

Newman



# Safely growing production while lowering costs

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27 October 2014



# 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.

Forward-looking statements can be identified by the use of terminology such as 'intend', 'aim', 'project', 'anticipate', 'estimate', 'plan', 'believe', 'expect', 'may', 'should', 'will', 'continue', 'annualised' or similar words. These statements discuss future expectations concerning the results of operations or financial condition, or provide other forward-looking statements.

These forward-looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this release. Readers are cautioned not to put undue reliance on forward-looking statements.

For example, our future revenues from our operations, projects or mines described in this release will be based, in part, upon the market price of the minerals, metals or petroleum produced, which may vary significantly from current levels. These variations, if materially adverse, may affect the timing or the feasibility of the development of a particular project, the expansion of certain facilities or mines, or the continuation of existing operations.

Other factors that may affect the actual construction or production commencement dates, costs or production output and anticipated lives of operations, mines or facilities include our ability to profitably produce and transport the minerals, petroleum and/or metals extracted to applicable markets; the impact of foreign currency exchange rates on the market prices of the minerals, petroleum or metals we produce; activities of government authorities in some of the countries where we are exploring or developing these projects, facilities or mines, including increases in taxes, changes in environmental and other regulations and political uncertainty; labour unrest; and other factors identified in the risk factors discussed in BHP Billiton's filings with the U.S. Securities and Exchange Commission (the "SEC") (including in Annual Reports on Form 20-F) which are available on the SEC's website at [www.sec.gov](http://www.sec.gov).

Except as required by applicable regulations or by law, the Group does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events.

## Non-IFRS financial information

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.

## Reliance on third-party information

The views expressed in this release contain information that has been 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. This release should not be relied upon as a recommendation or forecast by BHP Billiton.

# Disclaimer (continued)

## Ore Reserves, Mineral Resources and Exploration Targets

The information in this presentation that relates to the FY2014 Western Australia Iron Ore (WAIO) Ore Reserves, Mineral Resources (inclusive of Ore Reserves) and Exploration Targets was first reported by the Company in compliance with the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012' ('The JORC Code 2012 Edition') in market releases dated as follows:

BHP Billiton Operational Review for the Year Ended 30 June 2014 – 23 July 2014 (WAIO Mineral Resources); BHP Billiton Unlocking Shareholder Value Presentation – 19 August 2014 (WAIO Exploration Targets); and 2014 BHP Billiton Annual Report – 25 September 2014 (WAIO Ore Reserves). All reports (including those referenced below) are available to view on <http://www.bhpbilliton.com>.

WAIO FY2007 Mineral Resources and Ore Reserves are compiled by P. Whitehouse (MAusIMM) and T. Cockerill (MAusIMM) respectively, from the 2007 BHP Billiton Annual Report, dated 20 September 2007. WAIO FY2007 Exploration Targets are compiled by J. Knight (MAIG) from the BHP Billiton Western Australia Iron Ore Site Tour Presentation, dated 27 September 2011. This information was reported under the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2004' ('The JORC Code 2004 Edition').

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 Mineral Resources and Ore Reserves, 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.

WAIO FY2014 Exploration Targets, Mineral Resources and Ore Reserves are compiled by: J. Knight (MAIG), P. Whitehouse (MAusIMM) and T. Cockerill (MAusIMM) respectively. The above-mentioned persons are full-time employees of BHP Billiton, unless otherwise stated, and have the required qualifications and experience to qualify as Competent Persons for Exploration Targets, Mineral Resources and Ore Reserves under the relevant editions of the JORC Code. The compilers verify that this presentation is based on and fairly reflects the Exploration Targets, Mineral Resources and Ore Reserves information in the supporting documentation and agree with the form and context of the information presented.

The Exploration Targets, Mineral Resources and Ore Reserves breakdown by classification for WAIO FY2014 against FY2007 (100% basis) are contained in Table 1. All tonnes and grade information has been rounded, hence small differences may be present in the totals. Tonnages are reported on a wet basis in billions of tonnes (Bt). The range of Exploration Targets is estimated from geological information including drill holes, outcrops and geophysical information. The potential quantity is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resources. It should not be expected that the quality of the Exploration Targets is equivalent to that of the Mineral Resources. Deterministic target ranges are generated by multidisciplinary teams using a formal company procedure. Exploration Targets will be tested with future exploration activities in alignment with Business strategy.

## Ore Reserves, Mineral Resources and Exploration Targets

Table 1

Deposit	Financial Year	Proved Reserves (Bt)	Probable Reserves (Bt)	Total Ore Reserves (Bt)	Measured Resources (Bt)	Indicated Resources (Bt)	Inferred Resources (Bt)	Total Mineral Resources (Bt)	Range of Exploration Targets (Bt)			BHP Billiton interest (%)
									Low	Mid	High	
WAIO	2007	1.3 @ 60.5% Fe	1.1 @ 60.8% Fe	2.4 @ 60.6% Fe	1.7 @ 60.6% Fe	2.1 @ 60.3% Fe	4.2 @ 59.9% Fe	8.0 @ 60.1% Fe	12	24	36	87 <sup>1</sup>
WAIO	2014	1.7 @ 60.5% Fe	2.0 @ 61.0% Fe	3.7 @ 60.7% Fe	2.6 @ 60.0% Fe	5.6 @ 59.8% Fe	15 @ 59.0% Fe	23 @ 59.3% Fe	18 @ 56-60% Fe	31 @ 56-60% Fe	58 @ 56-60% Fe	88 <sup>1</sup>

1. WAIO BHP Billiton interest is reported as Pilbara Ore Reserve tonnes weighted average across all Joint Ventures. BHP Billiton ownership varies between 85% and 100%.

