

Sheffield Resources Limited

Sandsational returns

July 2023

Recommendation: BUY

- A globally significant project with attractive economics in a tier one location
- Construction is 90% complete with first mineral sands revenue next half
- Trading at a discount to project NPV, excluding its organic growth options

ASX: SFX

Share Price: \$0.47

Target Price: \$1.15

M/Cap.: \$185M

Valuation: \$1.15/share

Valuation: \$462M

Shares/options: 392.6

Monthly T/over: \$2M





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Figure 1: Top 20 Shareholders (June 2023)

	Name	Amount	%
1	Yangang (Hong Kong)	38,870,771	9.9%
2	BlackRock Investment Mgt	25,515,475	6.5%
3	Mr & Mrs Walter MG Yovich	17,375,524	4.4%
4	Mr Walter MG Yovich	14,020,611	3.6%
5	Konwave	13,413,723	3.4%
6	Thorney Investments	10,999,999	2.8%
7	Private Clients of HUB 24 Custodial Services	9,931,602	2.5%
8	Mr & Mrs Albert J Matthews	8,400,000	2.1%
9	Private Clients of FNZ Custodians	8,265,767	2.1%
10	Mr David L Archer	8,182,055	2.1%
11	Mr Bruce M McQuitty	7,991,289	2.0%
12	Mr William J Burbury	7,482,000	1.9%
13	Ms Anna M Weldon	4,737,554	1.2%
14	Mr & Mrs Gilbert M Pesenti	4,285,714	1.1%
15	Dimensional Fund Advisors	4,046,102	1.0%
16	Mr & Mrs Rees HJ Jones & Mr Walter MG Yovich	3,961,612	1.0%
17	Mr & Mrs Franklyn R Brazil	3,191,431	0.8%
18	Baumann & Cie	3,000,000	0.8%
19	Mr Allan W Tattersfield	2,942,307	0.7%
20	Kimberley Land Council Aboriginal Corp	2,836,120	0.7%
	Total	199,449,656	50.8%

Source: IRESS



A\$1.15

Sheffield Resources Ltd (SFX) BUY Share Price: A\$0.47

Sandsational returns

Sheffield Resources Ltd (SFX) is on the verge of becoming a mineral sands producer at its 50% owned Thunderbird Mineral Sands Project, located in the Kimberly region of WA. Thunderbird is a large, long-life asset in 50/50 joint venture with Yansteel, where Stage 1 is fully funded, 90% complete and tracking on time and budget. A simplified flowsheet will deliver concentrate products into a robust pricing environment, with strong cash flow to assist delivery of Stage 2 from 2029. In addition, SFX's South Atlantic Project mineral sands project provides scope for further growth and diversification. SFX trades at 0.41x P/NPV, a punitive discount given the minimal remain capex and lowtechnical risk development plan being implemented. We see SFX re-rating upon successful commissioning and sales over the coming 6-12 months. We initiate coverage with a BUY rating and A\$1.15/sh price target (1xP/NPV₁₀).

A simple, scalable project in a tier one jurisdiction

- Construction at Thunderbird is 90% complete and fully funded, with first sales expected early in 1H CY24
- The March 2022 DFS outlined 1.0-1.8Mtpa of mineral sands concentrate at a revenue to cost ratio of 2.2x
- The study outlined average annual free cash flow of A\$162m, a A\$1.3bn NPV₈ and 27.5% IRR (100% basis)
- Construction has progressed very well, with capital costs in line with the A\$484m budget, despite recent inflation
- We forecast low risk organic growth when plant capacity at Thunderbird is doubled in 2029, post debt repayment
- The project will supply 6.5% of global zircon supply and 3.5% of titanium feedstock supply over a 35-year period

Significant upside to our A\$1.15/sh price target

- Our fully diluted A\$1.15/sh target is based on 1.0x NPV₁₀
- We see material upside to the A\$0.81/sh valuation for Stage 1 alone, and back this management team to deliver on the organic growth opportunities in the portfolio

Mineral sands markets are supply constrained

- Around 53% of Thunderbird revenue is from zircon, with commissioning well timed given prices at multi-year highs
- End demand for both titanium and zircon is relatively GDP linked and also correlated to global housing trends
- While we conservatively forecast prices to fall from spot of US\$1,950/t to US\$1,300/t longer term, we highlight that spot pricing improves our price target to A\$2.60/sh

Key Dates Ahead

- March Q'24 First revenue from Thunderbird
- Dec Q'24 Thunderbird hits nameplate capacity
- July 2024 South Atlantic Project investment decision

