



## Strandline Resources Ltd (STA.ASX)

*Advanced developer with low cost projects*

### Event:

- We initiate research coverage on Strandline Resources (STA).

### Investment Highlights:

- STA's development ready assets are the Coburn and Fungoni mineral sands projects in WA and Tanzania. Both have mining and environmental permit approvals, and need completion of financing/offtake prior to FID.
- Coburn's JORC Reserves of 523Mt underpin an initial 23 year mine life at a rate of 23.4Mtpa. Capex for a mineral products case is \$257M which would generate 222kt across four products annually: Premium zircon (34kt); zircon concentrate (54kt); rutile/HiTi (24kt); and chloride grade ilmenite (110kt).
- We estimate high value products account for 76% of revenue, and contribute to a revenue to C1 cost ratio (R/C1) of 2.2x, which we determine places Coburn in the lowest quartile of TZMI's 2022 cash cost curve
- Given the 1.6bt JORC Resources, STA undertook an extension scoping study which showed a 28% increase over the DFS pre-tax NPV<sub>8</sub>, from \$551M to \$710M, by extending LOM to 38 years.
- We expect Coburn's offtake and financing negotiations to be completed by end FY20e and FID approval to follow soon beginning FY21e. We expect commissioning of the mine in mid-FY22e.
- Fungoni is a smaller project expected to yield ca. 50ktpa of products with 6-year LOM but with low capex of \$45M and a high R/C1 of 2.9x, which would place it in the lowest quartile of the TZMI cost curve. Its high value assemblage includes zircon, rutile, and monazite which will account for 71% of revenue.
- While Fungoni has a mining licence and LOM binding offtake agreements for all its product, FID has been delayed because of uncertainty over the Tanzania Government's 16% free-carry interest. We believe this will be eventually clarified and expect FID by end FY21e at the latest. We expect Fungoni to be commissioned in FY23e after Coburn.

### Earnings and Valuation:

- We forecast STA to generate losses of -\$7M and -\$8M in FY20e and FY21e, and breakeven NPAT in FY22e when Coburn is commissioned. We expect maiden NPAT of \$49M in FY23e when Coburn is fully ramped up and Fungoni comes online.
- We value STA shares at \$0.32 based on a risked NPV<sub>10</sub>. Our valuation assumes debt and equity funding of \$320M split 65% debt: 35% equity (\$208M debt: \$112M equity) to fund Coburn and Fungoni capex, working capital, corporate, and exploration over FY21 and FY22e.

### Recommendation:

- We initiate on STA with a Buy recommendation and 12-month PT of \$0.32/share, based on 1.0x risked NPV<sub>10</sub>.
- Catalysts for the share price include: 1) Binding offtake agreements for Coburn; 2) Finalising financing and FID for Coburn; 3) Clarity surrounding free-carry interest in Fungoni; 4) Completion of financing and FID for Fungoni; 5) Higher mineral sand prices; 6) Increase in JORC Resources or Reserves.

### Disclosures

The analyst does not own STA securities.  
Foster Stockbroking and associated entities (excluding Cranport Pty Ltd) do not own STA securities.  
Cranport Pty Ltd owns 7,341,594 STA shares.  
Refer details end of report.

Recommendation	Buy			
Previous	n/a			
Risk	High			
Price Target	\$ 0.32			
Previous	n/a			
Share price (A\$)	\$ 0.120			
ASX code	STA			
52 week low-high	0.087-0.16			
Valuation (A\$/share)	\$ 0.32			
Methodology	risked NPV			
Capital structure				
Shares on Issue (M)	373			
Market cap (A\$M)	45			
Net cash (debt) (A\$M)	3			
EV (A\$M)	42			
Ave daily volume ('000)	214			
Earnings Y/e Jun A\$M	FY19a	FY20e	FY21e	FY22e
Sales	0	0	0	43
EBITDA adj	-8	-8	-9	12
NPAT reported	-7	-7	-8	0
<b>NPAT adj</b>	<b>-8</b>	<b>-7</b>	<b>-8</b>	<b>0</b>
<b>EPS adj. \$*</b>	<b>-0.03</b>	<b>-0.02</b>	<b>-0.01</b>	<b>0.00</b>
<b>PE x</b>	<b>nm</b>	<b>nm</b>	<b>nm</b>	<b>nm</b>
EV/EBITDA x	nm	nm	nm	3.7

\* Adj = underlying

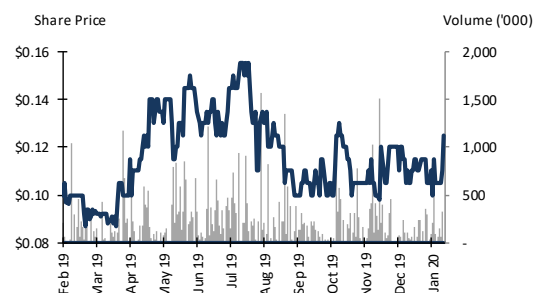
### Substantial shareholders

Ndovu Capital VII BV	33%
C&H International Investment Ltd	8%

### Board

Didier Murcia	Non-Executive Chairman
Luke Graham	CEO and Managing Director
Peter Watson	Executive Director
John Hodder	Non-Executive Director
Tom Eadie	Non-Executive Director

### Share price graph



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## Strandline Resources (STA)

Full Year Ended 30 June

Profit and Loss A\$M	2019a	2020e	2021e	2022e
Revenue	0	0	0	43
Operating Costs adj.	8	8	9	31
<b>EBITDA adj.</b>	<b>-8</b>	<b>-8</b>	<b>-9</b>	<b>12</b>
D&A	0	0	0	3
<b>EBIT adj.</b>	<b>-8</b>	<b>-8</b>	<b>-9</b>	<b>9</b>
Net Interest exp / (income)	0	0	0	8
<b>PBT adj.</b>	<b>-8</b>	<b>-7</b>	<b>-8</b>	<b>1</b>
Tax exp / (benefit) adj.	0	0	0	0
<b>NPAT adj.</b>	<b>-8</b>	<b>-7</b>	<b>-8</b>	<b>0</b>
Non-recurring items	1	0	0	0
<b>NPAT reported</b>	<b>-7</b>	<b>-7</b>	<b>-8</b>	<b>0</b>

<b>EPS diluted (\$)</b> adj.	<b>-0.03</b>	<b>-0.02</b>	<b>-0.01</b>	<b>0.00</b>
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Cashflow A\$M	2019a	2020e	2021e	2022e
EBITDA adj.	-8	-8	-9	12
Change in WC	0	0	0	-2
Tax paid	0	0	0	0
Other	1	1	1	1
Net interest	0	0	0	-8
Share based payments	1	1	1	1
<b>Operating Cashflow</b>	<b>-7</b>	<b>-6</b>	<b>-7</b>	<b>3</b>

Purchase of PP&E	0	0	0	0
Acquisitions	0	0	0	0
Capitalised expenses	0	0	-168	-134
Investments	0	0	0	0
<b>Investing Cashflow</b>	<b>0</b>	<b>0</b>	<b>-168</b>	<b>-134</b>

Equity issue	9	5	67	46
Debt proceeds	0	1	124	85
Debt repayments	0	0	0	0
Other	0	0	0	0
<b>Financing Cashflow</b>	<b>8</b>	<b>6</b>	<b>190</b>	<b>130</b>

<b>Net Cashflow</b>	<b>2</b>	<b>0</b>	<b>15</b>	<b>0</b>
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Balance Sheet A\$M	2019a	2020e	2021e	2022e
Cash	6	6	21	21
Receivables	0	0	0	3
PPE	0	0	0	254
Capitalised exploration	7	7	175	52
Intangibles	0	0	0	0
Other	0	0	0	0
<b>Total Assets</b>	<b>14</b>	<b>14</b>	<b>197</b>	<b>331</b>

Accounts payable	1	1	1	3
Provisions	0	1	1	3
Debt	0	1	124	209
Other	0	1	2	2
<b>Total Liabilities</b>	<b>1</b>	<b>3</b>	<b>128</b>	<b>216</b>

Reserves and capital	79	84	150	196
Retained earnings	-65	-73	-81	-81
<b>Total Equity</b>	<b>13</b>	<b>11</b>	<b>69</b>	<b>115</b>

Capital structure	M
Ordinary shares	372.8
Performance rights	18.9
Options	10.5
<b>Fully diluted</b>	<b>383.3</b>

Financial Metrics	2019a	2020e	2021e	2022e
Sales growth %	nm	nm	nm	nm
EPS growth %	nm	nm	nm	nm
EBITDA margin	nm	nm	nm	28%
EBIT margin	nm	nm	nm	21%
Gearing (ND/ND+E)	nm	nm	60%	62%
Interest Cover (EBIT/net int)	nm	nm	nm	1x
Average ROE %	nm	nm	nm	nm
Average ROA %	nm	nm	nm	3%
Wtd ave shares (M)	297	373	989	1410
Wtd ave share diluted (M)	297	403	1019	1440