# Key themes

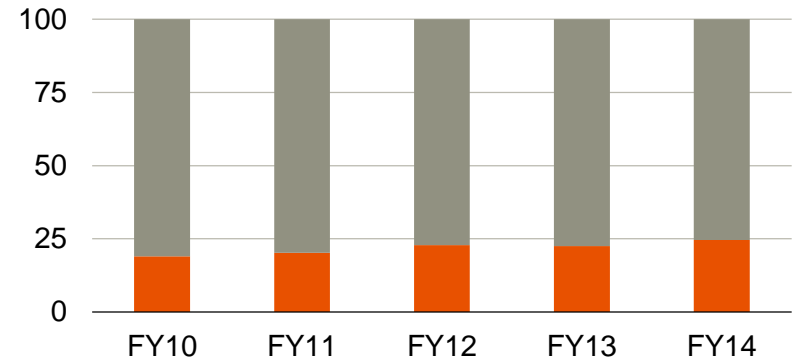
- We value safe and sustainable operations above all else
- We have the strongest resource position in the Pilbara
- A relentless focus on availability, utilisation and rate is enhancing performance across our integrated supply chain
- We are targeting FOB unit costs of less than US\$20 per tonne at WAIO over the medium term and will require less sustaining capital investment than others in the industry
- We plan to grow WAIO production by 65 Mtpa at a capital intensity of approximately US\$30 per annual tonne

# Iron Ore – a key pillar of BHP Billiton

- Our Iron Ore business, comprising Western Australia Iron Ore (WAIO) and Samarco, has delivered exceptional returns over the last five years
  - 22% of total BHP Billiton production<sup>1</sup>
  - average Underlying EBIT margin<sup>2</sup> of 59%
  - US\$57 billion of Underlying EBIT representing 46% of the Group total
  - invested US\$22 billion representing 28% of the Group total
  - generated an average return on net operating assets<sup>3</sup> of 66%

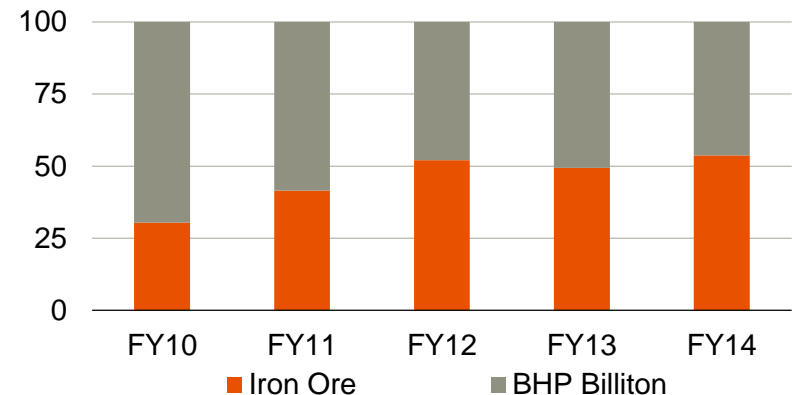
## A major contributor to production

(% of BHP Billiton production<sup>1</sup>)



## A major contributor to earnings

(% of BHP Billiton Underlying EBIT)



Note: Financial information for FY13 onwards has been included on the basis of IFRS 10, IFRS 11 and IFRIC 20.

1. Based on copper equivalent production calculated using FY09 average realised prices.

2. Excludes third party trading activities.

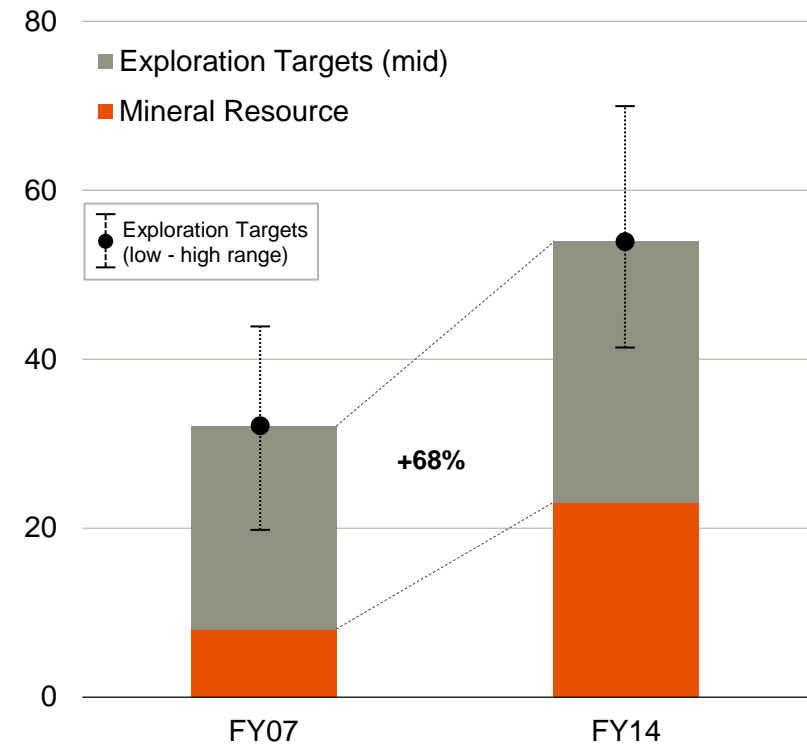
3. Represents Underlying EBIT divided by net operating assets.

