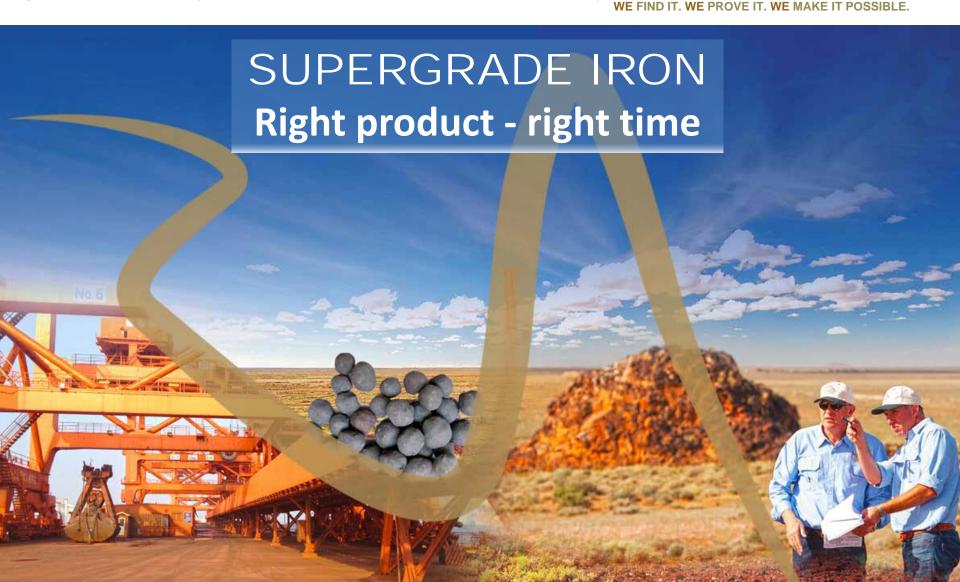
# **Investor Presentation October 2017**





#### **Disclaimer**



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### Hawsons Iron Project – Key messages



### Rights issue open to raise ~\$1.3m (Placement \$778k on 13 Oct.)

Use of funds

- maintain project schedule (EIS works)
- working capital while appropriate BFS solution achieved

### Positioned for strategic investment in bankable feasibility study (BFS)

Blast furnace feed (BF) - structural shift in iron ore pricing evidence of relative scarcity of high quality inputs, declining global ore quality and increasing long term emphasis on productivity and pollution

Direct reduction feed (DR)— steel makers seeking new independent suppliers, DR growth constrained by supply

High quality ore scarce due to high cost from extra processing and yield losses. Very few high quality projects incentivised at long term prices

### Hawsons is the world's leading high quality BF, DR pellet feed project

Traders, steelmakers and financial investors are attracted to Hawsons to secure world's highest iron content feed and robust long term returns







### Carpentaria is delivering



ASX: CAP

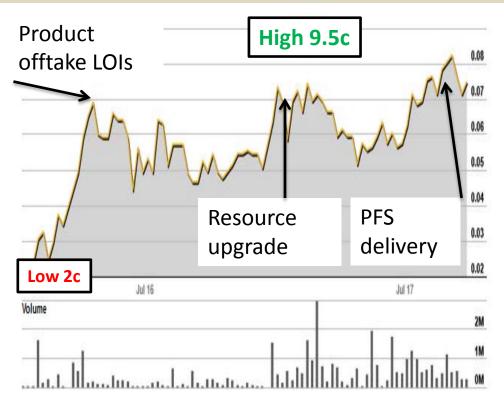
**Listed: 2007** 

SHARES: 180M

CASH: \$1.37 M 13 October, 2017

100% focussed on Hawsons Iron Project development (CAP 66.5%, Pure Metals PL 33.5%)

Dr Neil Williams - Chairman
Mr Quentin Hill - Managing Director
Mr Bin Cai - Director (non-exec.)
Mr Paul Cholakos - Director (non-exec.)
Mr Robert Hair - (Company Secretary)