Valuation multiples	2019a	2020e	2021e	2022e
P/E x	nm	nm	nm	369.7
EV/EBITDA x	nm	nm	nm	3.7

### Company Valuation

DCF, WACC 10% nominal

Segment	Unrisked		Risky	
	A\$M	A\$/sh	A\$M	A\$/sh
Coburn	400	\$0.28	276	\$0.25
Fungoni	39	\$0.03	29	\$0.03
Corporate	-55	-\$0.04	-39	-\$0.03
Tanzania exploration	12	\$0.01	12	\$0.01
Net cash (debt) Dec 19	3	\$0.00	3	\$0.00
Cash from in money options	2	\$0.00	2	\$0.00
Cash from future equity	112	\$0.08	78	\$0.07
<b>Total</b>	<b>513</b>	<b>\$0.36</b>	<b>361</b>	<b>\$0.32</b>
Shares now M	373		373	
Performance rights M	19		13	
Options-in-money at valuation M	11		7	
Shares future issue M	1,037		722	
<b>Full diluted shares M</b>	<b>1,439</b>		<b>1,115</b>	

### Commodity Assumptions

Prices (US\$/t)	2019a	2020e	2021e	2022e
Zircon	-	1,495	1,474	1,462
Rutile	-	1,165	1,165	1,165
Ilmenite - chloride grade	-	238	242	242
Rutile/HiTi	-	1,114	1,149	1,014
Monazite	-	1,430	1,427	1,456
A\$/U\$	0.73	0.70	0.71	0.72

Production (kt)	2019a	2020e	2021e	2022e
Zircon	0	0	0	8
Zircon concentrate	0	0	0	15
HiTi90	0	0	0	5
Ilmenite	0	0	0	28

<b>Revenue to cost ratio</b>	-	-	-	2.0
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### Segment Contribution

Segment Contribution	2019a	2020e	2021e	2022e
Coburn	-	-	-	42
Fungoni	-	-	-	0
<b>Sales</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>42</b>
Coburn	-	-	-	18
Fungoni	-	-	-	0
Corporate	-8	-8	-9	-10
<b>Group EBIT</b>	<b>-8</b>	<b>-8</b>	<b>-9</b>	<b>9</b>

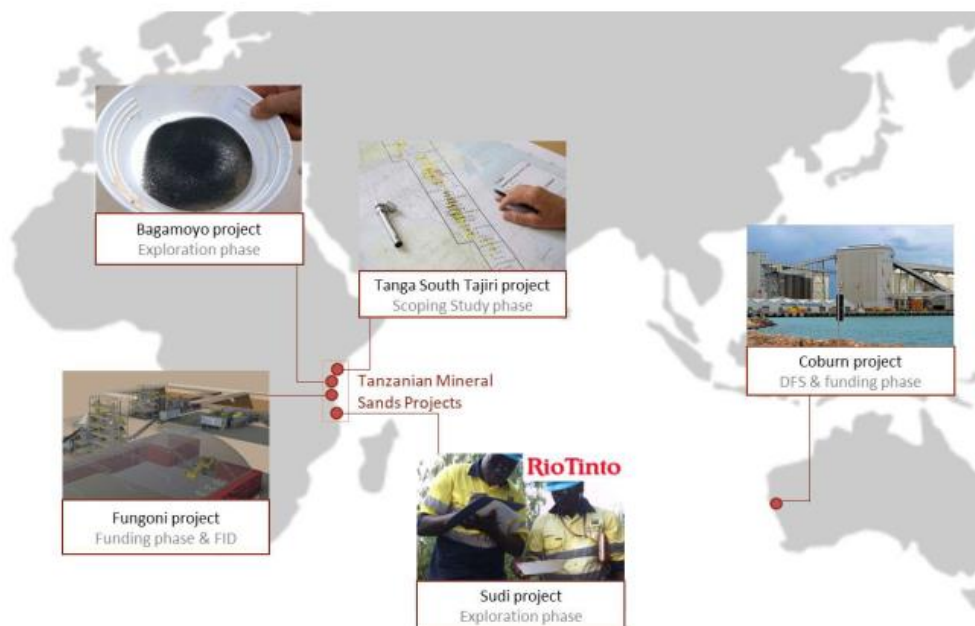
Source: Company; Foster Stockbroking estimates

## INTRODUCTION

### Strandline Resources – an emerging mineral sands producer

- Strandline Resources Ltd (STA) is an ASX listed company, whose main assets are development mineral sands projects in both Australia and Tanzania. The company is headquartered in Perth, WA. STA was formerly Gunson Resources Ltd which listed on the ASX in 2000, and became STA following the acquisition of Strandline Resources Pty Ltd and its Tanzanian assets in 2014.
- The company’s most advanced assets are its Coburn project in Western Australia and Fungoni in Tanzania, both of which had definitive feasibility studies (DFS) completed. Exploration assets include Tajiri, Bagamoyo, and JV projects with Rio Tinto, all in Tanzania.

Figure 1: STA Mineral Sands Projects



Source: Company

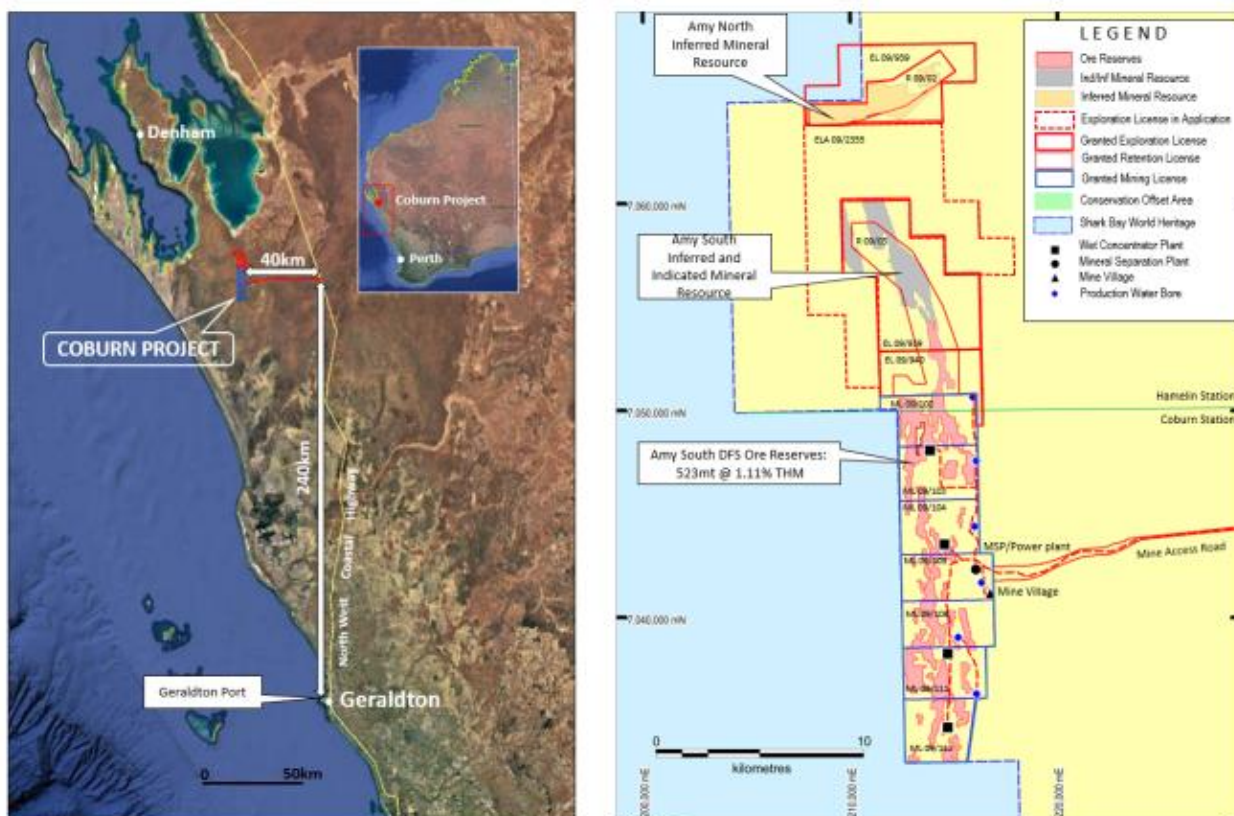
### COBURN (STA 100%)

- The Coburn project is located near the coast in mid-Western Australia. It lies 45km west of the North West Coastal Highway which links it to Geraldton and its port 250km to the south. The western boundary of the Coburn license abuts the Shark Bay Heritage World Park, while the closest town to Coburn is Denham, approximately 85km away. Coburn was discovered in 2000 by Gunson Resources and has since undergone exploration and a number of feasibility studies.

