



# Premium Iron Ore

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**... for steel sector decarbonisation**

IMARC Conference 29 October 2024



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## ADDITIONAL INFORMATION

This presentation should be read in conjunction with MGT's Annual Report at 30 June 2024 together with any announcements made by MGT in accordance with its continuous disclosure obligations arising under the Corporations Act 2001 (Cth). Any references to resources estimations should be read in conjunction with MGT's Mineral Resources statement for its magnetite projects at 9 June 2023 and subsequent releases to the Australian Securities Exchange as referenced.

MGT confirms that it is not aware of any new information or data that materially affects the information included in its ASX announcement made on 9 June 2023 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 announcement continue to apply and have not materially changed. All amounts within this presentation are stated in Australian Dollars consistent with the functional currency of MGT, unless otherwise stated. Tables contained within this presentation may contain immaterial rounding differences.

All references used in this presentation are included on Slide 17.

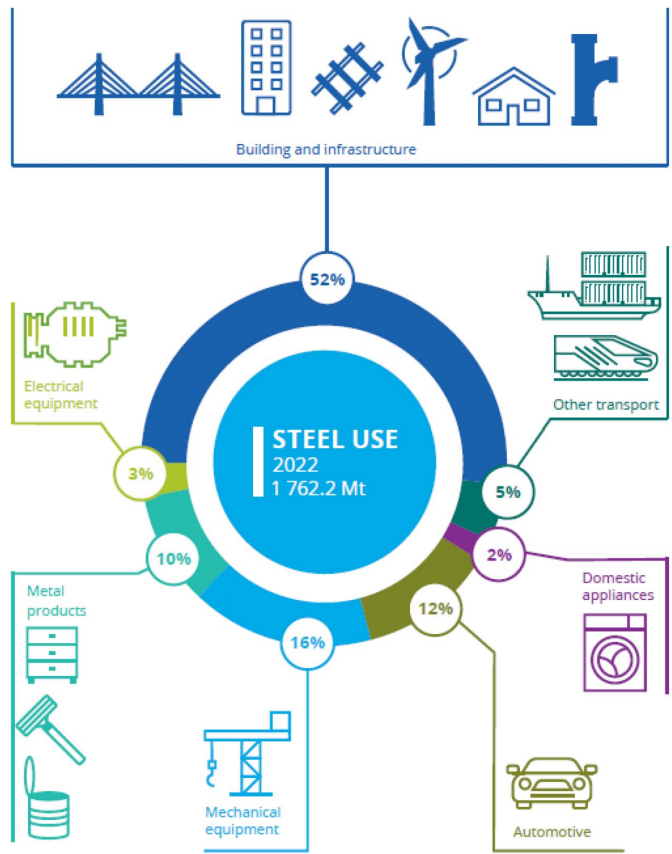
## ACKNOWLEDGEMENT OF COUNTRY

Magnetite Mines, our shareholders and our stakeholders acknowledge the Ngadjuri People as the Traditional Owners of the lands on which the Razorback Iron Ore Project is located. We respect their continuing custodianship of this Country, and their spiritual and cultural beliefs and practices.

# Increasing global steel demand is a certainty

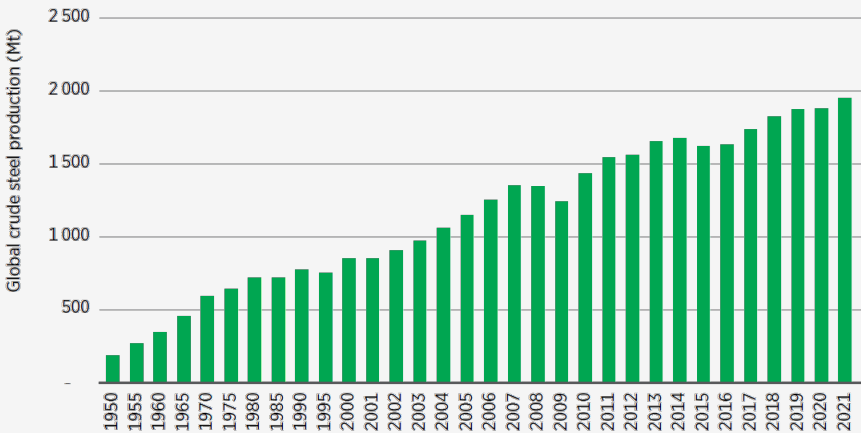
*Steel is also critical to tackling climate change*

