

# Investor Presentation

## August 2015



**Carpentaria** EXPLORATION  
LIMITED

WE FIND IT. WE PROVE IT. WE MAKE IT POSSIBLE.



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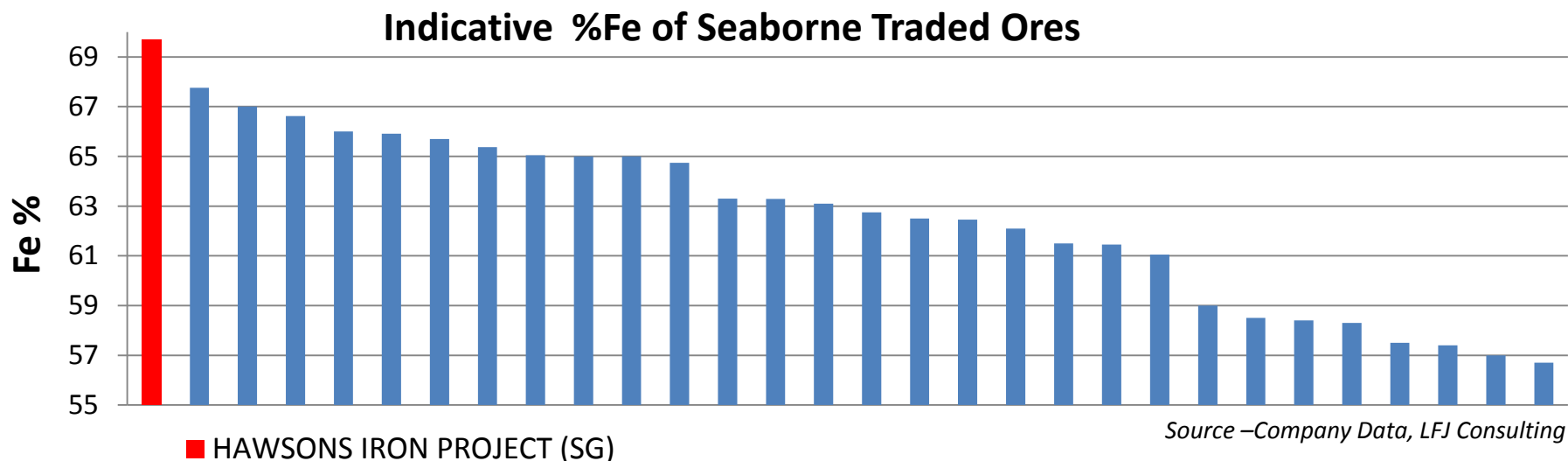


# Carpentaria – Our goal

**Be the preferred supplier of super grade iron products to growing high value markets in Asia and the Middle East to benefit of our shareholders, our customers and our communities.**



# Hawsons Iron Project is a stand out – World leading Fe grades and infrastructure



**Super grade** – highest seaborne grade in the world will deliver access to high value markets and the highest revenues.

**Super location** – existing port, rail and power infrastructure and workforce saves over USD1 billion in capital, reduces development risk.

**Super competitive** – soft ore allows lowest mining and processing cost targets.

**High demand** - well placed to supply multiple high value markets seeking high grade supply.

**Potential robust margins** in current market and the right attributes for development.

Project Concept – **deliver 10 Mtpa of world's leading grade** pellets and pellet feed >69.5% Fe, for a potential mine life of over 25years.

# Carpentaria - Balanced and experienced Board of Directors

- CAP:ASX - Listed in 2007 as exploration company
- Discovered Hawsons in 2009
- Focussed 100% on its development from 2013
- Hawsons Iron Project ownership  
CAP 62%, Pure Metals 38%



**Dr Neil Williams – Chairman**

- 40 years experience
- CEO Geoscience Australia 1995 - 2010
- Industry experience



**Mr Bob Hair (non-exec.)**

- 30yrs experience as a lawyer
- Former GM Commercial MIM Exploration
- Former CEO of AIM listed Ferrum Crescent



**Mr Quentin Hill – Managing Director**

- 18 yrs experience in exploration, development and management
- Part of Hawsons discovery team



**Mr Bin Cai (non-exec.)**

- Conglin Australia representative
- 18 years experience investing in emerging resource companies



**Mr Paul Cholakos (non-exec.)**

- 25 yrs experience in resources
- Mining Engineer
- Current Executive General Manager Technical Services –Oil Search

# Project Team - Experts in their field

## Quentin Hill

- CAP Managing Director , Project champion

## Ray Koenig - Consultant


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


## Adam Wheatley - Consultant


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


## Lou Jelenich - Consultant

- Market and steel expert
- Ex-BHPB iron ore technical marketer

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- Successful development
  - Return to shareholders
  - Reliability to customers
  - Trust in communities

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- Technical feasibility
  - Risk reduction

- 
- Project financing and bankability

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- Marketing saleable product
  - Offtake arrangements

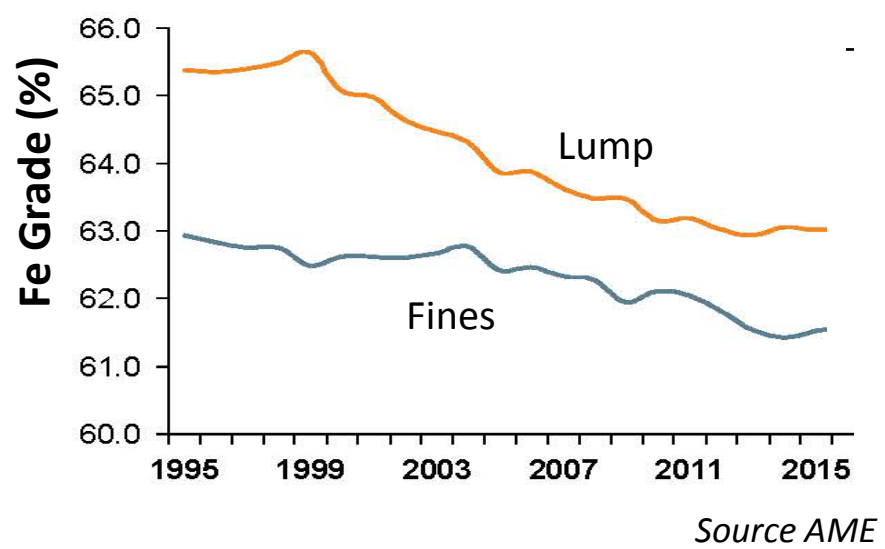


# Iron and steel are robust long term industries

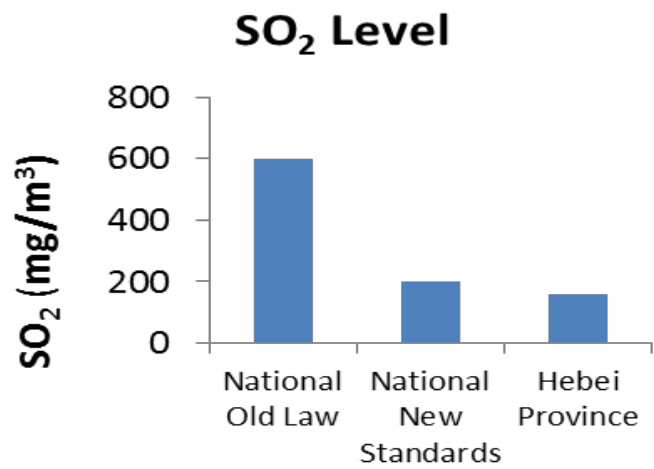
- Iron and steel are long term growth industries. World Steel Association May 2015 forecast 455Mt extra of steel demand from 2014 to 2030 globally
- That's 28mtpa steel and up to 46mtpa of new iron ore demand each year, for 16 years.
- China's urbanisation/industrialisation has a long way to run and resultant domestic steel demand is firm
- Future steel growth driven by infrastructure and urbanisation demand from ASEAN, India and MENA economies (source OECD) potentially sponsored by Asia Infrastructure Investment Bank