### Most Recent DFS and met test highlights

- STA released the latest DFS on Coburn in April 2019, further expanding on prior studies by incorporating revisions including advances in technology, optimisation of mine plan, improvements in recovery, power generation efficiencies, and improved product transport, all translating to enhanced NPV and a lower risk execution strategy.
- Confirmatory follow-up met tests were released on January 2020, which showed improved recoveries and product grade, especially for rutile/HiTi. The company is in the process of updating its financial evaluation of Coburn based on these latest tests.

Figure 2: Coburn Project Location



Source: Company.

- The DFS contemplated two development options: 1) A heavy mineral concentrate (HMC) case producing +95% HMC for sale to downstream processors; and 2) A final products case with an additional mineral separation plant (MSP) to separate zircon and titanium minerals into final products. The project is based on a 22.5 year life-of-mine (LOM) 23.4Mtpa operation producing 222ktpa of final product based on updated post-DFS metallurgical tests.
- The DFS derived an NPV<sub>8</sub> real post-tax of \$352M for the final products case, with IRR of 24.5% and a revenue to C1 cost ratio (R/C) of 2.2x. Capex is \$257M for the final products case with an 18 month construction time, 6 month ramp up, and payback of 2.3 years. TZMI base case prices were assumed and adjusted to account for quality and downstream handling costs, resulting in annual average EBITDA of \$86M.



**Figure 3: Coburn DFS Highlights**

Parameter	unit	Final product case	HMC case
		value	
EBITDA - annual average	\$M	86	69
Revenue to cost ratio (R/C)	x	2.2	2.1
AISC- average	\$/t	397	361
Cash margin - average	\$/t	363	304
Capex	\$M	257	207
NPV <sub>8</sub> post-tax	\$M	352	312
IRR post-tax	%	24.5%	27.4%
Payback from start of prod'n	years	2.3	2.2
LOM	years	22.5	22.5
Ore mined - annual	Mtpa	23.4	23.4
Strip ratio	x	0.7	0.7
Mine method		Open-cut	Open-cut
<b>Production – average*</b>			
HMC	ktpa	229	229
Premium Zircon	ktpa	34	-
Zircon concentrate	ktpa	54	-
Ilmenite chloride grade	ktpa	110	-
Rutile/HiTi	ktpa	24	-
<b>Price average fob</b>			
Product basket (HMC basis)	\$/t	760	665
HMC	US\$/t	-	479
Premium Zircon	US\$/t	1,480	-
Zircon concentrate	US\$/t	495	-
HiTi90	US\$/t	1,014	-
Ilmenite	US\$/t	267	-
A\$	US\$	0.72	0.72

\*Production based on updated post-DFS confirmatory testwork.

Source: Company. All currency units are A\$ unless otherwise stated.

### JORC Resource of 1.6bt and Reserves of 523Mt underpin long life

- Coburn contains 1.6bt JORC Resources at 1.2% total heavy minerals (THM) comprising 22% zircon, 7% rutile, 5% leucoxene, and 47% ilmenite. JORC Reserves are 523Mt at 1.11% THM with an assemblage of 23% zircon, 47% ilmenite, 6% rutile and 5% leucoxene. The Reserves underpin an initial 22.5 year LOM at the planned mining rate of 23.4Mtpa and lie within two pastoral leases – Coburn lease and Hamelin. The former is owned 100% by STA and Hamelin by Bush Heritage. Most of the Reserves in Hamelin will be accessed after year 20.
- Mineralisation is horizontal with consistent grade and continuity, while thicknesses range widely due to the undulating dunal morphology. Outcropping occurs in places. Strike length is approximately 35km comprising the deposits Amy South (27km, 3.5km wide, 2m-50m thickness) and Amy North (6.5km long, 1.5km wide, thickness ranging 2.5m to 40m). Coburn has a low 3% slime content. All Reserves are from Amy South.

**Figure 4: Coburn JORC Resources and Reserves**

Category	Ore Mt	THM Mt	THM %	Ilmenite %	Rutile %	Zircon %	Leucoxene %	Slimes %	Oversize %
Measured	119	1.5	1.3%	45.0%	4.5%	24.1%	5.9%	3.0%	6.0%
Indicated	607	7.7	1.3%	48.0%	6.5%	22.1%	4.9%	3.0%	3.0%
Inferred	880	10.4	1.2%	49.0%	7.0%	21.0%	4.0%	3.0%	1.0%
<b>Resource</b>	<b>1,606</b>	<b>19.6</b>	<b>1.2%</b>	<b>48.0%</b>	<b>7.0%</b>	<b>22.0%</b>	<b>5.0%</b>	<b>3.0%</b>	<b>2.0%</b>
<b>Reserves</b>	<b>523</b>	<b>5.8</b>	<b>1.1%</b>	<b>47.3%</b>	<b>6.0%</b>	<b>22.6%</b>	<b>5.1%</b>	<b>3.0%</b>	<b>3.7%</b>

Source: Company. Resources include Reserves.

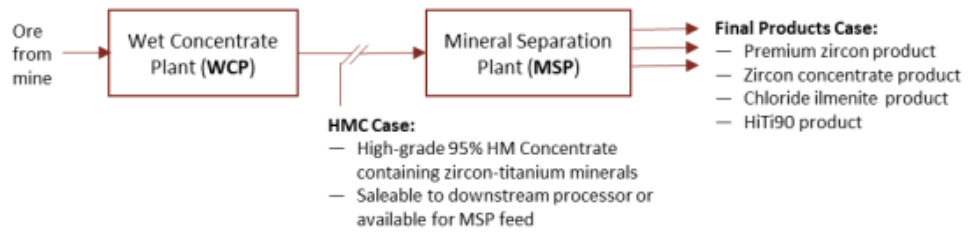
### Mining and Processing

- Mining is conventional open pit to be undertaken by a contractor, using bulldozers reporting material to two dozer mining units and a mobile excavator mining unit. The dozer units prepare ore for processing which is pumped in slurry form to the Wet Concentration Plant (WCP). The excavator alternates between overburden removal and ore processing during periods of dozer unit movement, which are moved every six days.
- Strip ratio is 0.7x with average pit depth 23m, extending from surface to maximum of 62m. Where overburden is present, it is removed by a bulldozer and placed in pit void immediately behind the mined out ore. No drill and blast is required due to free dig sand.
- The WCP utilises multiple stages of conventional gravity separation and classification to produce a 95% HMC, containing on average 25% zircon, 47% ilmenite, 5% leucoxene, 6% rutile, 12% light HM, and 5% free silica. Recoveries in the WCP are ilmenite 87%; rutile/HiTi 88%; and Zircon 98%. The WCP is relocatable and planned to be moved as mining advances along the orebody in years 8,10,18, and 19.

### Four saleable products

- The HMC can either be sold or processed by the MSP which utilises an electrostatic circuit and magnetic fractionation to produce four products, with characteristics as follows from the updated post-DFS confirmatory tests:
  - **Premium zircon (66% ZrO<sub>2</sub>).** This is low in deleterious uranium (U) and thorium (Th) and presents as a premium quality product suitable for ceramics, foundry, and chemical applications.
  - **Zircon concentrate (29% ZrO<sub>2</sub>, 7% TiO<sub>2</sub>).** The contained zircon is suitable for blending with other ceramic-grade zircon or as a stand-alone product for chemical and foundry applications. Its relatively low U and Th may be attractive for blending with higher impurity products.
  - **Rutile/HiTi (93% TiO<sub>2</sub>).** The rutile contains a blend of rutile and leucoxene titanium minerals resulting in 93% TiO<sub>2</sub> grade, which is attractive for chloride pigment application either directly or via blending with lower TiO<sub>2</sub> grade feed. The rutile is also suitable for titanium sponge production as a precursor to producing titanium metal.
  - **Chloride grade ilmenite (62% TiO<sub>2</sub>).** This product is suitable for direct chloride pigment application or upgrading via synthetic rutile or slag routes into high grade chloride route pigment feed. It is low in U, Th, Cr<sub>2</sub>O<sub>3</sub>, CaO, MgO, and MnO.
- Overall yields of minerals from ore to final products are ilmenite 103%, rutile 95%, zircon in premium 58%, and zircon in concentrate 41%. Ilmenite yield is >100% due to contribution from leucoxene.