## Steel is used in all aspects of the built environment



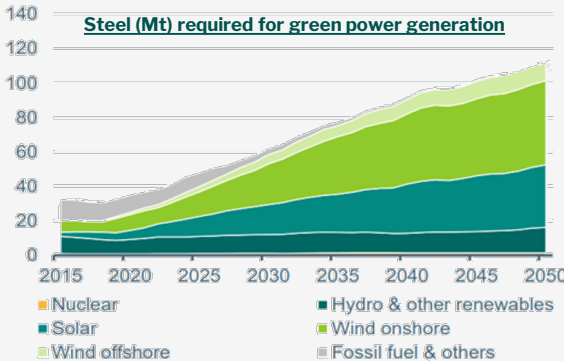
Source: World Steel Association

## Production has doubled every 20 years since 1950 ...



Source: World Steel Association

## ... and more steel is necessary for energy transition

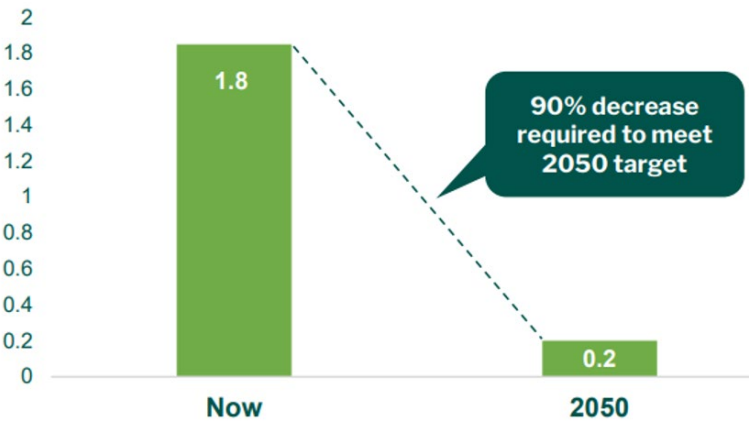


Source: Ben Ellis et al, 2022 Pathways to decarbonisation episode two: steelmaking technology

# Challenging steel decarbonisation targets have been set

Steel industry now committed and making transition investment decisions

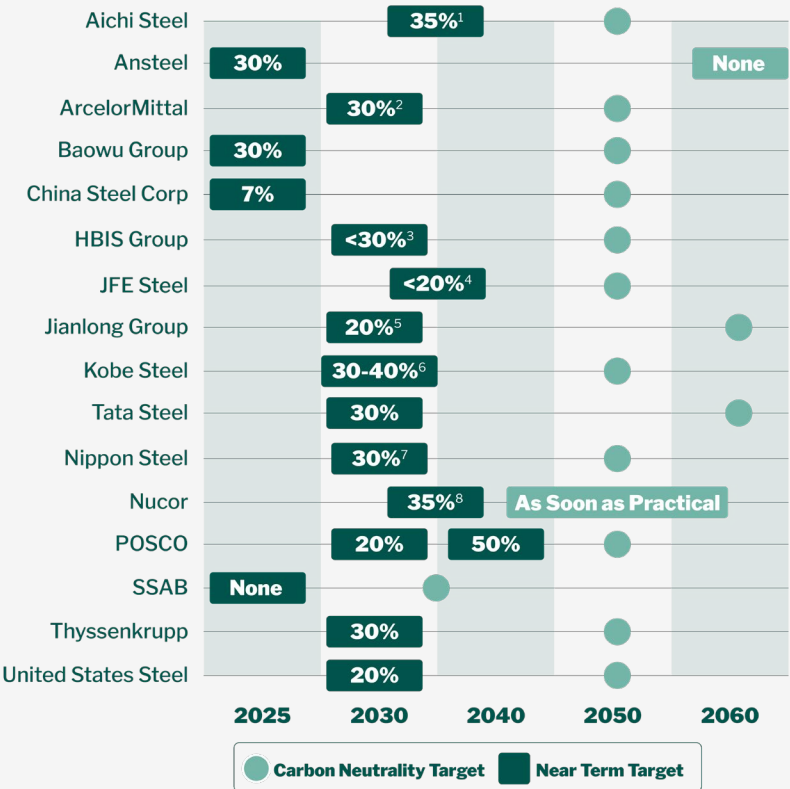
## Steel industry produces 8% of global carbon emissions



