

#### SHREE MINERALS

#### **CORPORATE UPDATE**

FEBRUARY 2014



# IMPORTANT NOTICES

This presentation contains only a brief overview of Shree Minerals Limited ("Shree") and its activities and operations. The contents of this presentation, including matters relating to the geology of Shree's projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.

This presentation contains a number of forward-looking statements. Such statements may include, but are not limited to, statements with regard to intention, capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for minerals and metals prices, the outlook for economic recovery and trends in the trading environment. Known and unknown risks and uncertainties, and factors outside of Shree's control, may cause the actual results, performance and achievements of Shree to differ materially from those expressed or implied in this presentation.

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The information contained in this presentation is not a substitute for detailed investigation or analysis of any particular issue. Current and potential investors and shareholders should seek independent advice before making any investment decision in regard to Shree or its activities.

#### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Mahendra Pal who is a Fellow of the Australian Institute of Mining and Metallurgy.

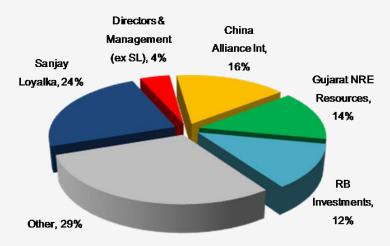
Mr Pal is a Director of Shree Minerals Limited.

Mr Pal has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Pal consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### CORPORATE OVERVIEW

- Company founded in early 2008
- Flagship Nelson Bay River iron ore project (Tasmania) acquired in mid 2008
- Listed on ASX in early 2010
- DSO discovery at NBR in late 2010
- Advancement through feasibility, permitting and development to first DSO production in November 2013
- Operations team all based on site
- ★ Tight shareholder register 66% currently with 4 holders
- Current EV = A\$19m

Capital structure	
ASX code	SHH
Shares on issue*	109.3m
Share price	A\$0.18
Market capitalisation	A\$19.7m
Cash (31 Dec 2013)	A\$3.9m
Debt (31 Dec 2013)	A\$3.2m
Performance rights/options	1.0m



### BOARD & KEY MANAGEMENT

BOARD		
Sanjay Loyalka (B.Com [Hons], CA) <b>Executive Chairman</b>	<b>&gt;</b>	Founded Shree Minerals in early 2008 and led the acquisition of the company's flagship Nelson Bay River project MD of Aditya Birla Minerals (2003-08); led the acquisition of Nifty/Mt Gordon copper projects and oversaw Nifty development
Mahendra Pal (MSc, MSGAT (Ind), FAusIMM) Non-Executive Director		25 years at Rio Tinto (Principal Geologist for Hamersley Iron); 4 years at ESSO Australia; 7 years independent geologic consulting Outstanding record of iron ore discovery in the Hamersley Basin (Tom Price/Paraburdoo) and Tasmania (Nelson Bay)
Andy Lau (MBA) Non-Executive Director	<b>*</b>	Broad range of experience in venture capital, securities and technology industries Vice-President of China Alliance International Holdings Group Ltd since 2005
Amu Shah Non-Executive Director		Ownership/directorship across a range of retail, distribution, mining services, manufacturing and property businesses Honorary Consul for Kenya in Perth

KEY MANAGEMENT		
Yue Guan (B.Eng, MSc Mining) Mine Manager	۶	10 years experience in mine engineering including roles at Rio Tinto, BHP Billiton and Savage River
Robert Reid (B.Sc [Hons], MSc Econ Geology)  Exploration Geologist	>	25 years geological and exploration experience in Tasmania and PNG in iron ore, gold, base metals and tin
David Gibbons (B.Sc [Hons])  Mine Geologist	۶	10 years experience in exploration and mine geology, predominantly in Tasmania
Richard Beazley (B.Eng, MBA)  Operations Adviser	Þ	25 years mine operations and management roles across iron ore, gold, copper and other operations (including Consolidated Minerals, St Barbara, Aditya Birla, Peak Resources)

#### NELSON BAY RIVER PROJECT

- Located on the north-west coast of Tasmania
- → Proximate to significant iron ore (Savage River) and base metal (Rosebery) operations
- ♣ Present resources I.6mt goethite-hematite DSO/BFO and 7.8mt magnetite
- All relevant approvals and permits granted
- First DSO production achieved in November 2013
- Current production rate 0.4mtpa 57-58% Fe DSO product
- Mine opened November 2013 by Deputy Premier Tasmania, Hon. Bryan Green



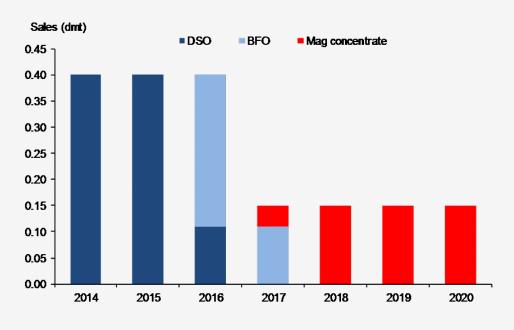
#### INFRASTRUCTURE SOLUTIONS

- → Diesel power generation set on site
- Utilising existing roads to Port Burnie export facilities
  - → EPA road haulage approval for baseline 0.4mtpa DSO production
- → General user export facilities at Port Burnie with significant excess capacity