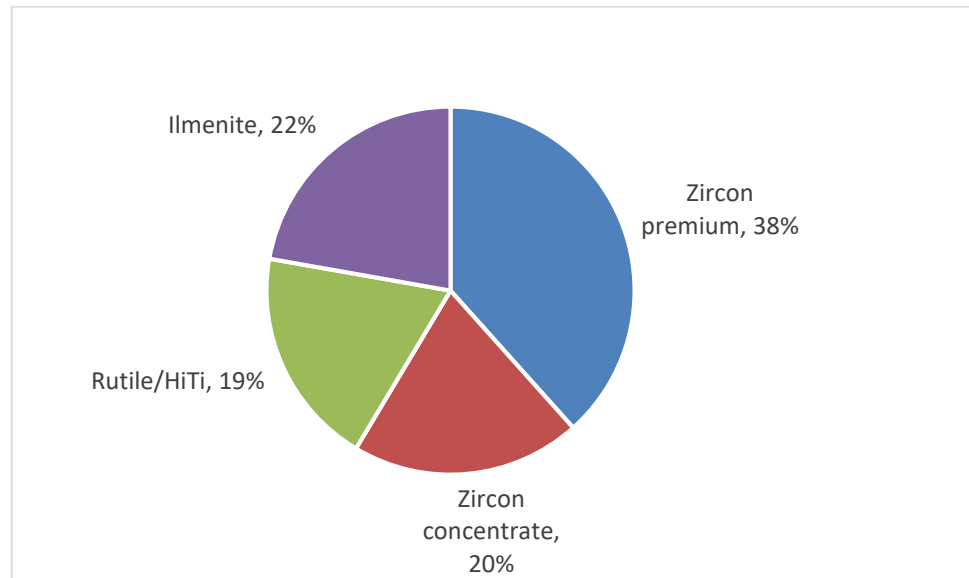
**Figure 5: Coburn WCP and MSP Process**



Source: Company.

- The largest contributor of revenue from Coburn based on the DFS is zircon which will account for 60% of revenue followed by ilmenite (24% of revenue) and rutile/HiTi (16%). We estimate this would alter to zircon (58%), ilmenite (22%) and rutile/HiTi (19%) based on the updated tests and assuming pricing as per the DFS. However we note that the higher grade rutile/HiTi may likely receive a premium to the HiTi90 product of the DFS.

**Figure 6: Coburn Revenue by product**



Source: Company; Foster Stockbroking estimates. Assumes DFS prices and post-DFS met testwork.

**Well located for infrastructure access**

- Coburn’s final products will be trucked 42.5km across an access road to be built connecting the MSP to the North West Coastal Highway, and to a storage shed built adjacent to Geraldton port. Products will be shipped in bulk form utilising Geraldton port’s existing handling and shiploading infrastructure which is managed by the MidWest Ports Authority. The port already ships mineral sands from Iluka Resources’ (ILU) operations.
- Power will be supplied from an on-site power station operating on LNG, with approximately 20% solar for low voltage stable loads. STA has a non-binding proposal with Woodside Petroleum (WPL) and EDL for the development of a 27MW hybrid gas and renewable power solution. LNG will be trucked from WPL’s Pluto loading facility near Karratha. Diesel back-up generators will be incorporated.
- Water is to be supplied from a combination of in-pit water, recycled sand tailings, slimes return water, and local bore fields. Potable water and water for the MSP is to be produced from an on-site desalination reverse osmosis plant.



- Project personnel will reside in a village on site, catering for a drive-in, drive-out workforce.

### Rehabilitation and tailings

- Tailings including coarse sands and slimes from the WCP will be pumped to moveable tails stackers comprising cyclones where sand is separated from lower density water and slime. The sand is deposited in the pit, and the water and slime returned for thickening and co-disposed with the sand in the pit. The tailings are then covered with stockpiled soils to recreate the planned soil profile and final land form for rehabilitation.

### We estimate revenue to cost ratio of 2.2x places Coburn in lowest cost quartile

- The DFS showed Coburn to have a revenue to C1 cost (R/C1) ratio of 2.2x, which we estimate would place it in the bottom end of the second lowest cost quartile of the TZMI 2022 cost curve. Even on an AISC basis, revenue to cost ratio would still be high at 2.0x. AISC are \$397/t, or US\$290/t, which should provide a margin of \$363/t based on average basket price of \$760/t, or 48%.

**Figure 7: Coburn Operating Costs A\$/t**

Item	Final product case	HMC case
Mining	135	136
Processing	145	119
Admin and general	30	28
Transport	36	34
C1 sub-total	346	316
Royalty	38	33
Sustaining capex	13	12
<b>AISC</b>	<b>397</b>	<b>361</b>

Source: Company.

### Fully permitted

- Coburn is fully permitted, with mining and environmental approvals granted, and has a renewed construction water extraction licence from the Department of Water and Environmental Regulation for water access. Native title mining agreements with the Nanda People exist for the southern project area which provides the first 20 years of Reserves. For the northern areas containing the last two years, STA has a Heritage Agreement with the Malgana People suitable for both Exploration and Retention Licences. Western Australia royalties are 5% on mineral sands.

### Extension Case Scoping Study highlights upside from large Resource size

- Given Coburn's large resource size, STA undertook an Extension Case Scoping Study, which examined Measured and Indicated Resources both north and south along strike of current Reserves. The study assumed production targets from Resources beginning in year 23, when current Reserves in the DFS are expected to be depleted. Mining, processing costs, recoveries, and pricing from the DFS was applied to the Extension Case.



**28% increase in pre-tax NPV<sub>8</sub> to \$710M**

- Results of the Scoping Study showed the extension case adds 15 years LOM for total of 37.5 years. When integrated with the DFS final products case, it delivers a pre-tax NPV<sub>8</sub> of \$710M, up 28% on the \$551M in the DFS alone. No upfront capex would be required, only additional sustaining capex relating to one additional WCP move during year 29, as well as for borefields, site roads, and land access.

**Figure 8: Coburn Extension Case Scoping Study Highlights**

Parameter	Unit	Extension case	Extension with DFS
LOM	years	15	37.5
Mine plan	year	22 to 37.5	1 to 37.5
Capex pre-prod'n	\$M	0	257
Ore mined	Mt	353	877
Mining rate	Mt	23.4	23.4
NPV <sub>8</sub> pre-tax	\$M	-	710
IRR	%	-	32%
LOM revenue	\$b	3.1	7.0
EBITDA annual	\$M	109	98

Source: Company.

**Offtake and funding remain to be completed for FID**

- STA is currently undertaking offtake negotiations which will be important to support project funding. The company is also in discussions with banks, other debt providers, and investors for project funding including debt and equity, and has stated its DFS financial model can comfortably support 60-65% gearing level.
- One potential debt provider is the Commonwealth Government's Northern Australia Infrastructure Facility (NAIF) which is undertaking due diligence on Coburn. NAIF's investment mandate is to provide debt finance to infrastructure projects that support growth in economies and population of Northern Australia.
- We believe given the attractive DFS metrics of Coburn, low sovereign risk, and large minerals sands market, the company should be able to conclude both offtake and funding agreements by mid-CY20e. We believe this will catalyse an FID soon afterwards and engender project execution. In the interim the company is undertaking project tendering and early works activities.

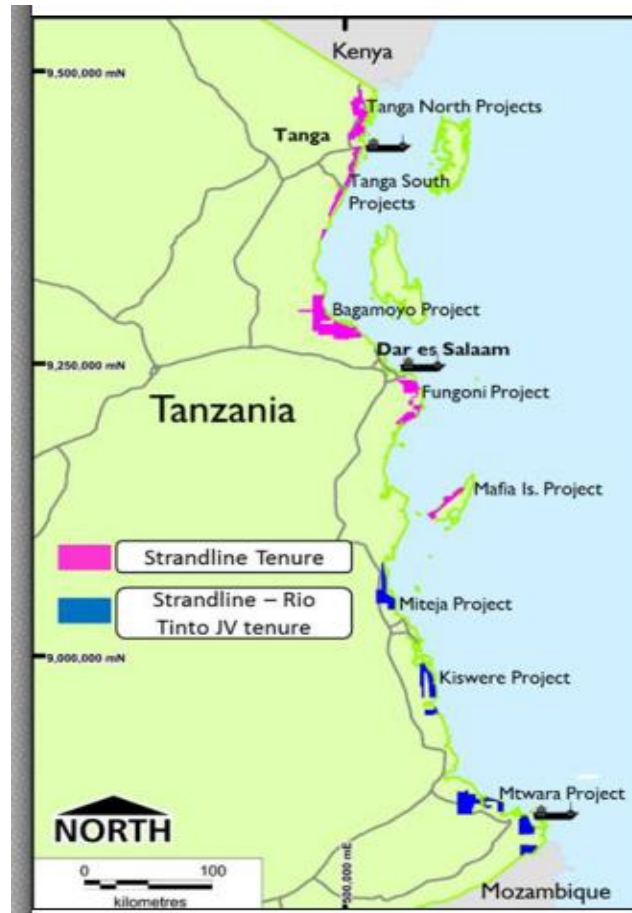
**TANZANIA**

- STA's Tanzanian projects include Fungoni, Tanga, Bagamoyo, and the Rio Tinto JV assets across 2,000km<sup>2</sup> of tenure across the coast.

