



Premium Iron Ore

For a decarbonising
iron & steel sector

December 2022



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ADDITIONAL INFORMATION

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 30 June 2022 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.

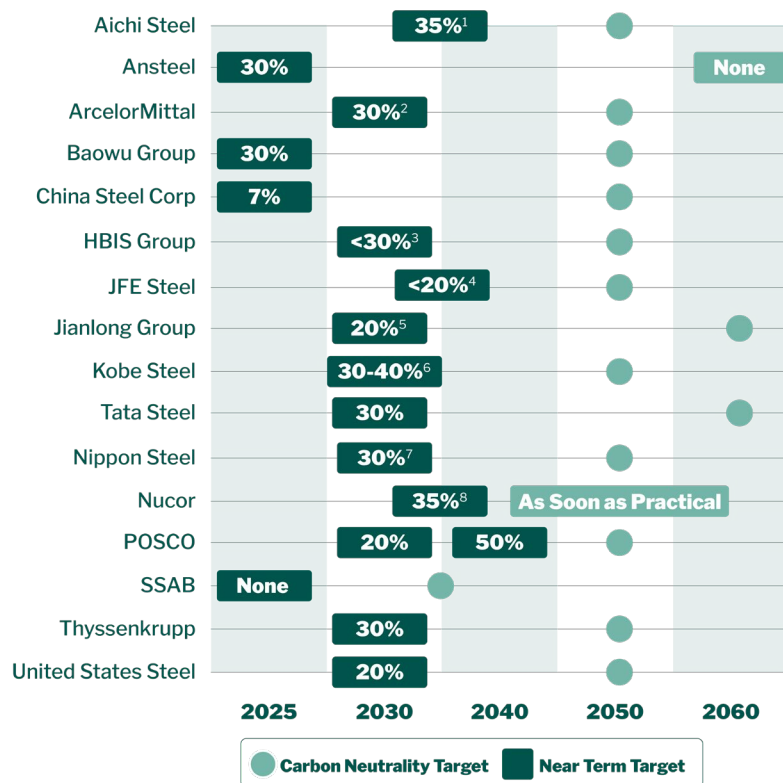
ACKNOWLEDGEMENT OF COUNTRY

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.

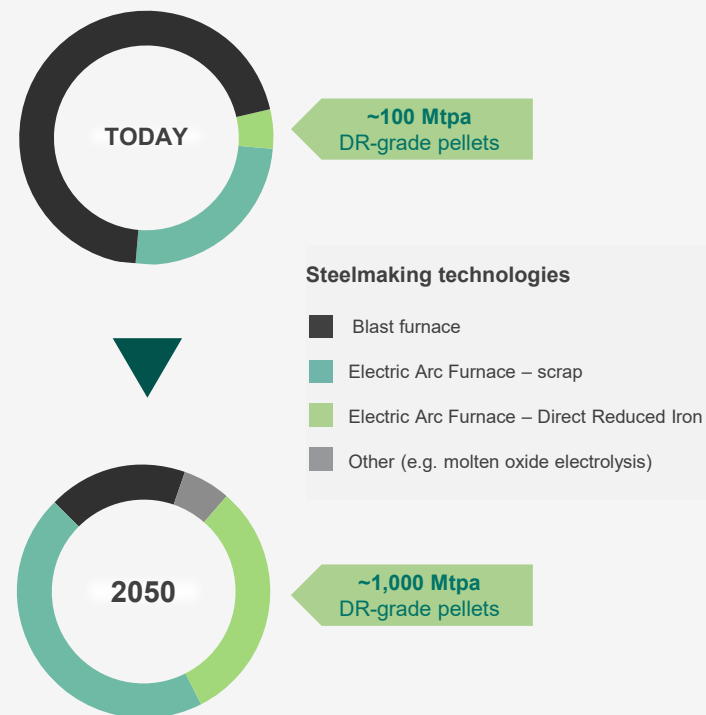
Iron & steelmaking is irreversibly changing

Increasing global demand for steel in direct conflict with decarbonisation

Major steel producer carbon reduction targets



Direct Reduction (DR) essential to transition



COP27 calls for billions in global green steel investment

Steel one of five priority areas targeted for emissions reductions



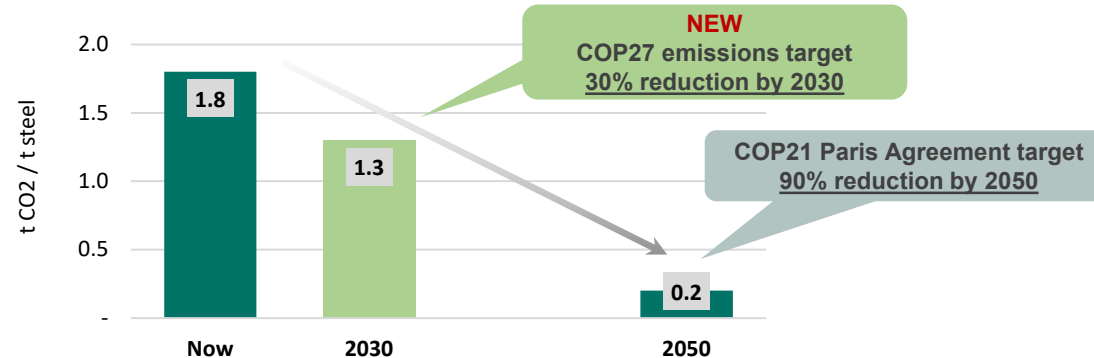
High-grade ore for Direct Reduction:

“... the scale of production needs to increase rapidly to support the 2030 goals.”