Company Data

Shares – ordinary (M)	392.6
Market capitalisation (\$M)	185
12 month low/high (\$)	0.4/ 0.68
Average monthly turnover (\$M)	2
GICS Industry	Metals & Mining

Target Price:

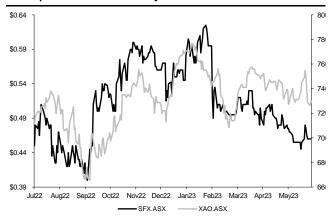
Financial Summary (attributable to SFX's 50% share)

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Year end June	2024F	2025F	2026F	2027F	2028F
Revenue (\$M)	37.4	168.7	177.0	172.3	170.7
Costs (\$M)	(42.5)	(102.8)	(112.2)	(116.2)	(117.4)
EBITDA (\$M)	(5.1)	65.8	64.9	56.1	53.3
NPAT (\$M)	(29.9)	21.0	24.2	17.8	4.5
EPS (¢ps)	(7.6)	5.4	6.2	4.5	1.2
EPS growth (%)	n.m.	n.m.	0	(0)	(1)
PER (x)	(6)	9	8	10	41
Op. Cashflow (\$M)	(16.5)	45.4	44.7	37.6	28.7
OCFPS (¢ps)	(4.2)	11.6	11.4	9.6	7.3
POCFPS (x)	n.m.	9.9	10.1	12.0	15.8
EV (\$M)	111	58	95	156	103
EV / EBITDA (x)	n.m.	n.m.	n.m.	n.m.	n.m.
Payout ratio (%)	-	-	-	-	-
Dividends (¢ps)	-	-	-	-	-
Yield (%)	-	-	-	-	-
Franking (%)	_	_	_	-	-

Board

Director	Position	Executive
Bruce Griffin	Chair	Yes
Ian Macliver	Director	No
John Richards	Lead Independent Director	No
Vanessa Kickett	Director	No
Gordon Cowe	Director	No