**FUNGONI (STA 100%, diluting to 84%)****Low capex project**

- Fungoni has JORC Resources of 22Mt at 2.8% THM and of Reserves are 12.3Mt at 3.9% THM with an average assemblage of 42% ilmenite, 18% zircon, 1.5% monazite, and 1.2% leucoxene. The orebody is exposed at surface with mineralisation showing geological continuity along strike and depth.

Figure 9: STA Tanzania Assets



Source: Company

Figure 10: Fungoni JORC Resources and Reserves

Category	Ore Mt	THM Mt	THM %	Ilmenite %	Rutile %	Zircon %	Leucoxene %	Monazite %	Slimes %
Measured	8.8	0.37	4.3%	43.3%	4.3%	18.3%	1.0%	na	18.5%
Indicated	13.0	0.24	1.8%	36.7%	4.3%	14.6%	1.4%	na	24.4%
<b>Resources*</b>	<b>21.7</b>	<b>0.61</b>	<b>2.8%</b>	<b>40.7%</b>	<b>4.3%</b>	<b>16.9%</b>	<b>1.2%</b>	<b>na</b>	<b>22.0%</b>
<b>Reserves</b>	<b>12.3</b>	<b>0.48</b>	<b>3.9%</b>	<b>42.3%</b>	<b>4.4%</b>	<b>18.2%</b>	<b>1.2%</b>	<b>1.5%</b>	<b>19.0%</b>

\*Reserves included in Resources.

Source: Company.

### DFS Highlights

- An updated DFS for Fungoni was released in November 2018 which showed an increase in pre-tax NPV, IRR, LOM revenue, EBITDA, and revenue to cost ratio, which was partially offset by a rise in capex. The DFS used price forecasts from TZMI (August 2018) and terms from binding offtake agreements.
- Key highlights included real post-tax NPV<sub>8</sub> of US\$35M, LOM of 6.2 years at a 2Mtpa rate, and payback of 2.7 years. A basket price of US\$556/t is realised across zircon, ilmenite, rutile, and monazite products with an implied AISC of US\$235/t and margin of 58%. R/C ratio is 2.8x, estimated to be in the lowest quartile. Average annual production is 50ktpa.
-

**Figure 11: Fungoni 2018 DFS Highlights**

Parameter	Unit	Value
IRR <sub>10</sub> real post-tax	%	42.1%
<b>NPV<sub>8</sub> real post tax</b>	<b>US\$M</b>	<b>35</b>
Payback (from construction start)	years	2.7
<b>LOM production</b>		
Ilmenite	kt	197
Rutile	kt	16
Zircon	kt	83
Monazite	k	7
LOM EBITDA	US\$M	115
LOM Opex C1 costs	US\$M	66
AISC	US\$M	75
<b>Revenue/C1 cost ratio</b>	<b>x</b>	<b>2.8x</b>
C1 operating margin	US\$/t	391
<b>Mining steady state</b>		
<b>LOM</b>	<b>Mtpa</b>	<b>2.0</b>
LOM	years	6.2
A\$	US\$	0.75
<b>Pre-production capex</b>	<b>US\$M</b>	<b>32.1</b>
<b>Prices fob LOM</b>		
Zircon	US\$/t	1,229
Rutile	US\$/t	1,129
Ilmenite	US\$/t	266
Monazite	US\$/t	1,804

Source: Company

### Mining and processing

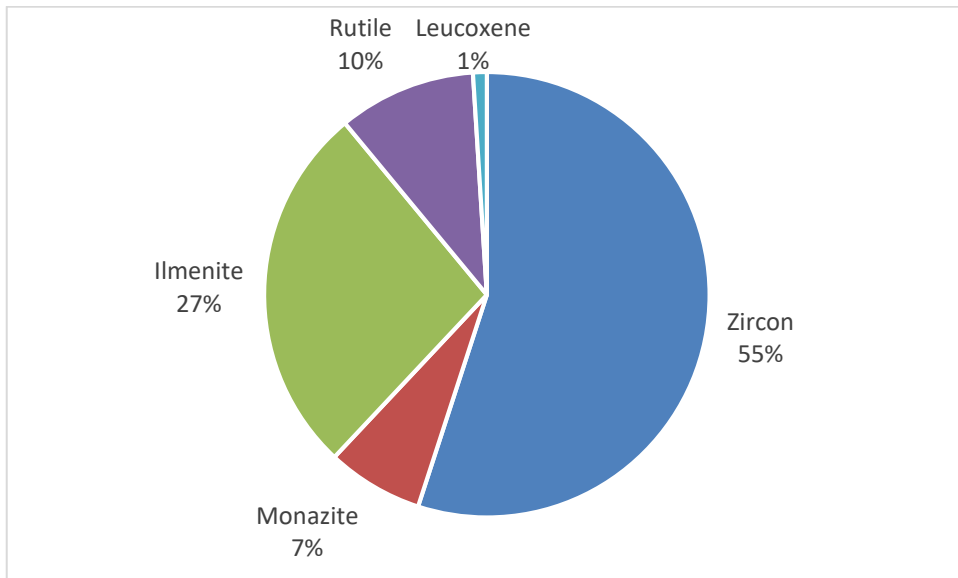
- The DFS examined a 2Mtpa conventional open cut operation by mining contractor of a series of pits comprising free-dig sands using an excavator. Ore begins from surface and averages 12m thickness with a maximum of 22m. It is trucked up to 750m to a Mobile Feed Unit (MFU), which is moved twice during the LOM as mining advances from south to north.
- Processing uses multiple stages of beneficiation including a WCP and MSP. The MFU prepares ore by scrubbing and screening, then pumping it in slurry form to the WCP, where ilmenite, rutile, zircon, and monazite are beneficiated as the lighter and coarse materials and clays are separated using screens and cyclones.

### Four saleable products

- The WCP produces a 94% HMC which is processed in the MSP using electrostatic separation, gravity, and magnetic fractionation to separate it into three saleable products:
  - Combined zircon and monazite product;
  - Rutile product (+95% TiO<sub>2</sub>); and
  - Chloride grade ilmenite (+58% TiO<sub>2</sub>).
- Recoveries are +93% of total valuable mineral in the ground, including 95% for zircon; 95% for ilmenite, and 71% for rutile. TZMI identified the products as marketable with low impurity and favourable grain size. Product samples have been tested by major end consumers.

- The largest contributor of revenue from Fungoni is zircon which will account for 55% of revenue and comprises 27% of production. This is followed by ilmenite (28% of revenue, 64% of production), and rutile (9% of revenue, 5% of production) and monazite (8% of revenue).

**Figure 12: Fungoni Revenue breakdown**



Source: Company.

**Infrastructure**

- Non-process infrastructure includes product storage, water treatment plant, diesel power, tailings storage facilities (TSF), water services, site roads, laboratory, offices, and workshop. Water will be sourced from dewatering and recycling of in-pit water, tails and slime dams, supernatant storage, and mine-site borefields.
- Coarse sand tailings will be used to construct walls of TSF as required. Slime, clay, and sand fines tailings will be deposited in the TSF, and progressively returned to mining voids for rehabilitation.
- Product will be transported by truck in container and bulk form 25km by road to the Dar Es Salaam port, which is managed by the Tanzanian Port Authority.
- Importantly, Fungoni’s modular relocatable process infrastructure means it can be re used at STA’s other mineral sand assets in Tanzania, once decommissioned.

**Costs place Fungoni in lowest cost quartile**

- We estimate that Fungoni’s R/C ratio of 2.7x would place the project in the lowest cost quartile of the TZMI 2022 cash cost curve.

**Approvals granted but government free-carry yet to be finalised**

- Fungoni has both a granted Mining Licence and Environmental Certificate from the Tanzania Government. However in July 2017 the Tanzania Government announced Parliament approved a bill providing the Government with a 16% non-dilutable free carry interest in the capital of a mining company or project.



- We believe this has caused uncertainty and delayed FID for the project, in particular financing, mostly due to what we understand to be lack of details concerning the free carry (e.g. how it is implemented, maintained, or impacted by change in circumstances, and banking and investment provisions to allow funding). The 16% free-carry was not included in the revised Fungoni DFS. We believe the free-carry needs to be clarified to the satisfaction of both Tanzania Government and STA (and its financiers) before the company can close FID. Both parties continue to undertake meetings and discussions.
- In the interim, STA has been preparing project funding and execution planning, including tendering activities for contract mining, logistics, and power. A conditional contract was entered into with GR Engineering (GNG) for EPC and commissioning of the processing plant.
- Fiscal parameters include corporate tax of 30%, capex write off 20% p.a. straight line basis, 3% royalty, US\$1/t export fee, and 0.3% service levy.