### **Major Shareholders**

Silvergate Capital 12.5%

Australia Conglin Int. Group 7.8%

SG Hiscock and Company 5.5%

### **Project Team - Experts in their field**





#### Ray Koenig - Technical Director

 One of Australia's leading magnetite engineers; ex-Savage River magnetite and pellets



 (e.g. Gindalbie/Kararra, Hancock/Hope Downs, Aztec/Koolan Island)



- Iron ore marketing and steel expert
- Ex-BHPB iron ore technical marketer



- Technical feasibility
- Risk reduction



 Project financing and bankability



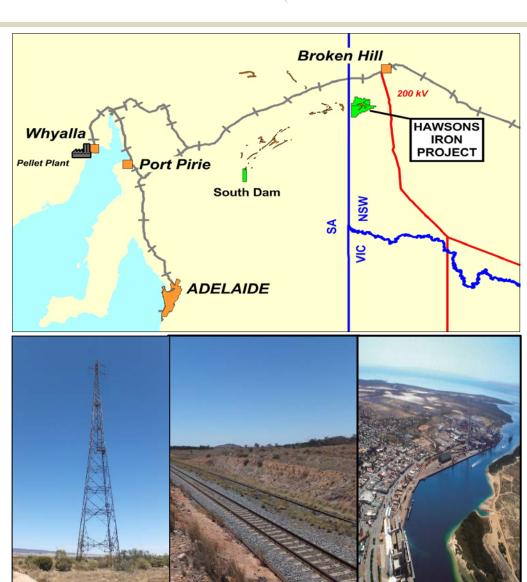
- Marketing saleable product
- Offtake arrangements



### **Hawsons Iron Project - Concept**



- Mine and process on site for 10mtpa concentrate production
- Hawsons unique soft ore makes the difference on cost and product quality
- Power from reliable eastern states grid
- Water from defined high yield saline aquifer 90km south
- Slurry product in pipeline to Broken Hill
- Rail to Port Pirie or Whyalla on existing rail (13mtpa spare capacity)
- Transhipment to Capesize vessels to customers in Asia and Middle East



## Hawsons Iron Project – PFS results cash flow positive at 62%Fe prices <US\$30/t



Hawsons PFS preproduction costs (yr 1-2)	USD (m)	Hawsons operating and sustaining costs (after prestrip, ~YR 3-22)	USD/dmt product
Preproduction mining costs including pre-strip	194	Mining	12.14
Mining	242	Processing	8.23
Processing	398	Infrastructure and admin.	1.48
Infrastructure and administration	359	rail and port	11.23
Rail and port	208	Total C1 FOB	33.08
Total <sup>1,2,3</sup>	1401	sustaining capital <sup>4,5</sup>	3.48
<sup>1</sup> incl EPCM 12.5% / contract management 3% of US\$127m		royalties	3.18
<sup>2</sup> incl. contingency and design growth (av. 16.5%)		Total all in FOB	39.74
<sup>3</sup> excludes finance costs		sea freight	8.29
		Total CFR China	48.03
⁴excludes new in-pit conveyor in yr 5 of US\$120m		less Supergrade premium	25.00
⁵net of salvage		62%Fe equivalent total CFR	23.03

Base case 10mtpa Hawsons Supergrade® production exported through Port Pirie

# Hawsons Iron Project – Prefeasibility study results, outstanding returns



Hawsons PFS key economic results	Base case	At 5 October 2017 prices 65%Fe fines US\$86.55/t (62%Fe fines US\$61.35/t)
Equity IRR (post tax, geared)	29.9%	38.4%
Equity NPV (10%) (post tax, geared)	US\$1,091m	US\$1,667m
Project IRR (post tax, ungeared)	17.8%	22.9%
Project NPV (10%) (post tax, ungeared)	US\$867m	US\$1,475m
Life of mine ave. annual revenue	US\$881m	US\$997m
Life of mine ave. annual all in costs	US\$480m	US\$486m
Life of mine annual margin (EBITDA)	US\$401m	US\$511m

