

Heemskirk Tin Project

Highest grade undeveloped ASX-listed tin project

August 2016 Update

ASX: SRZ

www.stellarresources.com.au

Agenda



Corporate overview

Share price recovery yet to reflect solid achievements at Heemskirk Tin

Company overview

- 100% owner of Heemskirk Tin Project, 150km south of Burnie, Tasmania
- Stand-out high grade resource (1.14% Sn) with vision to be a major Australian tin producer
- Metallurgical optimisation added A\$18m to valuation
- Fast start lowered capex by 57% and reduced time to first production by 33% to 24 months

Financial information

Share price (10-Aug-16)	A\$0.035
Number of shares	300.2m
Market capitalisation	A\$10.5m
Cash (30-Jun-16)	A\$1.6m
Debt (30-Jun-16)	No debt
Enterprise value	A\$8.9m

42.5m unlisted options (exercise prices A\$0.06 to A\$0.12, expiring 26-Feb-17 to 20-Nov-19)

Ownership reflects strong tin investor support

Capetown S.A.	20.8%
Bunnenberg Family	14.9%
Resource Capital Funds	12.0%
Directors & Management	4.2%
Top 20 Shareholders	70.2%

Tin price has bottomed

LME tin price is up 38% from its mid-January 2016 low

Supply rationalisation underpinning price

- China announced 17% reduction in tin smelter production in January 2016
- Indonesian tin exports down for the 4th consecutive year due to tighter licence conditions
- Myanmar exports down by 37% in June 2016 compared with June 2015 and 62% month on month
- No significant investment in new mine production

New uses to drive demand growth

- Lead acid moped batteries a significant new use in China
- Chemical uses of tin growing above trend
- Solder thrifting has now diminished in largest end-use
- New energy capture and storage technologies the game changer for tin?

Tin is an energy metal

ITRI have identified numerous potential new uses for tin in the energy sector

Storage		High end VRLA Antimony free
Lead-acid	Calcium tin grids, tin sulphate electrolyte	Tin solder
Lithium ion	Tin nanoneedles, Silicon + tin anodes, tin electrolyte	
Magnesium ion	Antimony or bismuth tin alloy anodes	Pb (anode)
Sodium ion	Tin sulphide / carbon anodes	Calcium-Tin PPO2 PPO2
Supercapacitors	Manganese + iron tin oxide anodes	(califode) Tin sulphate
Aluminium Air	Tin alloy addition, tin stannate electrolyte	H ₂ SO ₄ (aq)
Fuel Cells	Tin phosphate membrane, molten tin, tin platinum catalyst, tinned copper mesh	research project
Generation		
Solar cells	Copper Zinc Tin Sulphide (CZTS), Tin perovskite	
Solar storage	Molten Tin	
Thermoelectric	Tin Selenide, Magnesium Stannide	
Hydrogen		
Methane to hydrogen	Molten tin	Sn₃O₄
Water splitting	Tin oxide, tin sulphide photocatalysts	research project
Clean Fuel		
Biodiesel catalysts	Iron Tin oxide	
Fuel catalysts	Tin antimony alloys	

Best location for a new mine

North-west Tasmania is a world-class tin jurisdiction

- Significant mining district
 - Many historical and current operating mines across various commodities
- Supportive local community and skilled workforce
 - Experienced workforce available with several mines in the region
- Established road and rail to port at Burnie, water readily available and power infrastructure in place
- Low political risk
 - Tasmanian government supportive of Heemskirk
- Low environmental risk
 - Project located outside of environmentally sensitive areas

Solid record of achievement

Operational achievements in 2015 continuing in 2016

February 2015	Environmental Protection Authority guidelines received						
	Exploration licence granted to the south of Heemskirk						
March 2015	Metallurgy optimisation upgrades PFS metrics						
	Severn tin recovery increased by 7.4% and average tin recovery increased by 4.5%						
	Annual tin in concentrate production increased by 4.5%						
July 2015	Geological review flags new northwest trending structures and high grade tin infill zones presenting un-tapped upside to the Heemskirk resource						
	St Dizier scoping study completed - potential for development as a source of blending ore						
	Tailings storage site secured – low capital cost, life of mine facility						
September 2015	Optimisation increased PFS NPV by 62% to A\$99.0m - through +A\$18m recovery increase, +A\$16m reduction in pre-production capital and +\$4m from accelerated mine development						
July 2016	Application to convert Retention Licence into a Mining Lease – will increase tenure and add certainty to project						
July 2016	Fast start study - shows path to quicker ore access at lower capital cost						