### Offtake – wholly under binding agreements

- STA has 100% of Fungoni offtake under the following binding agreements:
  - **Zircon and monazite - Wensheng.** Hainan Wensheng High-Tech Materials Company (Wensheng) is China's largest mineral sands processor and leading consumer of zircon and rare earths, has a binding take or pay agreement to purchase 100% of zircon and monazite product for LOM. STA expects zircon pricing to be based on the prevailing US\$ market price for premium grade zircon, and monazite a premium to the 2017 market price and fixed for LOM. Conditions precedent (CPs) includes FID.
  - **Ilmenite - Maoming.** STA signed a binding sales contract in May 2018 with China's Maoming Ubridge Group Mineral Industry Company covering 100% of ilmenite for LOM. Price will be based on the prevailing US\$ market price for chloride grade ilmenite, and in-line with the DFS price assumption. CPs include FID.
  - **Rutile - IMMCO.** A binding sales contract with Industrial Minerals and Metals (IMMCO) covers all rutile product for LOM, with pricing based on that prevailing for welding grade rutile. IMMCO is a commodity trader and consumer of mineral sands based in Europe and Asia.

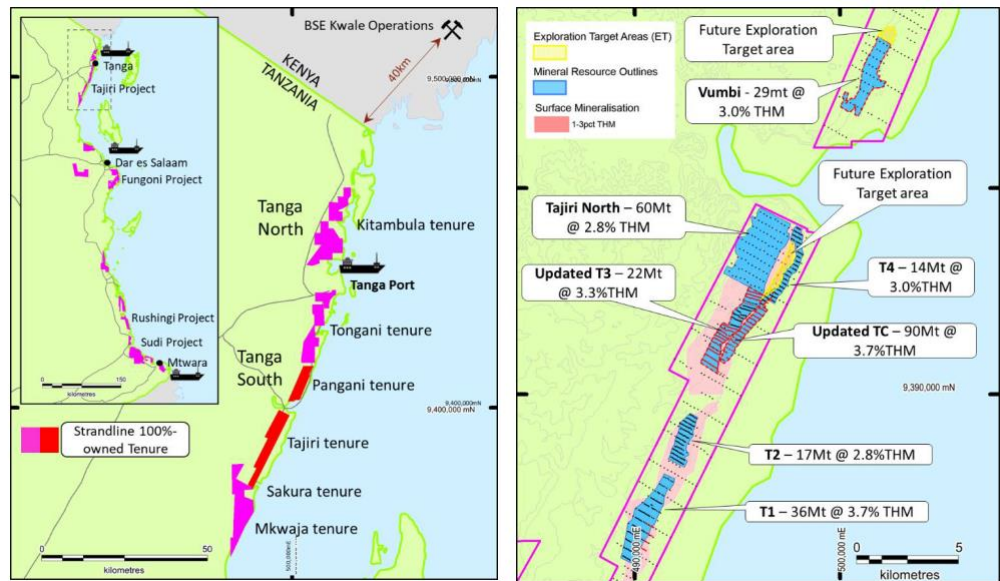
### Financing

- The company selected Nedbank CIB as lead arranger and underwriter of 100% of Fungoni's debt and a non-binding term sheet was signed for 5-year US\$26M project finance facility, accounting for most of the capex. Credit approval was obtained by Nedbank in June 2019. STA and Nedbank are focussing on finalisation of facility documentation and CPs prior to financial close.

### NORTHERN TANZANIA - TANGA AND BAGAMOYO (STA 100%)

- STA has a number of northern Tanzanian mineral sands projects under active exploration – Tanga South (Tajiri and Pangani-Tongoni), Bagamoyo, and Tanga North.

Figure 13: STA Northern Tanzania exploration projects



Source: Company.

### Tanga South - Tajiri

- The company envisages Tajiri as the next project likely to be developed after Fungoni and Coburn, with a Scoping Study ready to commence. The project is located 35km south of the port city of Tanga, and has JORC Resources of 268Mt at 3.3% THM. The resource starts from surface with potential for a low strip ratio and comprises 7% rutile, 4% zircon, 17% almandine garnet, and 59% ilmenite.

Figure 14: Tajiri JORC Resources

Deposit	Category	Ore Mt	THM %	Ilmenite %	Rutile %	Zircon %	Leucoxene %	Garnet %	Slimes %
Tajiri T1	Indicated	36	3.7%	71%	10%	6%	0%	3%	34%
Tajiri North	Indicated	60	2.8%	75%	6%	4%	1%	1%	47%
T2	Indicated	17	2.8%	58%	7%	4%	0%	18%	32%
T3	Measured	19	3.4%	64%	7%	4%	0%	5%	37%
T3	Indicated	3	2.8%	66%	8%	5%	1%	4%	39%
T4	Indicated	14	3.0%	61%	8%	4%	0%	12%	24%
TC	Measured	55	3.5%	42%	5%	2%	9%	38%	23%
TC	Indicated	35	4.1%	46%	6%	3%	0%	36%	27%
Vumbi	Inferred	20	3.0%	64%	7%	3%	1%	2%	30%
<b>Total</b>		<b>268</b>	<b>3.3%</b>	<b>59%</b>	<b>7%</b>	<b>4%</b>	<b>0%</b>	<b>17%</b>	<b>33%</b>

Source: Company.

- Resources stretch along 30km of coastline and comprise a series of deposits: Tajiri T1, T2, T3, T4, TC, Tajiri North, and Vumbi, with TC and Vumbi remaining open. Thicknesses range from 1.5m to up to 66m thick, with the average ranging from 5m to 39m. Strike lengths across the deposits range from 2.4km to 4.2km, and widths 400m to 2km wide.
- The company has completed bench scale met tests, and believes it did not identify any fatal flaws in relation to potential recoveries, product quality, or marketability.
- In 2019 the company made a discovery of a mineralised sand body at Sakura from surface, which is only 10km along strike from Tajiri. This has the potential to add to the Tajiri Resource. STA has drilled 5km of Sakura's strike.

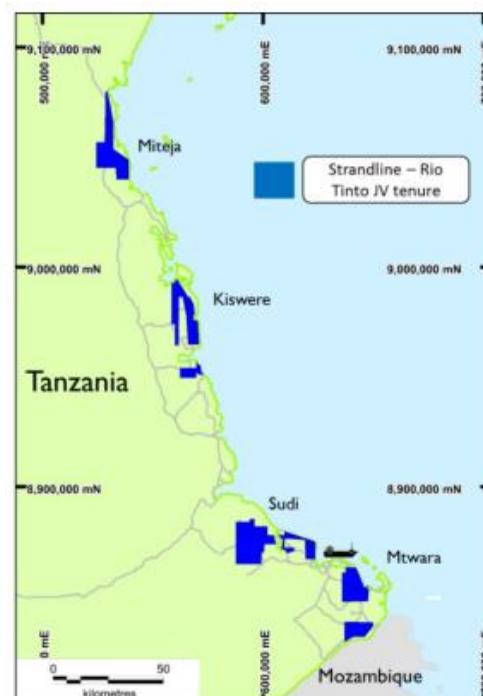
### Bagomoyo and Tanga North

- Bagomoyo is the third most advanced Tanzanian project after Fungoni and Tajiri. It is located south of Tajiri and 40km north of Dar Es Saalem and Fungoni. A maiden drilling program in 2018 was conducted over 11km strike and 5km wide area. Assays have shown good mineralisation occurring from surface with grades ranging from 0.7% to 6.4% THM, and intersections ranging from 1m to 12m. Many holes ended in mineralisation and remain open at depth.
- The company has an Exploration Target of 78 to 156Mt at 3% to 4.5% THM for Bagomoyo, with further drill programs to test the Target.
- Tanga North stretches from north of the port up to close to the Tanzania-Kenya border. Exploration is at the early stages.

### SOUTHERN TANZANIA JV PROJECTS (STA 100%, diluting to 25%)

- STA entered into an earn-in and JV agreement in 2017 with Rio Tinto Ltd (RIO) over its southern Tanzanian mineral sands projects. STA is the JV manager until RIO earns a majority interest via a two stage earn-in as follows:
  - Stage 1: US\$5M expenditure within 3.5 years to earn 51% (minimum JV commitment of US\$2M in 26 months has been satisfied); and
  - Stage 2: Additional US\$4M expenditure within two years to earn 75% interest plus US\$1.75M cash payment.
- RIO is sole funding testing of priority targets at Mtwara, Sudi, Kiswera, and Miteja along 200km of coastal area. The most advanced is Sudi, where drilling highlighted mineral sands anomalies of high value assemblage along 8km of strike. These included an average of 11.5% zircon; 4.7% rutile; and 64.4% ilmenite. Intersections ranged from 3 to 36m, with mineralisation depth beginning from surface. Sudi is located 30km by sealed road from the port of Mtwara.