Iron ore Fe Content evolution - global average



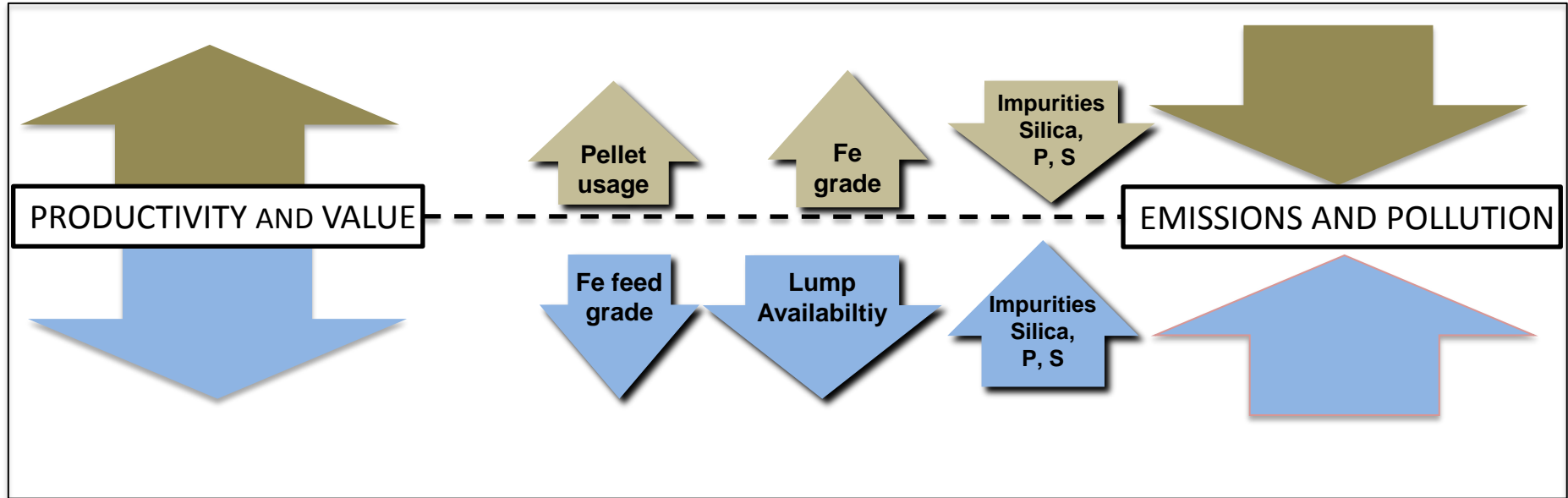
Example of China’s 2015 environmental restrictions on sintering and pelletising plants



- Global iron ore grades are falling
- Environmental restrictions are tightening
- Hawsons is well placed to access multiple high value markets because of its super grade

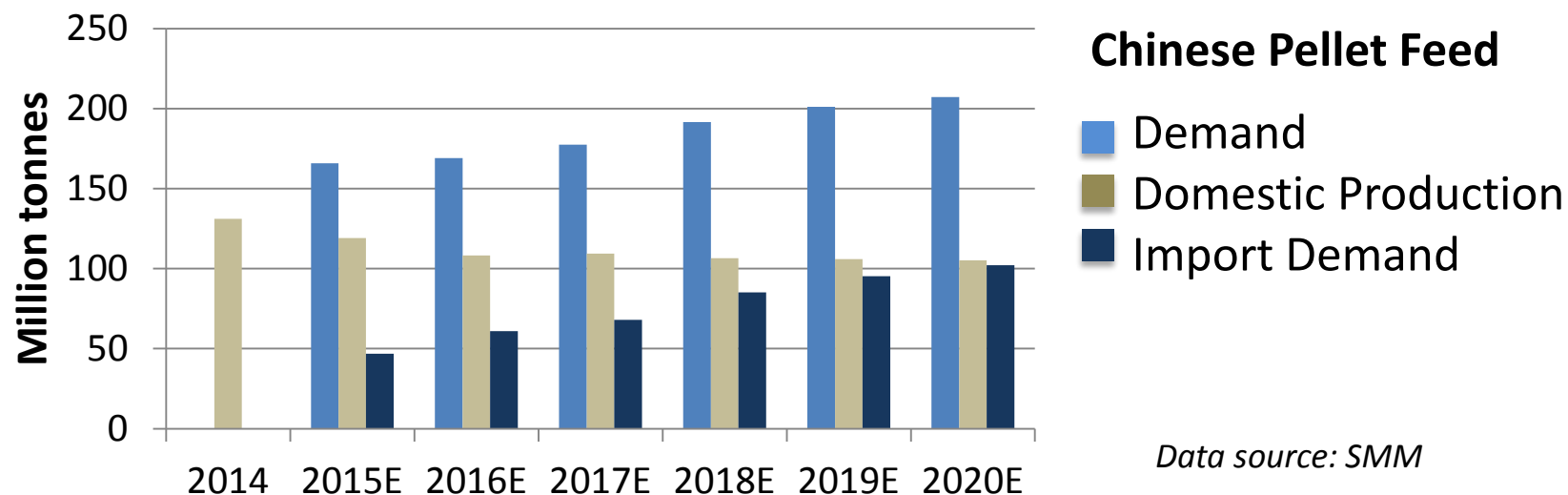


# Higher Fe grades are important for steel making productivity and environmental outcomes



- Steel makers favour increasing use of pellets and higher quality raw materials (high Fe and low impurities) because they provide;
  - Higher productivity, lower costs
  - Better environmental outcomes
- Environmental constraints set to increase cost and risk in steel making
- Markets and pricing have evolved to reflect this higher value

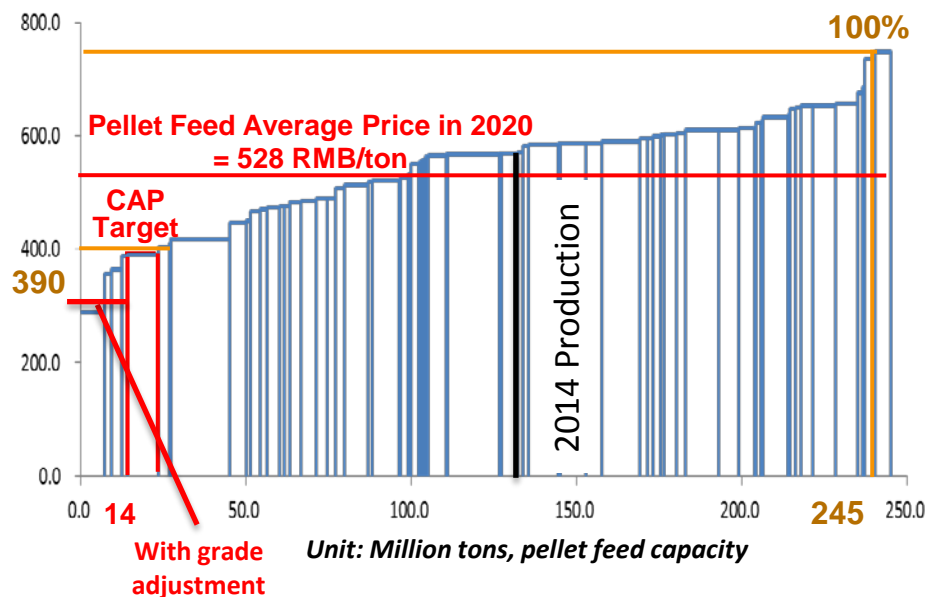
## China and South East Asia – High volume, high value growth market for quality blast furnace (BF) pellet feed