■ t CO2 / t steel

Source: World Economic Forum, Steel industry net-zero tracker

## Major steel producer carbon reduction targets



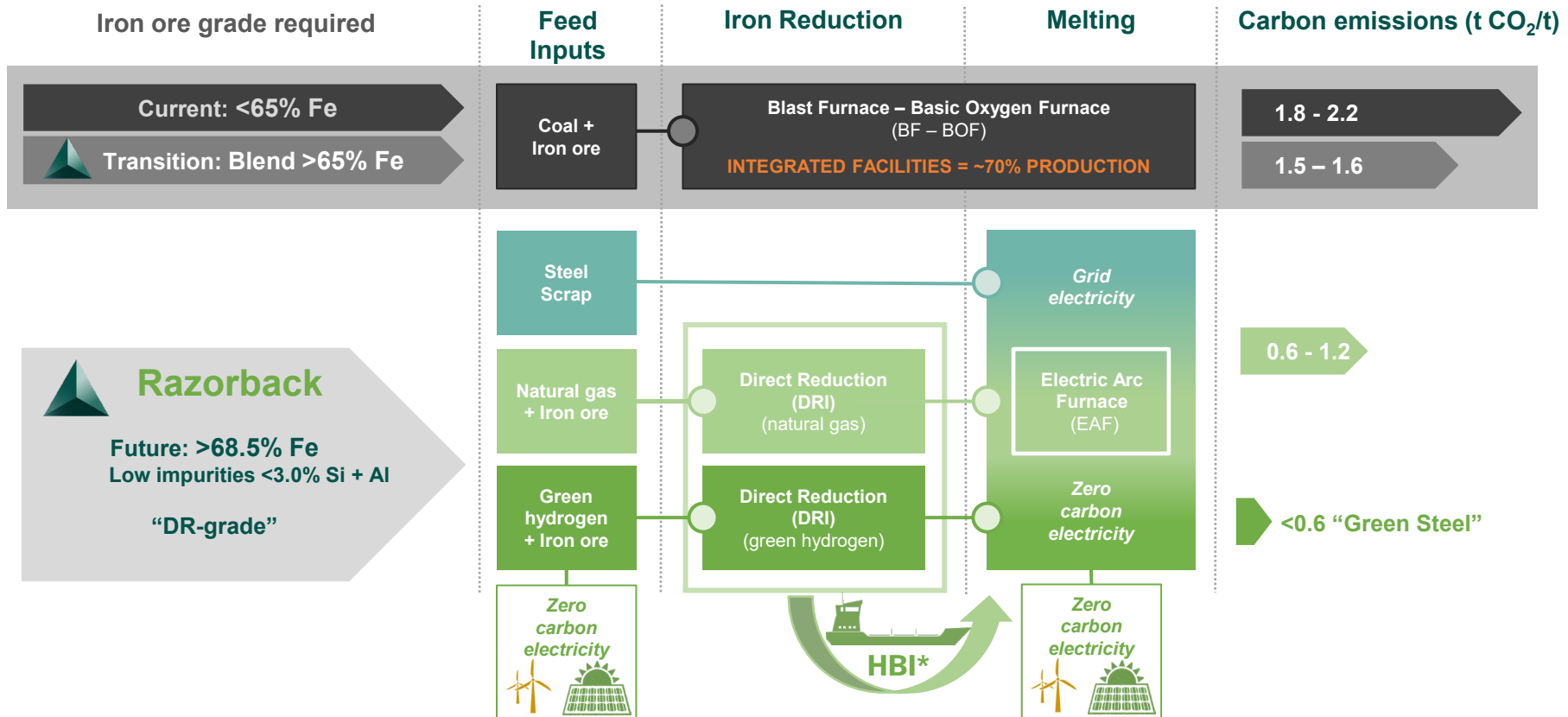
● Carbon Neutrality Target ■ Near Term Target

Source: Company filings 1. by 2030 compared to 2013 levels | 2. by 2030 over 2018 | 3. by FY2030 compared to 2022 | 4. by FY2030 compared to FY2013 | 5. lower by 2033 | 6. by 2030 from 2013 levels | 7. by 2030 compared to 2013 levels | 8. by 2030 using 2015 baseline

# The transition away from coal has commenced

Razorback to supply high-grade, low-impurity iron ore for replacement technologies

## Coal-using blast furnaces replacement to EAFs has commenced and forecast to accelerate



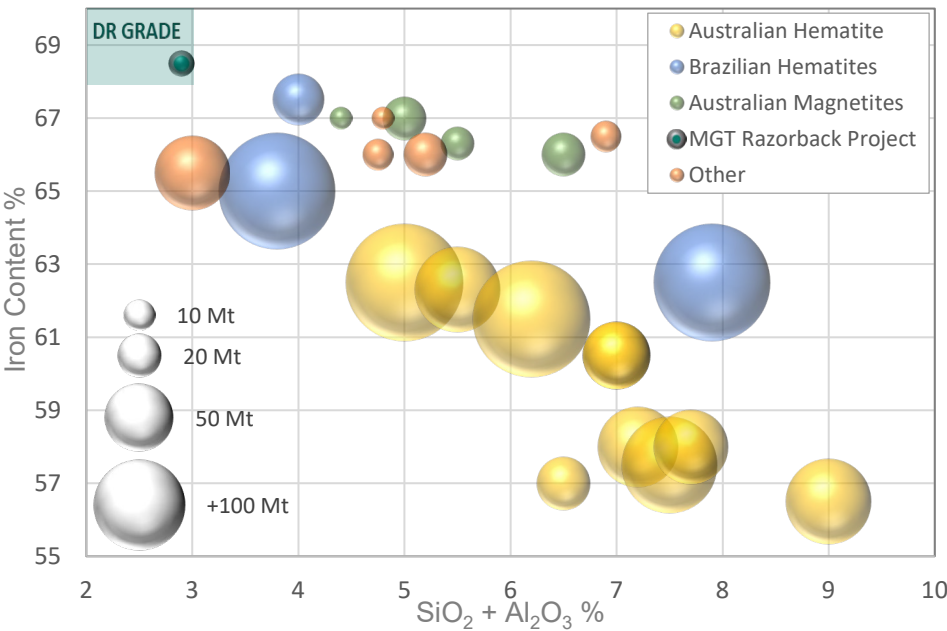
\*Hot Briquetted Iron (HBI) is a transportable form of direct reduced iron

