

Wednesday, 30 March 2022

The Companies Officer
Australian Securities Exchange Ltd
20 Bridge Street
SYDNEY NSW 2000

Dear Madam or Sir

### PRESENTATION AT ORD MINNETT EAST COAST MINING CONFERENCE

Hawsons Iron Ltd (ASX: HIO) advises that our Executive Chairman, Mr Bryan Granzien has been invited to present at the Ord Minnett East Coast Mining Conference in Sydney tomorrow, Thursday 31 March 2022.

The Ord Minnett East Coast Mining Conference is a two-day conference attended by fund managers, retail advisers and their clients.

Attached to this announcement is a copy of the presentation being used as part of this conference.

Yours sincerely

Hawsons Iron Ltd

Authorised by Greg Khan, Company Secretary

Released by authority of the Board

Hawsons Iron Ltd.



### **Hawsons Iron (ASX: HIO)**

**Ord Minnett East Coast Mining Conference** 

30 - 31 March 2022





hawsons.com.au





- 1. Steel decarbonisation it starts with us
- 2. Why Hawsons Iron and our Hawsons Iron Project?
- Expert Board, Management & Global Partners
- 100% Project Control
- Independent Research
- World Class Mine
- Best Ore in the World
- Compelling ESG Credentials
- Strong Market Demand
- BFS update 10Mtpa 20Mtpa
- 3. Outlook







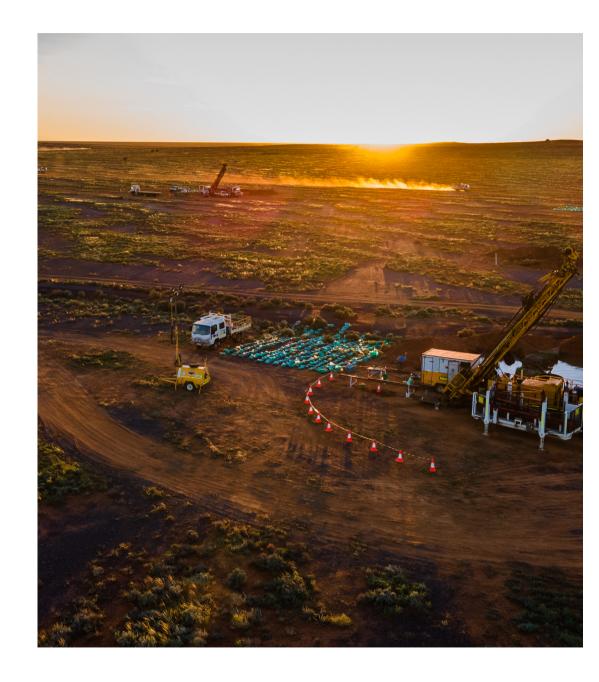












### **About Hawsons Iron**

- Emerging producer of low-cost, premium-quality iron ore.
- Custodian of the Hawsons Iron Project a world-class and large-scale iron ore resource in the Braemar Iron province.
- Current 2012 JORC Resource of 3.06 Billion tonnes at 13.1 DTR% for 400 Mt of concentrate.
- Answering the world's call for high-grade products essential to decarbonising the steel industry.
- During 2021/22, consolidation of Project ownership, board restructure, clear strategic direction, expanded leadership team and appointment of experienced BFS Advisory Committee.
- ✓ Partnering with global mining experts for Hawsons Iron Project Bankable Feasibility Study (BFS).













### **Board of Directors**

✓ Hawsons Iron Ltd is led by an experienced and dedicated Board of Directors and executive management team.



Mr Bryan Granzien **Executive Chairman** 

- B. Business
- GAICD Graduate of the Australian Institute of **Company Directors**
- Fellow CEO Institute
- 30+ years experience in resources sector
- ASX experience across mining, agribusiness, information technology and steel manufacturing
- Ex Senior Executive MIM Holdings and Grainco Australia
- Ex GM Neumann Steel and NatSteel Australia
- Ex Director/CEO Tata Steel Resources and Kalimati Coal



Mr Paul Cholakos Non-executive Director

- Master Business Administration (MBA)
- B. Engineering (Mining)
- 30+ years experience in resources sector
- Ex Executive: Oil Search Limited (ASX:OSH) and Exeter Resources
- Broad international experience in North America, South America and Asia-Pacific
- 20+ years in senior technical and commercial project roles
- Central to Oil Search's transition to an LNG producer, leading key elements of PNG LNG through construction, start up and to steady state operations