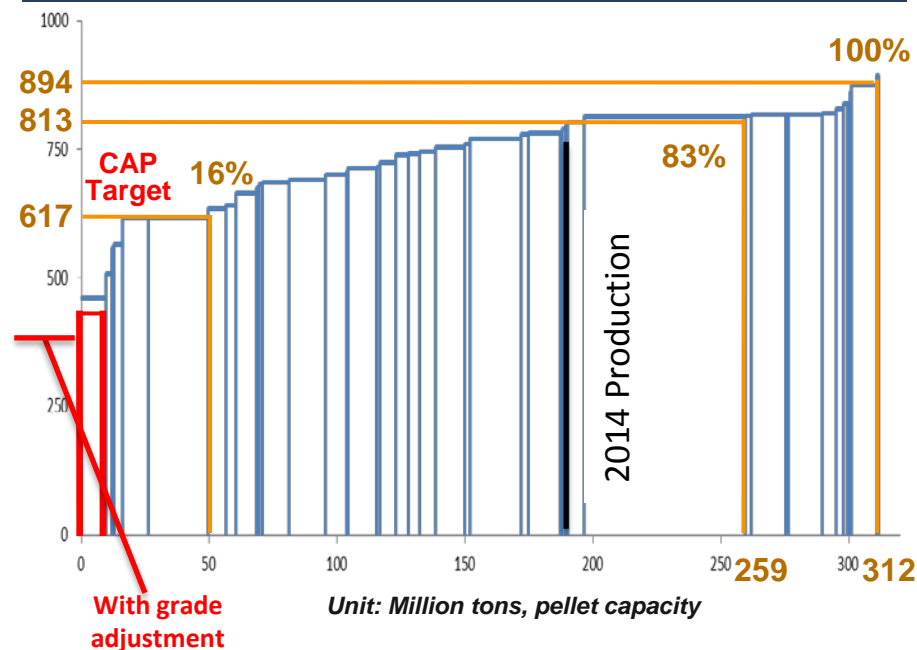
- Chinese imported pellet feed demand growth to 2020 expected to be equivalent of five new Hawsons projects underpinning market and price
- Substantial Chinese domestic production closures continue due to high cost, typically this production is magnetite pellet feed
- Magnetite is favoured over hematite for pelletising – higher productivity, less energy, fewer emissions, approximately \$10/t cheaper to pelletise.
- Hawsons potentially highest grade in the world, pure magnetite in concentrate over 69.5%Fe, maximum advantages as pellet feed.

# Hawsons ideally placed to meet shortfall in Chinese high quality BF pellet feed or pellets

**China's Pellet Feed Cost Curve in 2020**  
Not adjusted for grade or quality



**China Pellet Cost Curve in 2020**  
Not adjusted for grade or quality

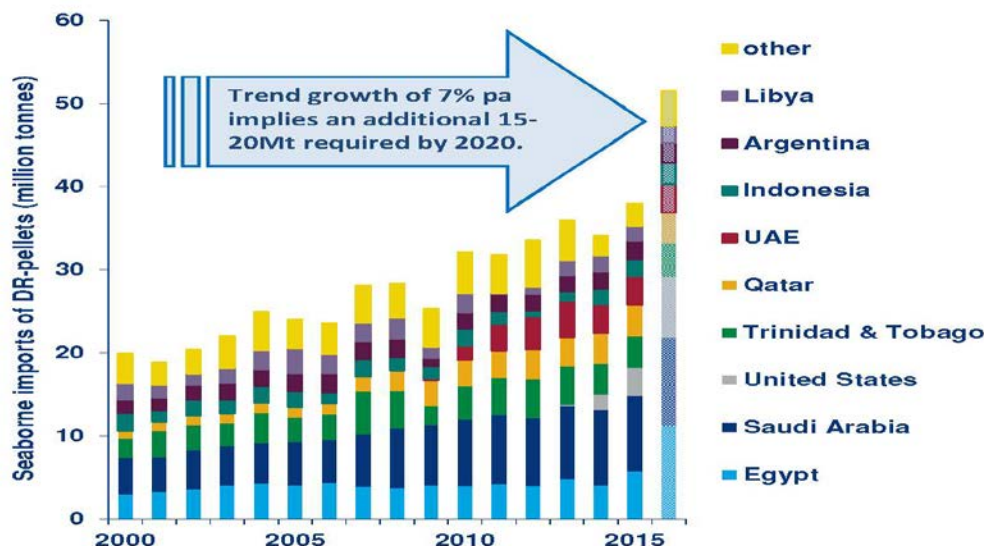


Source: SMM; Unit - RMB/wmt (excl. VAT, ex-work, includes depreciation, port surcharge); 6.1RMB : 1 USD: 0.75 AUD

- Hawsons cost targets are very competitive with domestic production in China.
  - Chinese typical pellet feed grade 65-66%Fe (Hawsons ~69.5%Fe)
  - Chinese typical domestic pellet grade 62-65%Fe (Hawsons ~68%Fe)
- Market feedback on quality very encouraging, work ongoing.
- Hawsons product used as replacement magnetite or pellet feed blending feedstock

## Direct reduction (DR) is a different high value market with a growing supply deficit

**Demand for imported DR-pellets is set to accelerate.**



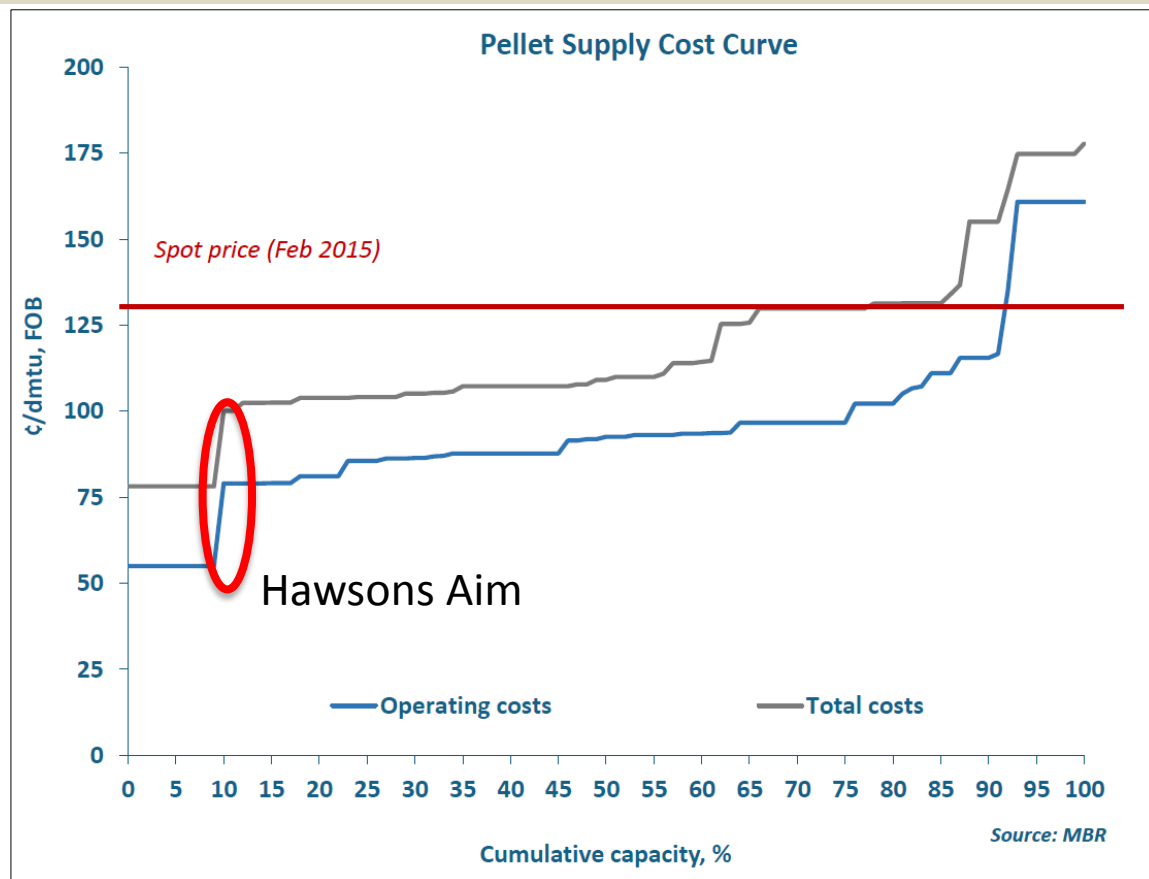
Source: Wood Mackenzie

- Likely supply deficit in 2020;
- Concentrated supply (Vale, Samarco, LKAB, Bahrain Steel – raw material ~80% from Brazil).
- Swing producers largely withdrawn (Wood Mac 2015).
- Market requires new, long term, low cost supply.
- Very encouraging product feedback from Middle East enterprises who favour diversification of supply.