Breakthrough Agenda Report for COP27
September 2022

- 100 - 500Mt of low emissions steel required by 2030
- 40 - 200 new electric arc furnaces by 2030 (5 - 25 every year)

Direct emissions intensity of steel production



Priority international actions under Steel Breakthrough plan

1. Internationally-agreed standards of low emissions steel
2. National & international policy incentivising low-emissions steel production
3. Public and private funding of projects along the steel-making value chain

Rapid commitment to new DRI-EAF installations

... has escalated urgency to secure high-grade iron ore feed supply



A Verisk Business

- High-grade iron ore consumption to increase five-fold to 750Mtpa
- US\$95 - \$125B to be spent on high-grade ore exploration by 2050
- Green premium of ~US\$80 by 2025 and ~US\$100 from 2030+

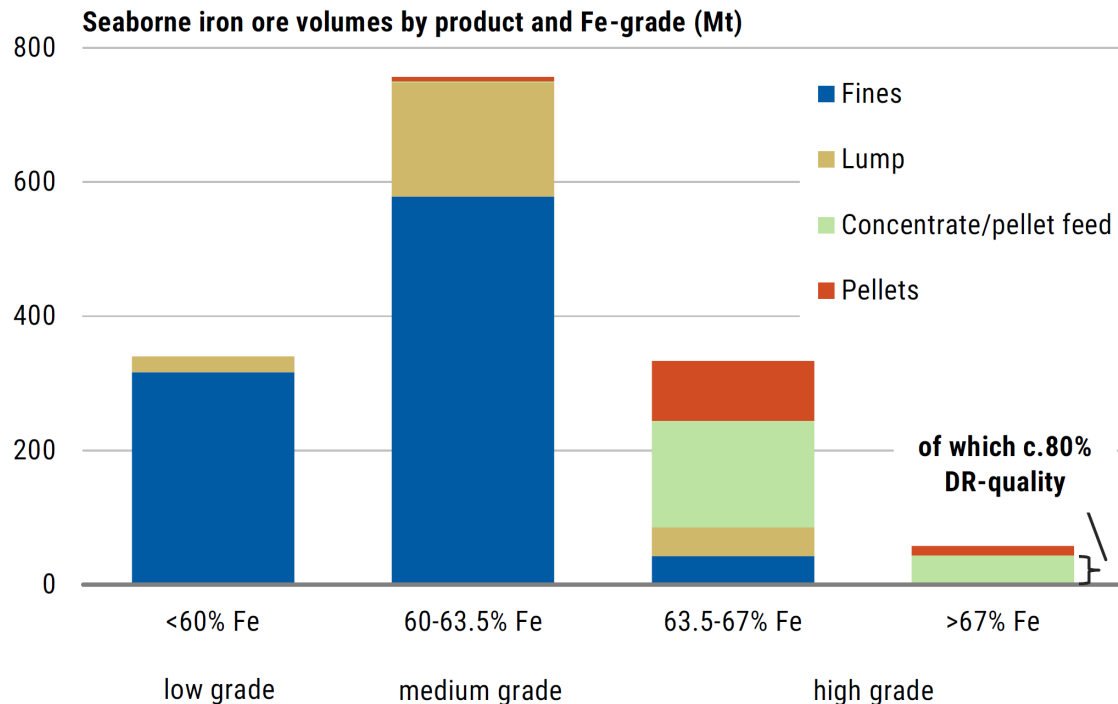
South Australia has all the ingredients to be a global leader in green steel

"... the state is judged to have strong potential to become a substantial exporter of high-grade, green ferrous feed/products."

May 2022



Not all iron ore is equal; the relatively small, higher-quality market



Source: Morgan Stanley Research, Wood MacKenzie

Asia to remain key market for Australian iron ore

Demand for iron ore & steel tied to infrastructure and housing development

Asia accounted for 81% of global iron ore demand in 2021



CHINA

- 63% iron ore imports met by Australia in 2021
- Accounts for ~62% of global steel emissions; emissions must fall by >95% to reach net zero target
- Carbon border taxes (eg, EU's carbon border adjustment mechanism) to incentivise low-emissions steelmaking



SOUTH KOREA

- 75% iron ore imports met by Australia in 2021
- Comprehensive 'Strategic Partnership with Australia' signed in Dec 2021 prioritises low-emissions steelmaking



JAPAN

- 50% iron ore imports met by Australia in 2021
- Continued strong investment in Australian iron ore, e.g. Roy Hill, Robe Valley, West Angelas
- 'Japan-Australia Partnership on Decarbonisation through Technology' highlights focus on low-emissions steelmaking



