

ASX: MGT

Equity Research

30 March 2023

SPECULATIVE BUY

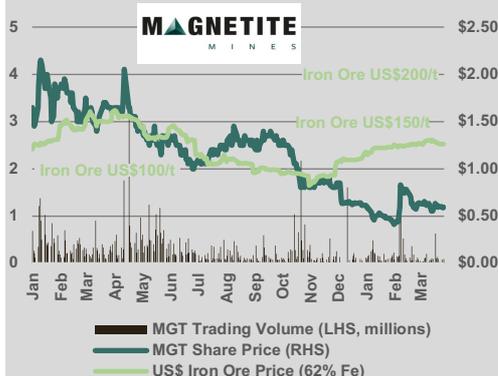
Share Price	\$0.595
Valuation	\$2.90*
Price Target	\$4.50*

* to be updated with Iron Peak included in development study

52-Week Range	\$0.455 - \$2.150
MGT Shares Outstanding	75.84m
Listed Options (\$2.50, 20 May 2023)	7.27m
Unlisted Options (\$2.265, 17 Mar 2024)	0.08m
Unlisted Options (\$1.95, 27 Jun 2025)	0.14m
Unlisted Options (various, various)	2.23m
Unlisted Options (\$2.03, 14 Oct 2025)	0.29m
Unlisted Options (\$1.39, 1 Dec 2025)	1.05m
Unlisted Options (\$0.915, 15 Dec 2025)	0.60m
Unlisted Options (\$0.78, 1 Feb 2029)	0.28m
STI Performance Rights	0.40m
LTI Incentive Options (\$1.34 ex. price)	0.38m
Sign-on Rights (30 Jun 2023 & 2024)	0.25m
Market Capitalisation	\$45.1m
Cash (30 Dec 2022)	\$9.6m
Enterprise Value	\$35.5m
Substantial Shareholders	
National Nominees Ltd	9.69%
Citicorp Nominees Pty Ltd	2.70%
Mr Kun Liu	1.42%
Mr Siat Yoon Chin	1.36%
Mr Mark Eames	1.30%

Board & Management:

Mark Eames	Chairman
Peter Schubert	Non-Executive Director
Jim McKerlie	Non-Executive Director
Paul White	Non-Executive Director
Simon Wandke	Non-Executive Director
Dr Carmen Letton	Non-Executive Director
Tim Dobson	Chief Executive Officer
Ian Kirkham	Chief Financial Officer & Co. Sec



Magnetite Mines Limited (ASX: MGT) is focused on the development of magnetite iron ore resources in the highly prospective Braemar iron region of South Australia. The mineral resource of its flagship Razorback project located 240km from Adelaide amounts to 6.0 billion tonnes of iron ore. The Project is a planned mining operation aiming to meet accelerating market demand for premium iron ore products. The Project consists of the mine, a processing plant, road access to an existing freight rail line for haulage of the iron ore concentrate to the Port of Whyalla.

Magnetite Mines Limited

Update on Key Positive Project and Markets Developments

Iron Peak Game Changer: the well-received by the market mineral resource update regarding the Iron Peak deposit represents significant improvements affecting the Razorback Iron Ore Project. Beyond the increase in tonnage to 503 million tonnes (up 20%), the increased mass recovery of 19.4% (up 15%) makes it the highest grade deposit available to the Project. Metallurgical testwork completed to date indicated that the Project is able to produce DR-grade products attracting higher price premiums.

New Mine Development: the development of the Iron Peak mineral resource takes now precedence over the Razorback deposit bringing with it improved Davis Tube Recovery (DTR), superior metallurgy and higher value products.

Economic Impact: starting the mine with the development of the Iron Peak mineral resource makes perfect economic sense and should add value particularly in the early years, when the project needs it the most.

Massive Mineral Resource: the Razorback Iron Ore Project combines a globally significant mineral resource with enviable characteristics: 6.0 billion tonnes inclusive of Ironback Hill and Muster Dam a very low strip ratio of 0.13 (with no pre-strip) and low deleterious elements (silica, alumina and phosphorus). Overall, this massive resource may translate to a mine life in excess of the 45 years currently envisaged in development studies.

Competitive Advantages: the results of our previous benchmarking (based on the 2022 Expansion Study) indicated that the Razorback project benefits from a reasonable capital intensity with the longest initial mine life among its peers. Profitability of the project was one of the best. We expect those economic parameters to improve further with the addition of Iron Peak.

From a steel manufacturing perspective, MGT's magnetite is a high-grade product with grade of 68.5% Fe and low impurities highly sought after by steelmakers to increase productivity, provide efficiencies & reduce emissions.

Development Options: given the increased mineral resource in terms of both size (6.0 billion tonnes and growing) and quality (DR grade), the optimisation study released on 20th March 2023 considered an initial 5 Mtpa concentrate production, increasing to 10 Mtpa a few years later (versus a previously envisaged 3 Mtpa to 7 Mtpa development scenario).

Government Support: the Razorback project fits well with the State Government's vision of becoming a leading global supplier of quality magnetite products for steelmaking. It is also worth noting that the financial contribution (royalties, corporate taxes, payroll taxes, excise duties, income taxes) from the project will be outstanding, estimated by a recent analysis report from BDO at \$31 billion over 30 years including \$1.6 billion for the South Australian Government and \$3.8 billion for the Australian Government.

Green Steel: as the expectation of cleaner, greener steel production becomes further embedded in the global narrative, MGT magnetite products offer a viable alternative to Direct Shipping Ores (DSO), for which most of the high-grade deposits are now significantly depleted. Its production will also be assisted by renewable energy making it even greener and more competitive.

Strategic Investors: a number of parties have been given access to a data room to undertake their due diligence of the Razorback project. One can expect some agreement with one or more of them during 2023.

Key Share Price Catalysts: the release of the Optimisation Studies delivering DR products should intensify the discussion with off-takers and project partners leading to project development pathways and funding, which will significantly de-risk the project and improve MGT's value further.