# We have the strongest resource position in the Pilbara

- Our Pilbara Mineral Resource has tripled<sup>1</sup> in size during the last seven years
  - Resources of 23 Bt inclusive of Reserves of 3.7 Bt<sup>2</sup>
- Our current focus is to increase resource definition around existing hubs
- Our resource endowment will support our business for more than 100 years<sup>4</sup>

## WAIO mineral inventory<sup>2,3,4</sup>

(billion wet tonnes, 100% basis)



1. Relates to our Total Resource FY07 versus FY14.

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

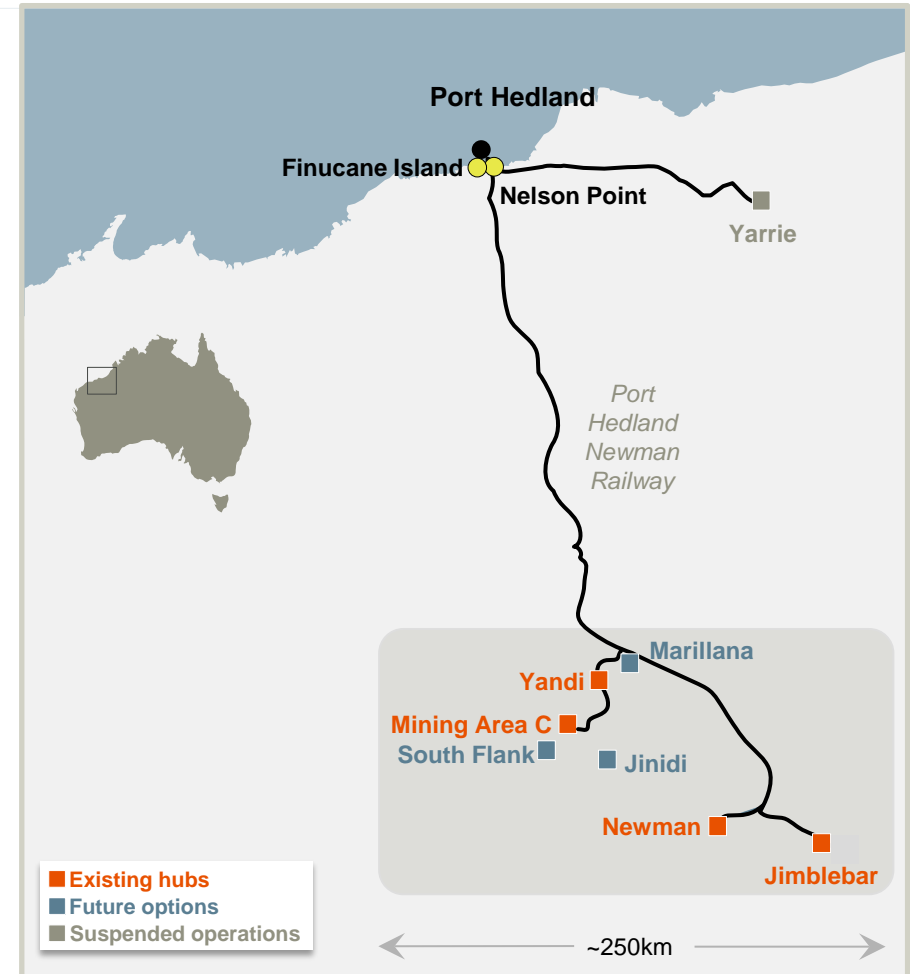
3. The range of Exploration Targets is estimated from geological information including drill holes, outcrops and geophysical information, and is shown as a range (black bars). The potential quantity is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer to Disclaimer on slide 3.

4. Mineral inventory is equal to the sum of FY14 Mineral Resources and ranged Exploration Targets. Inventory life is estimated from the mineral inventory (classified Mineral Resources converted to a run-of-mine basis using historical Mineral Resources to Ore Reserves conversion and Exploration Targets (Mid) converted using conceptual conversion) divided by the FY14 production rate on a 100% basis.



# The characteristics of our ore bodies support high-margin operations

- Our ore bodies underpin low cost operations
  - a low strip ratio of 1.3x
  - current operations are primarily above the water table and only 2% of production is beneficiated
- We have a suite of high-quality products
  - product specification will be maintained at the 62% Fe benchmark
  - lump is expected to remain ~25%<sup>1</sup> of the product mix
- The geographic concentration of our major mining hubs is a key differentiator
  - a new mining hub is not required for at least 30 years
  - no replacement mines are expected to be required for at least eight years