INDIA

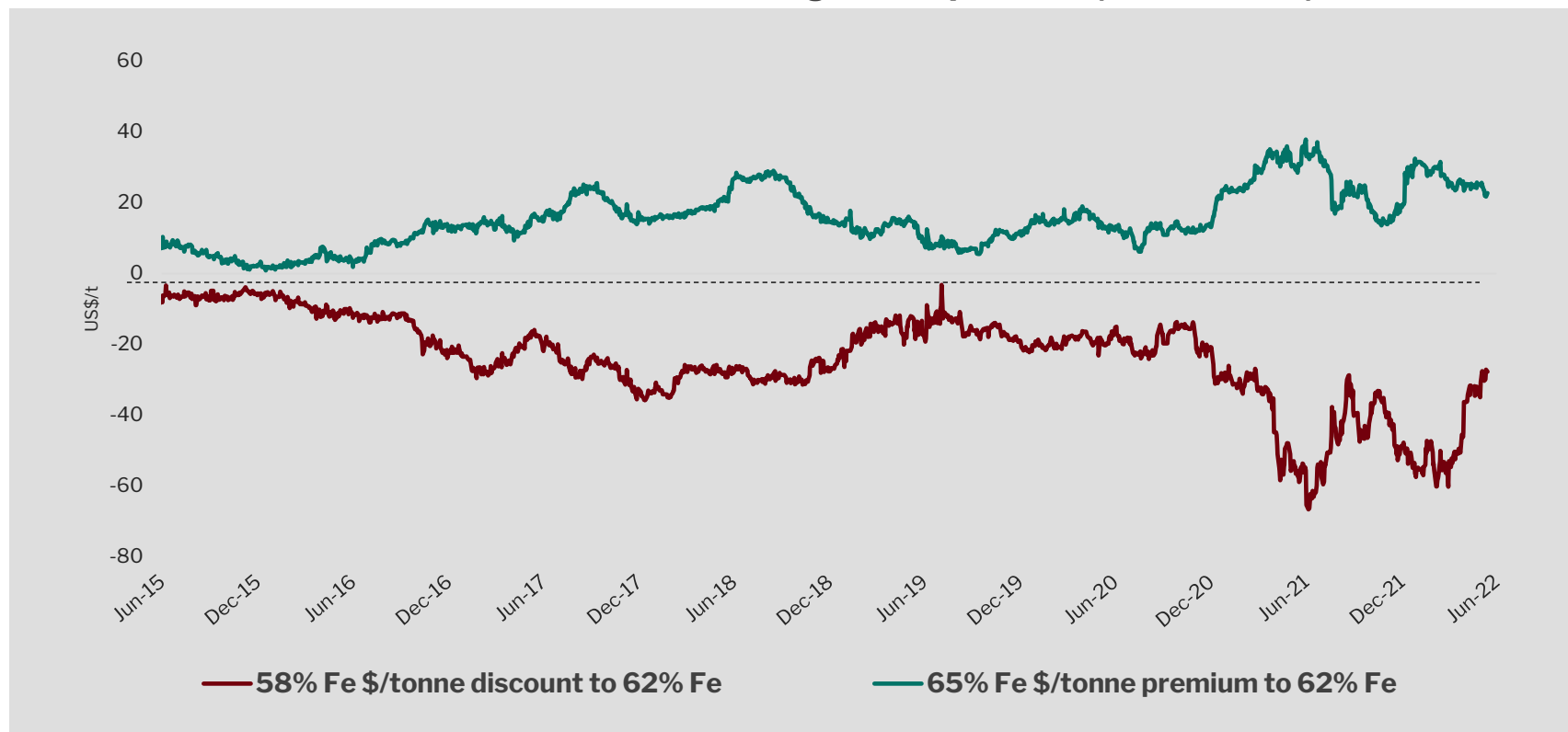
- In October, Prime Minister Modi reiterated goal of doubling steel production capacity from 154Mt to 300Mt by 2030

Source: Government of Western Australia – Iron Ore Profile Sep 2022, Wood Mackenzie, Times of India

Shift in demand for high-quality ore now evident

High-grade and low-grade iron ore prices are diverging

Fastmarkets iron ore index grade spreads (US\$/tonne)

