



# Mount Gibson Iron Limited

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**ASX ANNOUNCEMENT**

**ASX Code : MGX**

18 March 2013

## Koolan Island Optimisation Completed

- **Optimisation study confirms that maximum value is generated by the staged ramp up to 4 Mtpa of premium hematite iron ore products**
- **4 Mtpa annualised run rate targeted to be achieved by the end of calendar 2014**
- **Staged ramp-up reduces financial and technical risks of Main Pit development**
  - **“smoothed” waste stripping profile to remove spikes in strip ratio required under prior mining plan**
  - **majority of waste stripping expenditure completed within four years**
  - **increased material movement and efficiencies minimises unit mining costs**
  - **after three years, remaining life-of-mine average cash expenditure per tonne of ore sold is expected to be reduced by approximately 50%, reflecting the major reduction in strip ratio**
  - **step reduction in costs to deliver an extended cash harvesting period in latter half of mine life**
- **Koolan Island workforce to be built up by approximately 100 positions over 9 months**

Mount Gibson Iron Limited (**Mount Gibson**) advises that it has completed its detailed mine optimisation study for the Koolan Island iron ore mine, located 140 km north of Derby in the Kimberley region of Western Australia.

The study compared a range of mining schedules and iron ore production profiles from 2 million tonnes per annum (**Mtpa**) to 4 Mtpa to determine which delivered the most value accretive outcome to Mount Gibson whilst also reducing financial and technical risks.

This work has confirmed the strategy of a staged ramp up in production to a maximum rate of 4 Mtpa as the optimum development plan for Koolan Island, equating to a 33% increase on the current annual production rate.

Under the optimised mine plan, Mount Gibson expects to achieve the targeted annualised production rate of 4 Mtpa by the end of calendar 2014. The 4 Mtpa production rate was considered the maximum tonnage rate that could be achieved on a consistent basis. A slide presentation showing the indicative production and stripping profile, and the associated capital investment, is attached.

## **Mining**

Due to the nature and orientation of the Koolan Island orebody, all mining scenarios require stripping investment to open up reserves in Main Pit, which will remain the primary ore source over the remaining life of the mine, which stands at over 7 years on current reserves<sup>1</sup>.

The optimised mine plan will significantly reduce the maximum amount of stripping activity required in any one year compared with the previous life-of-mine schedule.

This “smoothing” of the stripping profile will spread this stripping investment requirement over the next three years, substantially reducing the financial and technical risk of undertaking this work in a volatile pricing environment.

The smoothed profile will reduce the indicative maximum waste:ore stripping ratio in any single year to approximately 8.3:1, compared to a maximum of 13:1 under the previous life-of-mine plan<sup>2</sup>. The average strip ratio over the remainder of the life of the operation remains approximately 4.5:1. Mount Gibson will continue to optimise the mine schedule over the remaining life of the operation.

Changes to the waste mining sequence have also reduced geotechnical risk by allowing waste to be mined in interim stages while further data is collected and assessed before the final pit wall is established, facilitating better pit wall management.

## **Costs and Cashflow**

Financial modelling indicates that the Koolan Island operation will continue to generate strong revenue and positive cash-flows during this period of stripping investment at prices well below those currently prevailing.

A reduction in cash unit mining costs is also expected as a result of the increased material movement over the next three years, and associated operating efficiencies implemented by Mount Gibson since late 2012.

Based on current expectations, these efficiencies are expected to reduce total cash unit mining costs at Koolan Island to within a range between \$8 and \$10 per tonne moved (including site administration costs), trending toward the lower end of the range as material movement peaks.

Beyond 2016, as stripping activity declines, gross mining costs will drop significantly and the average cash expenditure per tonne of iron ore mined and sold over the remaining life-of-mine is expected to be reduced by approximately half compared with the average of the prior three years. With this situation the operation will move into an extended period of cash-harvesting. It is expected that Koolan Island will be in the lowest cost quartile of producers at this time.

To capitalise on the benefits of the optimised mine plan, the proposed mining changes will be implemented immediately, resulting in up to \$50 million of waste movement that was previously deferred being brought forward to the current financial year ending 30 June 2013.

The changes will also require the staged addition of approximately 100 personnel over the next 9 months, a modest increase in site personnel following the major workforce reductions implemented in late 2012.