MGT Valuation: there are certainly a lot of positive developments in favour of MGT's project. Overall, we expect the project economics to improve quite significantly and look forward to the release of the financials to update our figures and valuation accordingly.

TABLE OF CONTENTS

1. Magnetite Mines' Strategy	2
2. Impact of Iron Peak on Project Economics	3
Increased Mass Recovery	3
Superior Metallurgy	4
Product Quality	4
3. Iron Ore Magnetite Market Developments	5
Iron Ore: Hematite v Magnetite	5
Decarbonisation of the Steel Manufacturing Industry	6
The South Australian Magnetite Advantage	7
Premium Products Attract Premium Prices	7
South Australian Government Support	8
Recent Magnetite Projects Development Activity in Australia	9
4. Magnetite Mines Projects	10
Project Location	10
Mineral Resource	10
Ore Reserve	11
Production and Exploration Upside	11
Iron Concentrate Product	12
5. Directors & Management Team.....	12
6. Investment Risks.....	12

All dollar amounts are in Australian dollars unless otherwise specified.

1. Magnetite Mines' Strategy

MGT's development approach for the Razorback Iron Ore Project is a staged approach producing an attractive high-grade concentrate and balancing the minimum amount of capital with the requirement to deliver an economic and robust pathway to first ore, using existing infrastructure to reduce upfront capital costs. The Project's large resources support a scalable operation with substantial expansion potential. Connection to the Southeast Australian electricity grid allows access to low-cost power with a progressively renewable supply mix (forecast to be 100% renewable by 2030) and decreasing emissions profile.

The Company has recently delivered optimisation studies results with the key outputs as follows:

1. Best-case Project configuration confirmed as a staged development commencing with Stage 1 capacity of 5Mtpa concentrate output, with potential to expand to 10Mtpa after 5 years.
2. New JORC-compliant Probable Ore Reserve calculated with a 340% increase in tonnage from 473Mt to 1,615Mt based on a 5Mtpa production scenario, not including Iron Peak.
3. DFS-quality metallurgical studies completed, substantially de-risking process design, flowsheet; equipment selection – all based on well-proven, industry standard technologies².
4. 100% of Stage 1 concentrate production to be DR-grade, pellet feed quality: 68.5% Fe with low major impurities (3.4% combined silica + alumina)². This feature establishes Razorback as a key contributor of the Green Steel supply chain.
5. Stage 1 to take advantage of existing product transport infrastructure with road transport planned to rail siding, and then rail to port. MoU with SIMEC firms Whyalla as logical Stage 1 port for Razorback concentrate export³.
6. Renewable energy supplied from South Australia's electricity grid confirmed, with transmission and connection design well advanced in conjunction with SA's electricity transmission provider ElectraNet⁴.

7. Three technically and economically viable Project water supply options costed. Preferred option is currently undergoing commercial in confidence negotiations.

MGT is now completing mining studies on the recently upgraded high-grade Iron Peak Resource to support Ore Reserve estimation and enable completion of financial modelling for the new Project configuration with results expected in the near future.

The Company has also commenced a value engineering (VE) program to reduce capital and operating costs for the new Project configuration prior to DFS-level engineering. Other priorities include securing the preferred water supply option, producing concentrate samples for customer assessment, completing geotechnical field work to support DFS-level engineering, and advancing negotiations with infrastructure partners.

This forecast demand for high-grade concentrates, along with associated pricing premiums, is now facilitating the economic development of the Razorback Iron Ore Project. MGT is assessing both the expected pricing premiums and the decarbonisation benefits that result from the use of Razorback concentrates to produce steel. Our previous valuation used a fixed US\$25/t high-grade premium assumption. There is considerable upside for the premium to increase before the project construction and over the life of the project as the steel market greenifies, See Section 3. Iron Ore Magnetite Market Developments.

It is also making sure the Project meets both the economic and Environmental, Social and Governance (ESG) criteria demanded by the market and necessary to attract investment.

2. Impact of Iron Peak on Project Economics

The high-grade Iron Peak deposit is now under assessment to support expansion to 10Mtpa and should see an increase of the ore reserve in terms of both tonnes and mass recovery. Awaiting the detailed parameters to be included with Iron Peak, we can confirm or infer the following at this time:

- Increase of throughput to build a concentrate production capacity of 5 Mtpa initially (Stage 1) increasing to 10 Mtpa (Stage 2) after five years
- Mine plan initially focused on the development of the Iron Peak mineral resource
- Increased ore reserve beyond the March 2023 ore reserve, which should be considered simply as a support for the processing plant capacity increase and expansion vis à vis the JORC Code
- Potential to increase mass recovery in early years mining from 14% to 19.4% initially thanks to the Iron Peak resource
- Improved concentrate iron grade and lower content of deleterious elements (silica, alumina and phosphorus)
- Increased premium pricing due to the combined effect of improved product quality and market dynamics
- Increased capital costs due to higher throughput and inflation
- Increased operating costs due to inflation, despite the economies of scale related to the increased throughput.

Increased Mass Recovery

Mass recovery (or weight recovery) is the most important measure of mineralisation quality in the evaluation of magnetite deposits and is the percentage of the head (feed) mineralisation by weight that is recoverable by concentration processes. Higher mass recovery enables more magnetite concentrate to be produced per tonne of plant feed.

The updated mass recovery for Iron Peak at 19.4% represents a substantial 15% increase over previous Mineral Resource Estimates, making Iron Peak a standout deposit not only in terms of the Magnetite Mines portfolio, but also when

compared with all currently announced Braemar Iron Formation resource estimates. The mass recoveries amount to 14.8% and 13.9% respectively for the Central Eyre deposit from Iron Road Ltd (ASX: IRD) and the Hawsons deposit from Hawsons Iron Ltd (ASX: HIO).