1. Total WAIO lump as a percentage of production includes Yandi fines.

# At WAI0 we operate a fully integrated supply chain from mine to rail to port

## Integrated Remote Operations Centre



Flow



Synchronisation

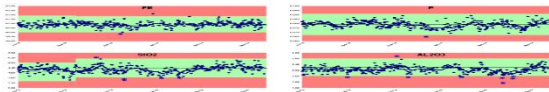


Balance

### Focus at Mines

**Enable SL<sup>1</sup> utilisation** – Target the factors that mines control

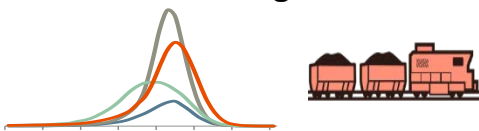
#### Product on specification



#### Load times



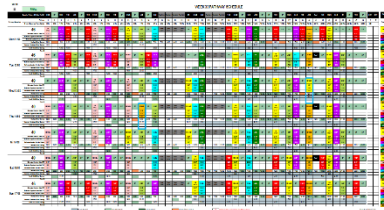
#### Ore car weights



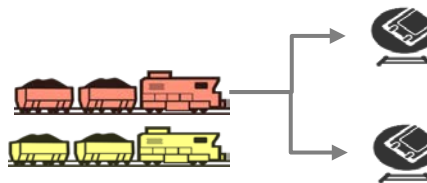
### Focus at Rail

**Enable SL<sup>1</sup> utilisation** – Target the reliable feeding of port

#### Reliable travel times and train departures per day



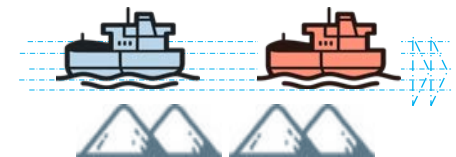
#### Reliable feed of car dumpers



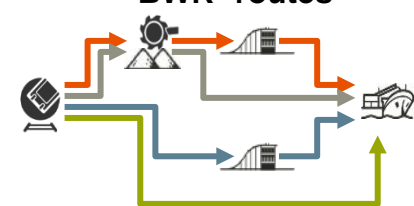
### Focus at Port

**Lifting SL<sup>1</sup> utilisation** – Maximise berth loading hours, underpinned by reliability

#### Vessel sequencing and yard focus



#### Direct to ship complementing BWR<sup>1</sup> routes



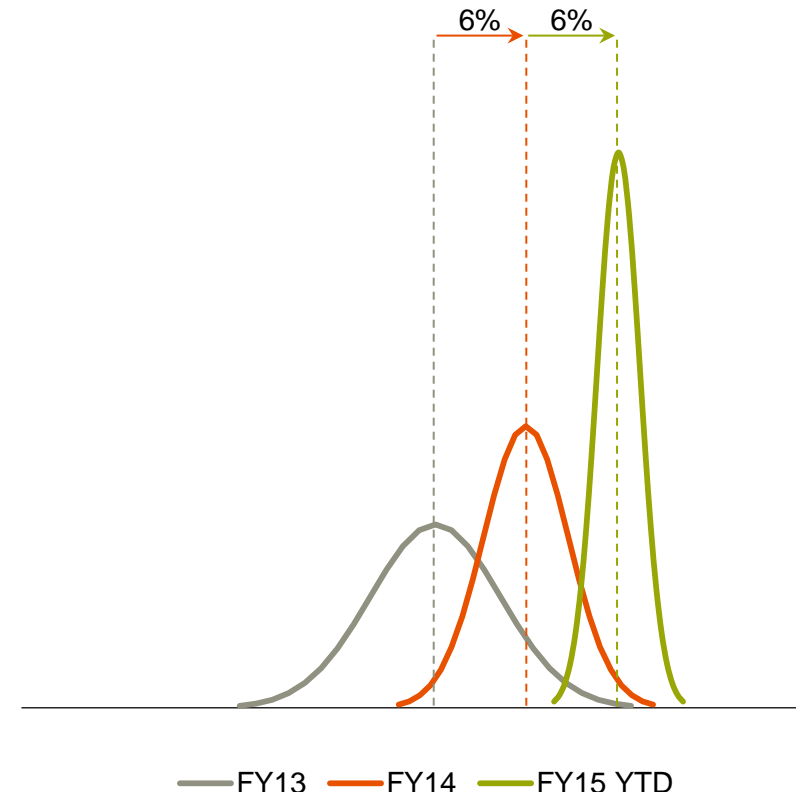
1. Refers to shiploader (SL) and bucket wheel reclaimer (BWR).



# Focus on availability, utilisation and rate has raised mines performance

- **Availability** of mine reclaimers and train load-outs has increased, improving supply chain performance
  - centralised shutdown management has resulted in a significant reduction in shutdown frequency
- **Utilisation** of OHPs<sup>1</sup> has increased by 9% from FY13 to FY15 YTD
  - focus on reducing feed delays by choke feeding primary crushers
  - installation of a grizzly at Mining Area C reduced crusher feed delays
- **Rate** of processing at OHPs<sup>1</sup> has increased by 12%<sup>2</sup> from FY13 to FY15 YTD
  - increased conveyor speeds through selected routes
  - improved control systems logic

**WAIO OHP processing rate<sup>1</sup>**  
(hourly production rate<sup>3</sup>, tonnes)



1. Excludes Jimblebar OHP.

2. Compound annualised improvement FY13 to FY15 YTD.

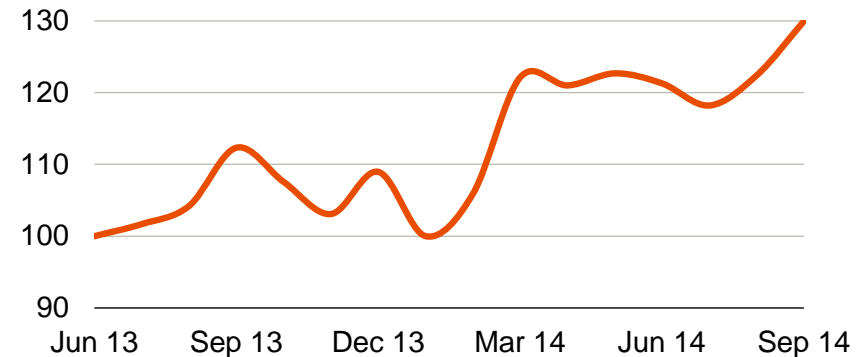
3. Data approximated to fit normal distribution.

# Focus on availability, utilisation and rate has raised rail performance

- **Availability** of rail has increased
  - completion of track ballast remediation project has improved track availability and extended track life longevity
  - centralised coordination of track maintenance has doubled productivity and increased the operating window
- **Utilisation** has improved by revising our scheduling methodology
  - 28% improvement in the number of train departures per day coupled with a 23% reduction in travel time
- **Rate** of railing has increased
  - revision of braking procedures to increase average train speed
  - reduction of track speed restrictions without compromising safety

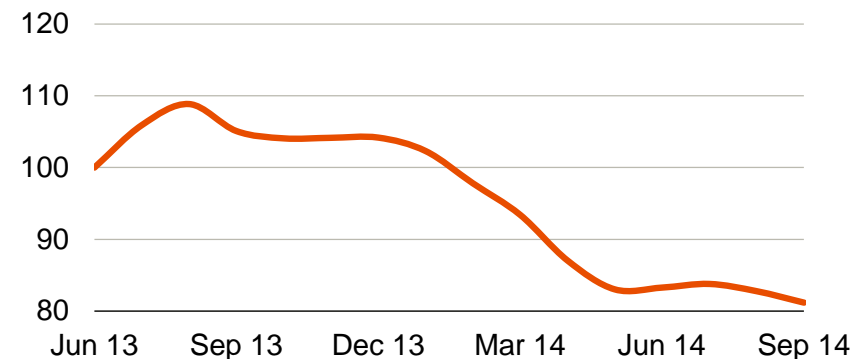
## Train departures per day are increasing

(index, June 2013 = 100)