Key Hawsons PFS assumptions									
total ore mined	1423mt	62% Fe fines benchmark*	US\$63/t	AUD:USD	0.75				
total waste mine	717mt	65%Fe fines benchmark*	US\$75/t	debt:equity	65:35				
total product	201mt	plus 5 x Fe 1% US\$1.10	US\$5.50/t	corporate tax	30%				
product specification	70%Fe	plus magnetite premium	US\$7.50/t	loan term	10.5 yrs				
annual production	10mt	product revenue (dmt)	US\$88.00/t	delivered rebated diesel price	A\$0.89/L				
moisture	8%	*ave. (mean) price forecast for 2020-2030 (re	al 2016)	delivered power price	A\$95/MWhr				

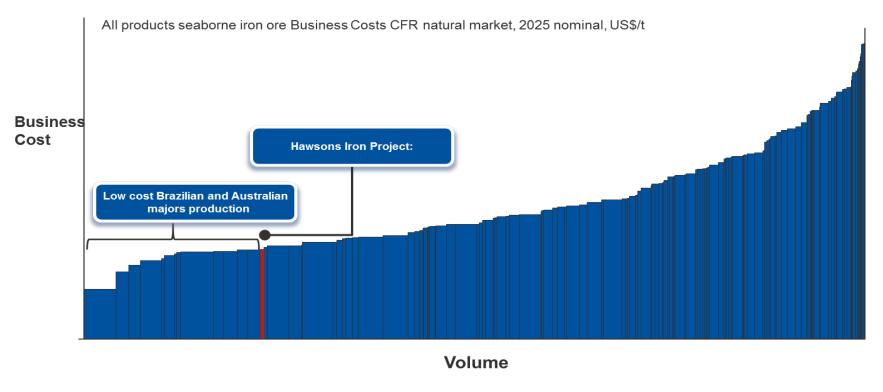
Base case 10mtpa Hawsons Supergrade® production exported through Port Pirie

The Company confirms that all assumptions and technical parameters underpinning the resource and reserve estimates continue to apply and have not materially changed since first reported on 28 July 2017.

## Hawsons Iron Project – 1<sup>st</sup> quartile costs, robust through the cycle



### Hawsons is in the first quartile of the CRU global iron ore cost curve



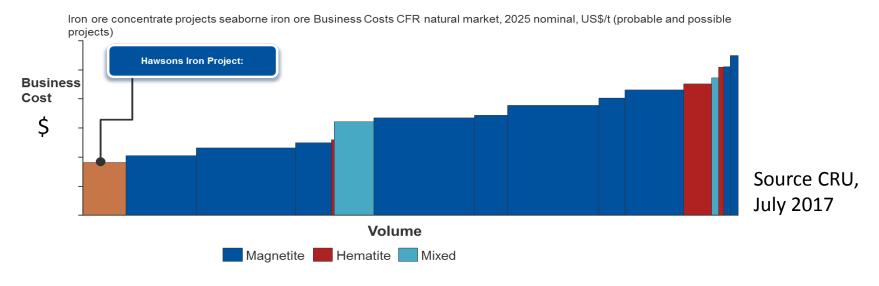
Source CRU, July 2017, Global iron ore business cost curve

CRU's Business Cost includes all cost sof operations up to delivery at the buyers' port and also includes a value in use adjustment that normalises all operations to the benchmark 62% iron ore price delivered to China, to allow for direct comparison. Cost curve includes projects. CRU's adjustment for Hawsons Supergrade is ~US\$18.

### Hawsons Iron Project - World's leading undeveloped concentrate project

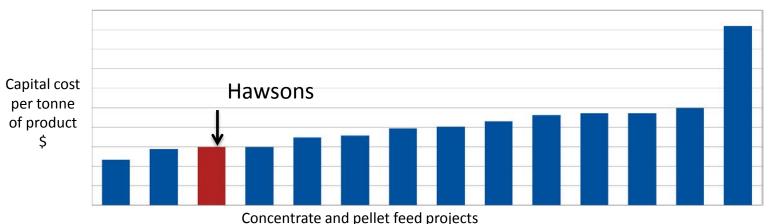


#### Hawsons is the leading undeveloped iron concentrate/pellet feed project operating costs



### Hawsons is one of the lowest capital cost undeveloped iron concentrate/pellet feed projects

Pellet feed project capital intensity, 2025 nominal, USD /t



Source CRU, July 2017

## Iron ore and steel demand – strong fundamentals



Finished steel forecast demand 2017 (World Steel Oct. '17)

