

# **Premium Iron Ore**

# For a decarbonising iron & steel sector

Ord Minnett East Coast Mining Conference March 2023



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### MAGNETITE M I N E S

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This presentation should be read in conjunction with the Annual Report at 30 June 2022 together with any announcements made by MGT in accordance with its continuous disclosure obligations arising under the Corporations Act 2001. Any references to resources estimations should be read in conjunction with MGT's Mineral Resources statement for its Magnetite projects at 9 February 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 the relevant market announcement 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.

#### 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.

## Steel demand continuously increases

... and is essential for energy transition



### Steel production has doubled every 20 years

### Additional demand to 2050 for energy transition



#### Steel (Mt) required for green power generation

Source: 2022 World Steel Association

Each new MW of solar power = 35 - 45t steel Each new MW of wind power = 120 - 180t steel

## Decarbonising steel critical to tackle climate change

Global governments and industry now committed



Direct emissions intensity of steel production

t CO2 / t steel

### 'Steel Breakthrough Agenda' agreed at COP27 (2022):

- > Consistent international standards for low emissions steel
- Policies to incentivise low-emissions steel production
- Public funding of projects along steelmaking value chain

### Major steel producer carbon reduction targets

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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

High-grade, low-impurity iron ore necessary for low-emission iron & steelmaking

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## Blast furnaces to be replaced over coming 5 – 25 years



## New high-grade iron ore supply critical to transition

Magnetite Mines' Razorback Project positioned to meet urgent new demand



### **Grade Position of Iron Ore Exporters**

### Direct Reduction (DR) essential to transition

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Source: Dazmin Consulting

Source: Bloomberg

## Shift in demand for high-quality ore now evident

Rising premiums reflect global demand for DR-grade products

## Iron ore's product premiums Vs mainstay fines (US\$/t)



### **Fastmarkets 67.5% Fe pellet feed index**

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- Created Feb 2023 to meet increasing supply/demand
- Feb-23 average price US\$151/t

	New Index base spec.	Razorback Concentrate		
Iron content (Fe)	67.5%	68.5%		
Silica (SiO <sub>2</sub> )	3%	3%		
Alumina (Al <sub>2</sub> O <sub>3</sub> )	0.5%	0.4%		
Phosphorus (P)	0.02%	0.02%		
Granularity P80	<0.15mm	<0.15mm		
Contract type / destination	CFR Qingdao	CFR Qingdao		

#### Source: Platts, Morgan Stanley Research

## MGT premium-quality iron ore is first quartile competitive

De-risking exposure to commodity price cycle downturns

## VIU-adjusted total cash cost curve – 62% equivalent<sup>a,b</sup>

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Production (Mt wet)

Source: Wood Mackenzie, Magnetite Mines

a) Accounts for product premium or discount based on grade / specification

8 b) Cash costs calculated in 2022 dollars using the Single-Step Expansion case from Expansion Study, March 2022





- ✓ Tier 1, geopolitically stable location
- Abundant magnetite resources
- $\checkmark$  100% renewable energy on grid by 2030
- **\$600m commitment to green hydrogen**



### BDO: Economic benefits for 5Mtpa project over 30 years

## Outstanding project location in the undeveloped Braemar

Close to rail, port & renewable energy supply



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## **Razorback Project well positioned for development**

The 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

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Undeveloped, low intensity pastoral country

## **6 Billion Tonnes in Resources**

- ~2,000km<sup>2</sup> total iron ore tenements
- 4.5Bt Razorback Resource<sup>1</sup> (JORC 2012 Indicated & Inferred)
- 1.5Bt Muster Dam Resource<sup>2</sup> (JORC 2012 Inferred)

## **1.6 Billion Tonnes in Reserves**

 1.6Bt Razorback Ore Reserves<sup>3</sup> (JORC 2012 Probable)

## **Positive Optimisation Studies Results**

Results leading to larger scale production and staged expansion strategy



## Commitment to staged development pathway



## **Respected consulting partners**









- ✓ Resource upgrades at Razorback and Iron Peak
- ✓ Metallurgy completed to DFS level
- ✓ Process flowsheet optimised
- Port options under MoU
- Confirmed infrastructure access for rail and power supply
- ✓ 3 water supply options under review
- ✓ Indicative economics robust underpinned by economies of scale
- ✓ Value engineering Stage 1, 5Mtpa case in progress

## High-grade Iron Peak – prioritised for production

Recently upgraded Mineral Resource, now the best deposit in the MGT portfolio



## 4km from Razorback

- Best mass recovery
- Best concentrate quality
- **V** First 10 years plant feed
- Orebody open along strike/depth