Figure 15: STA Southern Tanzania Projects



Source: Company.



## COMPARING PROJECTS WITH PEERS

### Coburn and Fungoni are in lowest quartile of cost curve

- We have compared STA's projects with other current and recently developed mineral sands projects of ASX listed companies (Figure 14). We have used companies' studies to source key parameters. While there is variation in pricing assumed in each study, we believe this is not marked given that most pricing is based on TZMI forecasts. The exception is Base Resources Ltd's (BSE) Toliara assumptions prior to 2034, which were based on its internal forecasts and appeared higher for zircon and rutile than those of TZMI.
- While only a short mine life, Fungoni does have attractive metrics. Its revenue to C1 costs (R/C1) of 2.9x sits only below BSE's Toliara project (3.4x) and we estimate it is placed within the lowest quartile of the TZMI 2022 cost curve. Its IRR of 42% also surpasses peers with the exception of Image Resources' (IMA) Boonanarring project.
- Coburn's R/C1 of 2.2x lies above Sheffield Resources' (SFX) Thunderbird and IMA's Boonanarring, and we estimate it is also in the lowest quartile of the TZMI 2022 cash cost curve. Its IRR of 25% compares favourably to Toliara and Thunderbird.
- We also note global leading mineral sands producer Iluka Resources (ILU) achieved an average R/C1 of 2.7x and 2.7x for 2018 and 2019 across its group operations, values to which Coburn and Fungoni compare favourably.

**Figure 16: Comparison of STA projects with peers.**

Project	Company	Revenue/C1 cost x	IRR %	NPV/ capex	Payback Yrs
Boonanarring	Image Resources	1.7	54%	1.9	1.3
Toliara	Base Resources	3.4*	21%	2.1	4.3**
Thunderbird	Sheffield Resources	2.1	24%	2.5	3.3
<b>Coburn</b>	<b>STA</b>	<b>2.2</b>	<b>25%</b>	<b>1.4</b>	<b>2.3</b>
<b>Fungoni</b>	<b>STA</b>	<b>2.9</b>	<b>42%</b>	<b>1.1</b>	<b>1.7</b>

Source: Companies; Foster Stockbroking estimates.

\*BFS reported 3.2x for C1+royalties. 3.4x is our estimate using C1.

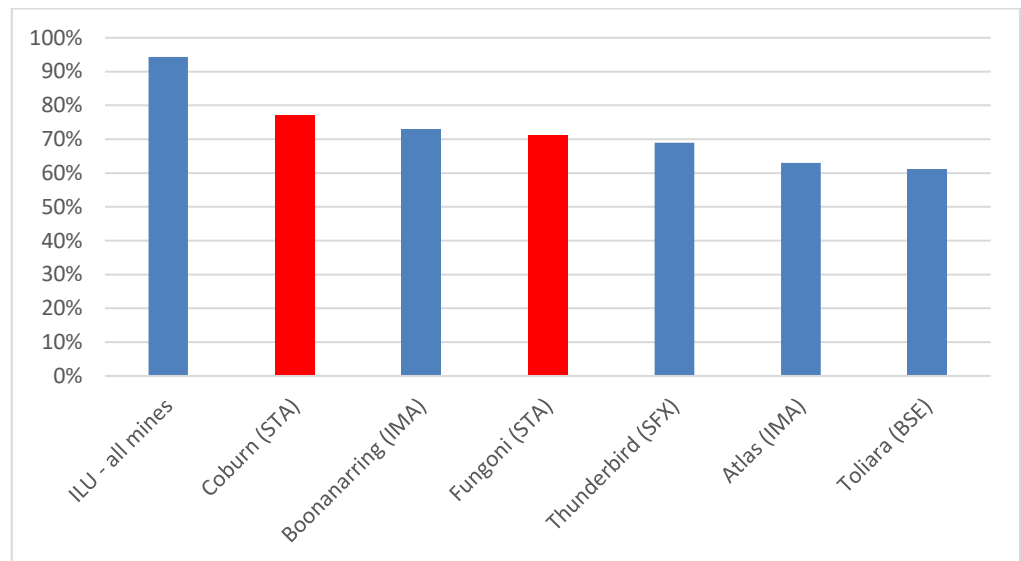
\*\*Includes Stage 2 capex.

### High mineral value assemblage

- We have also compared the projects in terms of portion of revenue generated by high value mineral sand products: zircon, rutile, synthetic rutile, monazite, and HiTi90, which are characterised by generally having forecast long-term of approximately prices  $\geq$  US\$500/t.
- We estimate Coburn and Fungoni generate 76% and 71% of revenue from their high value mineral sands, which provides them with some resilience to a downturn in prices, and contributes to their strong R/C positions on the cash cost curve.



**Figure 17. High Value Mineral Sands as % of Revenue**



High value mineral sands comprise zircon, rutile, synthetic rutile, monazite and HiTi90.  
Source: Companies; Foster Stockbroking estimates.

## MINERAL SAND PRICE FORECASTS

- Mineral sands is a mature industry and leveraged to urbanisation, consumer spending, and global growth. Growth in demand is forecast by TZMI to be 2.5%-3% p.a. but a supply deficit is emerging due to lack of new projects to replace mines nearing end of life. ILU, being one of the world's largest producers, is the most influential in setting benchmark prices. We have based our mineral sands forecasts on consensus, TZMI forecasts, and STA's DFS assumptions for Fungoni and Coburn.

**Figure 18: Commodity Price Forecasts - Nominal**

Commodity	Unit	FY20e	FY21e	FY22e	FY23e	LT
Zircon	US\$/t	1,495	1,474	1,462	1,479	1,496
Zircon concentrate	US\$/t	495	495	495	495	495
Ilmenite - chloride grade	US\$/t	238	242	242	242	242
Rutile	US\$/t	1,165	1,165	1,165	1,129	1,129
Rutile/HiTi	US\$/t	1,114	1,149	1,014	1,014	1,014
Monazite	US\$/t	1,427	1,456	1,804	1,804	1,804
A\$	US\$	0.70	0.71	0.72	0.73	0.73

Source: Foster Stockbroking estimates.

## EARNINGS FORECASTS

### We expect first earnings in FY22e when Coburn is commissioned

- Our forecasts are based on Coburn receiving FID and finalisation of offtake and funding by beginning FY21e, with construction following soon after. We assume Fungoni construction will begin commencing FY22e, by which time it would have received FID.
- We forecast STA to make losses of -\$7M and -\$8M in FY20e and FY21e as it incurs corporate and exploration expenses, and breakeven NPAT in FY22e when Coburn is commissioned. We



expect maiden NPAT of \$49M in FY23e when Coburn is fully ramped up and Fungoni comes online.

Figure 19: Forecast STA Earnings

P&L \$M	FY20e	FY21e	FY22e	FY23e	FY24e	FY25e
Coburn	0	0	42	168	169	172
Fungoni	0	0	0	23	46	47
<b>Sales</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>214</b>	<b>215</b>	<b>219</b>
Operating costs	8	9	31	103	113	113
Coburn	0	0	21	84	85	87
Fungoni	0	0	0	15	30	30
Corporate	-8	-9	-10	-11	-12	-12
<b>EBITDA</b>	<b>-8</b>	<b>-9</b>	<b>12</b>	<b>88</b>	<b>103</b>	<b>106</b>
D&A	0	0	3	21	21	22
Coburn	0	0	18	72	72	74
Fungoni	0	0	0	6	21	21
Corporate	-8	-9	-10	-11	-12	-12
<b>EBIT</b>	<b>-8</b>	<b>-9</b>	<b>9</b>	<b>67</b>	<b>81</b>	<b>84</b>
Net interest	0	0	8	14	13	12
PBT	-7	-8	1	52	68	72
Tax	0	0	0	4	20	22
<b>NPAT underlying</b>	<b>-7</b>	<b>-8</b>	<b>0</b>	<b>49</b>	<b>48</b>	<b>50</b>
NRI	0	0	0	0	0	0
NPAT reported	-7	-8	0	49	48	50

Source: Foster Stockbroking estimates.