Mr Jon Parker Non-executive Director

- B. Science (Physical Chemistry Hons)
- Grad. Dip Business Admin.
- 40+ years experience in the resources sector
- Ex General Manager of Commercial Iron Ore for Rio Tinto (26 years with Rio)
- Ex Managing Director Felix Resources and Norton Goldfields
- Distinguished record in executive management and value creation across the resources sector for a range of ASX-listed companies, where he has overseen substantial growth in market capitalisation













### **Executive management team**



Mr Greg Khan Chief Financial Officer Company Secretary

- B. Business (Accounting), (MIPA), (FGIA), (AFA), (MIMC), JP (Qual)
- ASX CFO with more than 25+ years in financial and management accounting, leadership, strategy, forecasting and financial reporting
- Experienced in corporate governance, financial control, management accounting, financial modelling, operational excellence and supply chain optimisation, across multiple industry sectors
- Member Institute of Public Accountants
- Fellow Governance Institute of Australia
- Associate Institute of Financial Accountants
- Member Institute of Management Consultants
- Member Queensland Justices Association



Ms Kerry Bailey Corporate Communications Lead

- B. Business (Communication)
- 20+ years' experience managing company reputations, issues, change and stakeholder relations
- Sector experience across renewable energy, mining, agriculture, property, retail, and manufacturing
- Previous leadership roles combining expertise in communications and human resources for Grainco Australia and consultancy Three Plus



Mr Justin Haines General Manager - Operations

- B. App. Science (Geology)
- G. Dip. Science (Honours)
- M. Mining Engineering
- Member Australasian Institute of Mining and Metallurgy
- Member Australia Institute of Geoscientists
- 25+ years experience in resources industry
- Over 10 years in technical executive roles in listed resource development companies
- Over 10 years in mining and resource consultancies
- Broad commodity experience including 3+ years in iron ore



Mr Rohan Koenig Study Manager

- Masters of Engineering Management (Current)
- Grad. Dip Engineering Management
- Grad. Cert Project Management
- Grad. Dip Applied Science (Aquaculture)
- B. Science (Biology)
- Long term role with GHD with project experience for Grange Resources, Bluestone Mining, Hawsons Iron, Harmony Gold, Lottah Mining, Rum Jungle Resources and MMG
- Skills include 3D tunnel mapping, geotech monitoring. photogrammetry and ground penetrating radar.



Mr Glenn Vassallo Capital Finance Lead

- B. Laws
- B. Commerce
- Member Law Council of Australia Company Law Committee
- Member Law Council of Queensland
- 20+ years' experience in equity and debt capital markets
- 10+ years' experience in project finance
- Co-Founder of GRT Lawyers and the GRT Foundation
- Significant ASX experience at Executive and Non-Executive level
- Guest speaker on global topics such as equity and debt raising and impact investing



Mr Peter Brennand **Procurement Manager** 

- B. Business
- Masters of Business Administration
- MCIPS Chartered Institute of Procurement and Supply
- Leadership roles in oil & gas, mining, engineering and construction
- Senior roles with Lockheed Martin, Beach energy, UTAS, Clough Engineering, Maersk Oil Qatar, BP Exploration (Irag). Ausenco & Thiess
- Skills include contract formulation, procurement strategies, transformation, stakeholder engagement and process











### **BFS Advisory Committee**

✓ Hawsons Iron Ltd has appointed an experienced committee of specialists to ensure the BFS is fit-for-purpose to secure funds to develop the world-class mine and our unique ore body



**Mr Nick Jukes** 

- Civil engineer with over 35 years' experience
- Chairman of BFS partner JukesTodd
- Senior roles at Sedgman, Thiess and BHP
- Experienced Director at Sedgman, AWE and Australasian Resources



Mr Dave Woodall

- 50 years' experience in commercial and not-for-profit sector
- Executive experience includes MIM Holdings, Grainco Australia
- Directorships at Ergon Energy, Energex, Tarong Energy, Terra Gas Traders, Starfish Windfarm, TN Power
- Chairman of Environmental Clean Technologies and Queensland Country Bank
- Chief Executive of Abused Child Trust



Ms Genevieve Gregor

- More than 30 years' banking and finance experience
- Chair of Noumi Limited
- Co-founding Partner of Colinton Capital
- NED at MoneyTech Group Pty Ltd
- Experienced executive at Goldman Sachs and Citigroup