#### Mineral Resources (Inferred + Indicated)

Tonnes

503 Mt

Mass Recovery: 19.4%

#### **Concentration Grade**

Iron Grade

68.5% Fe

Major impurities: **3.2%SiO2** (silica) **0.4% Al2O3** (alumina)

### **Robust economics**

#### **Previous Study Outcomes:**

	Unit	2021 PFS Plant Optimisedª	2022 Expansion Study
Production capacity	Mtpa	3	3 → 7
Development capital	A\$m	665	1,985
Post-tax NPV-8	A\$m	660	2,455
Post-tax IRR <sup>b</sup>	%	19%	27%
All-in breakeven <sup>c</sup>	US\$/t	53	40

- a) Expansion Study Stage 1 basis: PFS Plant Optimised case with 0.71 AUD:USD exchange rate
- b) 62% Fe iron ore price assumption of US\$110/t with quality adjustment premium of US\$25/t
- c) 62% Fe iron ore price equivalent break even price, CFR China (62% Fe equivalent)
- d) The Company confirms that all material assumptions underpinning the production targets and forecast financial information contained in the original 2022 Expansion Study announcement continue to apply and have not materially changed.

Building our ESG platform Founded on renewable energy use and global decarbonisation contribution



emission steel

Environmental sustainability	<ul> <li>Enabler for fast-evolving Green Steel production</li> <li>Low site Scope 2 emissions – SA renewable energy grid</li> </ul>	
Social & community inclusion	<ul> <li>Deep relationship building with Ngadjuri Nation</li> <li>MoU with local government underway to engage community</li> </ul>	Recording regional cultural heritage values with a Ngadjuri heritage team
Accountable governance	<ul> <li>Seeking early adoption of assurance/performance standards</li> <li>Planning for initial ESG disclosure reporting (end 2023)</li> </ul>	Grid-connected power supply, forecast to be 100% renewable by 2030
People & culture	<ul> <li>Values set workplace culture – building for future growth</li> <li>Zero reportable incidents in 2022</li> </ul>	

## **Corporate overview**



#### Market Cap

\$48M (Share price \$0.63 at 20 Mar 2023)

Cash

\$9.6M (31 Dec 2022)

Shares on Issue: 75.8M

Listed options MGTOE: 7.3M

**Options: 3M\*** 

**Unlisted Options 4.8m** 

**Unlisted Performance Rights 1.4m** 

### **Share Performance and Register**



## **Recently strengthened Board**

New governance team with deep corporate and resource credentials

### MAGNETITE M I N E S

## **Board of Directors**



#### Mark Eames Chair of the Board BA Metallurgy (Hons) MBA MAUSIMM

- Global minerals industry experience
- Senior iron ore roles with Glencore, BHP, Rio Tinto
- · Qualified metallurgist with international experience



#### Jim McKerlie Non-executive Director BA Economics (Hons) Dip Fin Mgt

- · International CEO and public company director
- Chaired four IPOs, depth of experience in technology & 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



#### Simon Wandke Non-executive Director BA Psych Mkt (Comm) G Dip Corp Fin

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



#### Paul White Non-executive Director Master of Business Administration

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



#### Dr Carmen Letton Non-executive Director BA Engineering (Hons) MAUSIMM, PHD Philosophy, Mineral Economics

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

Combining leadership with corporate and international resource project experience

### MAGNETITE M I N E S

## **Executive Team**



#### Tim Dobson Chief Executive Officer B.AppSc Ext.Metallurgy, GAICD, MAusIMM

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



#### Ian Kirkham Chief Financial Officer B.Ec Economics & Accounting

- Experienced resource company corporate executive
- Deep governance, risk and financial management experience
- CFO and Company Secretary roles at various ASX-listed companies



#### Trevor Thomas Study Director 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 GM – Sustainability B.EnvMgmt (Hons), GradCertProjMgmt

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



#### **Gemma Brosnan GM – External Affairs** BA Journalism (Hons)

- · Corporate communications and investor relations professional
- 17 years extensive international experience in the UK & Australia.
- Commenced career as journalist with London Evening Standard.

# Premium Iron Ore For a decarbonising iron & steel sector



## Decarbonisation Tailwind

Premium iron ore needed now to enable low emission iron & steelmaking

## Outstanding Project Credentials

Tier 1 location 6 billion tonne Resource Existing port & rail access

# Committed to Staged Development

Refocused DFS with Stage 1 capacity matched to market and risk profile

# Progressing to Development

Strengthened Board New management team Corporate presence

# **ASX:MGT**

## References

- 1. ASX Announcement 09/02/23 Iron Peak Resource Significantly Improved
- 2. ASX Announcement 22/11/22 Muster Dam Mineral Resource Estimate
- 3. ASX Announcement 22/03/23 Razorback Iron Project Ore Reserves Increase 340% Update





## Contact

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