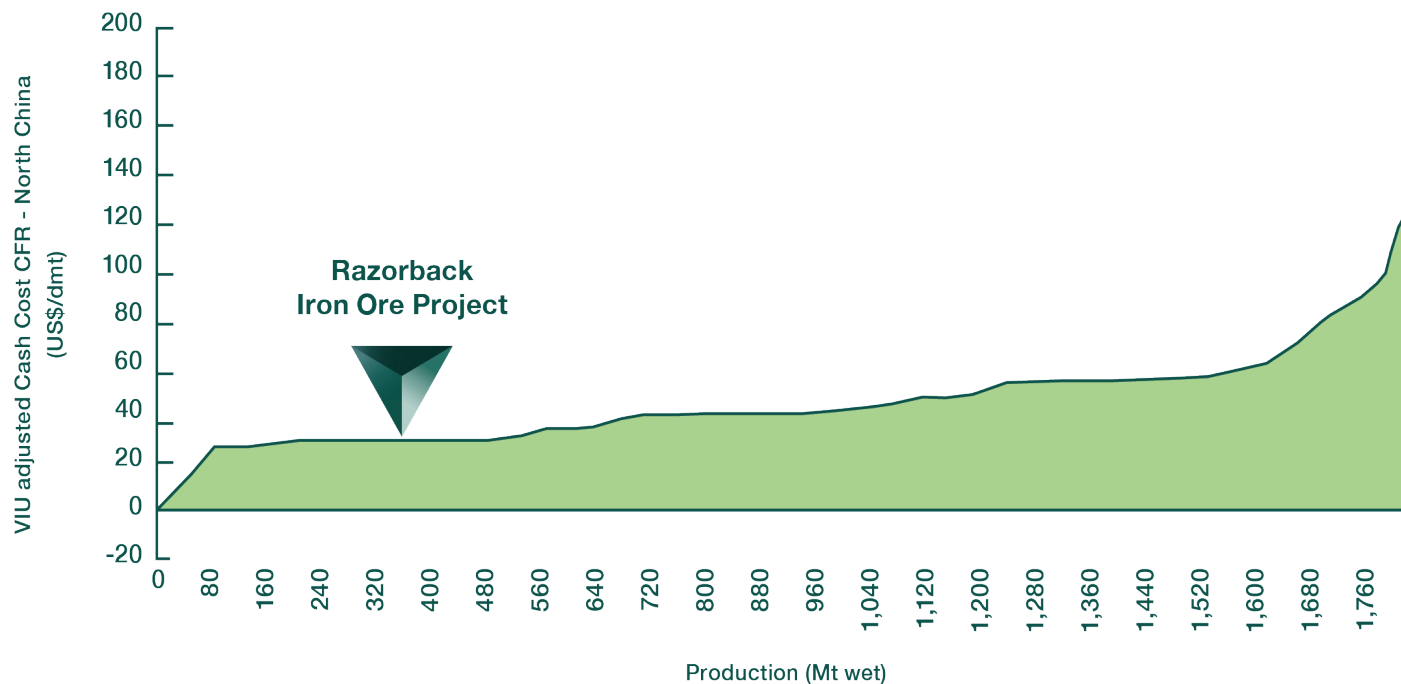


Premium quality iron ore is first quartile competitive

De-risking exposure to commodity price cycle downturns

First quartile cash costs (62% Fe equivalent)

VIU-adjusted total cash cost curve - CFR north China^{a,b}



Source: Wood Mackenzie, Magnetite Mines

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

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

Razorback Project well positioned for development

The Braemar – a globally-significant magnetite province



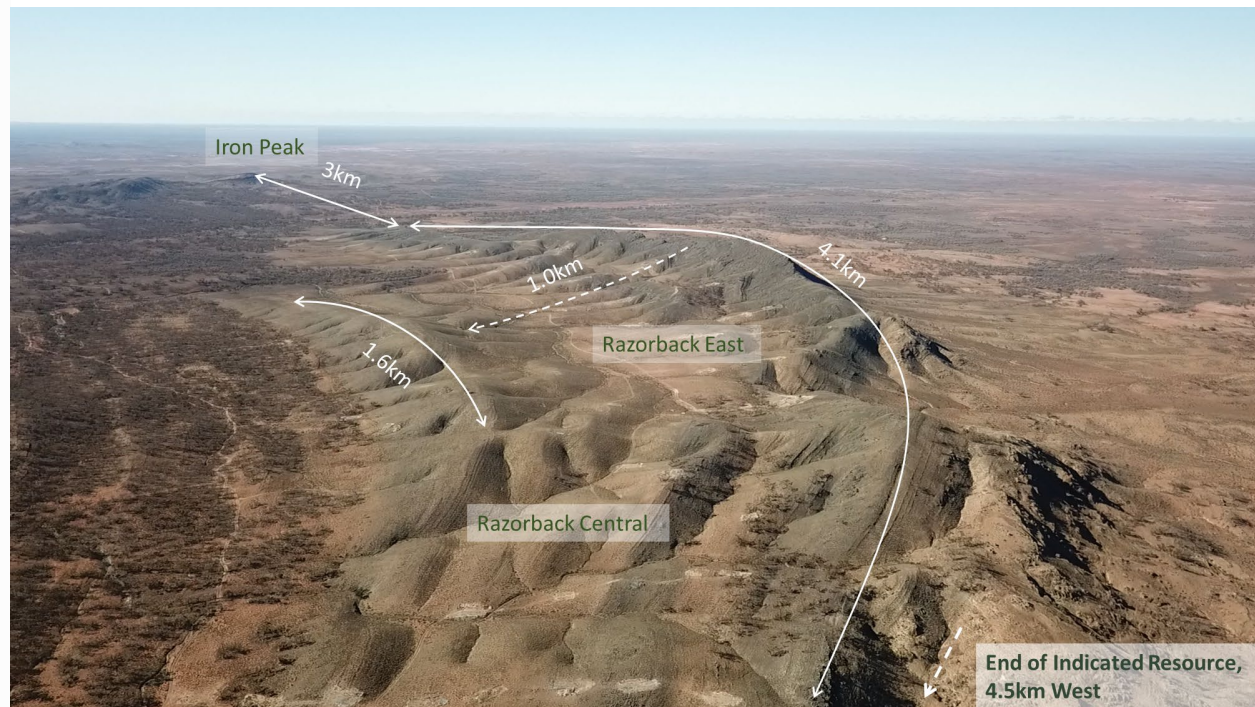
The Braemar advantage

- 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

Substantial resources

- ~2,000km² total iron ore tenements
- 4.2Bt Razorback Resource^{1,2}
(JORC 2012 Indicated & Inferred)
- 473Mt Maiden Ore Reserve³
(JORC 2012 Probable)
- 1.5Bt Muster Dam Resource⁴
(JORC 2012 Inferred)

*BIF: Banded Iron Formation, common host geology for West Australian magnetite deposits