It is currently anticipated that capital investment in mobile fleet and equipment associated with the planned increase in mining activity will continue to be financed.

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<sup>1</sup> Refer slide 13 of attached presentation “Optimising Koolan Island” dated 18 March 2013

<sup>2</sup> Refer ASX presentation released 13 August 2010

## Potential value-add opportunities

With a clear and detailed plan to exploit the existing reserves at Koolan Island defined, increased management attention can be applied to assessing potential opportunities to add to the reserve base and potentially extend the mine life.

This includes assessing the potential to convert more of the current resource base to reserves, such as the small Mangrove deposit, which has not yet been subjected to a detailed mining assessment.

Mount Gibson has also commenced a review of underground mining potential at Koolan Island. This work includes reviewing previous conceptual studies into underground mining of the resource below Main Pit, and also an evaluation of the potential for small-scale underground mining beneath the completed Mullet-Acacia satellite pit to supplement ore production from open pit mining in Main Pit.

In addition, Mount Gibson expects to commence field reconnaissance work at the Koolan South tenement (EL 04/1407), on the mainland immediately south of Koolan Island, during the 2013 dry season. The tenement, which was granted in October 2012, covers 230 square km and is considered prospective for iron ore and base metals. No exploration has been undertaken in the area for more than 15 years.

## Comment

Mount Gibson Chief Executive Officer Jim Beyer said the optimised mine plan would deliver the best possible outcome to shareholders by maximising returns from Koolan Island for the minimum risk in a volatile iron ore market.

"The optimised Koolan Island mine plan better aligns geotechnical risk management, capital expenditure and cash-flow, whilst also protecting Mount Gibson from undue financial risk associated with increased market volatility," he said.

"Put simply, the plan positions the mine to maintain positive cashflows and invest in stripping to open up the reserves in Main Pit while prices are higher, and sets the operation up to become a low-cost cash generator.

"This will also better balance the overall performance of Mount Gibson's existing asset portfolio. The Company's Mid West business is now entering its cash harvesting phase, and the operations as they now stand will be winding down as Koolan Island's cash generating capacity peaks in the second half of the current decade."

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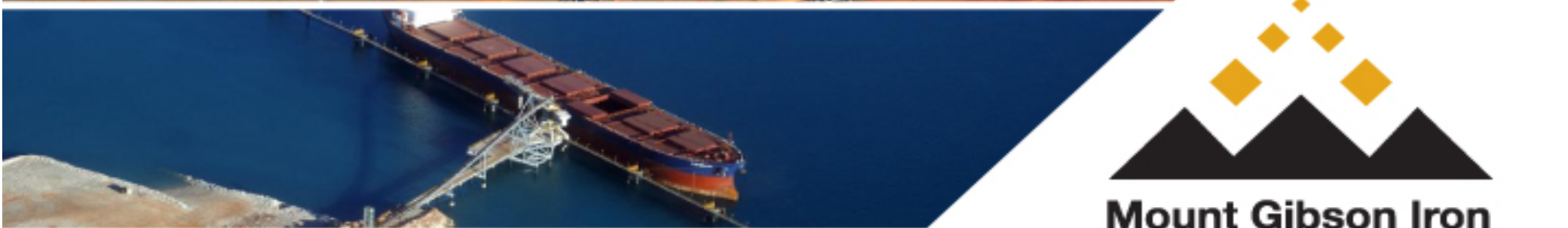
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# MOUNT GIBSON IRON LIMITED

*Optimising Koolan Island*  
18 March 2013



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# A leading WA mid-tier iron ore exporter



## Koolan Island

- High quality DSO lump and fines (high grade, low contaminants)
- Production optimisation strategy completed:
  - Staged ramp-up from 3 Mtpa to 4 Mtpa run rate by end 2014
  - De-risks development of Main Pit
  - Smoothed stripping and capital expenditure profile
  - Average strip ratio of ~4.5:1 over remainder of mine life

## Mid West Region

### Talling Peak, Extension Hill & Geraldton Port facilities

#### Talling Peak

- Mining scheduled for completion November 2013.
- Targeting ~2.5 Mt DSO production in FY2013
- Strong cash generating asset in FY2013
- Sales from low grade stockpiles to continue into FY2014
- T1- potential for limited additional production