- China forecast up 23 mtpa (~3%) \*
- Rest of world forecast up 26mtpa (~2.6%)

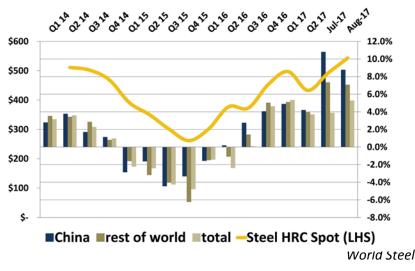
Population growth, urbanisation rates and economic development underscore long term demand growth, esp. India, Middle East and ASEAN

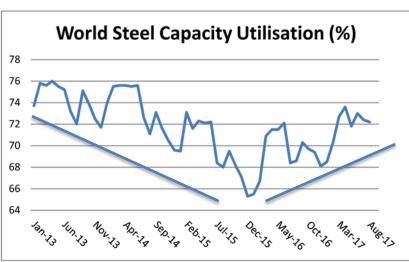
- BHP forecasts CAGR of 1.9-2.1% in steel production out to 2030
- That is 35-40mtpa new steel each year

Supply gap 2019-2021

- New supply from majors\*\* estimates at only 12mtpa in 2020.
- Mills and traders are planning now







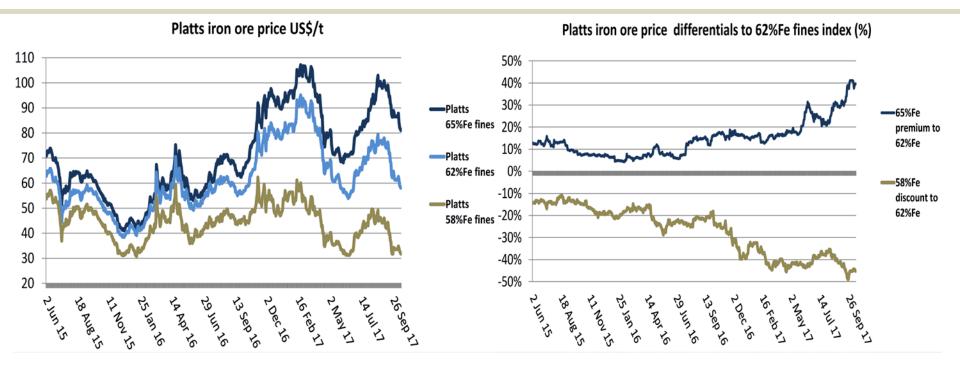
World Steel

<sup>\*</sup>corrected for production outside official figures

\*\*RIO, BHP, Vale, FMG, Roy Hill from company data, reports

## Iron ore and steel demand- shift to productivity driven steel making

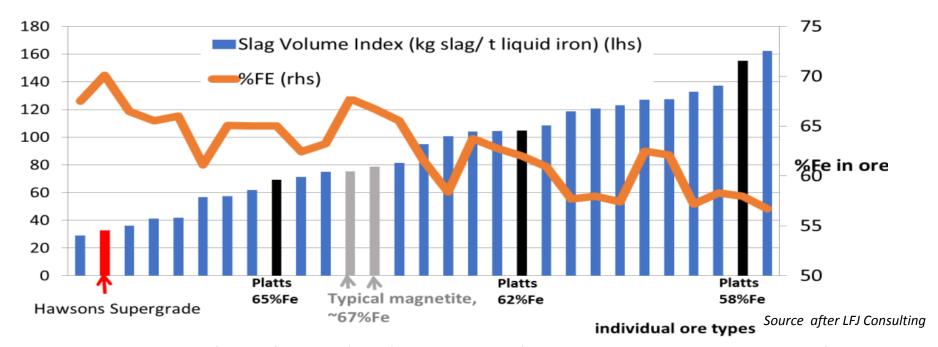




- Record high quality differentials reflect current productivity driven steel making in China
- Forecast to be a structural shift over time as China shifts to the same blast furnace operating practices as Europe and Japan
- CRU recently wrote "We forecast a clear shift towards pellet in Chinese burdens with the rate lifting from 150kg per tonne of hot metal to 273kg per tonne of hot metal ", "This results in an increase in demand of 76mtpa by 2030".
- Increasing environmental regulation enforcement and increasingly frequent production shut downs mean high productivity ores at a premium