Outstanding project location in South Australia

Close to rail, port & renewable energy supply



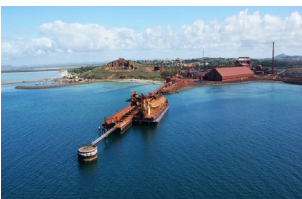
Adelaide

240km



Open-access rail

~50km



Whyalla Port

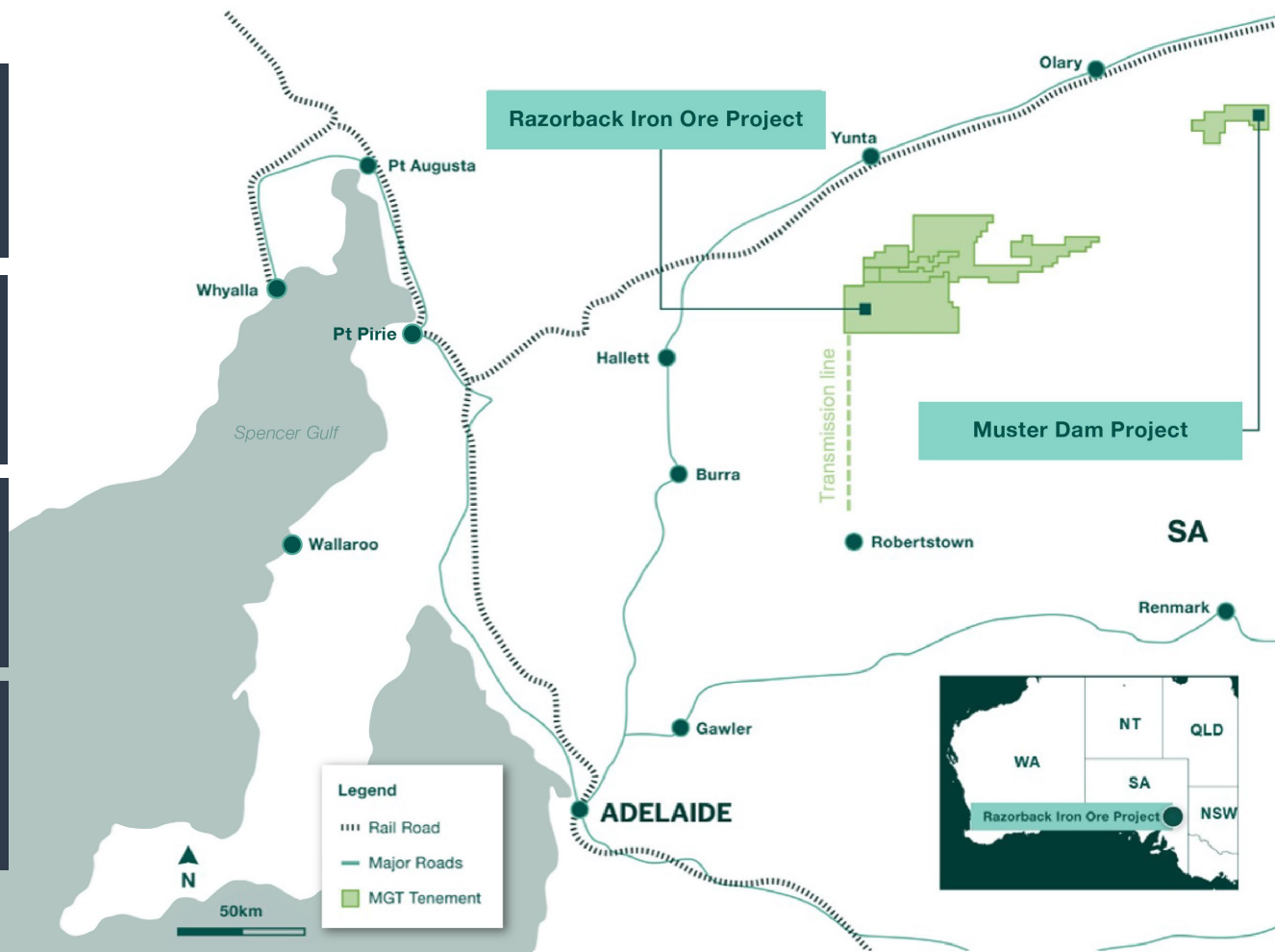
~315km



Grid Power

100% renewable by
2030⁵

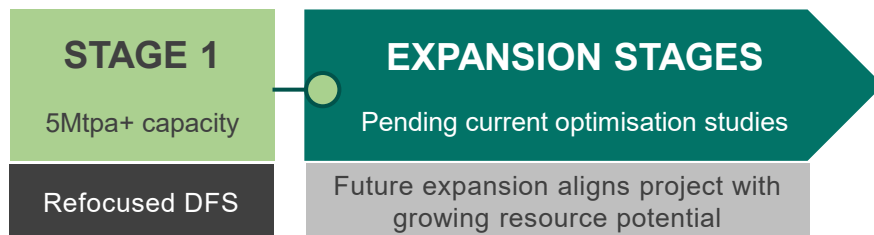
~125km



Project Optimisation Studies underway

Results leading to DFS go-forward position

Commitment to staged development pathway⁶



Best-in-class consultants engaged throughout

HATCH

AMC
consultants



eco
logical
AUSTRALIA
A TETRA TECH COMPANY

Optimisation studies to be completed Q12023

Providing basis for refocused 5Mtpa+ DFS

Significant expansion benefits evident⁷

Previous Study Outcomes:

	Unit	2021 PFS Plant Optimised ^a	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 ^b	%	19%	→ 27%
All-in breakeven ^c	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
- 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 on an established ESG platform

Founded on renewable energy use and global decarbonisation contribution



Recording regional cultural heritage values with a Ngadjuri heritage team



Grid-connected power supply, forecast to be 100% renewable by 2030



Premium-grade iron ore produces low emission steel

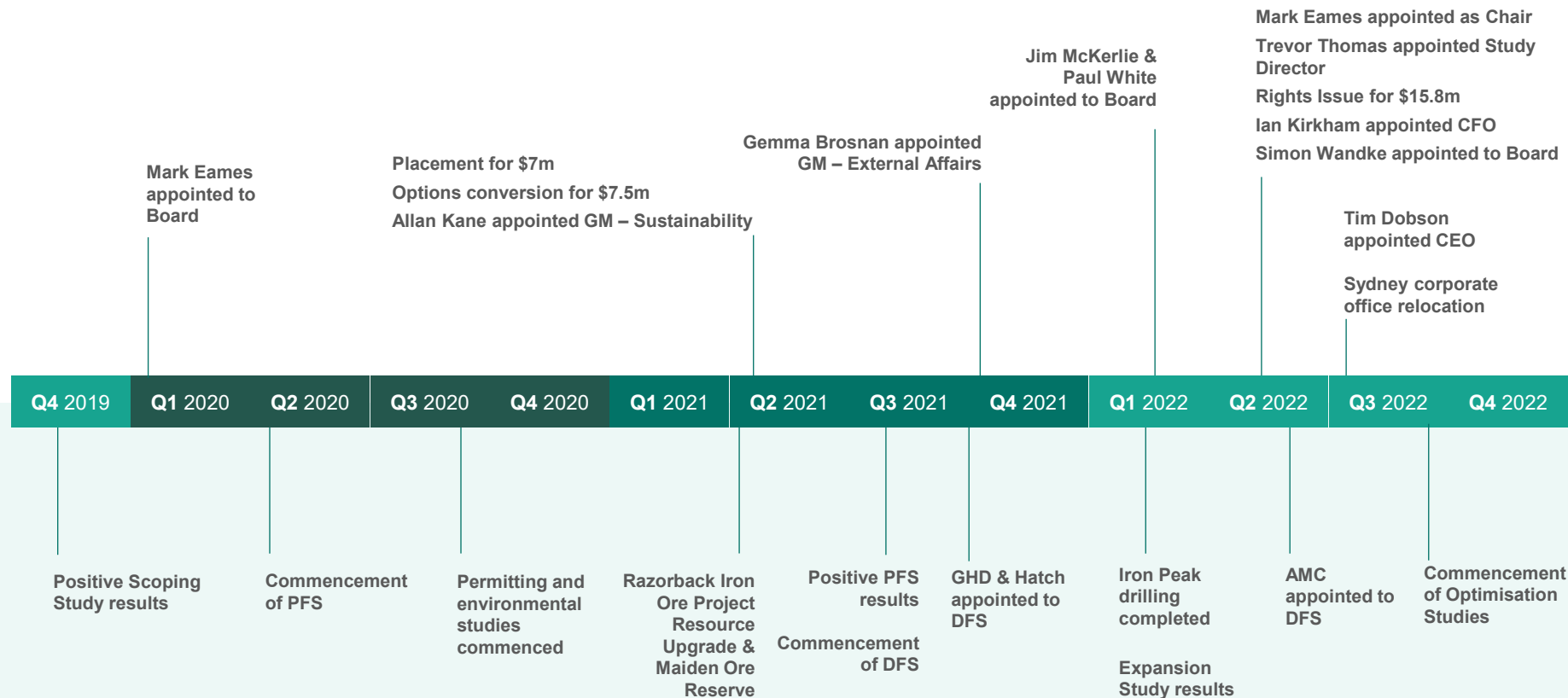


Magnetite Mines is transforming

Reflecting timing and acceleration of downstream industry needs

Corporate

Development



Corporate overview

Market Cap

\$62.6M

(Share price \$0.016 25 Nov 2022)

Cash

\$12.65M

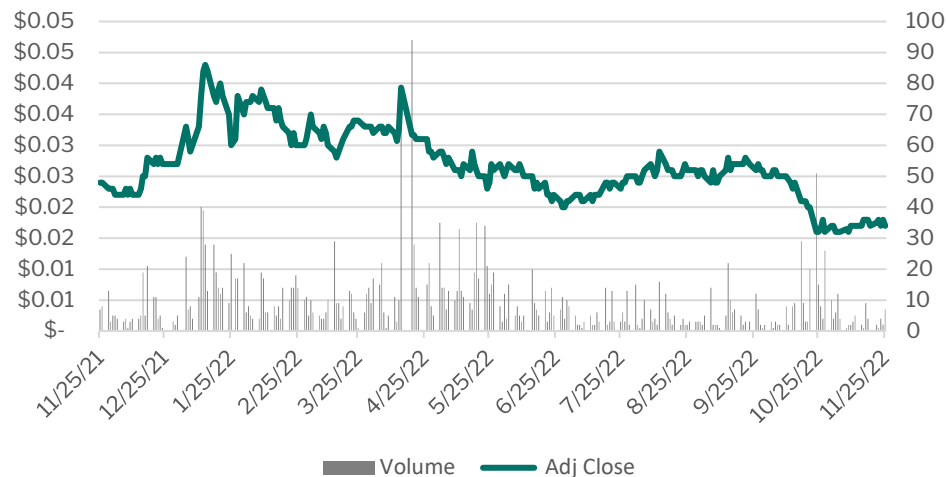
(30 Sep 2022)