**Mr Richard Robinson** 

- More than 40 years' experience in the Oil & Gas and Energy
- Former CEO of NiuPower Limited
- Former NED and executive at LogiCamms Limited, Kina Petroleum Limited, Fyfe Pty Ltd, and Oil Search Limited
- Experienced consultant to Total E&P, Senex Energy, Horizon Oil, Buru Energy and Strike Energy

### **Project partners**

### **Owners Team**

Jukes Todd

### **EIS and approvals**

**SLR Consulting** 

### Geology

H&Sc



### **Financial**

Mazars

### Hydrogeography

GeoEng

### Geotechnical

**PSM** 

### **Tailings**

GHD



Project

About Hawsons Iron Proje

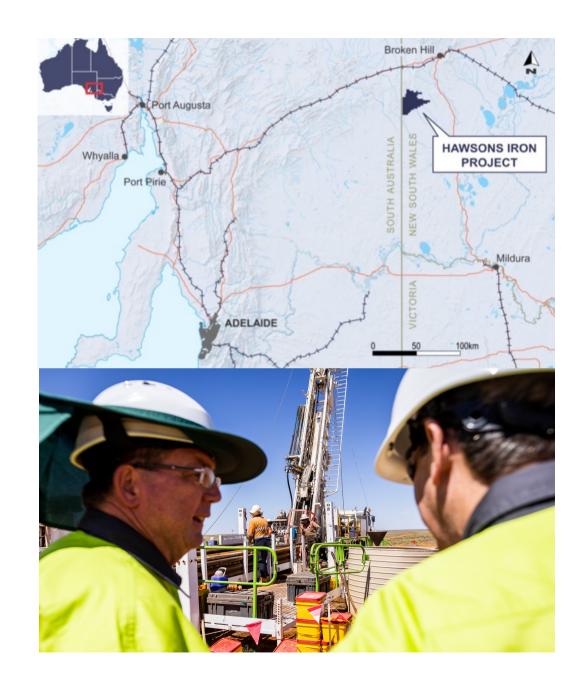


Hawsons Iron Project



### **Hawsons Iron Project**

- ✓ Location: 60km southwest of Broken Hill.
- Original production target of min 10 Mtpa for 20+ year mine life (upscaling to 20 Mtpa during BFS).
- Current JORC 2012 Resource of 3.06 Billion tonnes at 13.1 DTR% for 400 Mt of concentrate.
- ✓ Project declared a NSW State Significant Development, pending national Major Projects status and lodged SA Major Project application.
- Tenements: 3 tenements totalling 511km2 and one mining license application.
- ✓ Stage 1: Prefeasibility Study completed 2017.
- ✓ Stage 2: Bankable Feasibility Study due for completion December 2022.
- ✓ 24 March 2022, HIO announced 100% control of Hawsons Iron Project via the buyout of Starlight Investment Company's 6.037 per cent share









### **Hawsons Iron Project benefits**



**World class mine** 



Best ore in the world



**Strong market demand** 



**Compelling ESG** 



**Mining heartland** 

70%

Iron percentage of Hawsons Supergrade® product.

12.0

Offtake demand for Hawsons Supergrade® product (Mtpa).

400

Total production of Hawsons Iron Project 400 Mt (million tonnes) per DTR Concentrate: Mineral Resource Upgrade ASX Release 19 October 2021.











### World class mine



- ✓ Mineral Resource is larger than first identified in the PFS.
- ✓ Announced JORC Mineral Resource Upgrade 19 October 2021
  - √ 400 Mt of DTR concentrate
  - √ 9% increase in indicated resource to 132 Mt
  - ✓ 18% increase in Inferred resources to 268 Mt.