#### Extension Hill

- New DSO operation
- First ore sales Dec 2011
- Nameplate capacity of 3Mtpa
- Low strip ratio ~ 1:1
- Robust low cost operation
- Strong cash generator
- FY2013 focus on maximising sales from stockpiles
- Diversified customer base
- Mt Gibson Range DSO upside

Upgrades to Geraldton port and rail infrastructure have doubled MGI's export capacity from the Mid West to 6Mtpa

# Koolan Island - A quality long-life asset

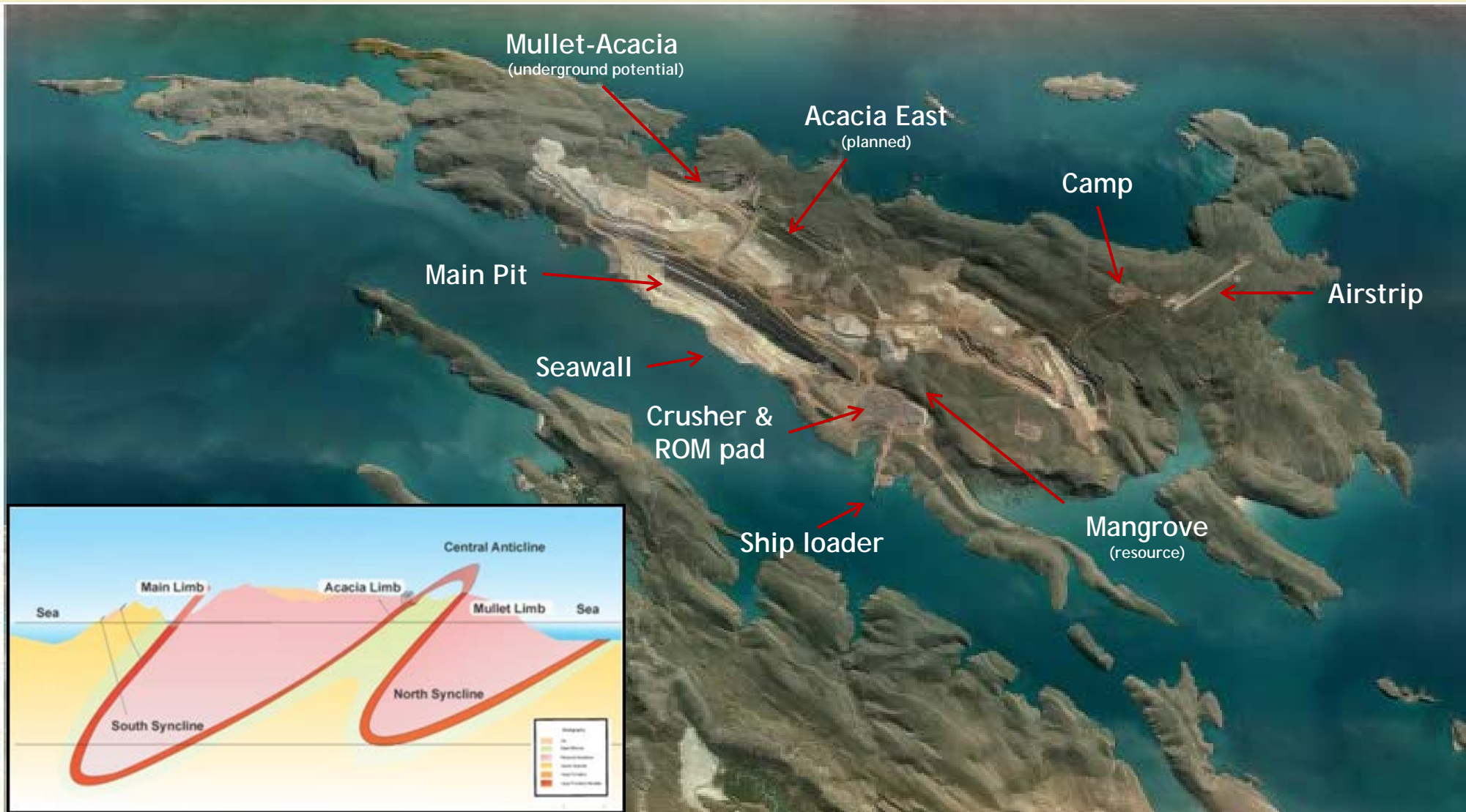


- Premium products - ~63.5%Fe, low phosphorous and alumina
- Simple logistics - no rail, standalone ship-loader
- Long life asset - Proved and probable reserves of 29.3Mt @ 64.1%Fe at 30 June 2012\* (less YTD depletion)
- 15.7 Mt total ore sales to end 2012 under Mount Gibson ownership
- Mineralised waste sales (~52%Fe) delivering additional cashflow
- Potential for additional resource to reserve conversion
- Underground mining potential under review
- Exploration of Koolan South tenement planned for 2013
- Other potential long term opportunities to utilise existing ship-loading capacity under review