## Productivity driven steel making is all about the slag volume





- Magnetite is not always better than hematite, only >68%Fe magnetite gives productivity improvements over the benchmark hematite 65%Fe fines product
- Blast furnace has a fixed volume therefore the more iron vs slag in the furnace, the more iron is produced per unit of time and energy ie higher productivity, less pollution
- Silica is rising in Brazilian ores and phosphorous is rising in Australian ores
- 169mtpa of mine depletion from majors over the next 5-7 years (Vale Nov. 2016)
- Hawsons has the world's highest iron content

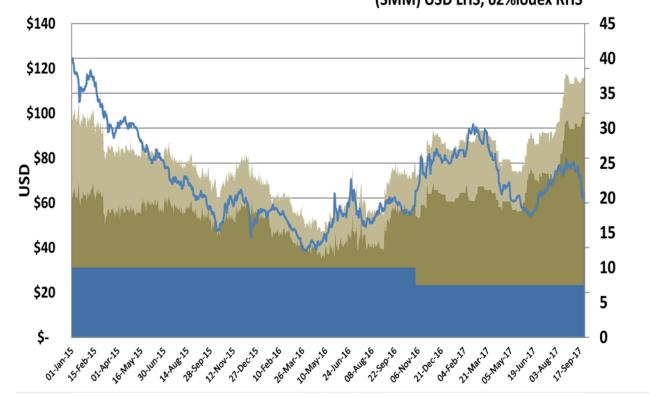
<sup>\*</sup>Slag Volume Index (SVI) – slag generators (silica + alumina)/ iron content

### Unique strategic value of Hawsons Supergrade – Blast furnace value in use



### Hawsons premium ~US\$25/t over the 62%Fe benchmark, long term, currently ~US\$35/t

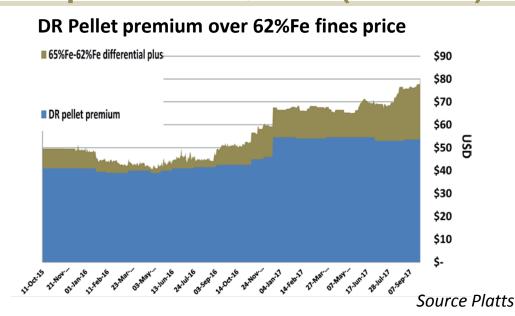
Hawsons potential premium over 62%Fe fines pricebased on Chinese steel mill index based price formula (SMM) USD LHS, 62%iodex RHS

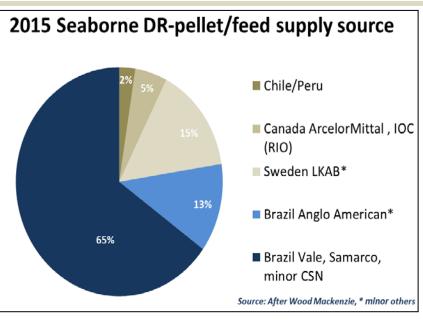


- Hawsons Fe% value in use (ie value of 5 Fe units above 65%)
- 65%Fe-62%Fe differential plus
- plus Hawsons pellet feed premium
- □ IODEX CFR CHINA 62% Fe \$/DMt

## Unique strategic value of Hawsons – DR pellets ~US\$135/t (Oct. '17)







DR feed highest value iron ore product – DR pellet currently 62%Fe fines plus ~US\$75

DR product quality is rare

- supply concentrated by four majors (~90%)\*
- supplied by ~ 10 projects \*\*

New and diversified sources of direct reduction feed required in the Middle East to

- 1. support DRI industry growth
- 2. offset pricing power of existing producers

**Bahrain Steel, Emirates Steel and Kuwait Steel** have signed for 4.9Mtpa of Hawsons DR feed under LOI demonstrating strategic interest