	Mi	neral Resource Upgrad	le
Category	Mt	DTR %	DTR Concentrate Mt
Indicated	960	13.7	132
Inferred	2,100	12.9	268
Total	3,060	13.1	400

Source: Hawsons Iron (ASX:HIO) ASX Announcement 19 October 2021

"Hawsons Iron: Mineral Resource Upgrade"

PFS 2017	Mineral resource upgrade – October 2021
JORC Inferred and Indicated Resources of <b>2.5 billion tonnes</b> – at a magnetite recovery of 14% (Davis Tube Recovery (DTR) at a 9.5% cut off) for <b>348 million tonnes</b> of high grade (69.7% Fe) concentrate – capable of sustaining a long-term operation and with potential for expansion	JORC Inferred and Indicated Resources of <b>3.06 billion tonnes</b> – at a magnetite recovery of 13.1% (Davis Tube Recovery (DTR) at a 6% cut off) for <b>400 million tonnes</b> of high grade (69.8% Fe) concentrate – capable of sustaining a long-term operation and with potential for expansion

Maiden Probable Reserve announced July 2017 comprising 755 million tonnes at 14.7% DTR, totalling 111 million tonnes of Hawsons Supergrade® product











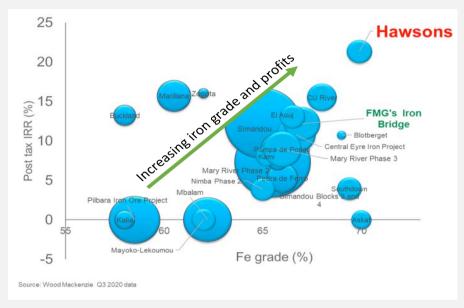


### World class mine



- ✓ One of world's best high-grade iron ore development projects excluding replacement or expansion projects owned by established majors (Wood Mackenzie)
- ✓ Equity NPV at PFS (price US\$88/t) US\$1.091b at 62% grade price
- ✓ NPV at high iron ore prices is significantly enhanced

### IRR and product grades for unfinanced greenfield iron ore projects - PFS stage or later



All projects except Hawsons at BFS stage. Hawsons at PFS stage

Source: Wood Mackenzie (developed from company 's stock exchange compliant releases, modified uniformly by Wood Mackenzie by internal long term price and cost forecasts, Wood Mackenzie is not aware of any material omissions in the data) Disclaimer. The data and information provided by Wood Mackenzie should not be interpreted as advice and you should not rely on it for any purpose. You may not copy or use this data and information except as expressly permitted by Wood Mackenzie in writing. To the fullest extent permitted by law.

<sup>\*</sup>Assumes that Hawsons is in production and the outcomes are as set out in the prefeasibility study announced on 28 July 2017. The Company confirms that all assumptions and technical parameters underpinning the Resource and Reserve estimates and all material assumptions underpinning the production target or the forecast financial information derived therefrom continue to apply and have not materially changed since first reported on 28 July 2017.

<sup>\*</sup>Bubble size represents annual production capacity

<sup>\*</sup>Excludes replacement or expansion projects owned by established miners RIO, BHP, CSN, FMG, Champion

<sup>\*</sup>Based on Wood Mackenzie long term price forecasts













# Best ore in the world



- ✓ Hawsons Supergrade® product will be among the highest-grade iron ore products on the seaborne market
- ✓ 70% Fe, <3% silica + alumina
- Low impurities delivers high quality steel product

**70%** 

Fe

Iron

### **Current Concentrate Grades**

Category	Fe%	SiO <sub>2</sub> %	Al₂O₃ %	S %	Р%	LOI %
Indicated	69.9	2.6	0.19	0.002	0.003	-3.0
Inferred	69.7	2.8	0.20	0.003	0.004	-3.1
Total	69.8	2.8	0.20	0.003	0.004	-3.0

Source: Hawsons Iron (ASX:HIO) ASX Announcement 19 October 2021

"Hawsons Iron: Mineral Resource Upgrade"





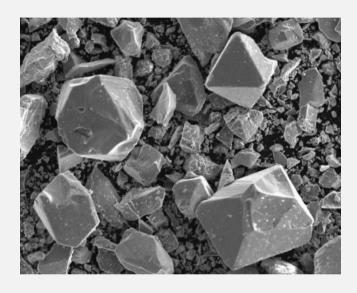


### Best ore in the world



- ✓ Hawsons Iron Project ore body deposited in a soft siltstone (a fine-grained silt in a sea).
- ✓ Unlike Pilbara ore bodies deposited in hard silica (a glass-like rock called "chert").
- ✓ Subjected to low grade metamorphosis (heat and pressure) which converted clays to silicate minerals.
- ✓ Breaks around the grain boundaries, rather than through the magnetite mineral grains.
- ✓ Simple liberation of a high purity concentrate using low energy.
- ✓ Less water consumed during processing due to absence of clay in the ore body.

### Not all ores are created equal



When HIO ore is crushed and ground to 40 microns, the magnetite is seen in its crystalline state.