# New premium-grade iron ore supply critical to transition

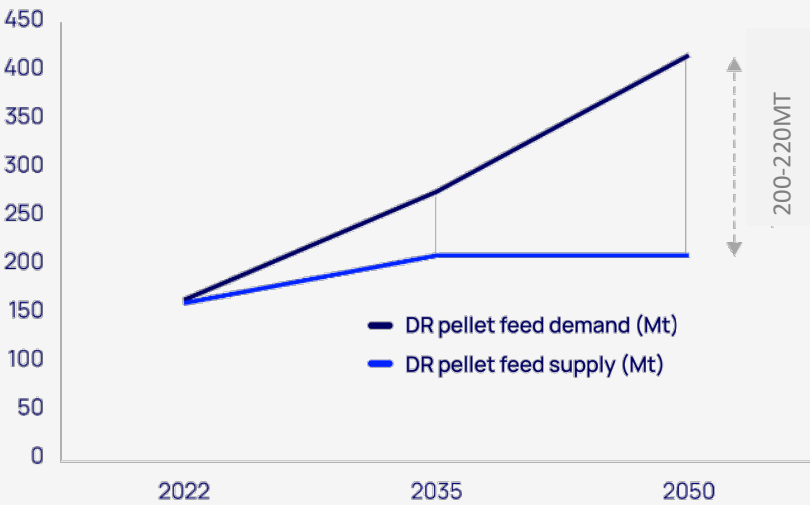
*Razorback Project positioned to meet urgent new demand*

**Razorback >68% Fe concentrates positioned in DR-grade range\***

Exported Iron Ore – Fe Grade Comparison



**High-grade iron ore demand-supply gap to increase**



Source: Dazmin Consulting

\* Initial Razorback Project production phase target concentrate specification, subject to further testwork

Source: Wood Mackenzie, "Metamorphosis": How decarbonisation is transforming the iron and steel industry (Oct 23)



# Australia is now recognising the green iron opportunity

*Realising the economic advantage of Australia's world-leading renewables*

**MAGNETITE**  
MINES



“The Malinauskas Labor Government will officially begin its search for partners to kickstart South Australia's Green Iron and Steel industry, cementing the state's position as a green iron powerhouse<sup>3</sup>.”

**Peter Malinauskas MP**

Premier of South Australia

27 February 2024



“The Australian Government has identified green metals as a priority industry for a Future Made in Australia, specifically production of low emissions iron, steel, alumina and aluminum<sup>4</sup>.”

**Ed Husic MP**

Australian Federal Industry Minister

31 May 2024

# The South Australia advantage

*SA is leading the way to a future green iron economy*

## Attracting international investment



**Magnetite +**  
**Renewable Energy +**  
**Green Hydrogen**

- ✓ **Tier 1, geopolitically stable location**
- ✓ **Access to labour markets**
- ✓ **Abundant magnetite resources**
- ✓ **100% renewable energy on grid by 2027**
- ✓ **SA Government commenced Green Iron EOI process**

## Value adding

Australia's opportunity can be realised through collaboration and investment in green iron hubs



Razorback DR-grade ore essential supply to each step in the value chain



# Green Iron SA consortium formed

*Accelerating South Australia's Green Iron opportunity*



*Green Iron SA plans to transform the strategic location of Port Pirie into a green iron production & export hub<sup>5</sup>*



- Development of the Razorback Iron Ore Project
- Delivery of 5Mtpa – DR-Grade iron concentrates



- Project management and engineering services
- Technical and economic feasibility assessments



- Port handling and logistics
- Port and supporting infrastructure development



- Rail operations, handling and logistics
- Rail and supporting infrastructure development



# Razorback: Expansive, soft, outcropping iron ore

South Australia's Braemar Iron Formation – a globally significant magnetite province



## The Braemar advantage

- **Outcropping** ore: very low strip ratio
- Siltstone-hosted iron ore, not BIF\*
- **Soft** relative to WA magnetite ores
- Concentrates to premium grade iron ore
- **Undeveloped**, low intensity pastoral country

## 6 Billion Tonnes in Resources

- **2,000km<sup>2</sup>** total iron ore tenements
- **110km** strike length
- **4.5Bt** Razorback Resource<sup>6a</sup> (JORC 2012 Indicated & Inferred)
- **1.5Bt** Muster Dam Resource<sup>7</sup> (JORC 2012 Inferred)

## 2 Billion Tonnes in Reserves

- **2.0Bt** Razorback Ore Reserves<sup>8</sup> (JORC 2012 Probable)

**All 50km from open-access rail**

\*BIF: Banded Iron Formation, common host geology for West Australian magnetite deposits  
a. Combined Razorback, Iron Peak & Ironback Hill Mineral Resource Estimates