\* Refer slide 13 for breakdown between proved and probable reserves.



# Koolan Island - Aerial view



# Koolan Island – Optimising for the future



## FY 2013 operating achievements:

- ✓ Increase sales from stockpiles
- ✓ Commence mineralised waste sales
- ✓ Defer waste stripping during price weakness
- ✓ Complete and implement mine optimisation study

## Optimisation study outcomes:

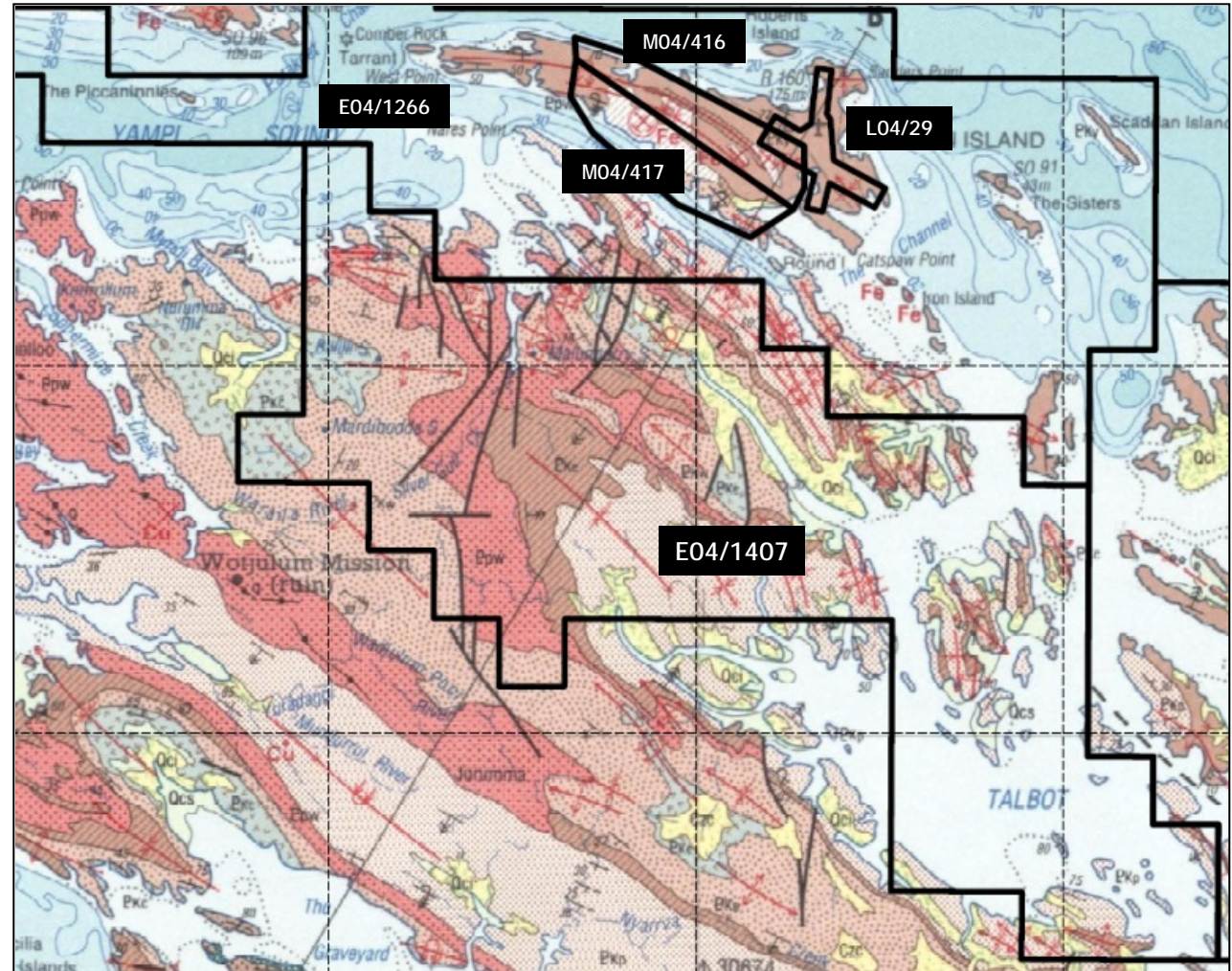
- Ramp-up to 4Mtpa confirmed as most value accretive production profile
- Immediate resumption of deferred stripping and mining ramp-up
  - Up to \$50m of previously deferred stripping brought back into FY2013
  - Targeting annualised 4Mtpa run rate by end of calendar 2014
- Staged cutbacks of Main Pit reduce technical and financial risk
  - Average strip ratio to end of mine life of ~4.5:1
  - New pit sequencing provides for significantly improved geotechnical risk management
  - “Smoothed” strip ratio - indicative maximum strip ratio in any year of ~8.3:1 vs 13:1 previously (August 2010 forecast)
  - Stripping investment declines after three years to further reduce financial risk in volatile price environment
  - Forecast to remain cash flow positive during stripping investment phase (subject to iron ore price and currency fluctuations)
  - Koolan Island cash unit mining costs to be reduced to range of \$8-10/t moved (including site admin), trending to lower end of range in line with productivity improvements from increased material movement
  - Reducing strip ratio drives significant reduction in ore costs and sets up for “cash harvesting” in latter half of mine life