It "liberates" along the grain boundaries and forms as 3dimensional crystals.











### Best ore in the world



- ✓ Viable at all points of iron ore price cycle.
- Robust financial model withstands price volatility.
- ✓ First quartile on the global iron ore cost curve, competitive with industry leaders.
- Structural shift widening in the iron ore market between higher and lower grade ores.
- Hawsons Iron is perfectly placed to attract premium prices for its high-grade product.





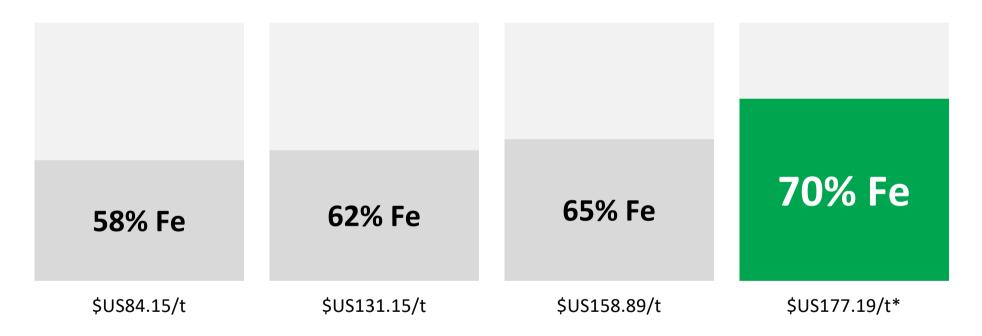
# Hawsons Iron About Hawsons Iron Project



### Best ore in the world



Hawsons Supergrade® (70%) Iron demands price premium



Note: Prices based on CFR North China. Source S&P Global Platts, Steel Raw Materials Monthly, Issue 108 / February 2022. HIO price calculated based on the following: VIU 1% Fe Differential - \$2.16. \$2.16 \* 5 = \$10.80 + \$7.50 premium = \$18.30 Hawsons Supergrade \* = \$158.89 + 18.30 = \$177.19.











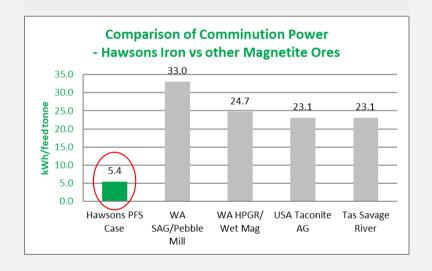
### **Compelling ESG Credentials**



- Energy Transition Underway
- ✓ Over \$130 trillion of capital committed to Net Zero
- ✓ HIO right in the middle of this global spend
- ✓ Green Steel starts with Hawsons Supergrade®
- Hawsons Iron Project will lead with low energy usage and CO<sup>2</sup> emissions through the value chain
  - Energy-saving in crushing and grinding
  - Water-saving processing
  - Less power per tonne of concentrate produced: confirm during our BFS works comminution power consumption used to process our iron ore up to 75% less than hard-rock magnetite mines

### Hawsons Iron will secure a unique position in the carbon-conscious global steel industry





Based on McNabb et al, Iron Ore 2009, Hawsons PFS and Web based Taconite operating data.











# **Compelling ESG path**



- ✓ Innovative mining and processing operation towards zero emissions footprint for our operations.
- ✓ Vision for Broken Hill renewable energy hub.
- ✓ Run site on solar and wind generation and battery power and storage.
- ✓ Deliver a safe and supportive workplace.
- ✓ Sustainable approach through ESG framework.
- ✓ Jobs creation during construction and operation.







# About Hawsons Iron Pr



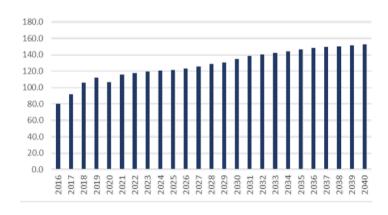




### Hawsons Supergrade® **Strong Market Demand**



- ✓ Forecast strong DRI growth to 2040
- ✓ Green steel drive to high-grade



Source: Wood Mackenzie

The next 10 years are critical for steel production. Government policy and demand for green steel will continue to tip the balance in favor of EAFs. That will bring a hyper-focus on scrap and a specific range of high-grade materials.

Source: Fastmarkets: https://insights.fastmarkets.com/the-true-price-of



Producing green steel from hydrogen and electric furnaces will require massive amounts of clean energy, and a shift to higher grades of iron ore.