# Hawsons well placed to provide new, reliable low cost DR supply

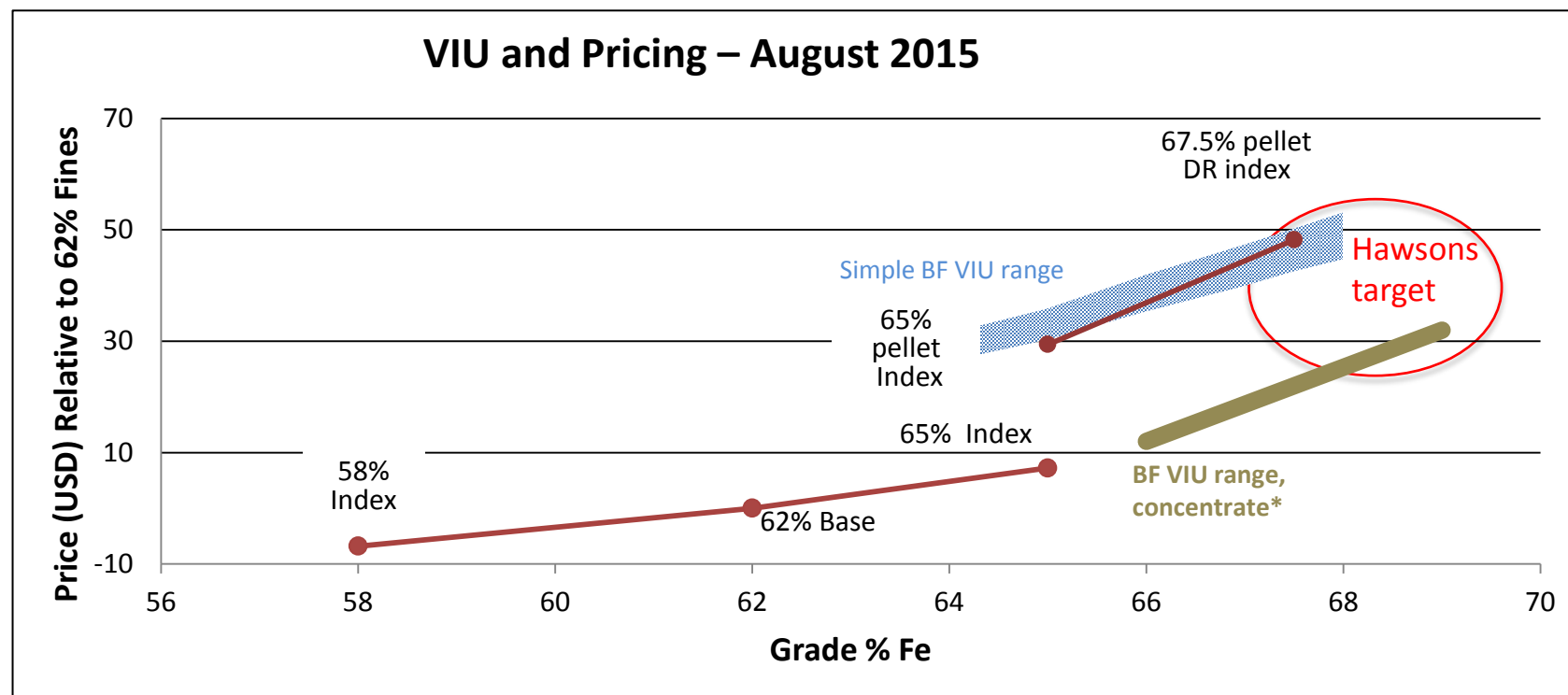
- Target first quartile pellet costs
- New Platts DR pellet premium \$48/t above 62% Fe price August 2015
- Pellet market in balance
- Little opportunity for substitution
- Therefore price should be supported, room for low cost entrants
- Global DR pellet production costs are higher because of quality requirements



Pellet supply cost curve FOB per iron unit (Source: Metal Bulletin Research March 2015). The spot price of USD 101/t CFR China for a 65%Fe pellet in February 2015 is corrected to USD 83/t to reflect USD 17/t shipping from Brazil, the dominant producer. This is then corrected for iron units to 128 cents/dry metric tonne unit as presented on the graph.

Hawsons has a \$US2-13/t location advantage over key markets in Asia that is not reflected in this illustration. Hawsons' 68%Fe pellet cost target of \$US43-51/t FOB.

# Price premiums reflect value to steel makers – highest relative pricing for highest quality

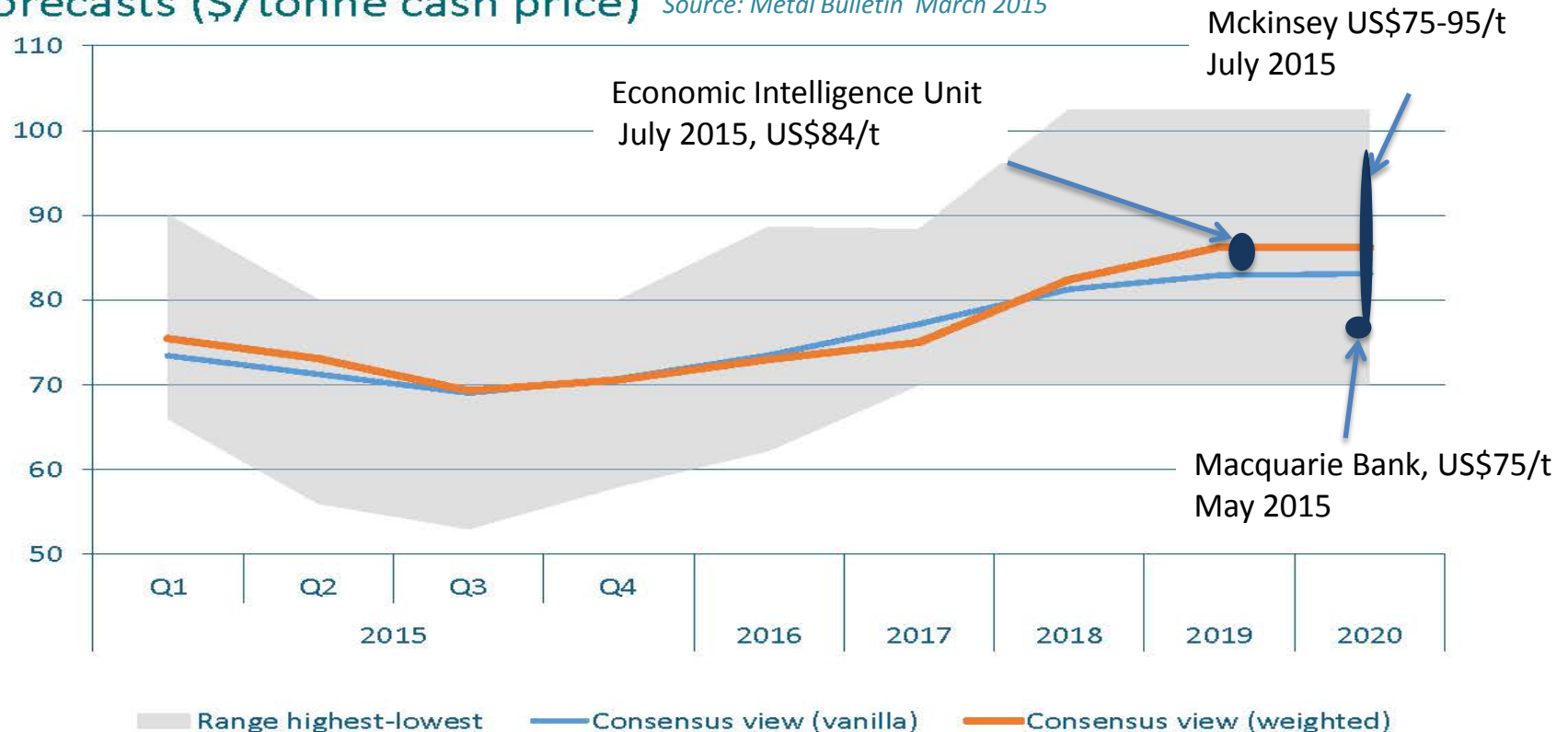


- Very high quality product attracts increasingly high premiums because of value in use (VIU).
- Medium long term trends to better productivity and environmental outcomes to support the premiums.
- Hawsons potential to achieve over US\$15/t over 65%Fe magnetite concentrates based on SMM surveys