# Outstanding project location in the undeveloped Braemar

*Close to potential future green iron hubs at Whyalla & Port Pirie*

Adelaide  
240km



Open-access rail  
~50km



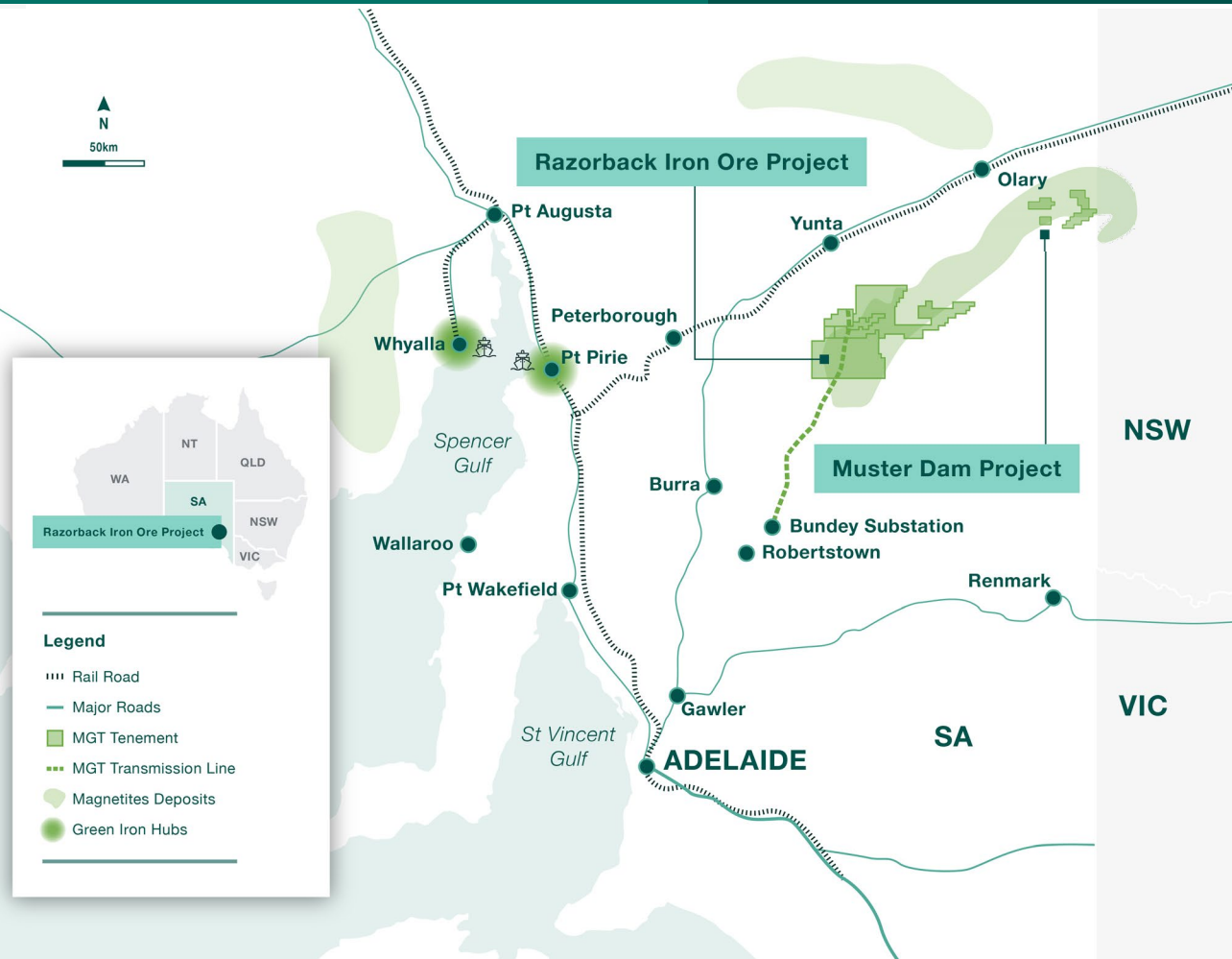
Whyalla Port  
315km



Port Pirie  
180km



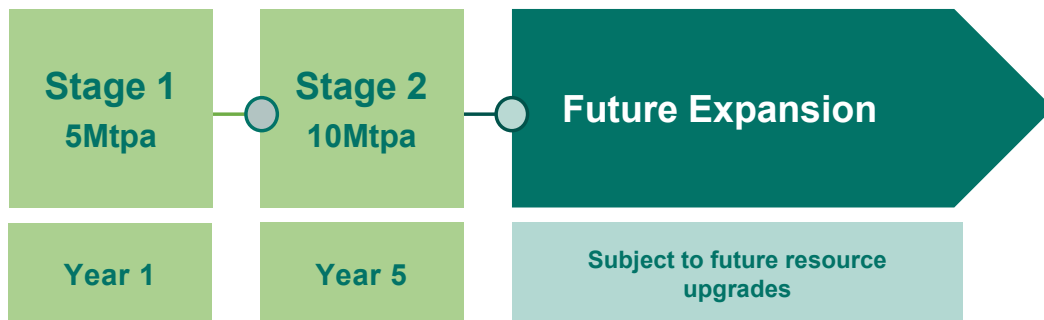
Grid Power  
100% renewable  
by 2027  
~125km