OPFS adds 62% to NPV

The 2013 PFS NPV has increased by A\$38m to A\$99m following an optimisation program that increased recovery and lowered capital cost

- Recovery increase to 72.5% added \$18m to NPV
- Lower mining cost offset by higher processing cost
 - Paste fill reduced mining cost by A\$4/t
 - Processing cost rose by A\$4/t
- Capex reduction added
 A\$16m to NPV
 - 85% of capex reduction due to process plant modifications
- Accelerated development added A\$4m to NPV
 - Orebody access reduced from 17 to 12 months

OPFS - simplified plant design

Metallurgical optimisation led to smaller primary grind and elimination of heavy media separation and silica float circuits saving A\$5m from capex

- Removed heavy media separation
- Coarser grind size
 - Increased to 250µ from 160µ
 - Improved recovery from gravity circuit to 69%
- Optimised sulphide regrind and float
 - Reduced tin loss from 10% to <3%
- Removed silica float
- Increased slimes cut-off
- Optimised tin float circuit
- Optimised finishing circuit

OPFS quality tailings dam site secured

Tailings dam site in plan and oblique view

- Capacity 3x initial mine life
- Low capital containment
 - Initial cost A\$1.4m wall plus A\$3.4m pipeline
 - No observed geological flaws
- Concealed valley
 - Crown land
 - No competing land use
 - No observed flora or fauna values
- Site secured by a mining lease

Competitive cost structure

At 0.75USD/AUD the Heemskirk project has moved down the international tin industry cost curve towards the 40th percentile position

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Substantial leverage to tin price

Significant upside for the Heemskirk NPV as the spot tin price increases over the next 3 years

Why consider a faster start?

- **Need to reduce the pre-production capital hurdle** equity finance is difficult to secure and still too expensive
- Faster access to ore required to meet the tin price upswing price recovery has already commenced
- \checkmark
- **Modularisation allows for expansion** once operation is generating positive cash flow
- - **Opportunity to drill-up deposits from underground** more efficient and accurate approach for Severn and Montana deposits
 - **Significant reduction in risk** less capital, best known deposit, reduced development time and lower execution risk

Lower Queen Hill supports FSS

LQH is closest Heemskirk tin deposit to the portal, is high grade, already drilled to Indicated Resource status and lowest cost deposit to develop

Classification	Deposit	Tonnes	Grade	Contained Tin	
	-	millions	% tin	tonnes	
Indicated	Queen Hill	1.41	1.26	17,790	
Inferred	Queen Hill	0.19	1.63	3,090	
Total		1.60	1.31	20,880	
Indicated	Upper Queen Hill	0.39	1.19	4,640	
	Lower Queen Hill	1.02	1.29	13,150	
Inferred	Upper Queen Hill	0.01	1.59	160	
	Lower Queen Hill	0.18	1.63	2,930	
Total		1.60	1.31	20,880	

FSS reduces capex to A\$48m

Preproduction capital reduced from A\$110m in OPFS to A\$48m in FSS

- Downsizing plant to 200ktpa from 600ktpa is the main driver of savings
- ✓ Focus on LQH reduces pre-production mine development by 64%
- Modular process plant reduces initial capital cost by 61%
- Smaller tailings facility required for stage 1 production

Capital Item		PFS	OPFS	FSS	FSS Capital Saving
					%
Treatment Rate	ktpa	600	600	200	-67
Mine development	A\$m	29.0	28.8	10.4	-64
Process plant	A\$m	75.5	64.4	25.3	-61
Tailings facility	A\$m	7.2	4.8	2.8	-42
Working capital	A\$m	10.4	8.6	6.5	-24
Contingency	A\$m	4.5	3.7	2.5	-32
Total	A\$m	126.6	110.3	47.5	-57

Fast start is an opportunity to explore STELLAR

Going underground provides an opportunity to better understand deposit geology and define deeper exploration targets below the known deposits

ML application over tin deposits

RL5/1997 to be replaced by a Mining Lease following positive outcomes on OPFS and FSS