1. DR pellet price – Platts 65%Fe US\$64 + Platts DR Pellet premium US\$41
2. Simple pellet VIU based on US\$52 62% fines price (source SMM)
3. Concentrate VIU based on \$70/t 62%Fe fines (source Mouton, Edwards AUSIMM July 2015) grade corrected for magnetite to hematite conversion
4. Index quotes are Platts based

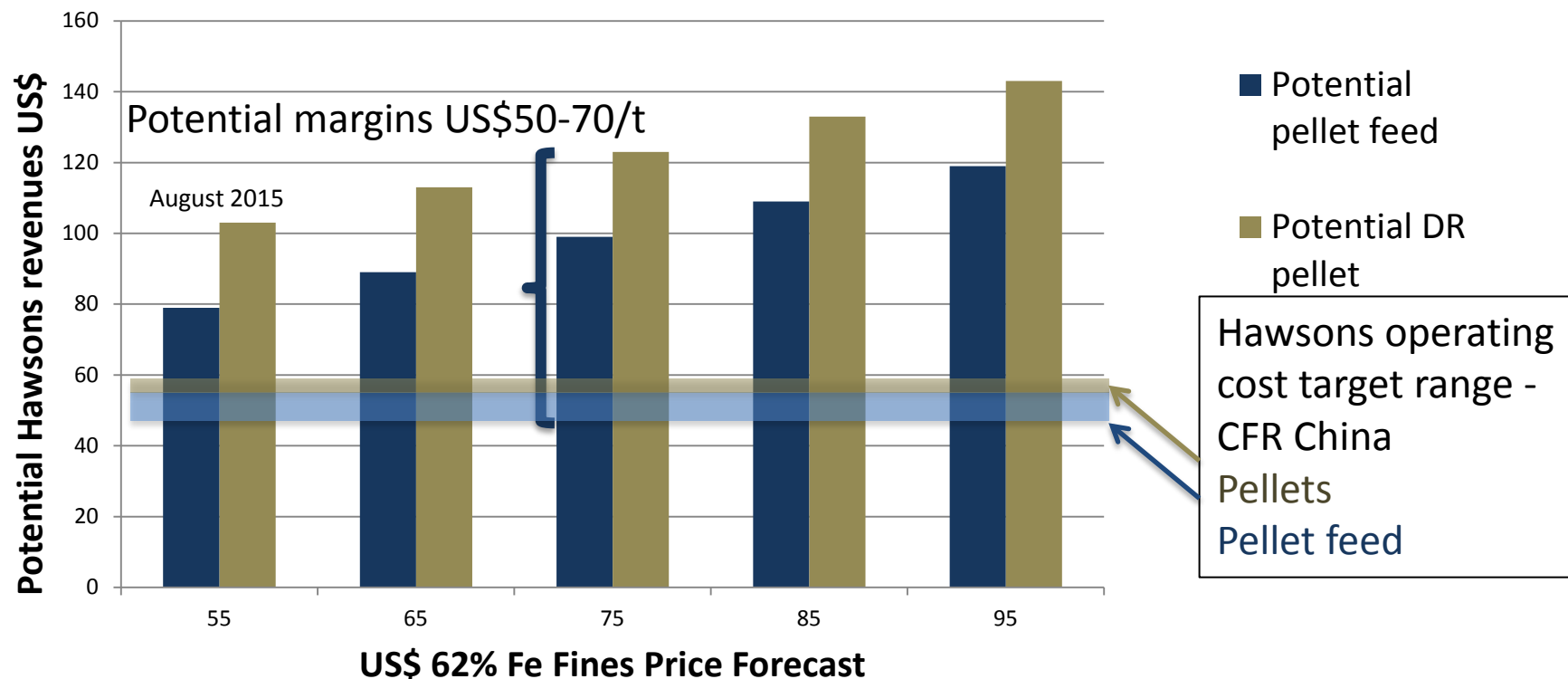
## APEX Forecast: Iron Ore 62% Fe Fines

Forecasts (\$/tonne cash price) *Source: Metal Bulletin March 2015*



- Recent forecasts of medium term outlook for iron ore is US\$75-95/t
- World Steel Association forecasts steel demand growth to increase by 455Mt by 2030, or 28mtpa steel and up to 46mtpa of new iron ore demand each year, for 16 years.

# Hawsons Iron Project potential margins are robust



- Potential for margins of >US\$50-70/t at consensus 2020 price outlook of US\$75/t
- Potential very robust returns based on super grade, index based pricing
- Potential to maintain profitability through commodity cycles

Potential revenues based on base 62% Fe price plus premium \$24/t concentrate and \$48/t pellets derived from index pricing and recent SMM survey of prices paid by Chinese steel mills (covering 25% of industry) for pellet feed.

Hawsons OPEX cost targets based on 1 AUD buys 0.75 USD



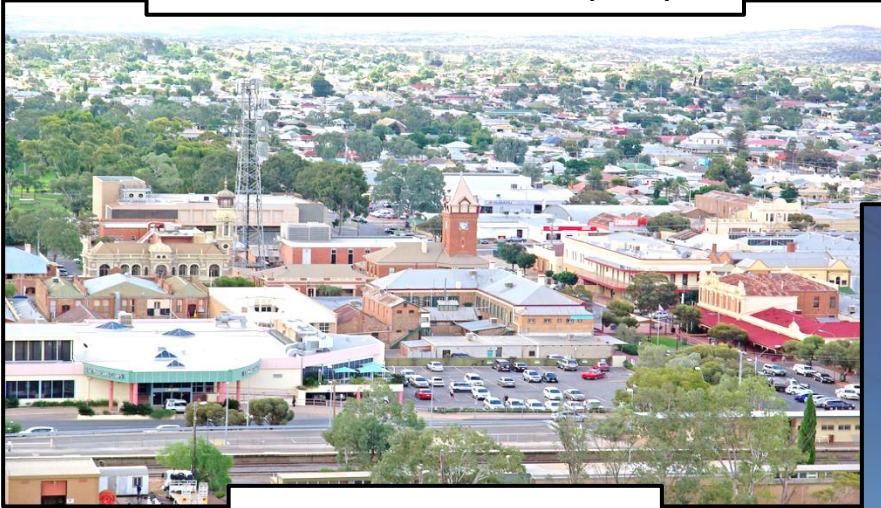
# Hawsons Iron Project is a stand out – World leading quality, existing infrastructure

- **Super grade** – highest seaborne grade in the world will deliver access to high value markets and attract the highest revenues
- **Super location** – existing rail, port and power infrastructure and workforce saves over USD1 billion in capital, reduces development risk.
- **Super competitive** – soft ore allows lowest mining and processing cost targets
- **Project Concept** – deliver 10 Mtpa of worlds leading grade pellet feed and pellets into multiple markets over a mine life of over 25 years



