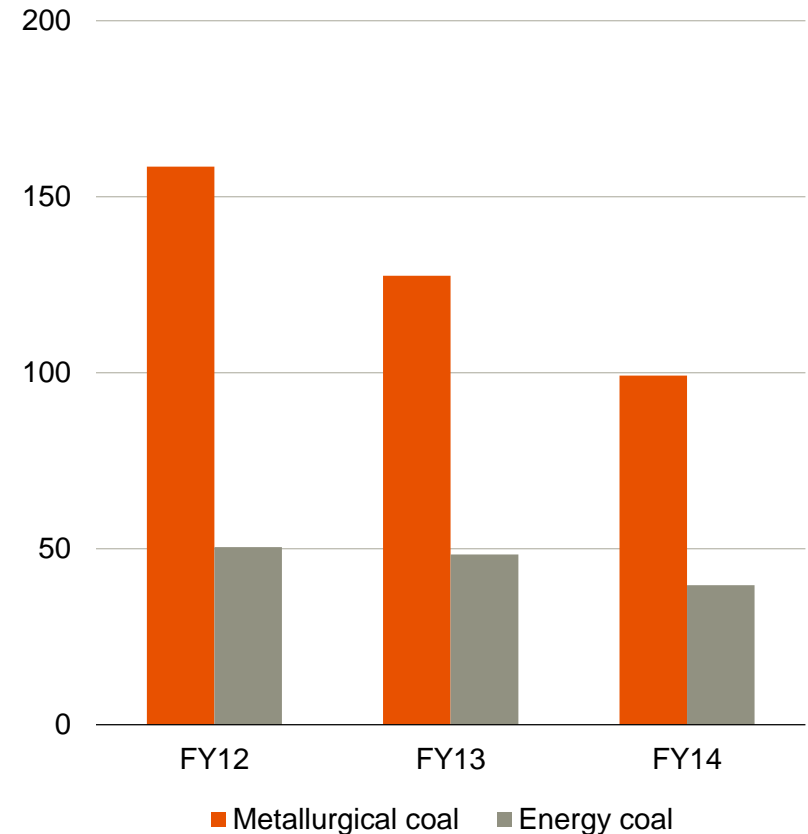
3. Queensland Coal comprises the BHP Billiton Mitsubishi Alliance (BMA) asset, jointly operated with Mitsubishi, and the BHP Billiton Mitsui Coal (BMC) asset operated by BHP Billiton.



# We have re-established our competitive advantage by sustainably reducing costs

- Our Coal business has embedded US\$2.4 billion of cost and volume efficiencies<sup>1</sup>, representing over one third of total savings achieved by the Group
- We have fundamentally reset the cost base
  - acted early to close high-cost, loss-making capacity at Norwich Park and Gregory open-cut mines in CY12
  - metallurgical coal unit cash costs down 37% in two years
  - energy coal unit cash costs down 21% in two years
  - we have initiatives underway to reduce costs beyond these levels