Table 2.1 –Iron Peak Mineral Resource

Classification	Million Tonnes (Mt, dry)	Mass (eDTR%)	Rec	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite%
INDICATED	286	19.3		18.5	47.8	8.2	0.16	5.8	16.1
INFERRED	216	19.5		17.9	48.3	8.3	0.16	5.9	15.8
TOTAL	503	19.4		18.2	48.0	8.2	0.16	5.8	16.0

Figures quoted at a 11% Mass Recovery cut-off

Source: MGT

Superior Metallurgy

The importance of this updated Iron Peak Minerals Resource Estimate becomes evident when considered in light of recent metallurgical testwork results. As shown in Table 2.1 below, Iron Peak has produced the highest-grade concentrate products to date for the Project: >69% Fe with less than 3% major impurities. This is considered premium-grade feed for Direct Reduction (DR) pellet facilities, extremely scarce in the current market, and increasingly in demand as DRI facilities replace carbon-intensive blast furnace operations globally. The Iron Peak sample also exhibits the lowest average bond ball work index at 6.8kWh/t (compared to a typical Pilbara at 24kWh/t) and the lowest abrasion index (0.05), translating to lower processing costs when compared with samples from other parts of the Project resource base.

Table 2.1 – Summary of concentrate product results to-date

Sample	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	TiO ₂ (%)	SiO ₂ +Al ₂ O ₃ +TiO ₂
RAZORBACK TEST 1	68.0	3.79	0.47	0.067	4.33
RAZORBACK TEST 2	68.5	3.31	0.42	0.064	3.79
RAZORBACK TEST 3	67.1	4.63	0.57	0.080	5.28
IRON PEAK TEST 1	69.7	2.34	0.29	0.034	2.66
AVERAGE	68.3	3.52	0.44	0.061	4.02

Final flotation tail testwork results; grind size P80 = 44microns

Source: MGT

Product Quality

100% of Stage 1 concentrate to be DR-grade, pellet feed quality: 68.5% Fe with low major impurities (3.0% combined silica + alumina). This feature establishes Razorback as a key contributor of the Green Steel supply chain.

3. Iron Ore Magnetite Market Developments

Iron Ore: Hematite v Magnetite

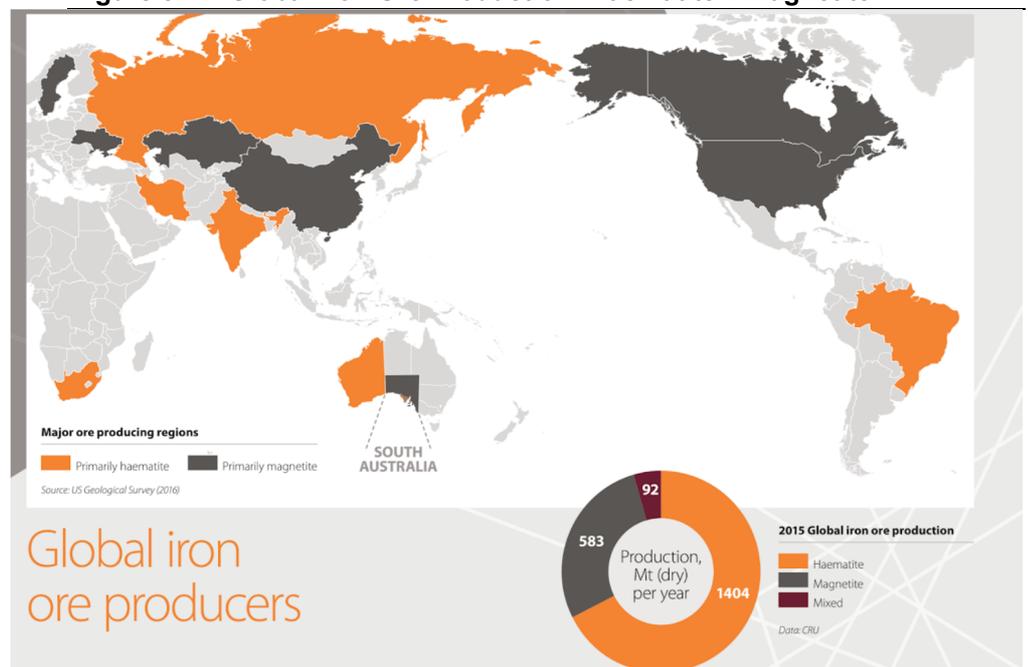
Iron ore is a mixture of chemical compounds of iron (Fe) and other minerals.

The chemical compounds of iron ore suitable for steelmaking are essentially ferric oxides – a mixture of iron with oxygen such as Fe₂O₃ (haematite) or Fe₃O₄ (magnetite).

The most commonly used iron-bearing minerals are magnetite and haematite.

The Pilbara region in Western Australia is rich in high-grade, predominantly haematite ore, known also as Direct Shipping Ore (DSO). DSO passes through a simple crushing, screening (milling) and blending process before it is shipped overseas for use in steel production. DSO, when mined, typically has iron content of between 56% Fe and 65% Fe.

Figure 3.1 – Global Iron Ore Production: Haematite v Magnetite



Source: CRU

Magnetite ore generally has an iron content of less than 40% Fe and is therefore unsuitable for steelmaking in its natural form. As its name implies, the iron in magnetite is magnetic and therefore can be separated from waste material by the application of a magnetic field.

Magnetite grain size and its degree of integration with the host rock determines the grind size to which the ore must be crushed and ground to enable effective magnetic separation.

The energy input requirement is commensurate with the level of crushing and grinding.