## Train travel time is decreasing

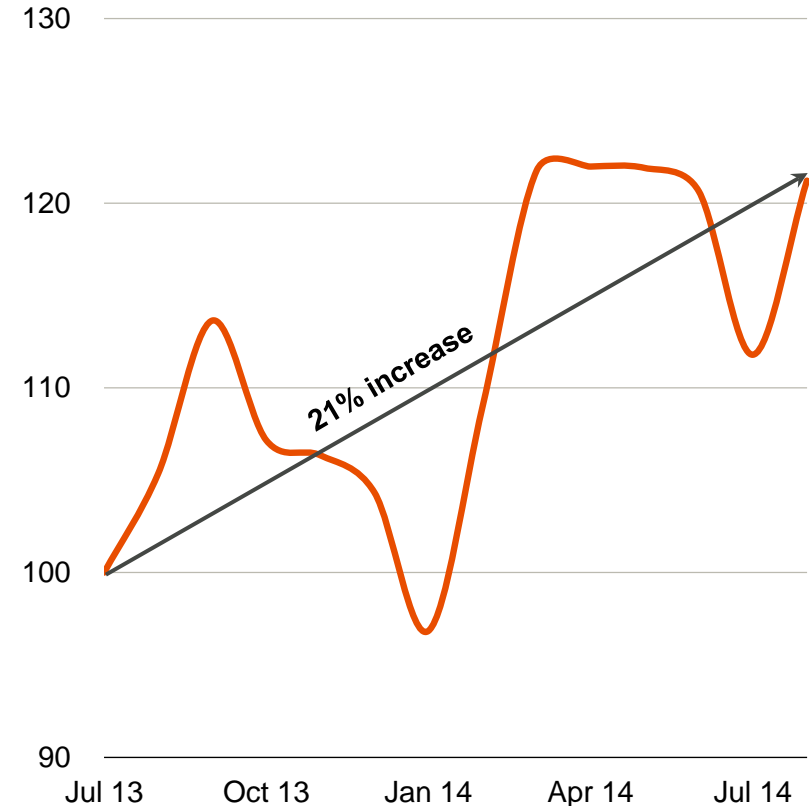
(index, June 2013 = 100)



# Focus on availability, utilisation and rate has raised port capability

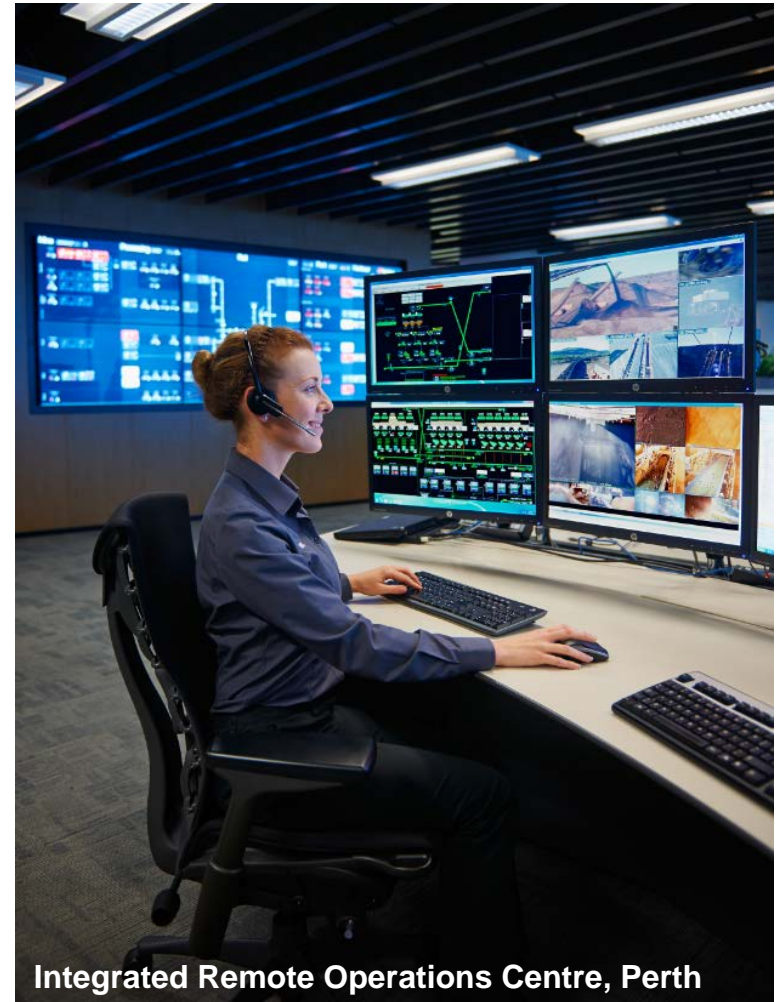
- **Availability** of car dumpers and shiploaders has increased following changes to our maintenance strategy
  - 50% reduction in electrical delays over the last 18 months
- **Utilisation** substantially enhanced through better planning and scheduling
  - regular train presentation has improved car dumper utilisation by 21%
  - improved ship sequencing and presentation at the berths
- **Rate** of port equipment lifted through a combination of initiatives
  - optimised direct to ship volumes
  - lump processing rates increased via direct loading from car dumper to rescreening plants
  - routes upgraded at low cost

**Total car dumper utilisation**  
(index, July 2013 = 100)



# Technology is a key productivity enabler

- Our technology agenda underpins the path to 290 Mtpa<sup>1</sup> and beyond
  - disciplined and value-based approach to technology driven by the business strategy
- Key technology enablers
  - our fully functioning Integrated Remote Operations Centre (IROC) continues to unlock capacity and synergies across the supply chain
  - autonomous haulage and drill rig trials are well advanced
  - we are actively studying best in class autonomous above rail capability
  - smarter exploration tools will substantially reduce resource definition costs