## Significant reduction in unit cash costs (US\$/t)



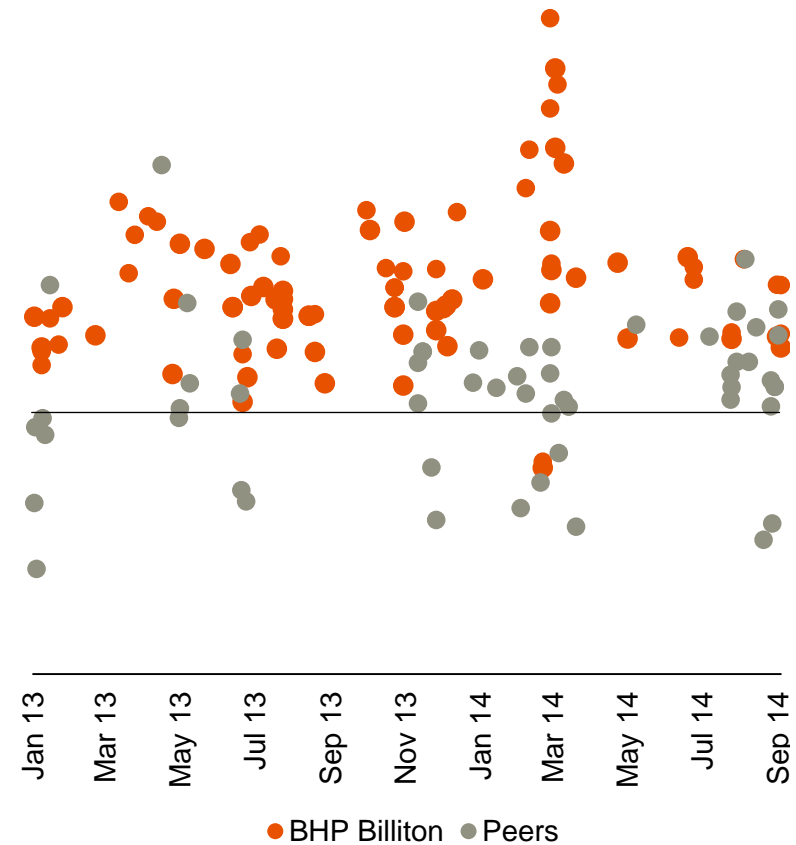
1. Represents annualised volume and/or cash cost productivity efficiencies embedded within the FY14 result relative to the FY12 baseline.



# Leveraging our marketing expertise to maximise margins

- Our marketing team is a major contributor to Coal's productivity agenda
  - transparent pricing to enable full value recognition for our high-quality resources
  - promoting the technical properties of our coals to ensure full recognition of their value in use
  - optimising the end-to-end supply chain leading to lower rail and port costs, higher throughput and reduced demurrage

**Spot PLV price realisation vs Platts PLV index<sup>1</sup>**  
(index, Platts PLV=100)



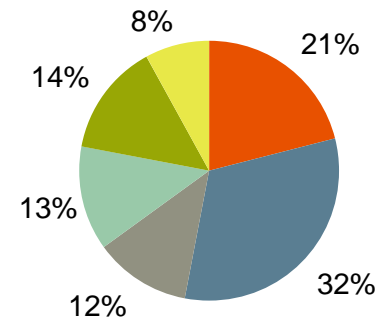
Source: BHP Billiton analysis; Platts Market Heards.

1. PLV refers to premium low volatile product. BHP Billiton PLV comprises Peak Downs and Saraji product.

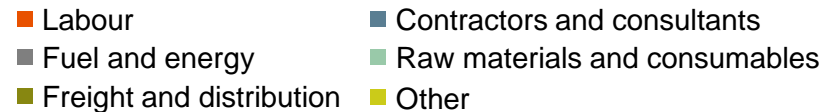
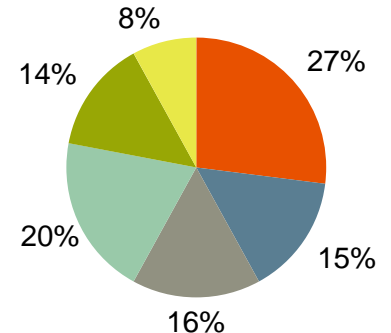
# Our people are becoming more productive

- People productivity is a key value driver
  - labour and contractors represent approximately half our operating costs
  - we reduced our total labour spend by 23% in FY14
  - the ability to benchmark performance is creating healthy competition
  - achieved a 29% increase in material moved per employee<sup>1</sup> in FY14
- A diverse workforce is key to improving future productivity
  - provision of residential and fly-in-fly-out employment opportunities
  - female representation of ~25% at our new Caval Ridge and Daunia mines