SFX - performance over one year





Analysis

Sheffield Resource	s (SF	X)					SHARE PRICE VS INDEX	
Year end 30 June							160 _]	
December detion				D			140	
Recommendation Price	\$			Buy 0.47			120 - Market Mar	
Target Price (12-month)	\$			1.15			100 Acade de la companya del la companya de la comp	
Upside / (Downside)	%			145%			80 -	
52 week high / low	\$		0.6	625 - 0.4			60 -	
Market capitalisation	\$m			185			40 -	
Shares on issue	m			393			20 -	
Options/Rights outstanding	m			8			Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23	Jun-23 Jul-23
Shares raised* Shares on issue (diluted)	m			0 400				Jul 25 Jul 25
Shares on issue (diluted)	m			400				
PROFIT & LOSS (attributable	e)	2024E	2025E	2026E	2027E	2028E	ASSUMPTIONS 2024E 2025E 2026E 202	7E 2028E
Revenue	\$M	37	169	177	172	171		.75 0.75
Operating Costs	\$M	(42)	(101)	(110)	(114)	(115)	·	1,300
Exploration	\$M	(1)	(2)	(2)	(2)	(2)		639
Other	\$M	- (5)	-	-	-	-	Ilmenite mag conc. US\$/t 130 130 130	30 130
EBITDA	\$M \$M	(5)	(22)	65	56	(22)	RESERVES AND RESOURCES	
Dep. & Amort. EBIT	\$M	(12) (17)	(22) 43	(18) 46	(18) 38	(22) 31	Mt HM (%) Z (%) HiTi (%) Leu (%) Ilm (%)
Net Interest	\$M	(12)	(13)	(12)	(13)	(25)	Reserve 754 11% 0.8% 0.3% 0.3%	
Pre-Tax Profit	\$M	(30)	30	35	25	6	Resource 1,050 12% 0.9% 0.3% 0.3%	
Tax	\$M		(9)	(10)	(8)	(2)		
Net Profit	\$M	(30)	21	24	18	5	THUNDER BIRD PRODUCTION (100%) 2024E 2025E 2026E 202	
Abnormal	\$M	-	-	-	-	-		13 113
Reported Profit	\$M	(30)	21	24	18	5		224 225
CASH FLOW (attributable)	Ch4	2024E	2025E	2026E	2027E	2028E	Mag Con 208 712 798 8	780
Operating Cashflow	\$M \$M	(17) (47)	45	45 (2)	38	29 (74)	Revenue to cost ratio 1.1 2.0 1.9	1.8 1.7
Capex Exploration	\$M	(1)	(2) (2)	(2)	(18) (2)	(2)	Revenue to cost fatto 1.1 2.0 1.9	1.0 1.7
Other	\$M	(1)	(2)	(2)	(2)	(2)	THUNDERBIRD REVENUE (100%)	
Investing Cashflow	\$M	(48)	(4)	(4)	(20)	(76)	700 1	
Equity Issues	\$M	-	-	-	-	-		
Borrowings / Prepayments	\$M	69	11	-	-	100	600 -	
Financing Cashflow	\$M	69	11	(78)	(79)	100	500 -	
Free Cashflow	\$M	(64)	42	41	17	(48)	400	
Surplus Cash Flow	\$M	4	52	(37)	(62)	52	400 -	
BALANCE SHEET (attributal Cash	sM	2024E 74	2025E 126	2026E 89	2027E 28	2028E 80	300 -	
Other Current	\$M	1	120	1	1	1	200 -	
Total Current	\$M	75	127	90	29	81		
PP&E	\$M	218	197	180	180	233	100 -	
Other	\$M	116	116	116	116	116	- 	
Total NC Assets	\$M	333	312	295	296	348	2024 2025 2026 2027 2028 2029 2030 2031 2032	2033
Total Assets	\$M	408	439	386	325	429	■ Paramag (A\$m) ■ Mag Con (A\$m) ■ Zircon Conc (A	Sm)
Current Liab	\$M	12	12	12	12	12		
Non Current Liab	\$M	152	163	85	6	106	THUNDERDIND DEVENUE TO COST DATIO	
Total Liabilities	\$М ¢м	164 244	175 265	97 289	18 307	118	THUNDERBIRD REVENUE TO COST RATIO	
Net Assets Equity	\$M \$M	244 244	2 65 265	2 89 289	307 307	311 311	700	2.5
Total Debt	\$M	146	157	79	0	100	600 -	A
Net Debt / (Cash)	\$M	73	31	(10)	(28)	20	500	2.0
RATIO ANALYSIS		2024E	2025E	2026E	2027E	2028E	<u></u>	- 1.5
EPS	¢	(7.6)	5.4	6.2	4.5	1.2	400 -	1.5
PER	x	(6.2)	8.8x	7.6x	10.4x	40.8x	300 - 🛕	1.0
EPS Growth	%	n.m.	n.m.	15%	(27%)	(75%)		- 1.0
EV/EBITDA	x	(50.7)	3.3x	2.7x	2.8x	3.8x	200 -	- 0.5
EV/OCF FCFPS	X	(16.2)	11.0	11.0	4.0	(11.7)	100 -	0.5
FCF Yield	¢ %	(16.2) n.m.	11.2 24%	11.0 23%	4.9 10%	(11.7) n.m.		
Payout Ratio	%	0%	0%	23% 0%	0%	0%	2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034	2035
DPS	¢	-	-	-	-	-	——Revenue (A\$m) ——Op Costs (A\$m) ▲ Ratio (I	
Yield	%	-	-	-	-	-	Trevenue (πφιτι) — Op Costs (πφιτι) ▲ Ratio (L	110)
Franking	%	0%	0%	0%	0%	0%		<u> </u>
Gearing ND/E	%	30%	12%	(4%)	(9%)	6%	VALUATION - Fully Diluted, 10% Discount Rate A\$n	
Interest Cover	x	(1.4)	3.2	3.9	3.0	1.3	, ,	37 1.34
EBITDA Margin	%	(14%)	39%	37%	33%	31%	South Atlantic Project (20% ownership)	20 0.05
EBIT Margin	%	(47%)	26%	26%	22%	18%	Exploration	10 0.02
Return On Assets Return On Equity	% %	(7%)	7% 8%	9% 8%	8% 6%	2% 1%	,	73) (0.18) 32) (0.08)
	% %	(12%) 30%	8% 30%	8% 30%	30%	30%	•	32) (0.08) 4 62 1.15
Eff Tax rate								

Source: Petra Capital



Executive Summary

Entering production this half in a tier one jurisdiction

Sheffield Resources (SFX) is an ASX-listed mineral sands developer through its 50% owned Thunderbird Mineral Sands Project, located in the Kimberley region of Western Australia. Construction at Thunderbird is 90% complete, with first production expected this half and first sales in the March quarter 2024. Thunderbird's March 2022 DFS outlined a staged project capable of producing up to 1.8Mtpa of mineral sands concentrate at a revenue to cost ratio of 2.2x. These attractive margins delivered a study post-tax IRR of 28% and an NPV₈ of A\$1.3bn (100%). It has a 700Mt Reserve and 35 year mine life, capable of producing 6.5% of the world's zircon needs and 3.5% of titanium feedstock requirements. Thunderbird is a globally significant project with attractive economics in a tier one location.