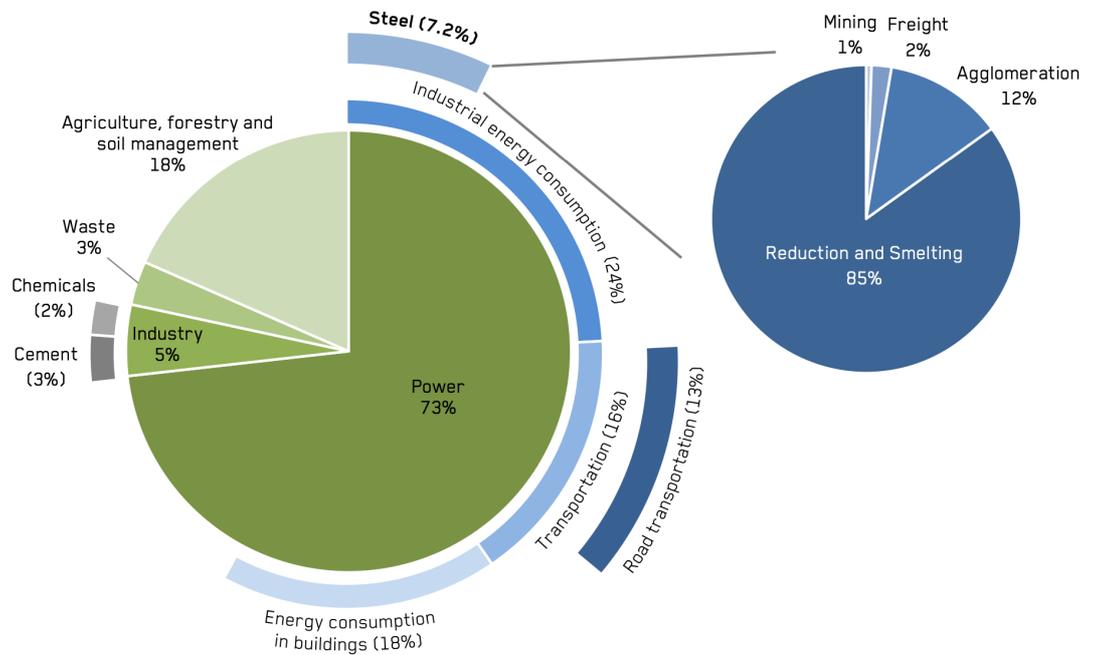
South Australia's magnetite ore is characteristically soft (low hardness) with large grain sizes in comparison with magnetite ore from other identified global magnetite regions.

The magnetite concentrate that can be produced from South Australian magnetite is a high-grade product to greater than 65% Fe with low impurities that is highly sought after by steelmakers to increase productivity, provide efficiencies and reduce emissions.

Decarbonisation of the Steel Manufacturing Industry

Energy constitutes a significant portion of the cost of steel production. The steel industry significantly increased its share of global emissions in the last 20 years and currently represents more than 7.2% of global CO₂ emissions. 85% of the emissions from steel making are generated by the reduction and smelting of ore.

Figure 3.2 – Global Carbon Dioxide Emissions



Source: 1. Left pie chart: Our World in Data (2020), numbers may not add up due to rounding.
2. Right pie chart: Data from IEA and Wood Mackenzie.

The steel making industry is one of the largest consumers of coal on the planet. For every tonne of steel produced, around two tonnes of greenhouse gases are emitted.

Global steel production is currently heavily reliant on coal. Almost 70% of the steel manufactured globally uses coal. Magnetite concentrate is exothermic, releasing heat during processes for steelmaking, requiring less external energy inputs (e.g. coal). The use of magnetite concentrates in sinter feed blends and pellet feed is widespread. Chinese steel mills are receptive to magnetite products supplied from foreign sources.

Steelmakers seek efficiencies to reduce, manage and control emissions from the steelmaking process. The use of magnetite concentrate in place of haematite can reduce the emissions intensity by as much as 30% in the overall steelmaking process.

In parallel, Direct Shipping Ore reserves are declining, coupled with increasing levels of deleterious impurities which increases steelmaking costs. This indicates reserve depletion of easily accessible, cheaply extracted DSO. Global demand is increasing for high-grade, low impurity feedstock for steelmakers.

In this context, magnetite iron ore feed has an increasing role to play as a feed in blast furnaces. In the same time, the development of direct reduced iron (DRI) processes will require high-grade magnetite feed.

According to Bloomberg New Energy Finance (BNEF), the transition from blast furnaces to direct reduced iron (DRI) processes will push the demand for DR-grade iron ore to increase 10-fold to reach 60% DRI by 2050.

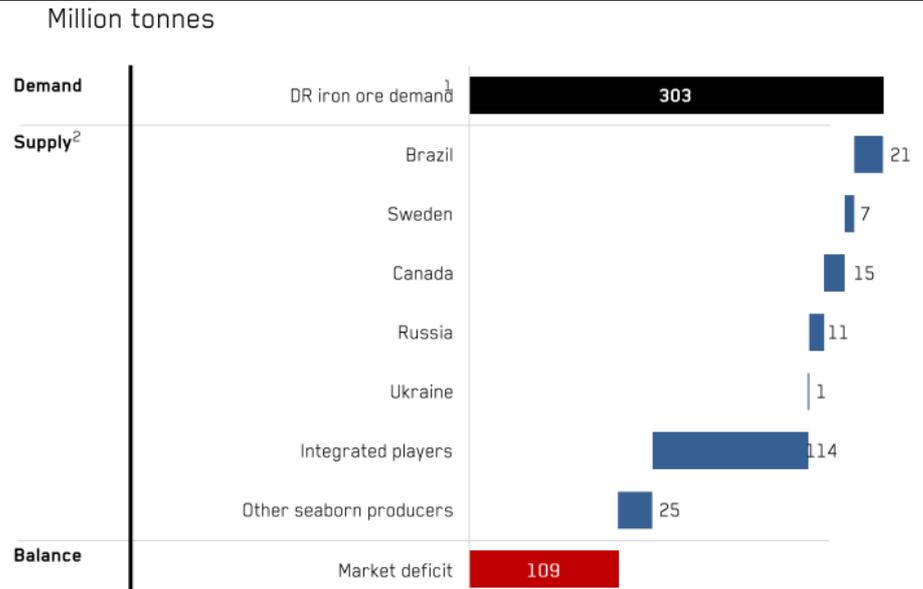
On a shorter horizon and according to analysis from Champion Iron Ltd (ASX: CIA, A\$4 billion market cap), the market deficit for DR-quality iron ore is expected

to be approximately 109 Mt by 2031 as the global market demand increases to exceed 300 Mtpa.