**Breakdown of FY14 costs<sup>2</sup>**  
(QCoal)

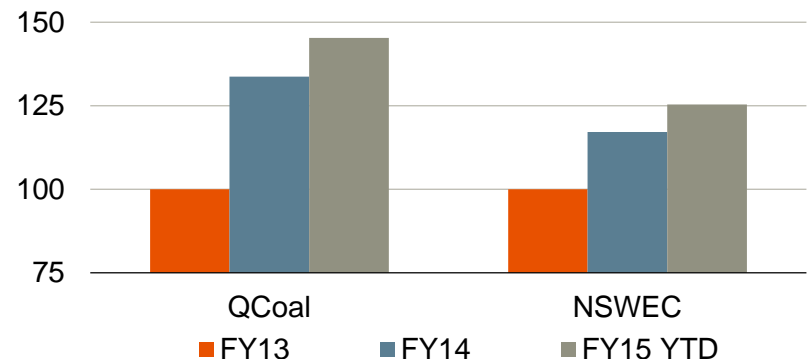


(NSWEC)



## Significant uplift in people productivity

(tonnes moved per FTE<sup>3</sup>, index, FY13=100)

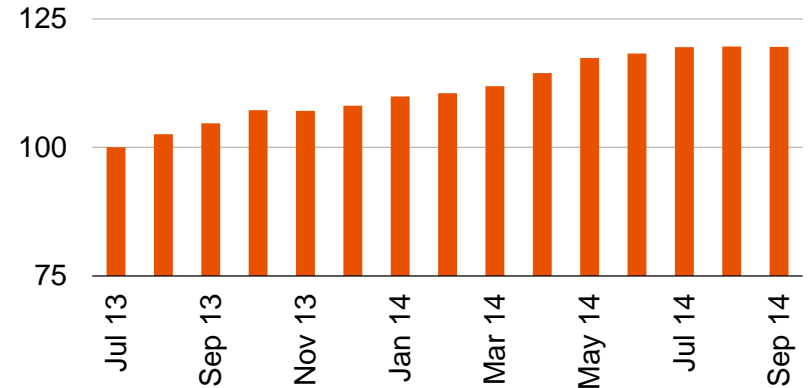


1. Represents QCoal and NSWEC.  
2. Excludes royalties.  
3. FTE refers to full-time equivalent.

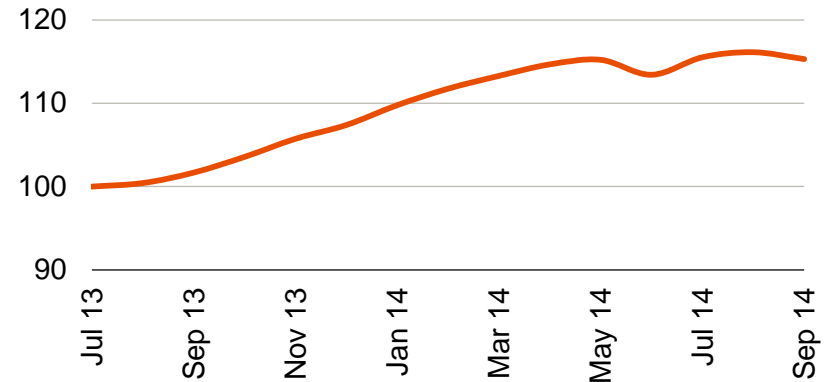
# We will continue to improve our equipment utilisation

- Our initiatives continue to deliver more volume from existing equipment at lower unit costs
- Improved truck performance has reduced material movement costs which is a substantial proportion of the cost base
  - targeting benchmark performance of 6,000 hours<sup>1</sup> per year
- Wash-plant utilisation has increased by 13% in FY14 at Queensland Coal
  - targeting benchmark performance of 8,000 hours per year