# Koolan Island - value-adding opportunities



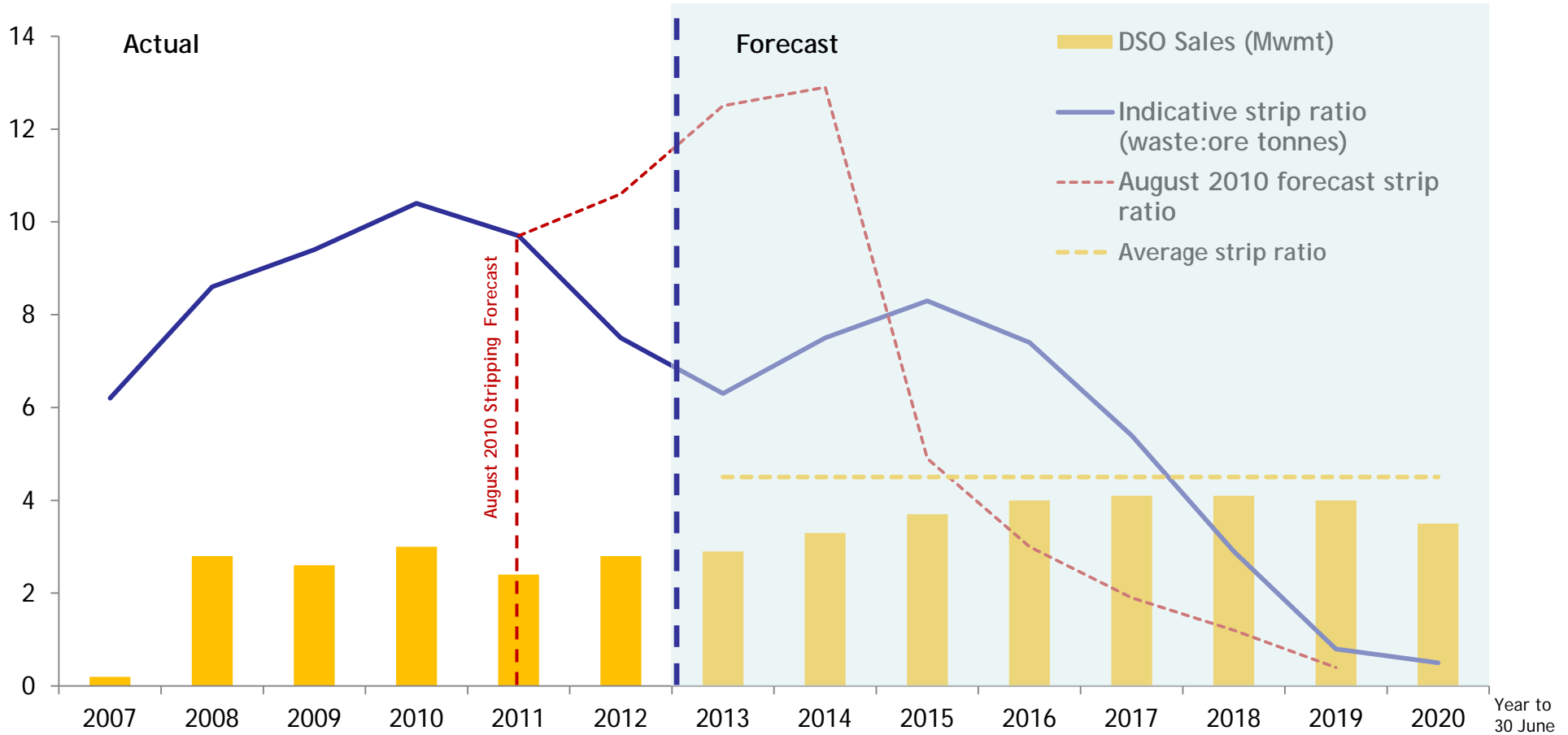
- Resource conversion:
  - Mangrove deposit - potential conversion of resource to reserves to be assessed
- Underground potential
  - Assessing options for supplementary “swing” production below Mullet Acacia pit
  - Reviewing prior underground concept for Main Deeps
- Koolan South (E04/1407)
  - Historic exploration and mining activity
  - Reconnaissance work planned for 2013 dry season