The potential suppliers of DR-quality iron ore are expected to be concentrated in a few countries and Australia has the opportunity to grow its position in that market.

Market deficit means pricing pressure towards higher premium for DR-quality iron ore.

Figure 3.3 – DR-Grade Iron Ore Supply/Demand Balance by 2031



Source: Champion Iron Limited

The South Australian Magnetite Advantage

Magnetite ores require initial crushing and screening like DSO, but then undergo successive stages of additional processing to produce a magnetite concentrate or pellets.

Unique mineralogical characteristics consisting of relatively soft ore and well-formed crystals define much of South Australia’s magnetite resulting in a concentrate that has comparatively lower input costs, higher iron grade and lower levels of deleterious impurities such as alumina, silica, phosphorus and sulphur. South Australia’s magnetite resources projects benefit from having a highly sought-after combination of hardness, integration with host rock and grain size to be globally competitive. Large grain sizes are not a feature of the Razorback project nor Braemar Iron Formation ores. The mineralisation is made of fine, but well-formed crystals with little intergrowth textures, therefore once crystals are liberated, they produce a very clean, high-grade concentrate.

Beyond the geology, power is another key competitive advantage. Producing magnetite consumes significant amounts of energy. If most or all of that energy comes from cheap green renewables, then any magnetite project located in South Australia has a huge advantage versus others using alternative power sources in their iron ore production. **70% of South Australia’s power is from renewables today and the State expects to be at 100% by 2030.**

Premium Products Attract Premium Prices

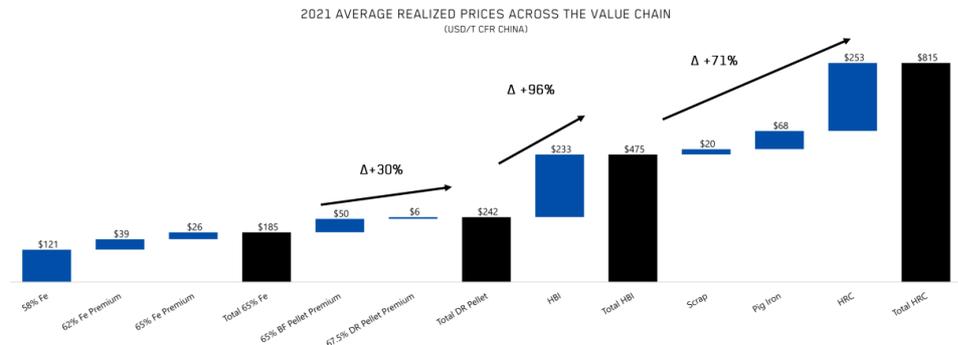
Further processing of magnetite concentrate can produce sinter or pellets that can be fed directly into blast furnaces and electric arc furnaces, including direct reduction iron (DRI) steelmaking plants. Pellets and concentrates are premium products that attract higher prices from steelmakers.

Premiums can reach up to US\$90/tonne, which means a potential doubling of revenue for some magnetite products.

Figure 3.4 illustrates the value-add of iron ore products as the iron content increase.

Figure 3.4 – Iron Ore Products Value Chain

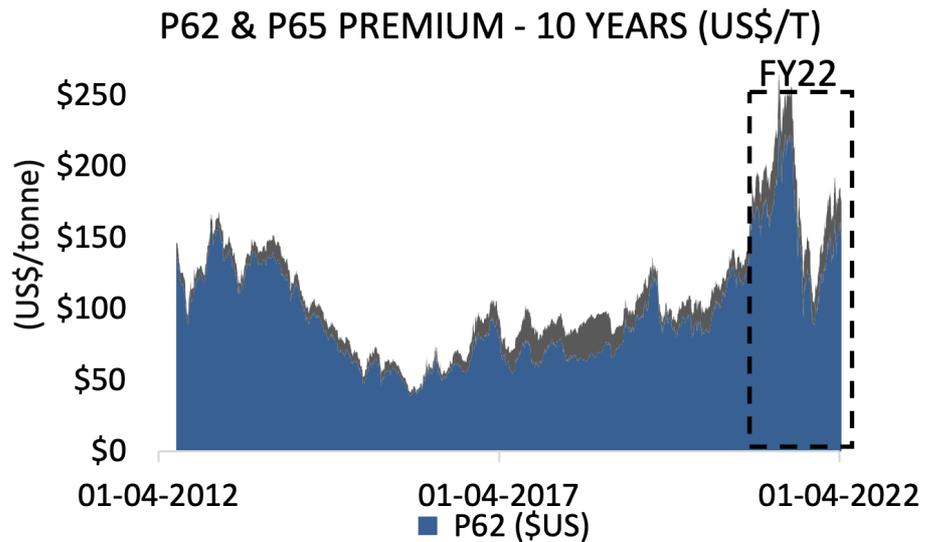
Material value captures in the steel value chain occurs between pellet and HBI as well as the HRC stage



Source: Champion Iron

Figure 3.5 illustrates the increasing the demand pressure on higher quality iron ore concentrate. With higher iron ore content, higher premiums are in order.

Figure 3.5 – Iron Ore Product Pricing – P62



Source: Champion Iron, Platts data

The magnetite products that are expected to be in demand during the next five to 10 years include:

- high-grade concentrates for use in sinter blends
- high-grade concentrates for blast furnace pellet feed blends, and
- very high-grade concentrates (>67% Fe, and <3% silica/alumina) for use as feed stock for direct reduction pellet production.