**Improving QCoal ultra class haul truck performance**  
(hours, 12 month moving average, index, July 2013=100)



**Increasing QCoal wash-plant production time**  
(hours, 12 month moving average, index, July 2013=100)



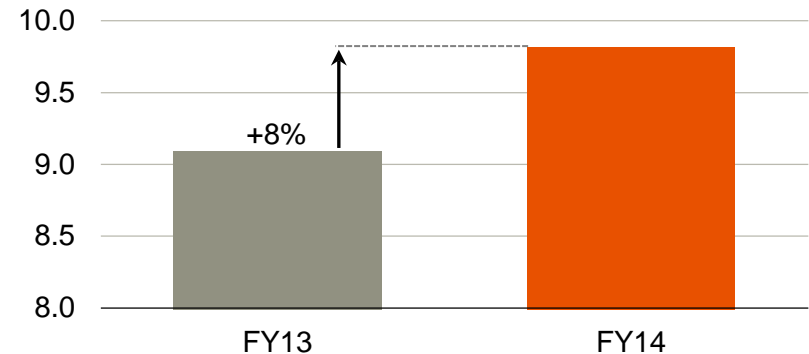
1. Excludes queue time.

# Peak Downs: delivering benchmark productivity

- Peak Downs increased production by 8% from existing infrastructure and reduced operating costs by 18% in FY14
  - nearing wash-plant benchmark performance of 8,000 hours per year
- We have a clear understanding of our installed capacity, the performance benchmarks and the bottlenecks
- We have adopted a multi-faceted approach to improvement
  - leadership and workforce participation – “lean” based approach with extensive use of visual performance metrics
  - increased level of planned maintenance and discipline using our common systems
  - modified plant maintenance regime
  - eliminated plant feed delays

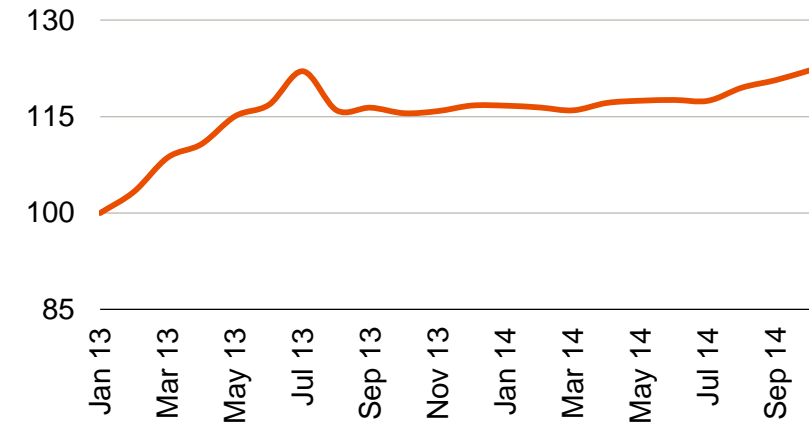
## Maximising Peak Downs production

(Mtpa, 100% basis)



## Improving wash-plant production time

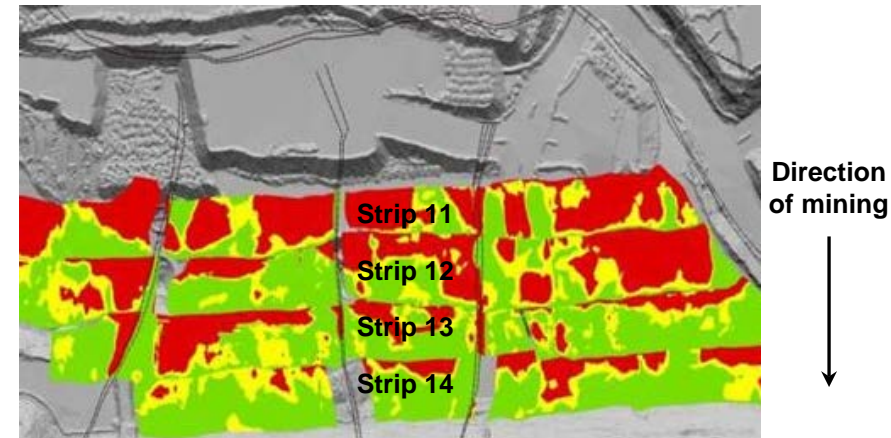
(hours, 12 month moving average, index, Jan 2013=100)