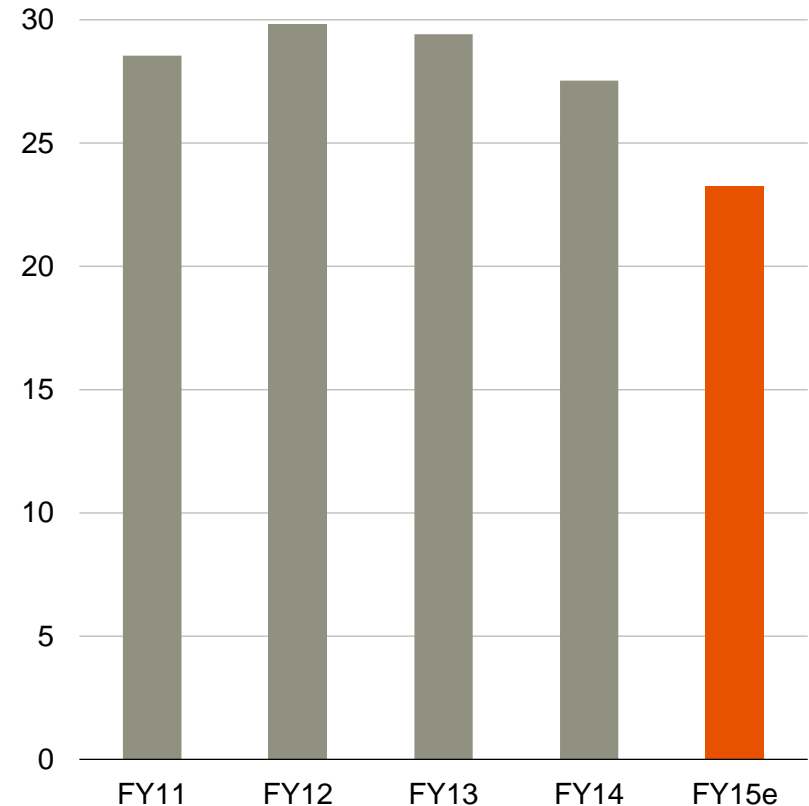
**Integrated Remote Operations Centre, Perth**

1. 100% basis.

# Targeting FOB unit cash costs of less than US\$20 per tonne

- As production grows we will maintain a relentless focus on costs
  - strong early momentum as we reduced unit cash costs<sup>1</sup> by 12% in H2 FY14 to US\$25.89/t
- We are targeting unit cash costs<sup>1</sup> of less than US\$20/t<sup>2</sup> in the medium term
- Average sustaining capital expenditure of ~US\$5/t is anticipated in our five year plan
  - underpinned by our major hubs and concentrated resource footprint
- On an all-in cash basis we aim to be the lowest-cost supplier to China

**A significant reduction in WAIO unit costs<sup>1</sup>**  
(US\$/t)



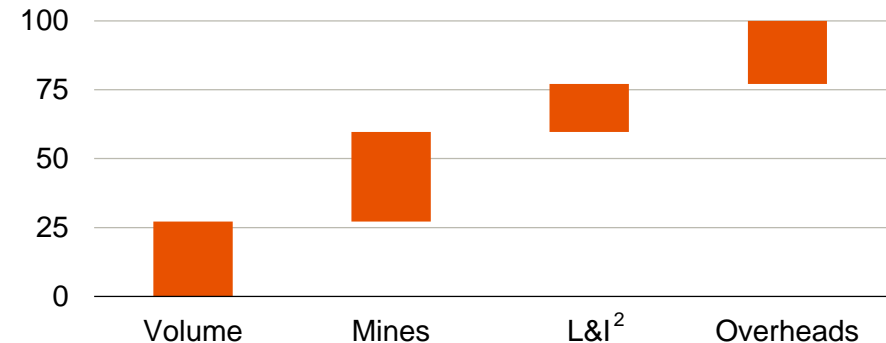
1. Unit cash costs excluding freight and royalties. FY15e is based on an exchange rate of AUD/USD 0.91.

2. Based on real 2014 terms and an exchange rate of AUD/USD 0.91.

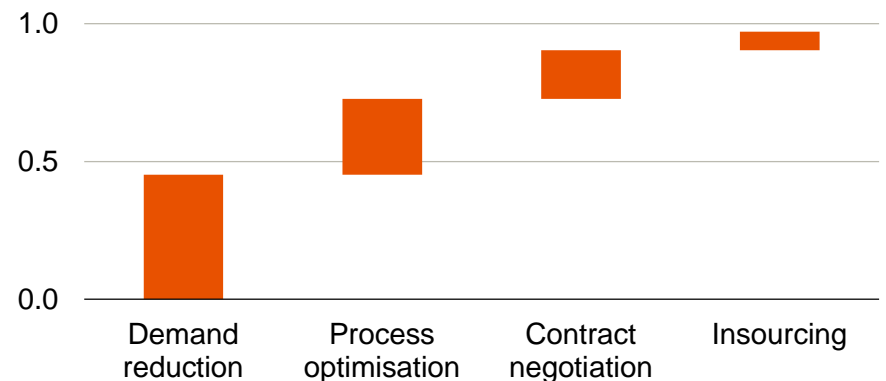
# Our plans are built from the bottom up

- We are systematically targeting cost savings across the supply chain
  - equipment productivity is reducing demand for new equipment and enabling a reduction in hire gear
  - supply productivity is reducing external expenditure through lower demand, better rates and insourcing of services
  - people productivity is driving efficiencies and allowing optimisation of functional support