# Koolan Island - Ramping up and reducing risk



Forecast waste stripping and DSO sales profile

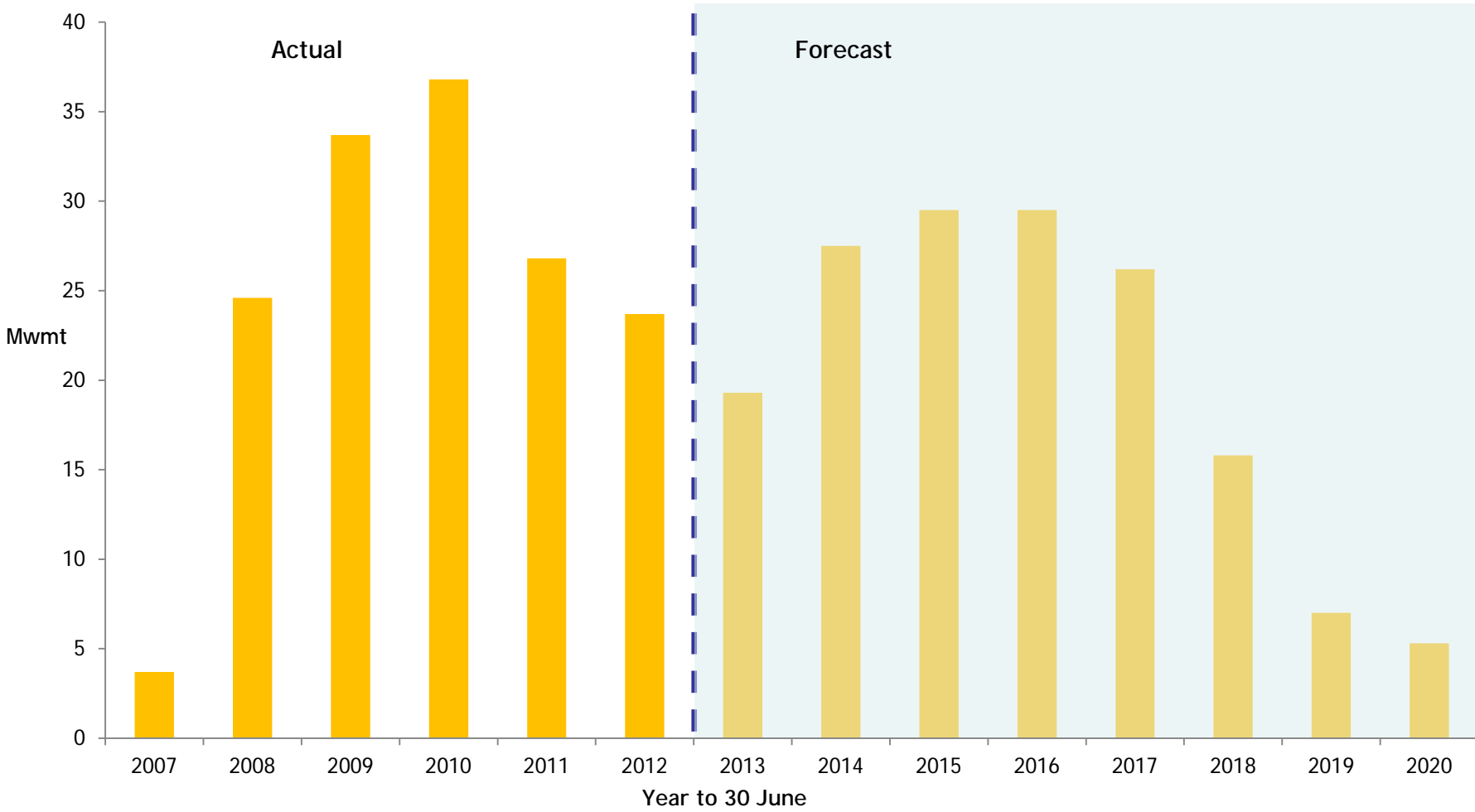


• Forecast ore sales exclude sales of mineralised waste. Stripping and production