# Poitrel: optimising mine plans to lower costs

- A significant improvement in coal recovery at Poitrel was underpinned by an 11% reduction in overburden during FY14
  - improved blast hole charge placements, depth, backfill and standoff from coal roof
  - well defined plans and matched operating practices have supported excavation to optimised levels
  - delivered cost savings of A\$3/t during the period

## Progression through the mine plan (September 2013 to August 2014)



### Difference between Mined Top of Coal vs Modelled Top of Coal

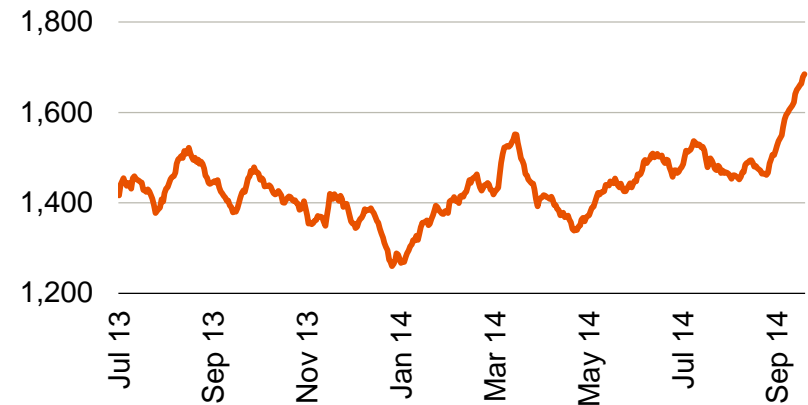
-2.00 m	■	-0.60 m
-0.60 m	■	-0.20 m
-0.20 m	■	-0.00 m

# NSWEC: improved equipment utilisation and mine planning delivering tangible benefits

- Equipment productivity will deliver further cost savings
  - increasing digging rates and hours will enable a reduction from 12 to 10 loading units
  - uplift in truck hours and payload will enable a 25% reduction in haul trucks
- Improved mine planning is delivering tangible benefits
  - reducing strip ratio by standardising high-wall angles, improving coal recovery and redesigning plans around major faults
  - reducing cycle time by improving haul routing and eliminating congestion
- Optimisation of maintenance will underpin additional savings

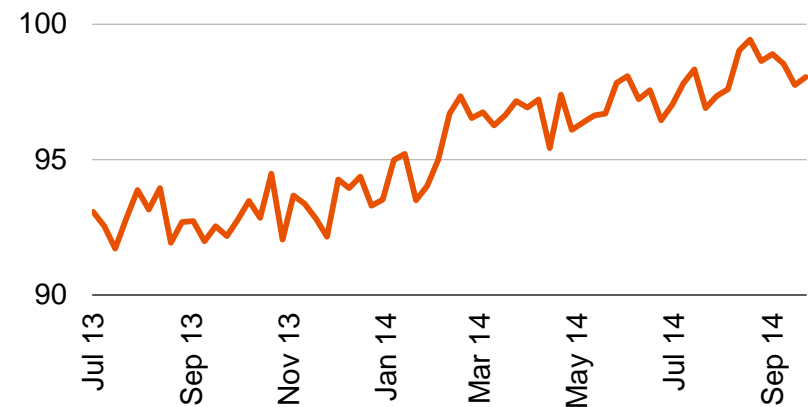
## Excavator dig rates are increasing

(bcm/hour, rolling 14 day average)