**The pathway to unit cash costs below US\$20/t<sup>1</sup>**  
(split of cost reduction, %)



**~US\$1 billion reduction in external expenditure by FY17<sup>3</sup>**  
(US\$ billion)



1. Unit cash costs excluding freight and royalties. Based on real 2014 terms and an exchange rate of AUD/USD 0.91.

2. L&I refers to logistics and infrastructure and includes rail, port and non-process infrastructure.

3. Annualised basis relative to FY14.

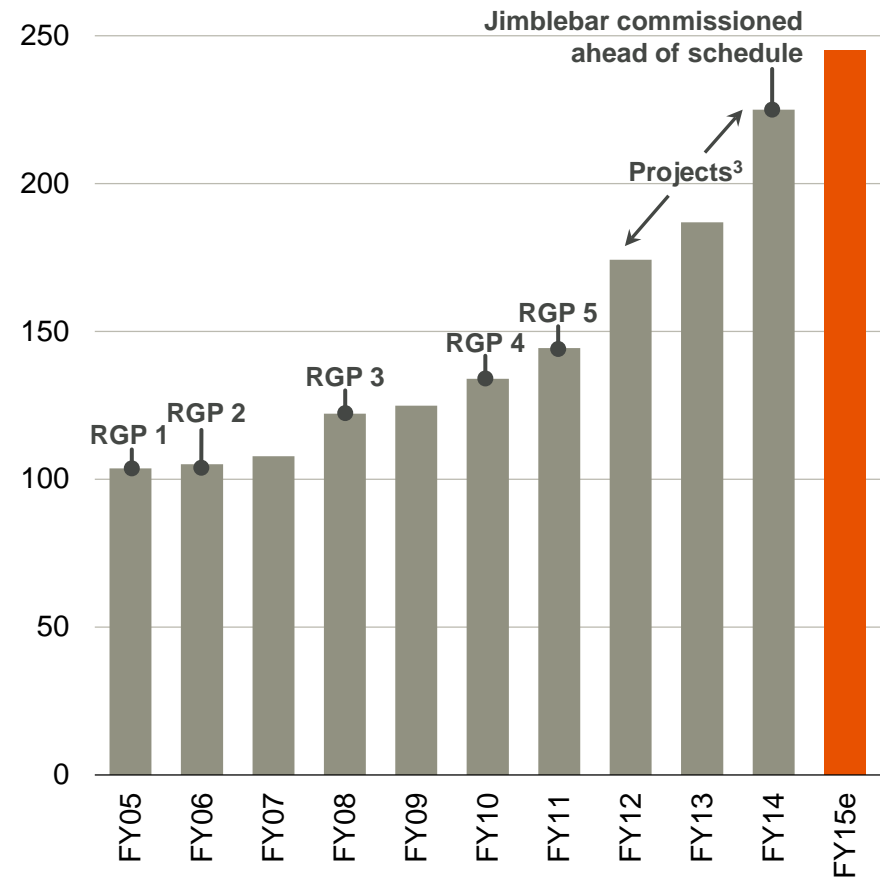


# A proven track record of project delivery

- Over the last decade we invested US\$25 billion in the Pilbara
- As a result we have more than doubled iron ore production in a strong pricing environment
- WAIO achieved a fourteenth consecutive annual record in FY14 of 225 Mt<sup>1</sup>
  - Jimblebar delivered first production six months ahead of schedule
  - supplemented by a series of volume enhancing initiatives
- Full-year guidance for FY15 is 245 Mt<sup>1</sup>
  - we have proven system capability significantly ahead of this rate

## Outstanding project delivery capability<sup>2</sup>

(production<sup>1</sup>, Mt)



1. 100% basis.

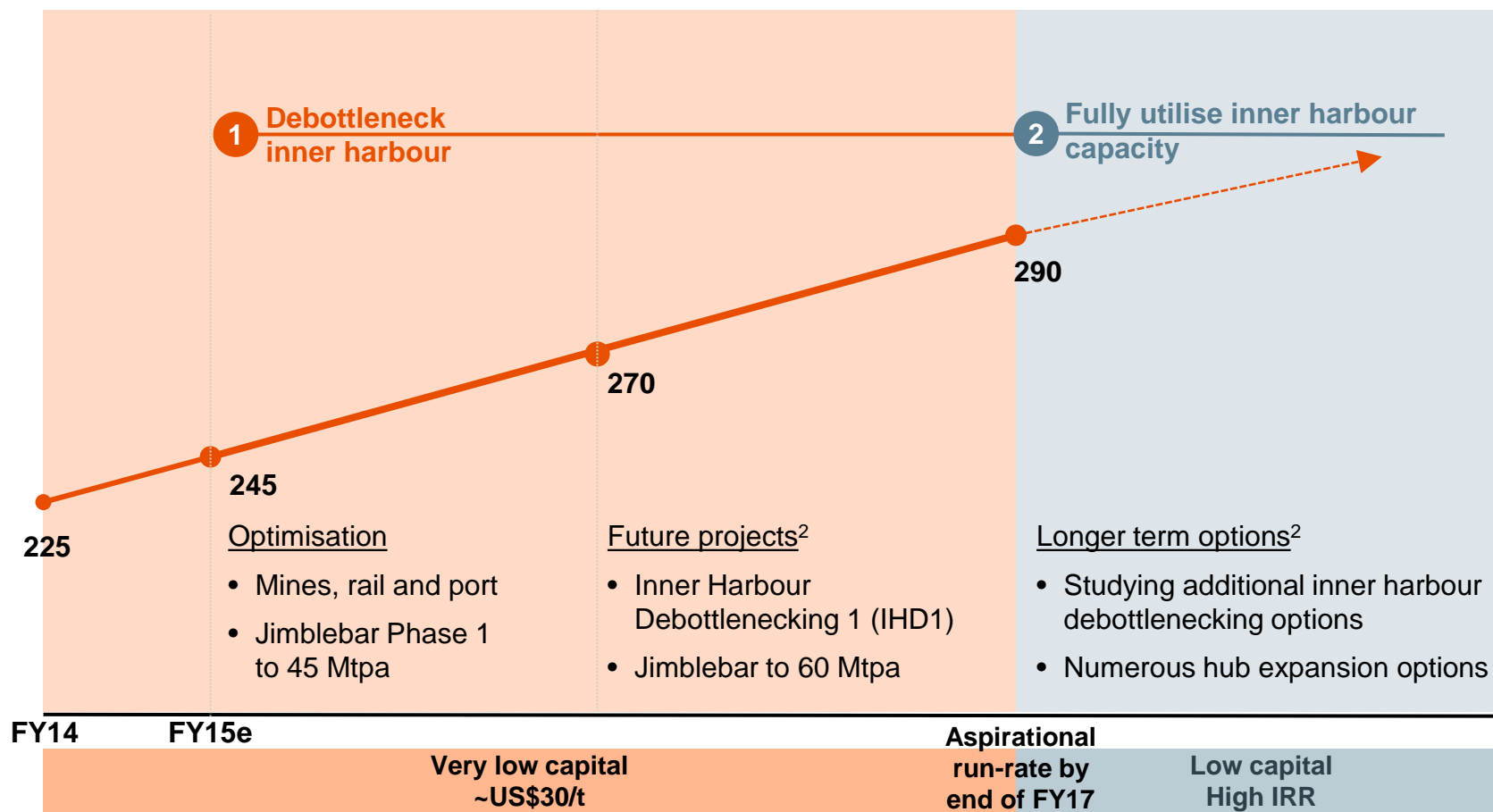
2. Rapid Growth Program (RGP) milestones indicate first ore dates.