In the case of sinter and blast furnace pellet applications, magnetite concentrates will increasingly be needed to displace China’s domestic concentrates as reserves are depleted and operations are closed due to uncompetitive costs and increasing environmental regulation. An opportunity exists for South Australia’s magnetite products to meet this expected shortfall.

South Australian Government Support

The South Australian government’s vision is to see the State becoming a leading global supplier of quality magnetite products for steelmaking by 2030.

South Australia aims to secure billions of dollars in investment to unlock magnetite resources and increase magnetite production to 50 million tonnes per annum by 2030.

To reach this goal, the South Australian government is pursuing the following actions:

- Engaging with stakeholders and industry partners
- Forging private-public partnerships to build transformational bulk-commodity infrastructure within a multi-user framework
- Supporting a strong and sustainable Australian steel industry

Government support means also significant revenues:

- Additional average annual Gross State Product contributions from the project are \$1.17 billion and \$1.01 billion for construction and operations phases, respectively; this represents over \$33 billion for a life of mine at 30 years.
- Direct operational phase employment of over 400 South Australians extended with flow-on SA employment reaching 2,446 through production and consumption-induced activities.
- Assuming an 8% direct employment target in Peterborough of 36 full time employees (FTE), and with flow-on employment outcomes (22 FTE), the local unemployment rate could fall from 11.3% to less than 1% (based on 2021 census results, assuming direct consumption of unemployed people only)
- Over thirty years of production at 5Mtpa, financial contributions to the South Australian Government exceed \$1.6bn, achieved primarily through royalties (\$50m/year) with further contribution through payroll tax and mining lease fees.
- Excise duties and income tax payable by salaried employees contribute \$462m over the 30-year operations phase, with company tax liability being assessed in current internal operational modelling.

Recent Magnetite Projects Development Activity in Australia

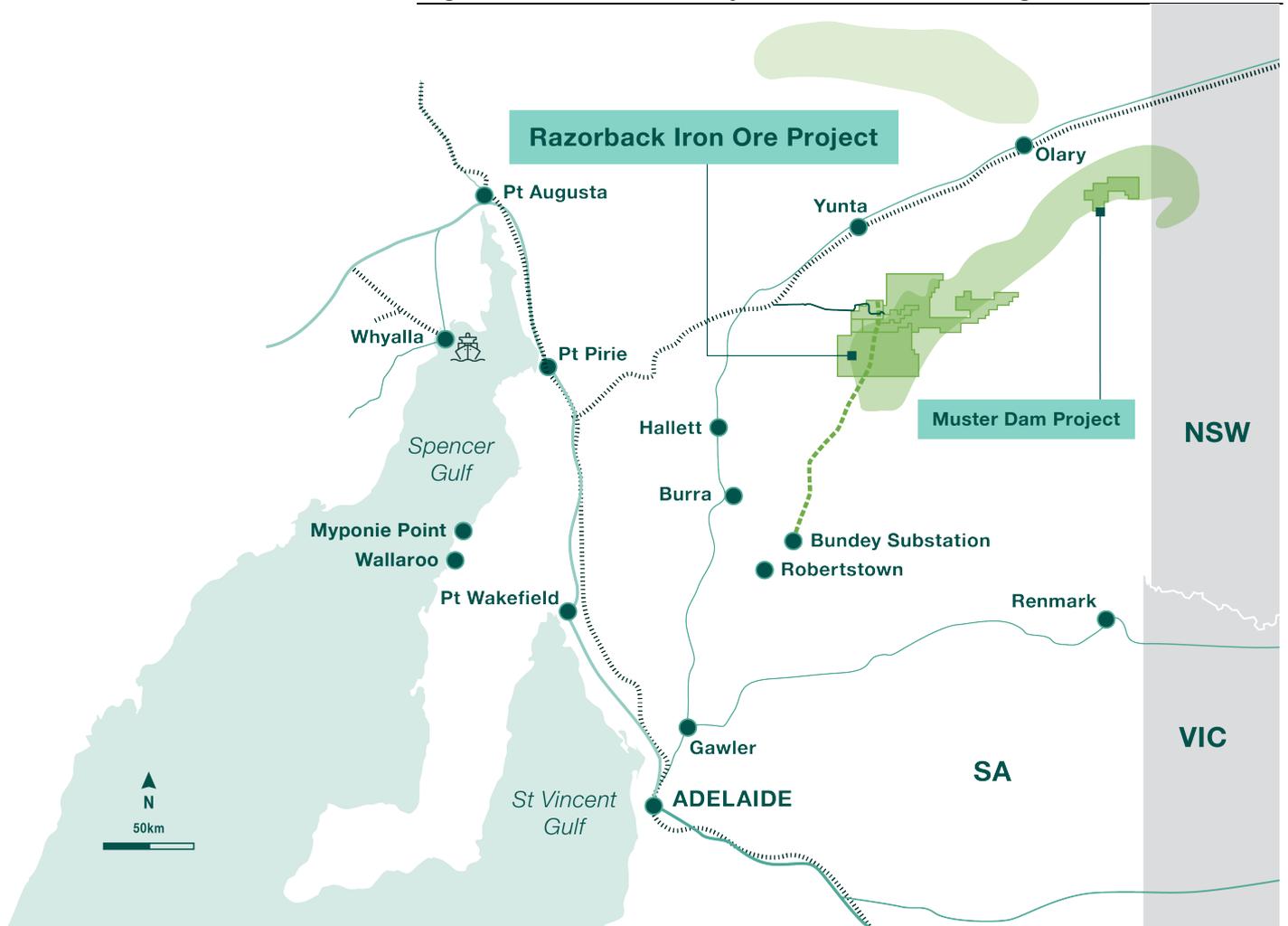
Listed below are the recent announcements made in relation to the development of magnetite projects in Australia:

- Fortescue Metals Group Limited's (ASX: FMG) Iron Bridge 22mtpa magnetite project under construction (capex of US\$3.6 to US\$3.8 billion) in the Pilbara with commissioning expected in the March quarter 2023 (AGM presentation 22 November 2022). First ore fed into processing plant (31 Oct 2022)
- Fortescue Metals Group Ltd (ASX: FMG) and Sinosteel have signed a binding Memorandum of Understanding (MoU) to complete a rapid project assessment of Sinosteel's Midwest Magnetite Project, with the assessment to include a rail and port development at Oakajee. At the conclusion of the 12-month rapid project assessment and subject to the outcome of that process, FMG has the option to acquire up to 50% of the Midwest Magnetite Project and up to 100% of the proposed port and rail infrastructure project (ASX announcement 21 January 2022)
- Mineral Resources Limited (ASX: MRL) is drilling at the Koolyanobbing Magnetite project to scope the resource potential for economic development (ASX announcement 26 October 2021)
- Macarthur Minerals Limited (ASX: MMS) Lake Giles Positive Feasibility Study announcement (ASX announcement 21 March 2022)
- Hancock Prospecting executed a JV agreement on 7 April 2022, to acquire 30% of the Mt Bevan project (neighbouring project to Mount Ida) with Legacy Iron Ore Ltd (ASX: LCY) now 42% and Hawthorn Resources Ltd (ASX: HAW) now 28%. The JV partners are currently undertaking a Pre-Feasibility Study (ASX announcement 3 May 2022)
- Cashmere Iron – Cashmere Downs project PFS expected Q3 2022 (Global Iron Conference presentation 29 July 2022)

4. Magnetite Mines Projects

Project Location

Figure 4.1 – Razorback Project Location and Existing Infrastructure



Source: MGT

The Razorback Project, is located in close proximity to existing infrastructure, being positioned 40km from rail and sealed roads, 75km from the nearest high voltage powerline and 110km from the mining town of Broken Hill. The main rail line comes from NSW down across South Australia to the ports of Port Pirie, Port Augusta and Whyalla which is around 315km away. Initially trucking is envisaged from the processing plant to the rail line. With capacity expansion, raiing from the mine will be developed.

Mineral Resource

The Mineral Resource Estimate at a 11% eDTR cut-off grade for the Razorback Iron Ore Project is summarised in Table 5.1 as well as the mineral resource of the recently acquired Muster Dam project.

Table 4.1 – Magnetite Mines Mineral Resource

Razorback Iron Ore Project (Razorback and Iron Peak Combined) ^a								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	Fe %	SiO ₂ %	Al ₂ O ₃ %	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
TOTAL	3,245	16.02	18.06	48.3	8.15	0.18	5.49	15.3

Results presented at 11% eDTR cut-off

Ironback Hill ^{*b4}								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	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

Results presented with no cut-off

Muster Dam Iron Project ^{*c5}								
Classification	Tonnes (Mt)	Mass Rec (DTR%)	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 with 10% Mass Recovery cut-off

Combined Mineral Resource Estimate								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite %
INFERRED & INDICATED	5,982	-	19.4	48.1	8.2	0.2	4.8	-

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

Source: MGT

Ore Reserve

On 20th March 2023, MGT released an updated Ore Reserve as summarised in Table 4.2.

Table 4.2 – Magnetite Mines Ore Resource (Probable)

Razorback Deposit	Tonnes Mt	Mass Recovery (eDTR) %	Fe %	Mag %
Total	1,615	14.2	17.6	13.6

Source: MGT

As expected, the ore reserve represents a substantial 340% increase compared to the ore reserve estimated at the time of the PFS released in July 2021 (473 Mt) and the mining inventory defined by the Expansion Study released in March 2022 1,365 million tonnes with a mass recovery of 14.4%.

The ore reserve represents only 27% of MGT's global mineral resource and more importantly 96% of the indicated mineral resource. As such, it appears that most of the inferred mineral resource should convert into ore reserve subject to additional drilling.

The high-grade Iron Peak deposit is now under assessment for maiden Ore Reserve to support expansion to 10 million tonnes per year and should see an increase of the ore reserve in terms of both tonnes and mass recovery.

Furthermore, the initial development focused on the Iron Peak mineral resource will generate improved project economics particularly in the early years of the project.

Production and Exploration Upside

With the ability to convert most of the global mineral resource into ore reserve, there is significant scope to increase both mine life and production rate.

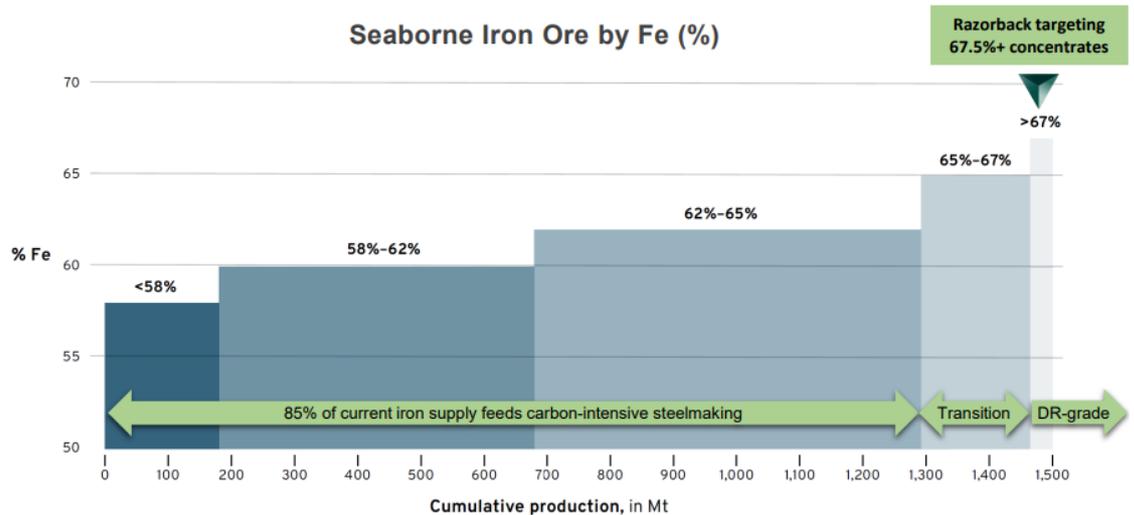
Also subject to further drilling, aeromagnetic surveys suggests that significant upside exists for delineating further mineral resources.