## CAT 793 payload performance is improving

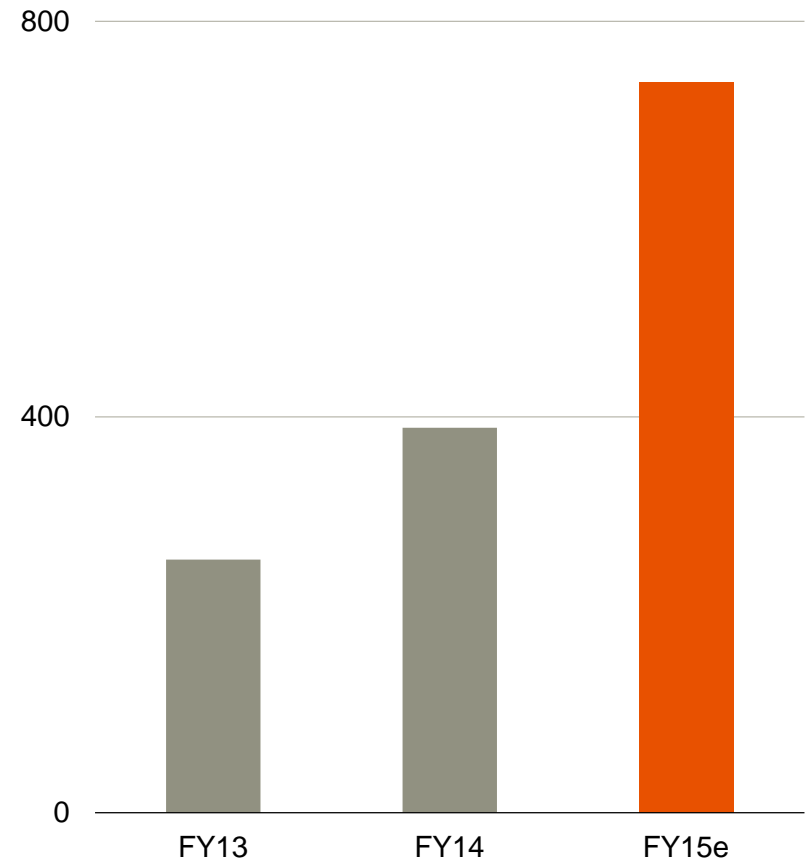
(% of capacity)



# Systematically targeting our external spend

- Our supply expenditure has reduced by ~US\$400 million relative to FY12 with additional savings to come
- We continue to focus on lowering external supply expenditure
  - reduction in contractor stripping costs as we maximise efficiency of our equipment
  - lowering of contract rates for all goods and services
  - adoption of rapid tendering of key inputs via supply innovations

**Annualised supply savings relative to FY12**  
(US\$ million)



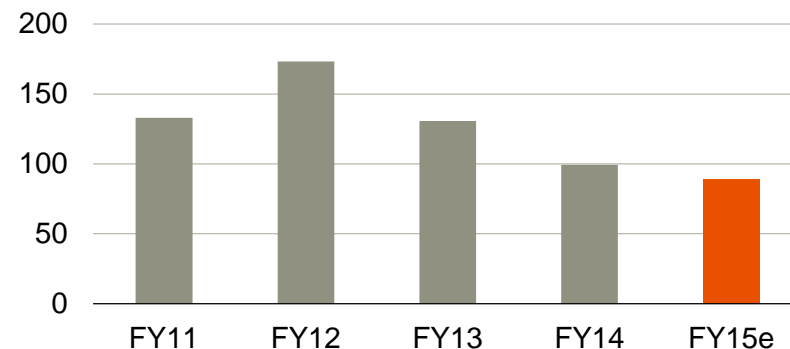


# Our plans will deliver significant cost reductions

- We expect further cost reductions across our operations
  - targeting a 10% reduction in unit costs in FY15<sup>1</sup> at Queensland Coal to below US\$90/t
  - targeting a 15% reduction in unit costs at NSWEC by FY16<sup>1</sup> to below US\$45/t