Source: https://about.bnef.com/blog/steelindustry-set-to-pivot-to-hydrogen-in-278billion-green-push/









# Hawsons Supergrade® Strong Market Demand



- ✓ Global steel industry responsible for 7% of global carbon emissions.
- High product grades allow steel mills to optimise their blast furnace burden, reducing costs and decreasing emissions.
- ✓ Longer term as steel technology adapts to reduce emissions, the market will demand more higher-grade ore.
- Hawsons Supergrade® product suited to 'green steel' production.
- ✓ Non-binding letters of intent from Asia and the Middle East for the Hawsons Supergrade® product.

66

The LOIs and finance we have in place shows the market understands how strong this opportunity is.

Bryan Granzien, Executive Chairman













- Broken Hill region has long and proud mining history, supportive of mining.
- ✓ City with generations of skilled mining workers.
- Low intensity pastoral land.
- ✓ State Significant development status NSW Mining Concierge team to facilitate.





# **Hawsons Iron Project – key project metrics**

Project element	
Stage	Bankable Feasibility Study (BFS) underway – due to be completed in December 2022.
Production target	Up to 20 Mtpa of 70% Fe concentrate – first production in 2024.
Mining	Conventional open cut truck and shovel.
Tails	Conventional tailings storage facility.
Transport options	PFS case Rail to existing port at upper Spencer Gulf, trans-ship to Cape Vessel. BFS to study transport options, including direct-to-port slurry pipeline and dedicated deepwater port.
Construction personnel	NSW 1,200 – 1,500. Preliminary studies show SA (slurry and port option) could add a further 750 – 1,000.
Operation personnel	NSW 400 – 500. Preliminary studies show SA (slurry and port option) could add a further.



# Transport study – 2017 PFS vs 2022 BFS at a glance

Study area	2017 Prefeasibility Study	2022 Bankable Feasibility Study
Mineral Resource	Study based on a Mineral Resource of 200 Mt	Study will be based on a Mineral Resource of 400 Mt
Project capacity	Based on a 10 Mtpa project	Based on a 20 Mtpa project
Transport options	Slurry pipeline from mine to rail at Broken Hill to port (trans-ship) Port Pirie	Underground slurry pipeline from mine direct to standalone, deep-water port Myponie Point Port Playford (Port Augusta)
Transport considerations	Based on constrained rail carrying capacity	Preliminary studies show new transport options could produce significant savings while removing existing rail export route carrying constraints
ESG considerations	Looked at ESG considerations	New ESG imperatives to decarbonise the steel industry & net zero emission mining



### **BFS Transport options**

### Rail and trans-ship (PFS base case)















Product from the concentrator directly enters the slurry pipeline and transported to the rail load point

Product is received at the dewatering plant, reducing the moisture level to the desired TML. Product is then stacked to stockpiles for transport by rail

Product is received via a dump station and stacked on stockpiles at the terminal

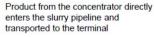
Product is loaded onto transhippers and transported to the OGV in deeper water

Product is loaded into the OGV from the transhippers

### Slurry pipeline to a new port option







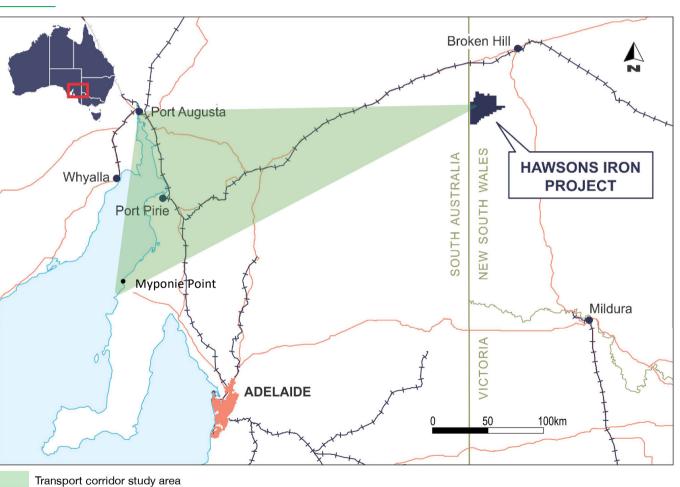


Product is received at the dewatering plant, reducing the moisture level to the desired TML. Product is then stacked to stockpiles