# Positive Razorback Project Optimisation Study economics

Results leading to larger scale production and staged expansion strategy

## Staged development pathway manages risk



## Respected consulting partners

**HATCH**



**AMC**  
consultants

**eco**  
**logical**  
AUSTRALIA  
A TETRA TECH COMPANY

## Key project metrics<sup>9</sup>

Physical Metrics	Unit	Base Case	Expansion Option
Concentrate production rate	dry Mtpa	5	10
Life of mine	Years	91	39
Mining rate (first 10 years)	Mtpa	57	91
LOM strip ratio	tt	0.35	0.35
Nominal plant feed at scale	Mtpa	25	67
Financial Metrics	Unit	Base Case	Expansion Option
Value-in-use price premium <sup>a</sup>	US\$/t	41	41
Value-in-use operating cost (62% Fe eq.) <sup>b</sup>	US\$/t	46 – 55	39 – 48
Pre-production capital <sup>c</sup>	US\$B	1.0 – 1.3	2.3 – 2.8

a. Value-in-use price premium is the forecast 2027 quality adjustment premium over and above the 62% iron ore index reference price as calculated by Wood Mackenzie for Razorback Project concentrate specification.

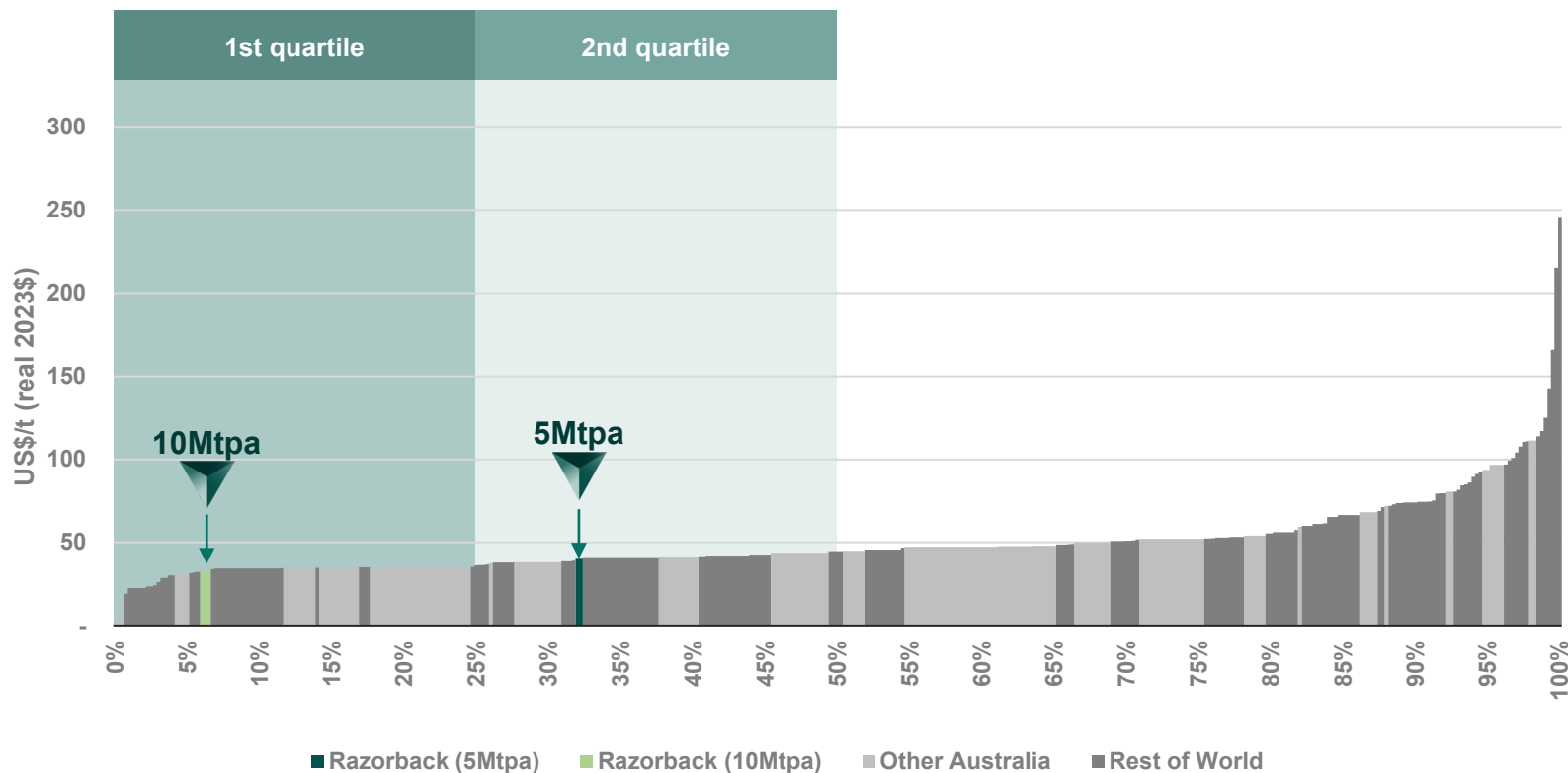
b. Value-in-use operating cost (62% Fe eq.) represents the total operating cost per tonne of concentrate produced for the first ten years of operations at scale, inclusive of freight, royalties, lease costs and sustaining capital, with the value-in-use price premium (see a. above) subtracted, enabling direct comparison with the benchmark 62% iron ore index reference price.

c. Pre-production capital represents the capital expenditure required to achieve production. For the Expansion Option, pre-production capital is the combined total for both initial and expanded production stages.