- Exclusive right to extract economic minerals
- Increased duration of tenure over tin deposits
- More secure form of title
- Board commitment to the project

Timeline

DFS on FSS to cost A\$5m over 12mths compared with A\$10m over 18mths for OPFS

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- Environmental and metallurgy work programs in the planning stage
- Drilling LQH to upgrade resource to an ore reserve determines timing

DFS timeline from commencement

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Five reasons to own Stellar

- **Tin price and share price have bottomed** price recovery from an over-sold position
- **Strong record of achievement** project momentum maintained despite difficult market conditions
- \checkmark
 - **Technical improvements demonstrated by OPFS** increased recovery and reduced capital cost

- Fast Start offers quicker, lower risk development at higher grade and lower capital cost
- **ML application** a key milestone in development timeline

Disclaimer

Forward Looking Statement

This presentation may include forward-looking statements. Forward-looking statements include, but are not limited to statements concerning Stellar Resources Limited's planned activities and other statements that are not historical facts. When used is this report, words such as "could", "plan", "estimate", "expert", "expect", "intend", "may", "potential", "should", and similar expressions are forward-looking statements. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward-looking statements. Although Stellar Resources Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward–looking statements. The entity confirms that it is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed. Nothing in this report should be construed as either an offer to sell or a solicitation to buy or sell Stellar Resources Limited securities.

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Competent Persons Statement – Heemskirk and St Dizier Mineral Resources

The information in this report that relates to Heemskirk Tin Mineral Resources was last reported on 24th July 2013 in an ASX release titled "Pre-feasibility Study Advances Heemskirk Tin". The information was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by Tim Callaghan of Resource and Exploration Geology. The information in this report that relates to the St Dizier Mineral Resource was announced on 12 March 2014 in an ASX release titled "Heemskirk Tin Project: New Open Pittable Resource at St Dizier". The information was prepared in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resource and Exploration Results, Mineral Resource and Ore Reserves' (JORC Code) by Tim Callaghan of Resource and Exploration Geology. Tim Callaghan is a Member of The Australasian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the Competent Person as defined in the JORC Code. This report accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context in which it appears.

Competent Persons Statement – Exploration

The drill and exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr R.K. Hazeldene who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hazeldene has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Hazeldene consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Appendix

Heemskirk PFS mine plan OPFS and FSS operating costs compared Board of Directors

Heemskirk 2013 PFS mine plan

Cash operating costs compared

Slight reduction in unit cash cost to A\$14,667/t under FSS

Heemskirk is cash positive at recent US\$13,125/t bottom-of-the-cycle tin price

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FSS unit mining cost is lower than in previous studies

- More efficient mining methods transverse, long-hole and avoca
- Reduced fill costs more rock fill and cemented rock fill
- Shorter average haulage distance

Higher processing cost reflects fixed labour costs

Comparative 4 year Average	Unit	PFS	OPFS	FSS	Cost Change
Operating Unit Cost					%
Mining	A\$/t ore	80	75	70	-7
Processing	A\$/t ore	35	40	44	10
TC/RC, transport, royalty	A\$/t ore	23	24	25	3
Administration	A\$/t ore	2	2	3	55
Total cash costs	A\$/t ore	140	141	142	1
Total cash costs	A\$/t tin	15,705	14,927	14,677	-2
Total cash costs @ 0.75 AUDUSD	US\$/t tin	11,779	11,195	11,008	-2

Board of Directors

Experienced and multi-disciplinary Board with strong global connections

Phil Harman Non-Executive Chairman

Geophysicist

- Over 30 years experience in BHP Billiton minerals exploration
- Past and present Director of several ASX listed companies

Peter Blight Managing Director

Geologist

- 30 years experience in exploration, mining and finance sectors
- Previously worked for UBS, UC Rusal and Rio Tinto

Miguel Lopez de Letona Non-Executive Director

Management Consultant

- Experience as a management consultant and banker with leading financial institutions
- Based in Belgium and advises on investment in the mining and oil and gas sectors

Thomas Whiting Non-Executive Director

Geophysicist

- Former manager of BHP Billiton exploration
- Chairman of Deep Exploration Technologies **Cooperative Research Centre**

Christina Kemp Company Secretary Accountant

- Over 30 years experience as an accountant and senior financial manager
- Has experience in the resources, manufacturing, retail and utility industries

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