forecasts are indicative only and remain subject to ongoing optimisation and market factors.

# Koolan Island - Indicative material movement



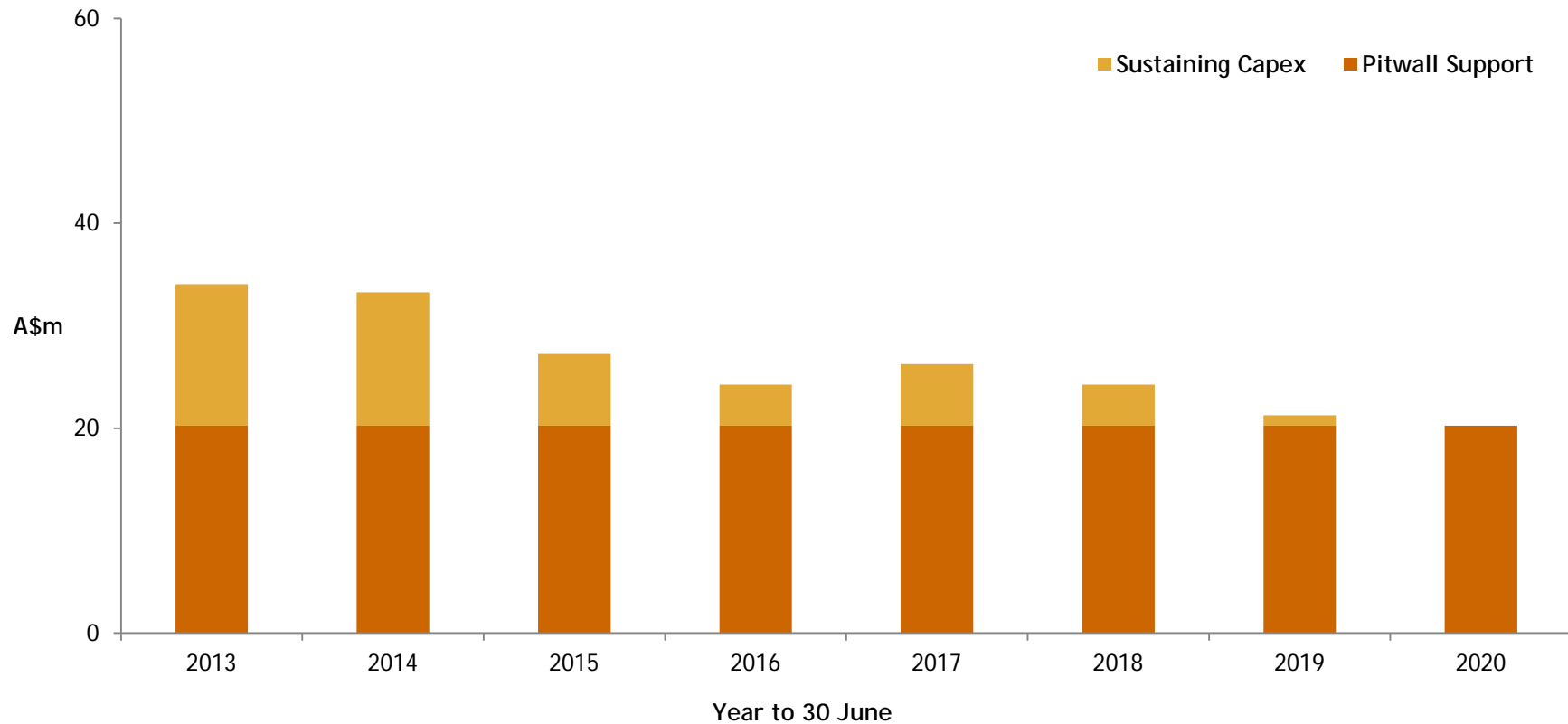
Total Ore & Waste Movement (Mwmt)