Successful commissioning likely to drive a re-rating

Construction and commissioning is a time of heightened operational and balance sheet risk for mining projects, with equities often trading at a discount until these risks are overcome. We note Thunderbird capital costs are in line with the original A\$484m total funding requirement, with first production due for delivery in the March Q 2024. SFX trades at 0.41x P/NPV and we believe the discount is overly punitive given risk of capital overrun has been largely mitigated. With first production expected within 6 months, we don't believe investors will be waiting long for the stock price to re-rate. We also note the relatively simple development and operating approach the joint venture has taken, with conventional dozer-trap mining feeding a wet concentrate plant (WCP) producing three concentrate products for sale. There is no Mineral Separation Plant (MSP) to produce final zircon and/or titanium product streams.

Organic growth options via expansion and a second project

SFX is fully funded to 1Mtpa of production of mineral sands concentrate at Thunderbird, which we value at A\$0.81/sh, representing 50% upside from the current share price. We expect the cashflows from Stage 1 will pay down debt by 2027, after which we anticipate the joint-venture to approve the doubling of plant capacity. Doubling plant capacity is expected to cost A\$258m in capital for an incremental A\$394m NPV₁₀ on our price forecasts, equating to an additional A\$0.53/sh in NPV.

In addition to Thunderbird, SFX secured an option over the South Atlantic Mineral Sands Project in Brazil in January 2023. The project has a large exploration target of 500-720Mt at 3.2-4.0% HM with a Zr-dominant assemblage. SFX can pay US\$12.5m for a 20% stake up to July-24. In the interim, the US\$2.5m option payment is funding a Resource and DFS, upon which to base an investment decision.

A\$1.15 price target on Petra forecasts, A\$2.60/sh at spot prices

Our A\$1.15/sh price target is based on $1.0x \text{ NPV}_{10}$ and an average price of US\$1,314/t and 0.75 AUD. We expect zircon prices to decline from the spot price of US\$1,950/t as more supply enters the market and Chinese demand softens due to a slowing property market. Should spot currency and commodity prices continue, SFX has material leverage and upside (Figure 2).

Figure 2: Valuation sensitivity to price & FX forecasts, Petra NPV & spot valuation ranges

			-							_
	Zircon USD	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900
AUD										
0.90		0.33	0.45	0.57	0.68	0.80	0.91	1.03	1.14	1.25
0.85		0.48	0.61	0.73	0.85	0.97	1.10	1.21	1.34	1.46
0.80		0.65	0.78	0.91	1.04	1.17	1.30	1.43	1.56	1.69
0.75		0.84	0.98	1.12	1.26	1.40	1.54	1.68	1.82	1.96
0.70		1.06	1.21	1.36	1.51	1.66	1.81	1.96	2.11	2.26
0.65		1.31	1.47	1.63	1.79	1.96	2.12	2.28	2.44	2.60
0.60		1.61	1.78	1.96	2.13	2.31	2.48	2.66	2.83	3.01

Source: Petra NPV shaded grey based on LT forecasts of US\$1,300/oz & 0.70 FX; spot valuation in blue







Level 17, 14 Martin Place, Sydney NSW 2000 Office: +61 2 9239 9600 ABN 95 110 952 782 ACN 110 952 782 AFSL 317 944

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Australia Petra Capital Level 17, 14 Martin Place Sydney	United States & Canada Jett Capital Advisors 712 5th Avenue New York	United Kingdom & Luxembourg Cornhill Management No. 1 Cornhill London
China & Hong Kong Tonghai Financial 29 Queen's Road Central, China Building, Hong Kong	Singapore Aris PrimePartners Asset Mgmt 16 Collyer Quay Singapore	Japan Capital Partners Securities 1 Chome-13-7 Uchikanda, Chiyoda City, Tokyo
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United Arab Emirates MAC Capital Sheikh Zayed Road, 4th Interchange Dubai	Switzerland SEAL Group Via Nassa 5, CH – 6900 Lugano	Spain GVC Gaesco Fortuny 17, 28010 Madrid
Cyprus Eurofast Cypress Centre, 5, Chytron Str Nicosia	United States TerraNova Capital Partners Suite 1402, 420 Lexington Avenue New York	United States Auerbach Grayson 25 West 45 Street New York

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