#### NBR DEVELOPMENT STRATEGY

- Phased development approach
  - → Initial 2+ years DSO operations at ~0.4mtpa production; then
  - → Beneficiation of suitable residual goethitehematite resource (~0.4mt); then
  - → Magnetite ore mining and concentration at ~0.4mtpa ROM = ~0.15mtpa product
- All contract mining, processing and haulage
- Super low capital intensity given availability of existing roads and port facilities
  - → < A\$20/t annual capacity DSO/BFO
  - → < A\$100/t annual capacity mag conc</p>



# DSO PROJECT

- ♣ Initial DSO mine plan 0.91mt in-pit resources over 2+ year LOM
- ★ Targeted cash cost base
  - → ~A\$59/wmt FOB Port Burnie
  - → ~A\$82/wmt CFR China (including royalties)
- ★ 57-58% Fe DSO product
- ♣ Attractively low alumina spec 1.4%
- → 2 year offtake agreement signed with Singapore based marketing company
  - → Includes A\$4m loan facility (drawn to A\$3m), repaid at ~A\$0.5m per shipment
  - → Based on Platts 58% Fe (low Al) index pricing currently US\$110/dmt

Ore reserves *	Tonnes (mt)	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Р	LOI
DSO	0.65	56.7%	1.4%	8.7%	0.09%	6.5%









# TRUCKING TO PORT



#### DSO PROJECT CASHFLOW

62% Fe price index	US\$/dmt	100	130	160
58% Fe (low AI) price index	US\$/dmt	90	117	144
Shree realised price	US\$/wmt	82	107	133
Shree realised price	A\$/wmt	92	121	149
Mining and processing cost	A\$/wmt	27	27	27
Trucking and port cost	A\$/wmt	32	32	32
Freight cost (supermax)	A\$/wmt	20	20	20
Royalty cost	A\$/wmt	2	3	4
Total cash cost CFR	A\$/wmt	81	82	83
Cash margin	A\$/wmt	11	39	66
Total DSO production	mt (wmt)	0.95	0.95	0.95
Operating surplus	A\$m	11	37	63
Source: Shree Minerals				

- Indicative project cashflow under various iron ore price scenarios
- Estimated ~A\$30m pre-tax project operating surplus at current spot iron ore prices
- Conservatively assumes no lump premium
  - → Current lump premium is +US\$15/dmt
  - → Over 60% of NBR DSO output is expected to be lump fraction

# BFO PROJECT

- Logical extension option with natural lead-in to magnetite project phase
- → BFO in-pit inventory (northern end of NBR deposit) = 0.4mt
- Incremental capital = ~A\$Im
- Fed by -3mm ore stream; upgraded by dry LIMS (Low Intensity Magnetic Separation)
- ★ Testwork indicates upgraded product of 57.5% Fe, I.6% Al<sub>2</sub>O<sub>3</sub> and II.5% SiO<sub>2</sub> at 82% mass recovery
- ★ Targeted cash cost base (inclusive of some pre-strip for magnetite phase)
  - → ~A\$65/wmt FOB Port Burnie
  - → ~A\$88/wmt CFR China (including royalties)

Mineral resource	Tonnes (mt)	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Р	LOI
BFO	0.73	46.8%	2.7%	23.7%	0.02%	4.7%

Source: Shree Minerals

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# MAGNETITE PROJECT

- ★ Magnetite recoverable resource of 7.8mt
- Testwork indicates Davis Tube Recovery (DTR) of 38% to a 67-69% Fe concentrate
- → Planned mining of 0.4mtpa ROM to produce 0.15mtpa concentrate over +7 year LOM
- ♣ Indicative plant capex = ~A\$I5m
- \* Key value driver is ability to access niche coal wash market in Australia
  - → Dense Media Magnetite (DMM) separation in NSW/Qld coal washery plants
  - → Premium pricing in DMM market = current term contracts at A\$200-250/t
  - → At a DMM price of A\$200/t, indicative magnetite project operating margin is ~A\$65/t

Mineral resources - recoverable	Tonnes (mt)	DTR Mag %	Mag (mt)
Indicated	1.7	38.5%	0.67
Inferred	6.1	38.2%	2.32
Total	7.8	38.3%	2.99