\* Wood Mackenzie, 2015, \*\*MBR, 2015

# Hawsons Iron Project – Preparing for development



Offtake demand for Hawsons Supergrade® product

Company	Volume
Formosa Plastics	2.6 Mtpa
Bahrain Steel	3.0 Mtpa
Shagang	2.5 Mtpa
Mitsubishi Corp. RtM	1.0 Mtpa
Gunvor	1.0 Mtpa
Kuwait Steel	1.0 Mtpa
Emirates Steel	0.9 Mtpa
Total	12.0 Mtpa

- Discussions commenced with leading project finance banks, initial feedback on customer quality and project metrics is encouraging
- Bankable feasibility study (BFS) funding sought ~A\$25-30m
- Engaged with multiple third parties capable of substantially funding the BFS
- These parties are undertaking pre-transaction due diligence, and therefore the nature of any transaction that may possibly result is uncertain

## Hawsons Iron Project – Placement and Rights issue



### **Capital raising**

13<sup>th</sup> October, Placement of 10,800,000 new shares at \$0.072 for \$777,600 substantially to new and existing institutional shareholders.

31st October, Rights Offer closes - 1 new share for 10 existing shares at \$0.072 to raise \$1.3m

#### Use of funds

Maintain project schedule – EIS works, final spring ecology, water bore drilling etc

Working capital while the most appropriate BFS solution is sought (A\$25-30m)

### **Project Schedule- subject to funding**

	2017			2018				2019				2020				
Task		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1 Approvals and bankable feasibility study test work					test work											
Phase 2 Bankable feasibility study and engineering																
Construction and production																

# Hawsons Supergrade is in demand, CAP taking the right steps



Iron ore market is more complex and sophisticated than is generally understood by investors in Australia

Steel industry participants recognise the value of securing high quality iron ore as global quality declines

Those that can access high quality will have an advantage over their rivals

CAP's offtake partners have signed up because they recognise

- Hawsons targeted metrics make it the leading project
- Hawsons development risk is relatively low
- Hawsons product can help their business
- New high quality ore projects are required to maintain global productivity
- New iron ore supply required 2019-2020

CAP is taking the right steps to build a bankable project, with global leaders.

## Thank you for your attention

Please refer appendix for additional information

Phone: +61 7 3220 2022

To find out more, visit us at www.capex.net.au







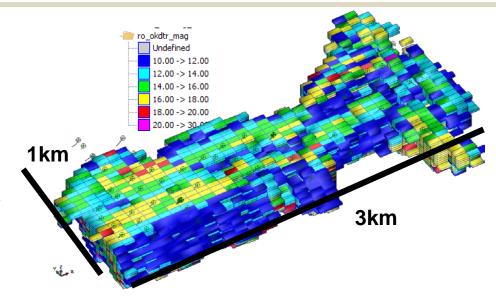
The information in this presentation that relates to Exploration Results, Exploration targets and Resources is based on information compiled by Q.S. Hill, who is a member of the Australian Institute of Geoscientists and has had sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Q.S.Hill is an employee of Carpentaria and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



### Resource increase, 30+ year mine life



- Total resources >330mt concentrate
- Conversion rate from Inferred to Indicated Resources was outstanding at 96%, giving confidence in future upgrades
- High value concentrate grade and recovery unchanged after ~40% more data point



					Concentrate Grades						
Category	Mt	DTR %	DTR Mt	Fe Head %	Fe %	Al2O3 %	Р%	S %	SiO2 %	TiO2 %	LOI %
Probable Reserves	755	14.7	111	17.5	69.9	0.19	0.003	0.002	2.60	0.03	-3.03
Indicated (incl. Reserves)	840	14.5	121	17.4	69.9	0.19	0.004	0.002	2.61	0.03	-3.04
Inferred	1,660	13.6	227	16.8	69.7	0.20	0.004	0.003	2.91	0.03	-3.04
Total	2,500	13.9	348	17.0	69.7	0.20	0.004	0.002	2.81	0.03	-3.04

The Company confirms that all assumptions and technical parameters underpinning the resource and reserve estimates continue to apply and have not materially changed since first reported on 28 July 2017. Reported at a 9.5%DTR cut off grade, and 38micron grind.