# Super Location – Access to over \$1B of existing infrastructure

Workforce – ~20,000 people



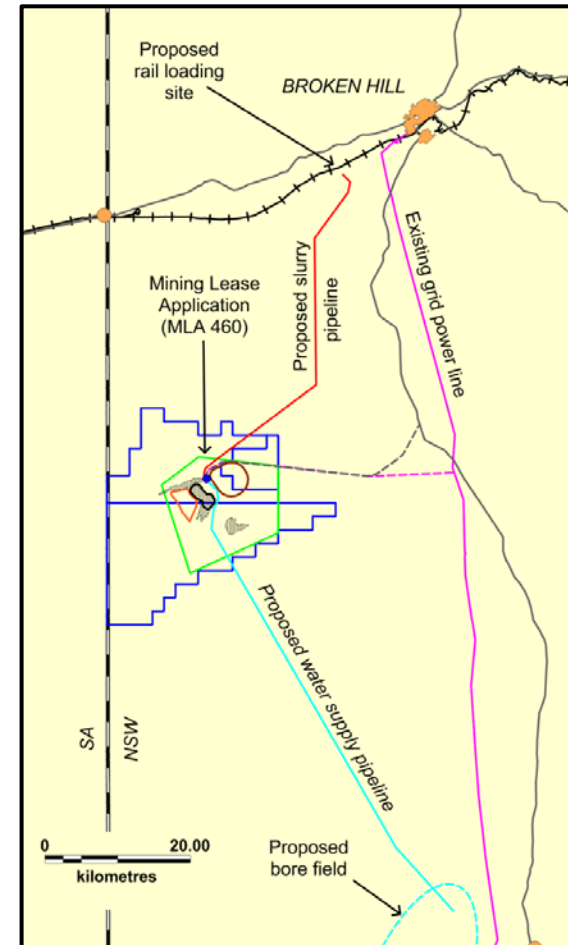
Community support



Water – high yield



Power – up to 300MW



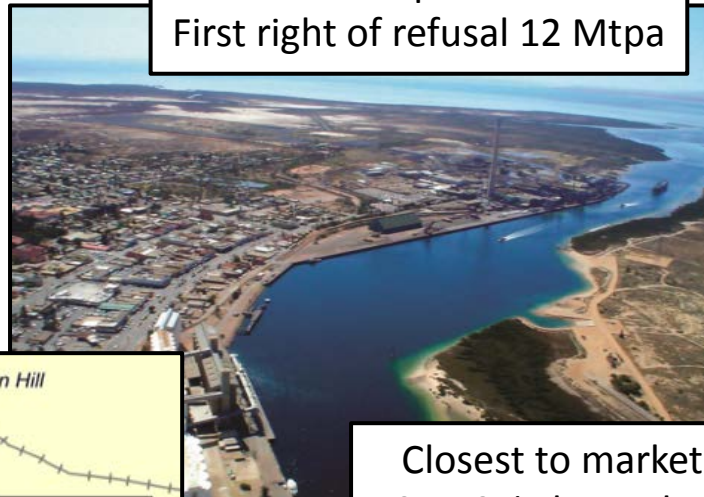


# Super Location – Access to over \$1B of existing infrastructure

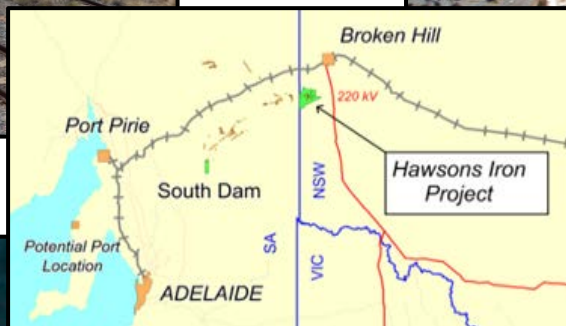
25 t axle load rail,  
13 Mtpa spare capacity



Port Pirie Spare Berths  
First right of refusal 12 Mtpa

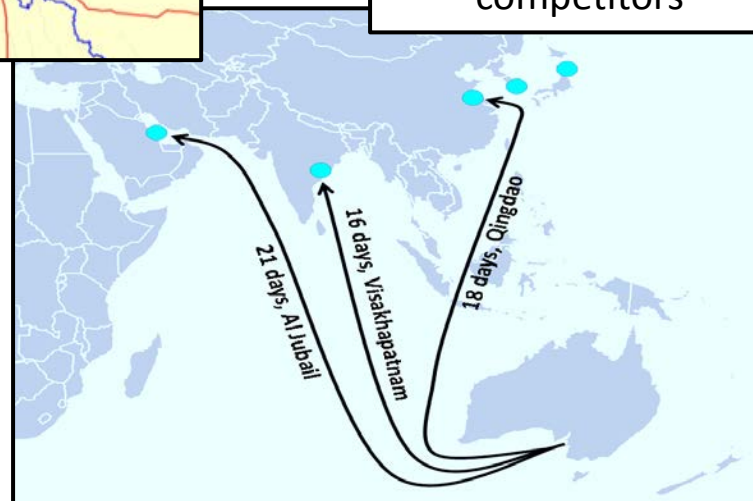


Closest to markets  
25-50% closer than  
high grade  
competitors



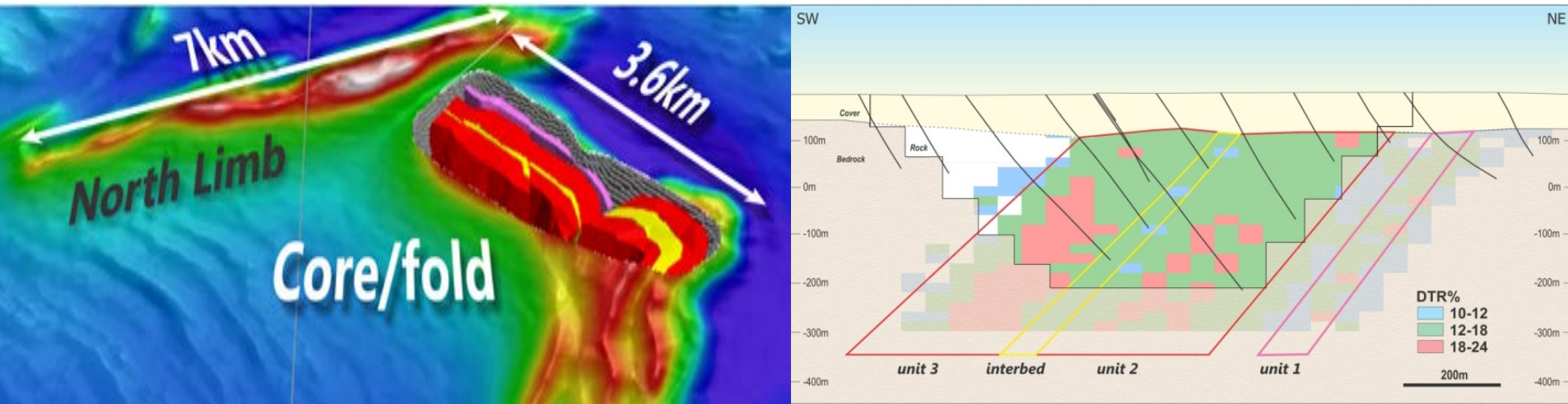
Iron ore concentrate transferred  
to ocean going vessels

Cape Size capacity



# Super Soft, Super Grade – Resources and mining

Hawsons Iron Project Cross Section



Resource JORC Inferred (88%) plus indicated (12%)

- 1.8 Bt at 15% mass recovery for 263 Mt of 69.7% Fe concentrate (*refer Appendix 1*)
- 26 years at 10Mtpa, significant exploration potential to support over 40 years mine life in a single pit (*refer Appendix 1*)

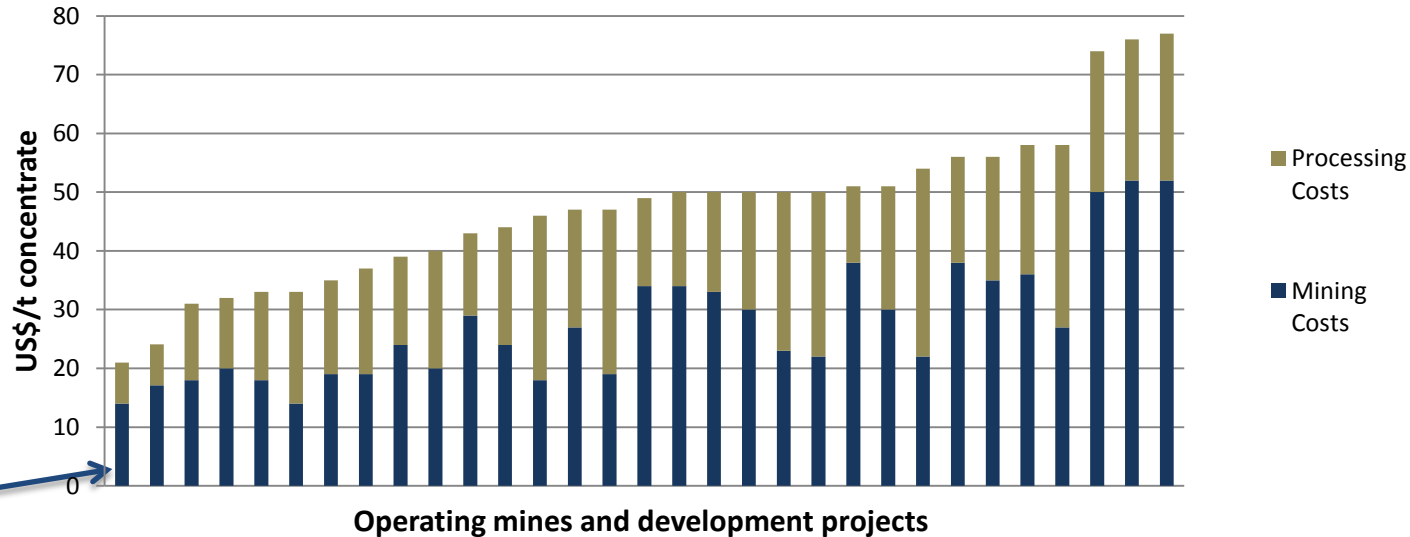
Mining:

- Low strip ratio 0.47:1 waste:ore, falling to near zero by year 8
- Low cost bulk mining methods – in-pit crushing and conveying
- Rock strength soft
  - Unconfined compressive strength (UCS) 50-90 Mega Pascals (Mpa), cf. 350 MPa.
- Large optimisation opportunities

The Company confirms that all assumptions and technical parameters underpinning the resource estimates continue to apply and have not materially changed since first reported on 26 March 2014.



## High quality concentrate mining and processing cost estimates 2020, not corrected for grade



Source after Metalytics, company data

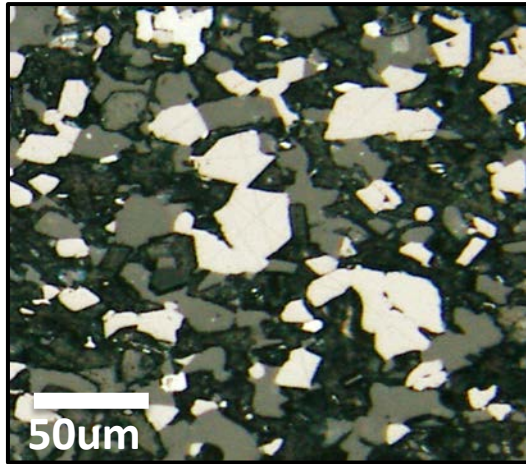
### Hawsons

- Grade 69-70% Fe (rarely achieved by others)
- Low cost processing (US\$6-8), geology allows super high grades at low cost

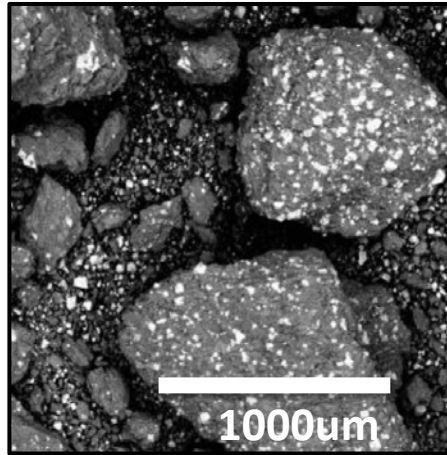
### Typical magnetite concentrates

- Grade 65-68% Fe
- Requires high cost processing (ave. US\$20/t)
- Cost and geology typically prohibit higher grades (more grinding, impurities within magnetite)

# Processing – Super grade because of geology



Natural grain size <50µm easily achieved



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



45% rejection at first magnetic separation

Ball Milling  
100% <40µm  
7kwh/t



After second magnetic separation 66%Fe



Elutriation removes free silica upgrade > 69%Fe

## Pellet feed - High purity

### Pellets – High strength

- Currently a bulk concentrate upgrade using elutriation (water only washing) is underway and additional pellet test work is planned
- The Company believes that there will be flexibility in Fe % level depending upon customer's preference including DR grade

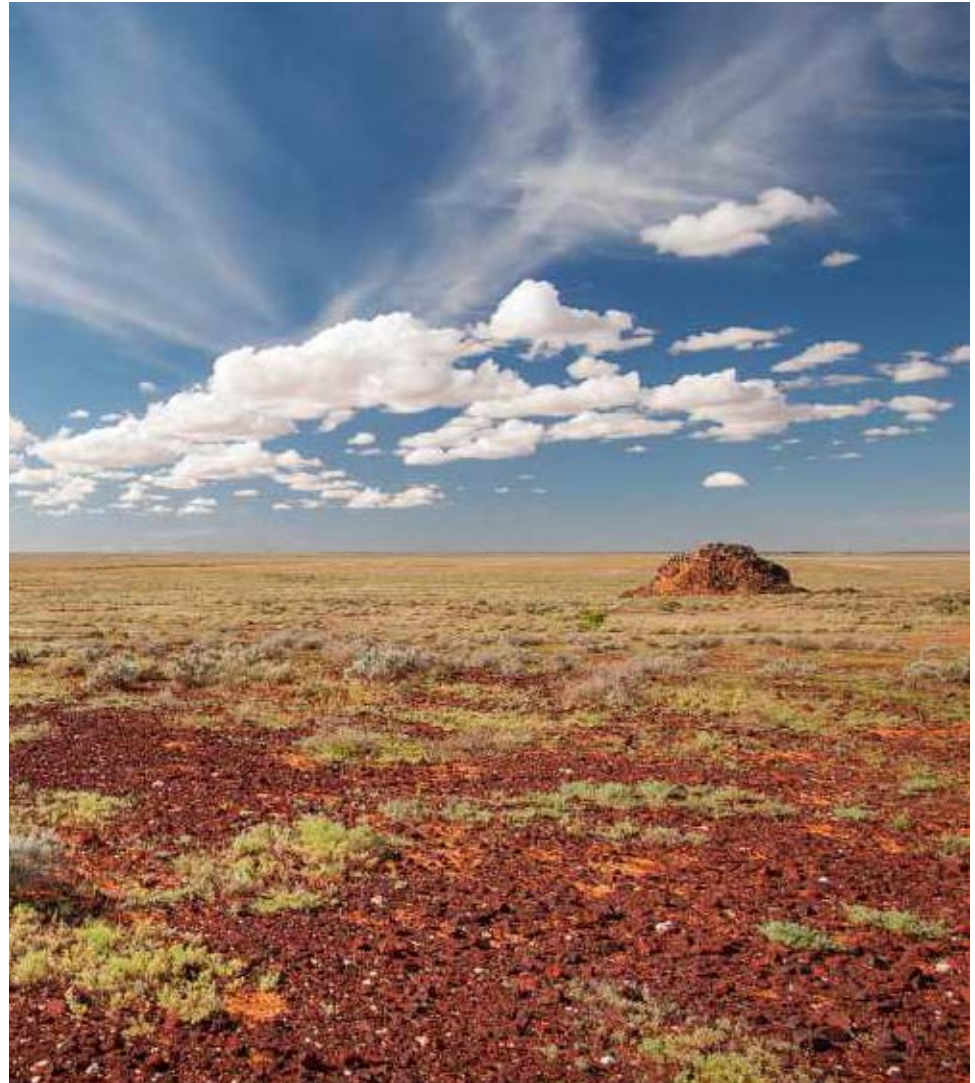
Pellet Feed Product Specifications			
Fe	70.1	P	0.004
SiO <sub>2</sub>	1.43	S	0.002
Al <sub>2</sub> O <sub>3</sub>	0.23	MnO	0.00
SiO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	1.63	Na <sub>2</sub> O + K <sub>2</sub> O	0.085
CaO	0.11	Cl	0.00
MgO	0.14	TiO <sub>2</sub>	0.08
		LOI	-3

Based on 8t Pilot plant test work, February 2015, ALS Iron Ore Technical Centre, Perth.