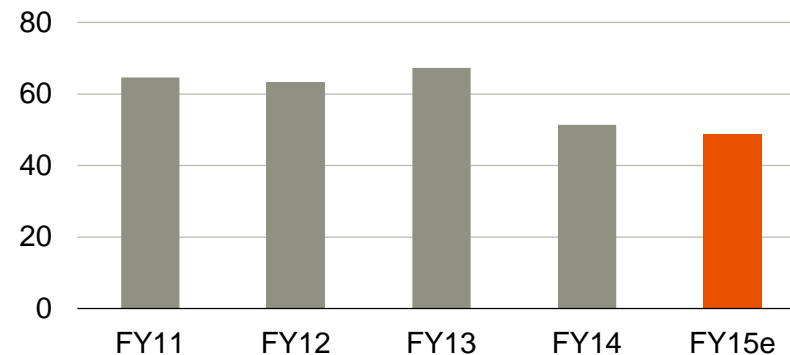
## Targeting further reductions in QCoal unit costs<sup>1</sup>

(US\$/t)



## Targeting further reductions in NSWEC unit costs<sup>1</sup>

(US\$/t)

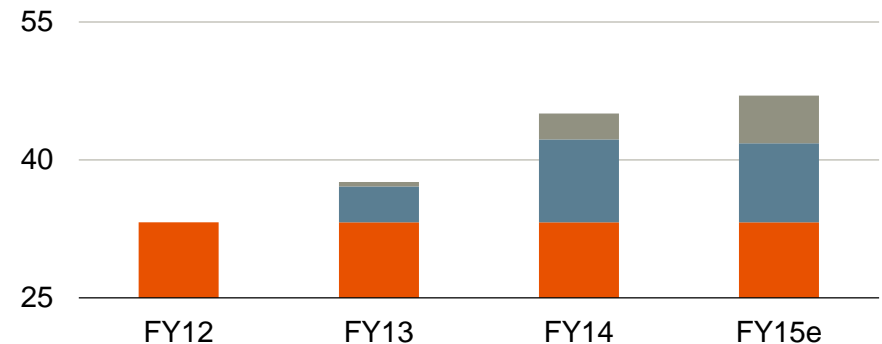


1. Unit cash costs. FY15e and FY16e is based on an exchange rate of AUD/USD 0.91.

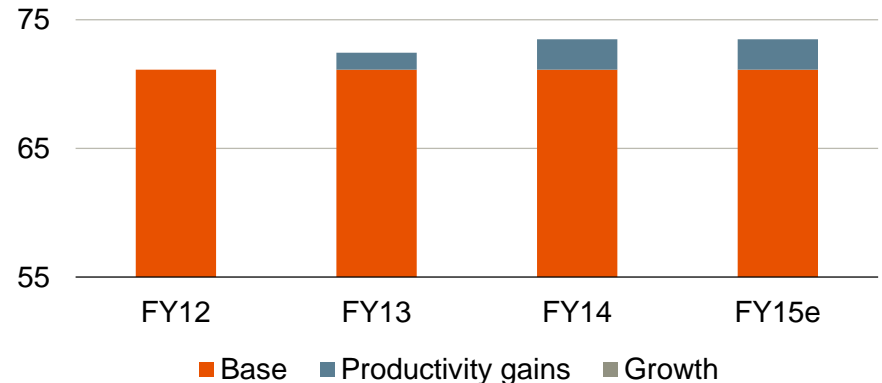
# Maximising the utilisation of installed capacity

- Record metallurgical coal volumes of 47 Mt anticipated in FY15
  - Caval Ridge operating at full capacity
  - continued improvement in equipment utilisation across all operations
  - production is expected to commence from our 1 Mtpa trial mine in Indonesia during H2 FY15
- Energy coal volumes are expected to remain steady at 73 Mt in FY15