Iron Concentrate Product

Figure 4.2 highlights the current state of the iron ore markets and the current niche state of high-quality iron ore products.

As the market evolves towards reducing CO₂ emissions, the “niche” market is expected to experience tremendous growth.

Figure 4.2 – Razorback Iron Ore Product Targets



Source: Magnetite Mines, Platts data

5. Directors & Management Team

From the bio detailed in our previous report, we would like to highlight that the Board and management team have a strong background in developing large projects. Tim Dobson the CEO was the President of the giant Ambatovy Nickel project in Madagascar that Sheritt International built for US\$8bn and Simon Wandke ran Arcelor Mittal’s highly successful mining business (iron ore and coal).

6. Investment Risks

MGT is exposed to a number of risks including:

- **Geological risk:** the actual characteristics of an ore deposit may differ significantly from initial interpretations.
- **Resource risk:** all resource estimates are expressions of judgement based on knowledge, experience and industry practice. Estimates, which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate.
- **Commodity price risk:** the revenues MGT will derive mainly through the sale of iron ore magnetite products exposing the potential income to commodity price risk. The price of iron ore fluctuates and is affected by many factors beyond the control of MGT. Such factors include supply and demand fluctuations, technological advancements and macro-economic factors.
- **Exchange Rate risk:** The revenue MGT derives from the sale of iron ore products exposes the potential income to exchange rate risk. International prices of commodities are denominated in United States dollars, whereas most of operating costs are in Australian dollars and the financial reporting currency of MGT is the Australian dollar, exposing the company to the fluctuations and volatility of the rate of exchange between the AUD and USD as determined by international markets.

- **Mining risk:** A reduction in mine production would result in reduced revenue.
- **Processing risks:** A reduction in plant throughput would result in reduced revenue. In all processing plants, some metal is lost rather than reporting to the valuable product. If the recovery of metal is less than forecast, then revenue will be reduced.
- **Operational cost risk:** an increase in operating costs will reduce the profitability and free cash generation of the project.
- **Management and labour risk:** an experienced and skilled management team is essential to the successful development and operation of mining projects.

Evolution Capital Pty Ltd
Level 6, 1 Castlereagh Street
Sydney, NSW 2000
Tel: +61 2 8379 2958
www.eveq.com

Disclosure & Disclaimer

Evolution Capital Pty Ltd (ACN 652 397 263) ("Evolution Capital") is a corporate Authorised Representative (number 1293314) of Amplus Global Pty Ltd (ACN 162 631 325), the holder of Australian Financial Services Licence number 505929.

The information contained in this report is only intended for the use of those persons who satisfy the Wholesale definition, pursuant to Section 761G and Section 761GA of the Corporations Act 2001 (Cth) ("the Act"). Persons accessing this information should consider whether they are wholesale clients in accordance with the Act before relying on any information contained

Any financial product advice provided in this report is general in nature. Any content in this report does not take into account the objectives, financial situation or needs of any person, or purport to be comprehensive or constitute investment advice and should not be relied upon as such. You should consult a professional adviser to help you form your own opinion of the information and on whether the information is suitable for your individual objectives and needs as an investor.

It is important to note that Evolution Capital, or its agents or representatives, engaged and received a financial benefit by the company that is the subject of the research report. The financial benefit may have included a monetary payment or certain services including (but not limited to) corporate advisory, capital raising and underwriting. In addition, the agent or representative drafting the advice may have received certain assistance from the company in preparing the research report. Notwithstanding this arrangement, Evolution Capital confirms that the views, opinions and analysis are an accurate and truthful representation of its views on the subject matter covered. Evolution Capital has used its best endeavours to ensure that any remuneration received by it, or by an agent or representative, has not impacted the views, opinions or recommendations set out in this research report.

The content of this report does not constitute an offer by any representative of Evolution Capital to buy or sell any financial products or services. Accordingly, reliance should not be placed solely on the content of this report as the basis for making an investment, financial or other decision.

Recipients should not act on any report or recommendation issued by Evolution Capital without first consulting a professional advisor in order to ascertain whether the recommendation (if any) is appropriate, having regard to their investment objectives, financial situation and particular needs. Any opinions expressed are subject to change without notice and may not be updated by Evolution Capital.

Evolution Capital believes the information contained in this report is correct. All information, opinions, conclusions and estimates that are provided are included with due care to their accuracy; however, no representation or warranty is made as to their accuracy, completeness, or reliability.

Evolution Capital disclaims all liability and responsibility for any direct or indirect loss, or damage, which may be incurred by any recipient through any information, omission, error, or inaccuracy contained within this report.

The views expressed in this report are those of the representative who wrote or authorised the report and no part of the compensation received by the representative is directly related to the inclusion of specific recommendations or opinions.

Evolution Capital and / or its associates may hold interests in the entities mentioned in any posted report or recommendation.

Evolution Capital, or its representatives, may have relationships with the companies mentioned in this report – for example, acting as corporate advisor, dealer, broker, or holder of principal positions. Evolution Capital and / or its representatives may also transact in those securities mentioned in the report, in a manner not consistent with recommendations made in the report.

Any recommendations or opinions stated in this report are done so based on assumptions made by Evolution Capital.

The information provided in this report and on which it is based may include projections and / or estimates which constitute forward-looking statements. These expressed beliefs of future performance, events, results, or returns may not eventuate and as such no guarantee of these future scenarios is given or implied by Evolution Capital. Any forward looking statements are subject to uncertainties and risks that may mean those forecasts made by Evolution Capital are materially different to actual events. As such, past performance is not an indicator of future performance.