# Koolan Island - Indicative capex outlook



## Indicative capital investment profile\*



\* Capex profile is indicative only and does not include capitalised waste stripping. Mobile fleet requirements are assumed to continue to be lease financed.

- **Optimised Koolan Island mine plan reduces financial and technical risk in volatile price environment:**
  - Stripping investment spread to reduce financial risk
  - New sequencing provides for significantly improved geotechnical risk management
  - Increased efficiencies and material movement lowers total cash unit mining costs during stripping phase
  - Sets up for “cash harvesting” in latter half of mine life, reflecting significantly lower cost base after stripping complete
- **Complements existing Mid West operations**
  - Koolan Island stripping aligned with higher cash generation at Talling Peak and Extension Hill operations
  - Koolan Island cash generating capacity increases as cash flow moderates from current Mid West operations

# Thank You



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# Additional information



## Total Group Mineral Resources and Reserves at 30 June 2012

	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
Mineral Resources	95.2	61.6	8.29	1.19	0.03
Mineral Reserves	44.3	62.6	6.40	1.16	0.03

NOTE: All estimates quoted to three significant figures. Rounding errors may occur.

### Attributions

The information in this report relating to Mineral Resources is based on information compiled by Rolf Forster, who is a member of the Australasian Institute of Mining and Metallurgy. Rolf Forster is a consultant to Mount Gibson Mining Limited, and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the December 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rolf Forster has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. The information in this report relating to Mining Reserves is based on information compiled by Rolf Forster and Weifeng Li, who are both members of the Australasian Institute of Mining and Metallurgy. Rolf Forster and Weifeng Li are consultants to Mount Gibson Mining Limited, and have sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking, to each qualify as a Competent Person as defined in the December 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rolf Forster and Weifeng Li have consented to the inclusion of the matters in this report based on their information in the form and context in which it appears.

## Koolan Island

### Mineral Resources, above 50% Fe

	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
Measured	10.8	59.6	13.0	1.04	0.02
Indicated	44.3	64.1	6.70	0.77	0.01
Inferred	13.7	60.6	12.1	0.63	0.01
Total	68.9	62.7	8.77	0.78	0.01

### Ore Reserves

Proved	5.46	60.0	13.2	0.50	0.01
Probable	23.8	65.0	5.26	0.87	0.01
Total	29.3	64.1	6.73	0.80	0.01

## Extension Hill

### Mineral Resources, above 50% Fe

Measured	12.0	58.0	6.69	2.16	0.06
Indicated	5.14	58.0	8.91	1.67	0.06
Inferred	2.26	62.6	5.13	1.25	0.05
Total	19.4	58.6	7.10	1.93	0.06

### Ore Reserves

Proved	8.97	59.3	5.30	1.84	0.06
Probable	3.26	59.9	7.12	1.25	0.06
Total	12.2	59.5	5.78	1.68	0.06

## Tallering Peak

### Mineral Resources, above 50% Fe

Measured	3.48	61.5	4.76	2.65	0.04
Indicated	2.84	57.4	8.21	3.74	0.07
Inferred	0.61	55.8	12.8	2.90	0.06
Total	6.93	59.3	6.88	3.12	0.05

### Ore Reserves

Proved	1.77	63.0	4.14	1.97	0.03
Probable	1.02	57.5	8.11	3.86	0.05
Total	2.80	61.0	5.59	2.66	0.04

NOTE: All estimates quoted to three significant figures. Rounding errors may occur.