Pellet Feed properties	
FeO	>27.5%
Size	100% < 45um
Pelletising properties	
Blaine	829
Green ball drop number	>3.5
Green ball compression strength	>1 kg
Green ball moisture	7.9 - 8.7%
Tumble index	96.7
Abrasion index	2.8
Cold compression strength (CCS)	~350 kg
FeO in pellets	0.25 - 0.31

Based on CSIRO pelletising test work, 2011

- No Native Title – it is extinguished on the mining and easement areas
- Mining Lease Application lodged
- Environmental Impact Assessment guidelines received
- Ecology and cultural heritage surveys largely complete, no showstoppers identified





## **Focussing on our potential customers**

- Initial product feed back from multiple markets is very encouraging
- Product has been successfully differentiated
- Current work program to further exploit product advantages
  - bulk concentrate upgrade
  - additional pelletising and steel mill performance test work
- Next phase – customer visits and progress towards agreements

## **Development schedule potential to meet the market timing**

- Two years to complete feasibility study, approvals and financing (major iron ore supply expansions completed and absorbed over this time)
- Two years for construction
- Target production 2019/2020, little new production on stream, prices and demand forecast to be in upswing

- Not all iron products are created equal
- The iron ore market continues to segment into high value and low value products
- Hawsons is a stand out development project because
  - Super grade provides access to markets and highest revenue
  - Super location provides a clear and achievable project pathway with access to existing infrastructure significantly reducing development risk
  - Hawsons potential cost structure is super competitive
- Opportunity to develop in the downturn and produce in the upswing

# Carpentaria Exploration

We find it. We prove it. *We make it possible.*

Phone: +61 7 3220 2022

To find out more, visit us at  
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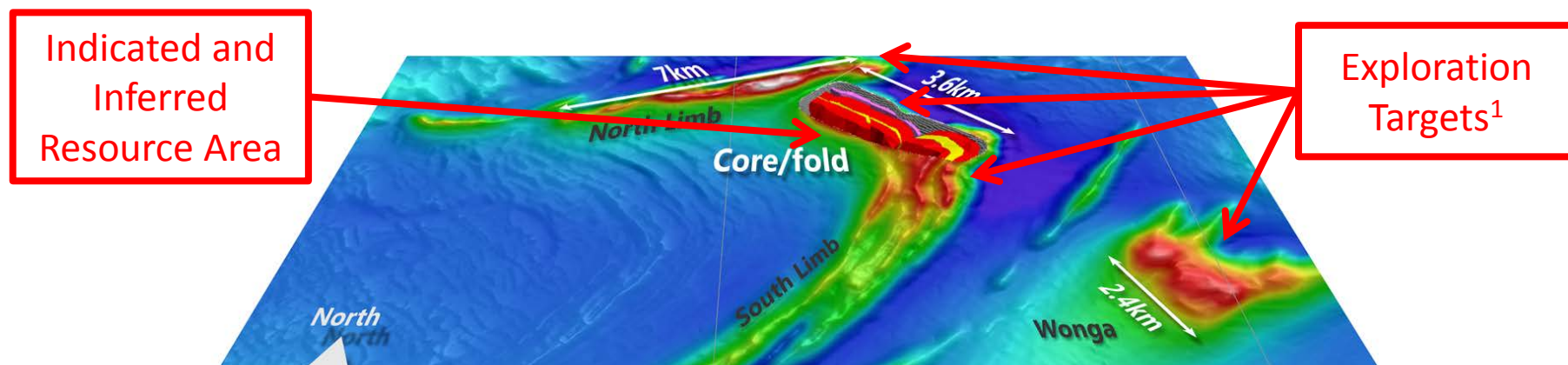
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*The information in this presentation that relates to Exploration Results, Exploration targets and Resources is based on information compiled by Q.S. Hill, who is a member of the Australian Institute of Geoscientists and has had sufficient experience 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.*



# Resources – Long life, high capacity, over 260 Mt concentrate defined

			Concentrate Grades					
Category	Billion Tonnes	Magnetite DTR%	Fe%	Al <sub>2</sub> O <sub>3</sub> %	P% <sup>1</sup>	Si <sub>2</sub> O <sub>2</sub> %	LOI%	Contained Concentrate (Mt)
Inferred	1.554	14.7	69.6	0.20	0.004	2.9	-3.0	228
Indicated	0.215	16.2	69.8	0.20	0.005	2.8	-3.0	35
<b>Total</b>	<b>1.769</b>	<b>14.9</b>	<b>69.7</b>	<b>0.20</b>	<b>0.004</b>	<b>2.9</b>	<b>-3.0</b>	<b>263</b>
<b>Exploration Target</b>	<b>6-11</b>	<b>14-17</b>	<b>69</b>			<b>2.5-3</b>		<b>800-1900</b>



<sup>1</sup> Defined by drilling and assaying all magnetic anomalies combined with detailed magnetic modelling.

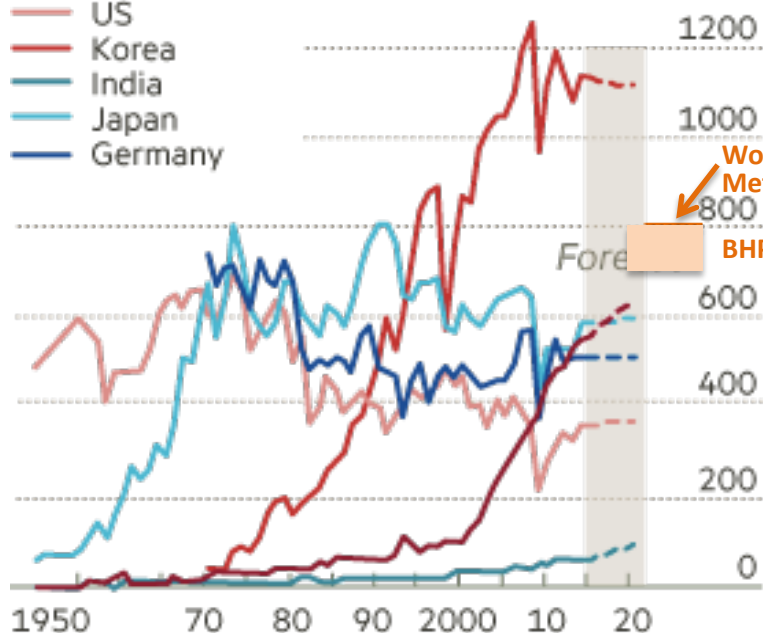
<sup>1</sup> The potential quantity and grade of the exploration targets is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource.

# Iron ore will continue to sustain global industrialisation and urbanisation

## Crude steel consumption

Kg per capita

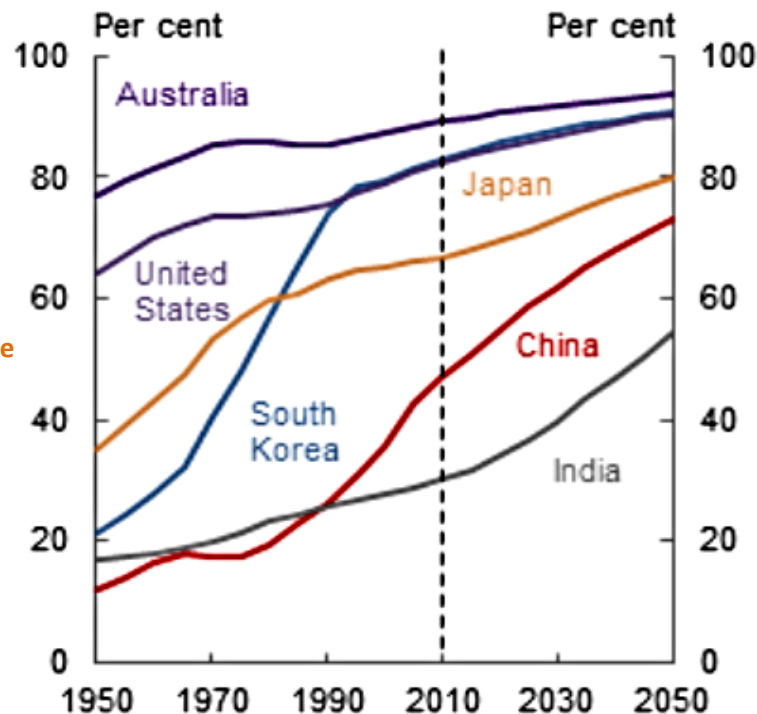
— China  
— US  
— Korea  
— India  
— Japan  
— Germany



Source: Macquarie Research

FT

## Urban share of population



Source : World Bank, United Nations 2011,