**Targeting 4% growth in metallurgical coal production<sup>1</sup>**  
(Mtpa)



**Energy coal production is expected to remain steady**  
(Mtpa)

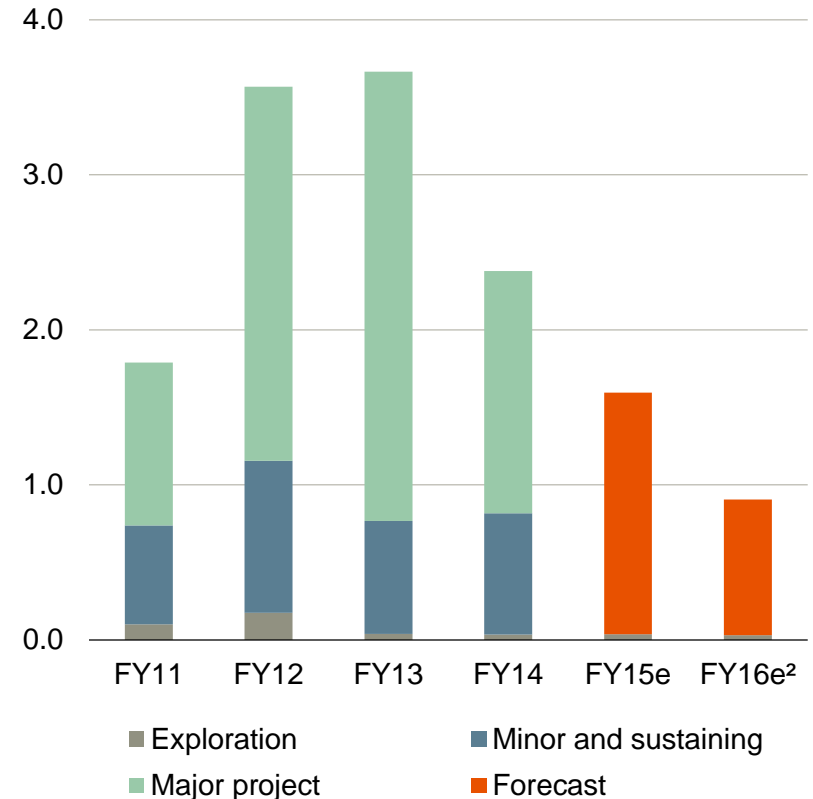


1. Production ceased at the 5.5 Mt (100% basis) Norwich Park mine on 11 May 2012 and the 1.25 Mt (100% basis) Gregory open-cut mine on 10 October 2012.

# Our major growth projects are nearing completion

- Two major capital projects delivered first production in FY14
  - 5.5 Mtpa Caval Ridge hard coking coal project delivered three months ahead of schedule and under budget, operating at capacity in the September 2014 quarter
  - Cerrejón P40 project delivered first coal on schedule
- Hay Point Stage Three Expansion will increase port capacity from 44 Mtpa to 55 Mtpa
  - expected completion in CY15

**Coal capital and exploration expenditure<sup>1</sup>**  
(US\$ billion)



1. Shown on an equity accounted basis.

2. FY16 excludes Illawarra Coal and Energy Coal South Africa, selected as part of proposed new company.

# Simplification of the portfolio will provide additional opportunity

- The proposed demerger will further simplify the Coal Business and accelerate productivity gains
  - enhanced focus on fewer large, long-life assets with a reduction in core operations<sup>1</sup> from 19 to 12
  - simplified organisational structure and processes with centralisation of functional activities
  - commonality of fleet and concentration of operations in Australia
  - allows management to focus on the high-margin export market
- We continue to review options for the San Juan mine



1. Excludes Norwich Park, Gregory, Navajo and San Juan mines, and the IndoMet Coal Project.

# Key themes

- Driving ongoing improvement in our health, safety, environment and community performance
- Our business is underpinned by a large, high-quality resource base
- We have re-established our competitive advantage by closing high-cost capacity and sustainably reducing costs
- We have a structured approach to productivity
- We will maximise the utilisation of installed capacity
- All our coal operations are cash positive despite the low price environment
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resourcing the future