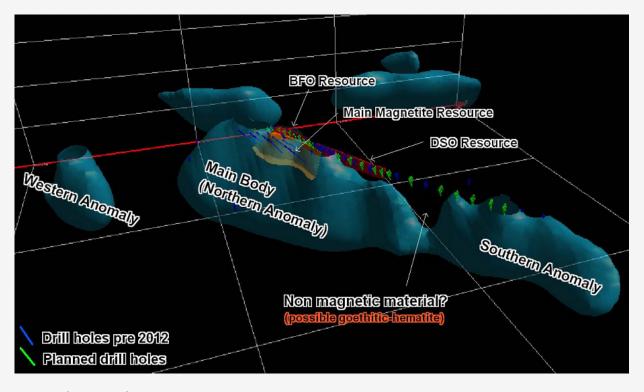
### BFO/MAG PROJECT CASHFLOW

#### Indicative total BFO and magnetite projects pre-tax cashflow:

- @ US\$130/t 62% Fe index; A\$220/t DMM; 90c A\$/US\$ = A\$87m
- @ US\$110/t 62% Fe index; A\$200/t DMM; 90c A\$/US\$ = A\$58m
- @ US\$90/t 62% Fe index; A\$180/t DMM; 90c A\$/US\$ = A\$28m

#### RESOURCE GROWTH OPTIONS

- Current global resource is based on limited drilling (<1km) at the north end of a 4km aeromagnetic anomaly</li>
- **3D** aeromagnetic inversion studies indicate continuation at depth and along strike
- Further DSO potential in central zone
  - → Limited by drilling
  - Chasing the tonnes with the best economics



# KEY MILESTONES

- → First DSO production November 2013
- First DSO shipment January 2014
- New BFO drilling and testwork program − I<sup>st</sup> half 2014
- Finalisation of BFO study late 2014
- ★ Magnetite offtake (DMM market) negotiations Ist half 2015
- First BFO sales Ist half 2016

### THE SHREE INVESTMENT CASE

- Producing junior iron ore exposure
- Leveraging existing export infrastructure roads and port facilities
- Two year offtake agreement in place linked to Platts 58% Fe (low Al) price index
- Strong free cashflow expected from commissioned DSO production
- High DSO resource extension potential
- Super low capital intensity of further development and internally funded
- ★ Future concentrate product targeted into NSW/Qld coal washing market = premium and stable pricing
- → Tight shareholder register

# JUNIOR IRON ORE PEER REVIEW

- **Emerging Tasmanian iron ore producers**
- Well established iron ore industry in Tasmania with Savage River (Grange Resources) and Kara (Tasmania Mines) operations
- Shree the first to conceptualise, discover and mine DSO with the accompanying margin benefits

Company	Market cap (A\$m)	Enterprise value (A\$m)	lron ore projects	Reserve base	Product	Project status	Current/Target sales (ktpa)
Tasmania Mines (TMM)	27	25	Kara	12.8mt @ 45% Fe	DMM & fines	Producing	200
Venture Minerals (VMS)	53	47	Ridley	1.8mt @ 57% Fe	DSO	Subject to reg. appeal	1,000
venture wither ars (vivis)	33	47	Livingstone	2.2mt @ 57% Fe	DSO	Approvals process	1,000
Chuna Minavala (CIIII)*	20	19	Nelson Bay	0.7mt @ 57% Fe	DSO & BFO	Producing	400
Shree Minerals (SHH)*	20			NA	DMM	Fe asibility	150



Sanjay Loyalka

**Executive Chairman** 

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# APPENDIX: RESOURCES

DSO							
Mineral resources	Tonnes (mt)	Fe	$Al_2O_3$	SiO <sub>2</sub>	Р	LOI	
Measured	0.39	57.8%	1.4%	8.7%	0.09%	6.5%	
Indicated	0.26	57.7%	1.5%	8.8%	0.09%	6.5%	
Inferred	0.22	57.4%	1.4%	9.3%	0.09%	6.4%	
Total	0.87	57.7%	1.4%	8.9%	0.09%	6.5%	

\*Nominal 54% Fe cut off; average density 3t/m³

#### **BFO**

Mineral resources	Tonnes (mt)	Fe	$Al_2O_3$	SiO <sub>2</sub>	Р	LOI
Inferred	0.73	46.8%	2.7%	23.7%	0.02%	4.7%
Total	0.73	46.8%	2.7%	23.7%	0.02%	4.7%

\*30% Fe cut off; average density 3t/m³

#### Magnetite (recoverable)

Mineral resources	Tonnes (mt)	DTR Mag %	Mag (mt)				
Indicated	1.7	38.5%	0.67				
Inferred	6.1	38.2%	2.32				
Total	7.8	38.3%	2.99				
*20% DTR cut off; average density 3.71t/m³; fresh rock material							

### APPENDIX: RESERVES

DSO								
Ore reserves	Tonnes (mt)	Fe	$Al_2O_3$	SiO <sub>2</sub>	Р	LOI		
Proved	0.39	56.7%	1.4%	8.7%	0.09%	6.5%		
Probable	0.26	56.7%	1.5%	8.8%	0.09%	6.5%		
Total	0.65	56.7%	1.4%	8.7%	0.09%	6.5%		