Shares on Issue: 3,791M

Listed options MGTOE: 363.3M

Options: 152.3M*

Share Performance and Register



Other Shareholders: 68.5%

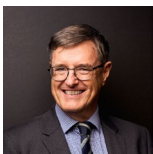
Top 20: 26.4%

5% Board and Management

Recently strengthened Board

New governance team with deep corporate and resource credentials

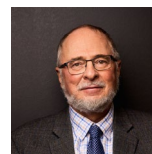
Board of Directors



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



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



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

New executive team

Combining leadership with corporate and international resource project experience

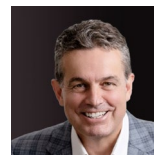
Executive Team



Tim Dobson Chief Executive Officer

B.AppSc Ext.Metallurgy, GAICD, MAusIMM

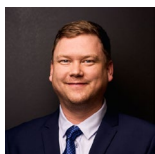
- 35 years extensive international mining experience
- Track record of developing, operating and transforming projects
- ASX CEO & international senior executive leadership roles



Ian Kirkham Chief Financial Officer

B.Ec Economics & Accounting

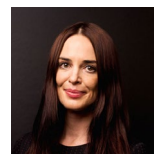
- Experienced resource company corporate executive
- Deep governance, risk and financial management experience
- CFO and Company Secretary roles at various ASX-listed companies



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



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.



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

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
5.7 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 – 24/05/21 – Razorback Iron Project Mineral Resource Upgrade
2. ASX Announcement – 20/11/18 – Ironback Hill Deposit – JORC 2012 Resource Update
3. ASX Announcement – 30/06/21 - Maiden Ore Reserve for the Razorback Iron Project
4. ASX Announcement – 11/05/22 – Magnetite Mines Secures Muster Dam Tenement
5. Government of South Australia – Energy and Mining – Leading the green economy
6. ASX Announcement – 13/09/22: Magnetite Mines Transforming To Meet Growing High-Grade Market
7. ASX Announcement – 21/03/22 – Magnetite Mines Confirms Benefits of Expansion at Razorback
8. ASX Announcement – 05/07/21 – Positive PFS Results for Razorback Iron Project
9. ASX Announcement – 21/07/22 - Positive Interim Metallurgical Test Results
10. Wood Mackenzie, Magnetite Mines research

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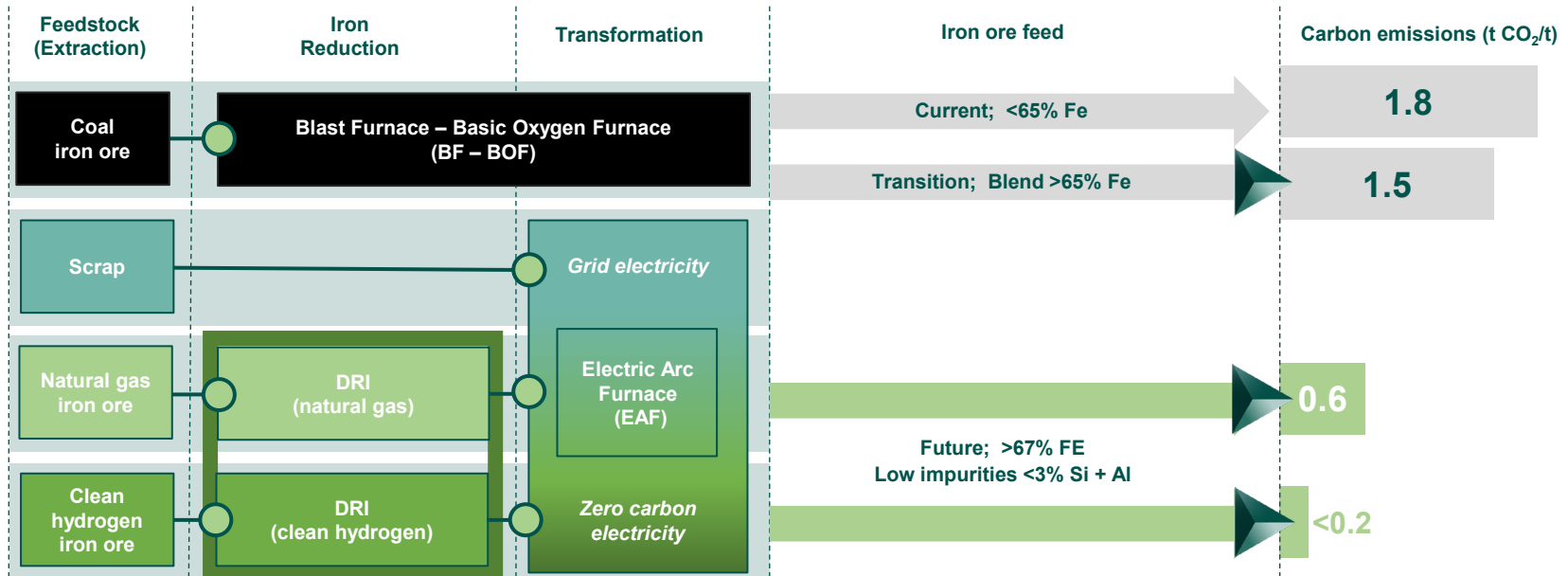