Product is loaded into the OGV directly from the terminal

Legend: Transportable Moisture Level (TML) Ocean Going Vessel (OGV)

### **Transport study corridor**



### **Key drivers for assessment**

- PFS trans-shipment case is limited by rail capacity.
- Scalability project could reach 20 Mtpa production targets.
- Holistic solution new transport and new port combination provides ease of access, but must be viable.
- New transport and new port combination reduces risk – project would not be competing for access.
- New transport and new port combination produce best life-of-project ESG outcomes, and potentially opens up the Braemar minerals province to further development.
- New transport and new port combination produces higher initial capital outlay but potentially significant transport operating cost savings over the long-term – increasing the overall value of the project.



















### **Outlook and overview**

- BFS due for completion in December 2022. Partnering with global mining specialists to progress BFS.
- Prilling program underway with up to seven drill rigs on site. Analysis commenced. Updated resource statement due in Q2 2022.
- Environmental Impact Study (EIS) underway .

Activity		20	)21			20	22			20	23			20	24	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BFS funding secured																
Approvals																
Bankable Feasibility Study																
Resource upgrade																
Demonstration plant run																
Engineer and design																
Procurement and Contracts			İ													
Cap Raise - Mine Build																
Construction												<u> </u> 				
First Production																

Hawsons Iron Coutlook and overview

### **Pre-feasibility results**

PFS financials	
Annual profit margin	US \$401 m
Equity IRR	29.9%
Equity NPV	US \$1,091 m
Tonne of Hawsons Supergrade®	201 m
Mine life / pay back period	20 / 3-4 years
62%, 65% Fe price assumption	US \$63, 75 per tonne

World	leading	metrics
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- ✓ US \$48/t opex. CFR China
- ✓ US \$1.4 Bn capital cost pay back in <1 year today
- ✓ Production 10 Mtpa for 20 years, potential to expand and extend
- ✓ Production targeted in 2 years

PFS cost estimates	
Operating costs – C1 FOB	US \$33.08
Operating costs – all in	US \$39.74
Operating costs – CFR China	US \$48.03
Hawsons Supergrade® price premium over 62% Fe	US \$25.00
Revenue per dry metric tonne	US \$88.00
Equivalent 62% Fe CFR cost	US \$23.03
Capital cost inclusive of contingency	US \$1.40 Bn

The Company confirms that all assumptions and technical parameters underpinning the Resource and Reserve estimates and all material assumptions underpinning the production target or the forecast financial information derived therefrom continue to apply and have not materially changed since first reported on 28 July 2017.

### **Cautionary statement**

This presentation has been prepared by the management of Hawsons Iron Ltd (HIO) for the benefit of customers, analysts, brokers and investors and not as specific advice to any particular party or persons. The information is based on publicly available information, internally developed data and other sources. Where an opinion is expressed in this presentation, it is based on the assumptions and limitations mentioned herein and is an expression of present opinion only. No warranties or representations can be made as to origin, validity, accuracy, completeness, currency or reliability of the information HIO disclaims and excludes all liability (to the extent permitted by law) for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it. Where HIO expresses or implies an expectation or belief as to the success of future exploration and the economic viability of future project evaluations, such expectation or belief is expressed in good faith and is believed to have a reasonable basis. However, such expected outcomes are subject to risks, uncertainties and other factors which could cause actual results to differ materially from expected future results. Such risks include, but are not limited to, exploration success, metal price volatility, changes to current mineral resource estimates or targets, changes to assumptions for capital and operating costs as well as political and operational risks and governmental regulation outcomes. HIO does not have any obligation to advise any person if it becomes aware of any inaccuracy in or omission from any forecast or to update such forecast. Total Mineral Resources available to the Hawsons Iron Project, 400 Mt (million tonnes) per DTR Concentrate: Mineral Resource upgrade ASX Release 19 October 2021, reported in accordance with the 2012 JORC Code & Guidelines.

### Disclaimer

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# **Corporate Directory**

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Web: www.hawsons.com.au

Email: Via website ABN: 63 095 117 981 ACN: 095 117 981 Australian Securities Exchange Ltd ASX Code: HIO Ordinary Shares

Share Registry
Link Market Services Limited

Level 21, 10 Eagle Street Brisbane, QLD, 4000 Phone: 1300 737 760

**Contact information** 

Executive Chairman Bryan Granzien Company Secretary & Chief Financial Officer Gregory Khan

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