3. WAIO Port Hedland Inner Harbour Expansion, WAIO Port Blending and Rail Yard Facilities, WAIO Jimblebar Mine Expansion.

# We plan to grow WAIO production by 65 Mtpa at a capital intensity of ~US\$30 per annual tonne

## Delivering value from our installed infrastructure<sup>1</sup>

(Mtpa, 100% basis)



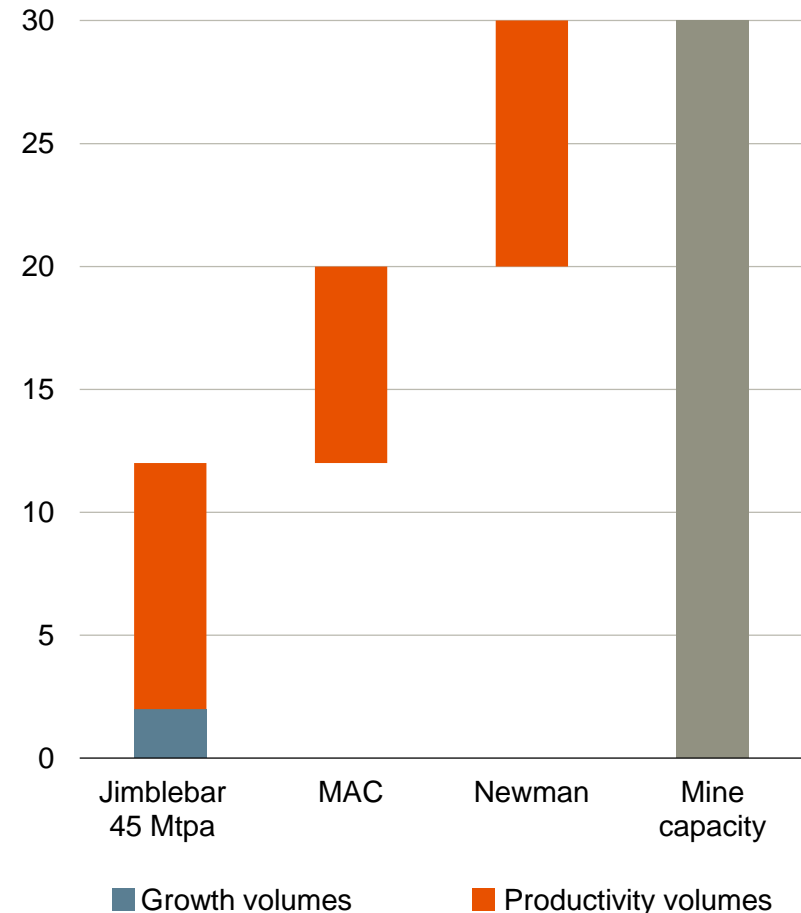
1. Represents actual production for FY14, FY15 guidance and aspirational future system run-rate.

2. Subject to Board approval.

# Step 1 to 290 Mtpa – raising the capacity of our mines without fixed plant investment

- WAIO production is expected to increase by 20 Mt to 245 Mt<sup>1</sup> in FY15
- Beyond FY15 our relentless focus on productivity will deliver volume growth from already installed infrastructure
  - Jimblebar Phase 1 will now achieve 45 Mtpa<sup>1</sup>
  - Mining Area C (MAC) volumes to increase by 8 Mtpa<sup>1</sup>
  - Newman volumes to increase by 10 Mtpa<sup>1</sup>
- Our dual track rail infrastructure is capable of supporting the uplift in mine capacity
- As mine capacity increases to ~275 Mtpa<sup>1</sup> the bottleneck shifts to the port

**Re-rating our hub capacity<sup>1</sup>**  
(FY15 baseline, Mtpa)



1. 100% basis.

# Step 2 to 290 Mtpa – investing in IHD1 and Jimblebar Phase 2

- The two key components to the second step of growth to 290 Mtpa<sup>1</sup> have a low capital cost and offer attractive investment returns
- Inner Harbour Debottlenecking 1 will deliver ~20 Mtpa<sup>1</sup> of incremental port capacity
  - low-capital intensity upgrades of critical inflow and outflow routes at Nelson Point and Finucane Island
  - replacement of Reclaimer 6 and expansion of Lump Rescreening Plant 2
- Jimblebar Phase 2 will increase hub capacity from 45 to 60 Mtpa<sup>1</sup>
  - ore handling plant has been re-rated from 55 to 60 Mtpa to match the installed stockpile and train load-out capacity
  - primary crusher and additional mining fleet required



1. 100% basis; subject to Board approval.

# Key themes

- We value safe and sustainable operations above all else
- We have the strongest resource position in the Pilbara
- A relentless focus on availability, utilisation and rate is enhancing performance across our integrated supply chain
- We are targeting FOB unit costs of less than US\$20 per tonne at WAIO over the medium term and will require less sustaining capital investment than others in the industry
- We plan to grow WAIO production by 65 Mtpa at a capital intensity of approximately US\$30 per annual tonne



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resourcing the future