Appendix

High-quality feed necessary to make the change

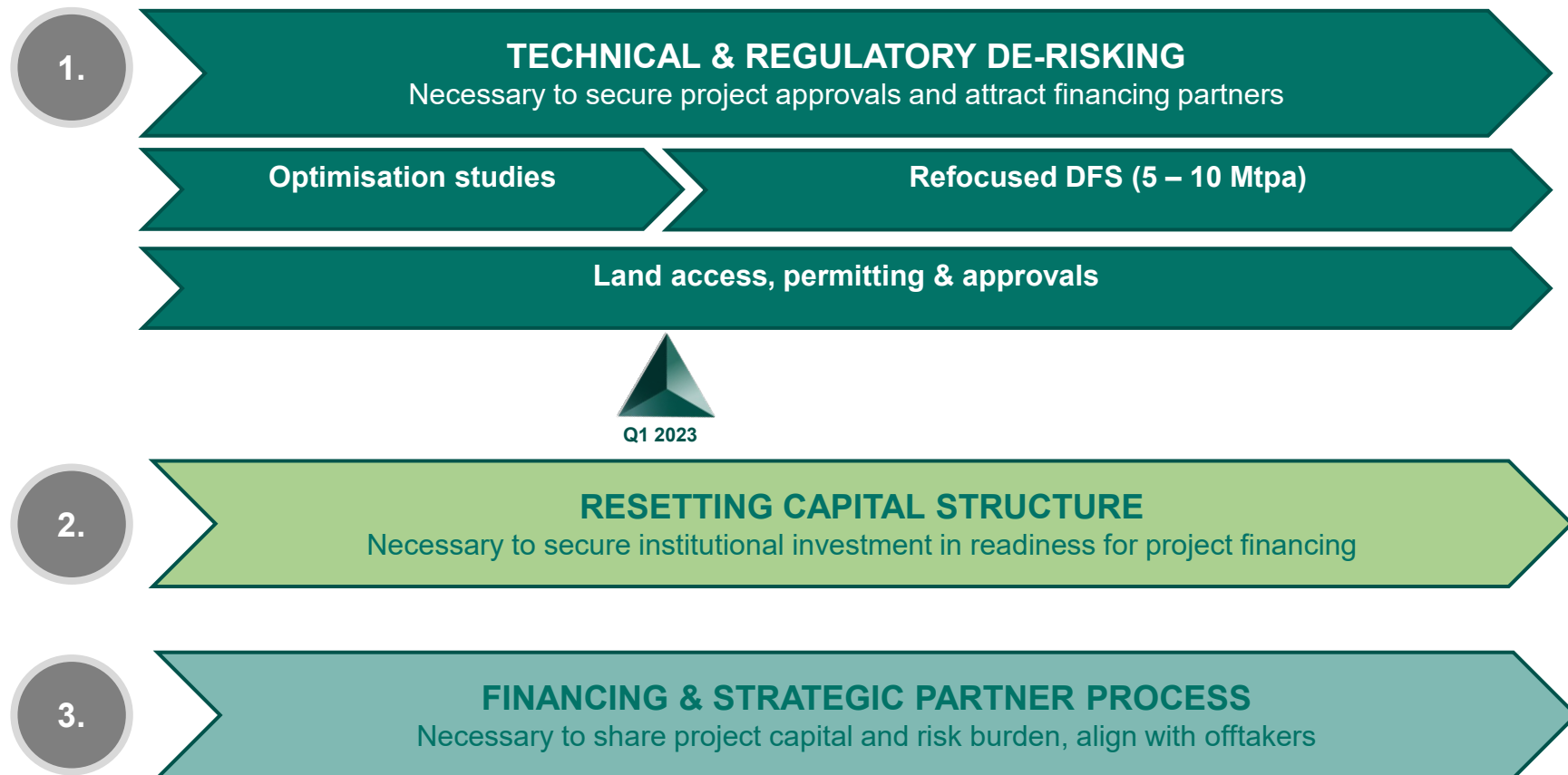
Low-emission iron & steelmaking requires high-grade, low-impurity iron ore

Steel manufacturing technologies



Work in focus to secure best possible project structure

Three workstreams progressing in parallel



Mineral Resources and Reserves

Razorback Iron Ore Project*1,A

Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
Indicated	1,500	15.6	18.5	47.9	8.0	0.18	5.4	15.0
Inferred	1,500	16.0	18.0	48.3	8.2	0.18	5.5	15.9
Sub-total	3,000	15.8	18.2	48.1	8.1	0.18	5.5	15.5

Results presented at 11% eDTR cutoff

Ironback Hill*2,B

Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO ₂ %	Al ₂ O ₃ %	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^C

Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
Inferred	1,550	15.2	18.7	49.6	8.8	0.2	2.8	-

Results presented at 10% eDTR cutoff

Global Mineral Resource Estimate*

Classification	Tonnes (Mt)	Mass Rec %	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
Inferred and Indicated	5,740	-	19.4	47.7	8.1	0.2	4.7	-

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

Razorback Iron Ore Project Ore Reserve*3

Classification	Ore (Mt)	Mass Rec %	Concentrate (Mt)
Probable	472.7	14.5	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.