## VALUATION

### Our risked NPV<sub>10</sub> of STA shares is \$0.32

- We derive a valuation for STA of \$0.32, based predominantly on DCF for Coburn and Fungoni. The assumptions behind our valuation for Coburn and Fungoni are similar to that assumed by STA in its DFS for each project, with the key exceptions as follows:
  - **Prices.** We have used our own A\$ and mineral sand price forecasts (Figure 16). However these are not too dissimilar to STA's assumptions. For Fungoni's monazite, ilmenite, and rutile, we have used STA assumptions.
  - **Start dates.** We assume first commissioning of Coburn beginning FY22e, and for Fungoni beginning FY23e. We have discounted cash flows back to now.
  - **Free-carry.** We assume 84% ownership of Fungoni with the Tanzania Government acquiring the interest for free. This means STA incurring 100% of the capex and *not* recovering its expenses before paying its share of profit to the Government.
  - **Mineral products case.** We assume STA will select and proceed with the MSP products option for Coburn.
  - **Discounted for risk.** Our risked NPV includes discounting Coburn and Fungoni DCFs by 69% and 74% to account for the risks faced in delays, funding access, commissioning, costs overruns, and operations.



- Other key assumptions, including capex and operating costs, remain the same. We have included the extension case in our Coburn valuation and a nominal figure for Tanzania exploration.
- We have not incorporated the post-DFS met testwork update, preferring to wait for the impact on financial evaluation.

#### We assume funding of debt and equity totaling \$320M

- STA had \$2.9M cash end 1HFY20e and we estimate the company will need to raise equity and debt beginning FY21e to fund Coburn. We expect construction to occur over FY21e and 1HFY21e, with commissioning in 2HFY22e. We expect Fungoni construction in FY22e and commissioned FY23e.
- Our valuation assumes \$320M split 65% debt: 35% equity (\$208M: \$112M) to fund both Coburn and Fungoni capex; working capital; exploration; and corporate costs over FY21-FY22e. We assume future equity issued at 10% discount to current share price.

Figure 20: STA valuation

Segment	Unrisked		Risked		Risk Factor
	A\$M	A\$/share	A\$M	A\$/share	
Coburn	400	\$0.28	276	\$0.25	69%
Fungoni	39	\$0.03	29	\$0.03	74%
Corporate	-55	-\$0.04	-39	-\$0.03	70%
Tanzania exploration	12	\$0.01	12	\$0.01	100%
Net cash (debt) Dec 19	3	\$0.00	3	\$0.00	100%
Cash from in money options	2	\$0.00	2	\$0.00	70%
Cash from future equity	112	\$0.08	78	\$0.07	70%
<b>Total</b>	<b>513</b>	<b>\$0.36</b>	<b>361</b>	<b>\$0.32</b>	<b>91%</b>
Shares now M	373		373		100%
Performance rights M	19		13		70%
Options-in-money at val M	11		7		70%
Shares future issue M	1,037		722		70%
<b>Fully diluted shares M</b>	<b>1,439</b>		<b>1,115</b>		<b>77%</b>

Source: Foster Stockbroking estimates.

#### Discounted P/E Multiple approach yields valuation above current share price

- Even if adopting a multiple approach to valuation, we derive a valuation above the share price. Using the average ASX small-mid cap resources P/E multiple of 10x for FY21e on STA's FY24e earnings, we derive a \$0.32/share future valuation, inclusive of future share issues we have assumed for equity raising. Discounting this back by 10% p.a. over three years would imply a valuation of \$0.24/share now.



## MINERAL SANDS SNAPSHOT

### Zircon

- The global market for zircon ( $ZrSiO_4$ ) is about 1.15Mtpa. China is the largest consumer, importing about one-third of global supply, the latter mostly originating from Africa (38% of supply) and Australia (34%).
- Ceramics (tiles, baths, tableware) is the dominant market segment for zircon accounting for approximately 50% of global demand. Zircon can be processed further into zirconia ( $ZrO_2$ ) and zirconium (Zr) for segments such as refractories and foundries, paints, catalytic converters, construction, electronics. Zircon is resistant to water, chemicals, heat, and abrasion, and has high opacity and strength.

### Titanium

- Titanium oxide ores include rutile ( $TiO_2$ ), leucoxene, chloride and sulphate grade ilmenite ( $FeTiO_3$ ). Ilmenite can be upgraded to high grade titanium feedstocks, including synthetic rutile and titanium chloride or sulfate slag, for the production of white pigment used in paint, paper, plastics, textiles, and ink. This accounts for 90% of titanium demand.
- Rutile and some high grade chloride ilmenite is mostly used for the production of titanium metal (Ti) for aerospace, welding, chemicals, and defence.
- Global market size is 7Mtpa ( $TiO_2$  units) including 0.75Mtpa of chloride grade ilmenite. Chloride ilmenite is supplied mostly from Africa (43%) and Australia (23%).

### Monazite

- Monazite is a phosphorous mineral containing rare earth oxides such as cerium, lanthanum, neodymium, and praseodymium, which is used in applications such as flat tv screens glass, rare earth magnets, silicon wafers, batteries, electric cars, catalytic converters, and electronics.



## DIRECTORS

- **Didier Murcia. Non-Executive Chairman.** *B.Juris, LLB.* Appointed 2016. Lawyer with over 30 years' legal and corporate mining industry experience. Previously Non-Executive Director appointed 2014. Member of the Order of Australia and Honorary Consul for Tanzania for twenty years. Chairman and founding director of MPH Lawyers and has been a director of ASX listed companies Alicanto Minerals, Centaurus Metals, and Gryphon Minerals.
- **Luke Graham. Managing Director and CEO.** Appointed 2016. *A.Dip (Hons) (Elec Eng), MAICd.* Formerly Senior Manager of global minerals engineering and mine operations company Sedgman Pty Ltd (member of CIMIC Group). Engineer with extensive experience in mine and port project development, design, construction, and operations within resources sector including coal, mineral sands, iron, copper, and gold. Also Non-Executive Director of Primero Group since 2018.
- **Peter Watson. Executive Director.** Appointed 2018. *BEng (Hons) (Chem), gAICD, FIEAust, Dipl (Acct).* Chemical engineer with over 30 years' experience in resources sector globally, including MD and CEO of Sedgman. Has held directorships with ASX listed companies including Resource Generation Ltd, New Century Resources, and Sedgman.
- **John Hodder. Non-Executive Director.** Appointed 2016. *BSc, BComm.* Geologist, director, and fund manager with over 20 years' experience in resources industry. Principal of Tembo Resources Fund and formerly director of ASX listed Paladin Energy and Nzuri Copper.
- **Tom Eadie. Non-Executive Director.** *BSc (Hons), MSC, FAusIMM,* Appointed 2016. Previously MD in 2016. Geologist with over 20 years' experience in mining industry. Former Chairman of Copper Strike and Syrah Resources, and prior board member of Australasian Institute of Mining and Metallurgy and Australian Mineral industry Research Association. Former director of Adleran Resources, Copper Strike, New Century Resources, and Pure Alumina.

## RECOMMENDATION AND PRICE TARGET

### Initiate with Buy, 12-month PT of \$0.32/share

- We initiate on STA with a Buy recommendation with a \$0.32/share price target, based on 1.0x risked NPV<sub>10</sub>. We view share price catalysts for STA as follows:
  - i. Binding offtake for Coburn;
  - ii. Clarification of free-carry interest for Fungoni;
  - iii. FID for both Fungoni and Coburn;
  - iv. Financing for Fungoni and Coburn;
  - v. Construction of projects;
  - vi. First production from projects;
  - vii. Resource and Reserve upgrades; and
  - viii. Advancement of other Tanzanian projects.



## RISKS

The following risks may negatively impact the STA share price:

- **Geological risk.** STA may not be able to economically exploit its JORC Resources or Reserves, which can negatively impact valuation and earnings.
- **Sovereign risk.** Any change in government, policy, legislation, or fiscal policy of Tanzania or Australia may markedly impact the ownership, financing, permitting, or economics of the company's projects.
- **Commodity price risk.** Declines in one or more mineral sand prices may negatively impact the potential to develop projects or reduce forecast earnings and the company's share price.
- **Development risk.** Problems may occur preventing STA from developing its projects, including issues impacting permitting, financing, offtake, construction, or commissioning.
- **Financing risk.** To fund its projects the company may raise equity which may dilute shareholders, and/or borrow debt which it may not be able to service.
- **Economic and market risk.** Should global economic growth decline or share markets fall, this may reduce the appetite for both STA's commodity exposure and its shares.



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## FOSTER STOCKBROKING DIRECTORY

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**Specific disclosure:** The analyst does not own STA securities at the time of this report. Diligent care has been taken care by the analyst to maintain honesty and fairness in writing the report and making the recommendation.

**Specific disclosure:** Foster Stockbroking personnel, including the analyst, attended an STA site visit in November 2019 for which STA paid for their flights, accommodation, and meals.

**Specific disclosure:** The analyst received assistance from STA in preparing the report, including STA reviewing it for factual accuracy.

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**Disclosure review.** All the disclosures in the report have been reviewed and checked by Rob Telford, Corporate.

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