### **Appendix – Hawsons product quality**



Elen	nents and Compounds	Supergrade Pellet Feed (ALS, CISRI)	Supergrade pellets (CISRI) Fired at 1230°C	Midrex DR Specifications*
	Fe	70.3	67.80	67.00 min.
	SiO <sub>2</sub>	1.99	2.39	
(%)	$Al_2O_3$	0.29	0.44	
chemical Analysis (%) (on dry basis)	SiO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	2.28	2.83	3.00 max.
mical Analysis (on dry basis)	CaO	0.11	0.15	
A →	MgO	0.2	0.22	
ical	Р	0.007	0.008	0.030 max.
em (c	S	0.001	0.003	0.008 max.
5	TiO <sub>2</sub>	0.11	0.10	0.15 max.
	Na₂O	0.032	0.056	
	K <sub>2</sub> O	0.05	0.054	
– sa	Blaine Index (cm2/g)	1910		
Physical Properties	Tumble (% +6.3mm)		96.53	NA
hy ope	Abrasion (% -0.5mm)		2.99	NA
Pr	CCS (Kg/pellet)		324	>250
ical	Reducibility Index (%)		62.04	
letallurgica Properties	Reduction swelling index (%)		13.92	
Metallurgical Properties	Softening/Melting (Kpa. <sup>0</sup> C)		551	

Hawsons indicative specifications based on bulk pellet feed test work (ASX Announcement, 14 October 2015) and China Iron and Steel Research Institute test work (CISRI) in Beijing February 2016). \*P8 The Midrex Process by Midrex 2015

### **Appendix - Direct reduction iron**

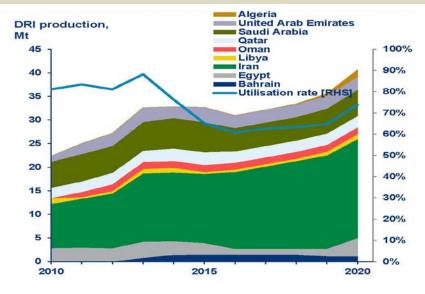


#### Benefits of DRI / EAF vs Blast furnace

- Less capital investment
- Lower operating costs
- Shorter construction period
- Relies on availability of natural gas
- Boosted by shortage of coking coal
- Flexibility of production capacity, can be on or off more easily than a BF
- fewer CO2 emissions

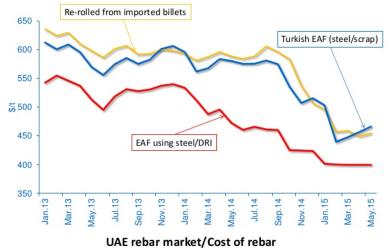
#### DRI production to increase in MENA to 2020

- DRI reduction agent is gas not metallurgical coal
- As metallurgical prices rise, DRI becomes more competitive
- India would benefit from a supplement to its hematite and goethite DR feed to increase productivity



Source World Steel, Midrex, Wood Mackenzie May 2016

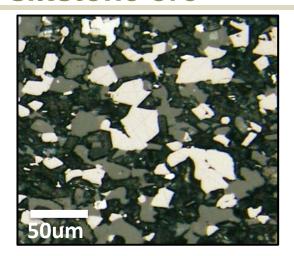
#### EAF-based mills using DRI have the lowest cost



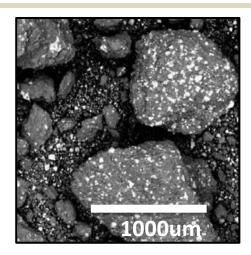
Source: World Steel Markets. Metal Expert estimate.

## Appendix - Supergrade from unique siltstone ore





Natural grain size <50um easily achieved



Crushing stage generates high proportion of fines ~30% <150um



45% rejection at first magnetic separation



Ball Milling 100% <40um 7kwh/t





After second magnetic separation 66%Fe



Particle 3

Elutriation removes free silica upgrade > 69%Fe