# Razorback Project economics globally competitive

Highly-competitive cost base on a standardised basis

## Wood Mackenzie 2027 VIU-adjusted (62% Fe eq.) cost curve (US\$/t)<sup>a,b</sup>



a) Adjusts cost base for product premium or discount based on grade / specification relative to 62% Fe index

b) Operating costs per [Iron Peak Strengthens Razorback Project Economics](#) ASX Release June 9, 2023



# Razorback Project financing approach

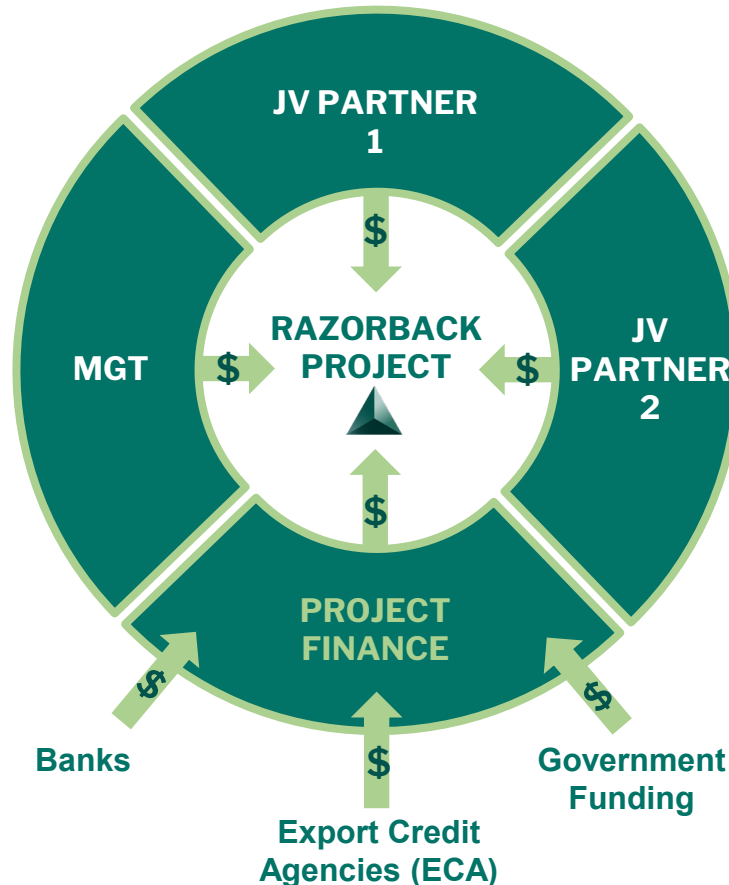
*Joint venture with motivated offtakers*



## Joint Ventures (JV)

- Well-proven model for big Australian iron ore projects over many decades
- Shares capital burden and project risk amongst the parties
- Enables access to low-cost capital, reducing dilution to MGT shareholders

## UNINCORPORATED JOINT VENTURE (JV)



## Potential partners

- World-class asset has attracted global steel industry players
- **JFE Shoji Heads of Agreement** signed July 2024<sup>10</sup>
- Assessment in progress:
  - Virtual data room access
  - Site visits
  - Due diligence
  - Ongoing discussions

# Corporate overview (ASX:MGT)

Recent corporate transformation in readiness to develop project



## Market Cap

**\$21M**

(Share price \$0.18 at 1 Oct 2024)

## Cash

**\$1.2M**

(30 Jun 2024)

## Shares on Issue: 115.35M

Top 20 (excl B & M) 30.17%

Board & Management: 5.5%

Other shareholders: 64.33%

## Listed Options: 27.47M

## Unlisted Options: 6.5M

## Board



### Paul White Chair of the Board

MBA, MAICD

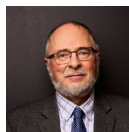
- Background of driving organisational performance
- Former CEO of ASX-listed Brisbane Broncos
- Executive experience with Anglo American and Xstrata



### Simon Wandke Non-executive Director

BA Psych Mkt (Comm), GDip Corp Finance

- 40+ years mining and minerals industry experience
- Highly accomplished C-suite leader
- Former EVP and Global CEO of ArcelorMittal Mining



### Jim McKerlie Non-executive Director

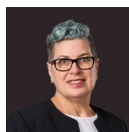
BA Economics (Hons), Dip Fin Mgt, FCA, FAICD

- International CEO and public company director
- Chaired four IPOs, deep experience in tech. / energy sectors
- Former Chair of Drillsearch and Beach Energy



### Peter Schubert Non-executive Director

- Track record of developing resources sector businesses
- Magnetite Mines Executive Chairman Sep-18 to May-22
- Magnetite Mines Interim CEO Mar-21 to May-22



### Dr Carmen Letton Non-executive Director

BA Min.Eng (Hons), PhD, Mineral Economics, MAusIMM

- 35+ years' global mining experience
- Former head of asset strategy development at Anglo American
- Previous senior roles at BHP, Rio Tinto, Newmont and Newcrest

## Management



### Tim Dobson Managing Director

BAppSc (Ext.Metallurgy), GAICD, FAusIMM

- 35 years extensive international mining experience
- Track record of operating and transforming major projects
- ASX CEO & international senior executive leadership roles



### Simon Smith Chief Financial Officer

BCom, Accounting & Finance, CA

- CFO with 30+ years international experience
- Led equity and debt capital raisings of over A\$500 million
- Oversaw \$340m project financing of Woodlawn Zn Cu Mine



### Gemma Brosnan Director, External Affairs

BA Journalism (Hons), DipInvRel (AIRA)

- Corporate communications and investor relations professional
- 20+ years extensive experience in UK & Australia.
- Commenced career as journalist with London Evening Standard.



### Trevor Thomas Director, Studies

MEarthSci (Hons), MAIG, MAusIMM

- 14 years exploration & resource development geologist
- Lead for project management of all technical & feasibility studies
- Delivered Razorback Maiden Ore Reserve; acquired Muster Dam



### Allan Kane Director, Sustainability

BEnvMgmt (Hons), GradCert ProjMgmt, MAusIMM

- 15 years broad resources sector experience
- Lead for sustainability and corporate ESG framework
- Previous roles with SA Department for Energy and Mining

# Magnetite Mines

## Decarbonisation Tailwind

- Premium-grade iron ore needed now to enable decarbonised 'green' iron & steelmaking
- State/federal governments now assessing new green iron industry opportunity

## Outstanding Project Credentials

- Tier 1 location
- Close to port & rail
- 6 billion tonnes in Resources<sup>6,7,8</sup>
- 2 billion tonnes in Ore Reserves<sup>6</sup>

## Progressing to Development

- Partnering in progress
- Experienced Board & management in place
- Progressing through Definitive Feasibility Study

## Substantial re-rating potential

- Project set for long life cash generation
- Very low MGT market cap relative to project value
- Project milestones ahead should close the gap

**ASX:MGT**

## References

1. World Steel Association – 18/05/2023 – World Steel in figures 2023
2. [Metalmorphosis: How decarbonisation is transforming the iron and steel industry | Wood Mackenzie](#)
3. <https://www.premier.sa.gov.au/media-releases/news-items/global-call-to-arms-for-sas-push-to-decarbonise-iron>
4. [Unlocking green metals opportunities for a Future Made in Australia: consultation paper - Consult hub \(industry.gov.au\)](#)
5. ASX Announcement – 22/10/24 - Green Iron SA alliance launched for Green Iron revolution
6. ASX Announcement – 09/02/23 – Iron Peak Mineral Resource Significantly Improved
7. ASX Announcement – 03/11/22 - Muster Dam Mineral Resource Estimate
8. ASX Announcement – 09/06/23 - Iron Peak Deposit Maiden Ore Reserve
9. ASX Announcement – 09/06/23 - Iron Peak Strengthens Razorback Project Economics
10. ASX Announcement – 08/07/24 - Agreement signed with JFE Shoji to fund DFS



## Contact

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# Appendix 1

## Mineral Resources and Reserves<sup>1,3</sup>

Razorback Iron Ore Project (Razorback & Iron Peak deposits combined) <sup>a</sup>								
Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	Magnetite %
Indicated	1,675	15.95	18.36	48.02	8.06	0.18	5.46	15
Inferred	1,570	16.09	17.74	48.6	8.23	0.18	5.53	15.6
<b>Sub-total</b>	<b>3,245</b>	<b>16.02</b>	<b>18.06</b>	<b>48.3</b>	<b>8.15</b>	<b>0.18</b>	<b>5.49</b>	<b>15.3</b>

Results presented at 11% eDTR cutoff

Ironback Hill <sup>*b</sup>								
Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	Magnetite %
Inferred	1,187	-	23.2	44.4	7.2	0.21	5.4	12.9

No cut-off applied to results

Muster Dam Iron Ore Project <sup>*c</sup>								
Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	Magnetite %
Inferred	1,550	15.2	18.7	49.6	8.8	0.2	2.8	-

Results presented at 10% eDTR cutoff

Combined Mineral Resource Estimate								
Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	Magnetite %
Inferred and Indicated	5,982	-	19.4	48.1	8.2	0.2	4.8	-

Results presented as weighted averages of items A, B and C

Razorback Iron Ore Project Ore Reserve*				
Classification	Ore (Mt)	Mass Rec %	Concentrate	
Probable	1,977	14.6	68.5	

Ore Reserves are a sub-set of Razorback Iron Ore Project Indicated Mineral Resource Estimate.\*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 below, 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 Person's findings are presented have not been materially modified from the original market announcements. Tonnages and grades presented above are estimates of in-situ rock characteristics.