

Ticker: IXR AU	Cash: A\$20m	Project: Makuutu
Market cap: A\$132m	Price: A\$0.03/sh	Country: Uganda
<i>REC. (unc): BUY</i>	<i>TARGET (-0.02): A\$0.15</i>	<i>RISK RATING (unc): HIGH</i>

Today's DQ22 update had no surprises with key points 1) Mining Lease Application (MLA) remains on track for 1Q23 (per IXR's expectations); 2) study on US downstream refinery guided for 1Q23, and 3) plans for the Makuutu demonstration plant in 2H23. Other highlights included achieving a maiden Digbee ESG rating of BB and acceptance into the UN Global Compact, both important for securing funding for an energy transition metal project. Overall we think IXR is following the right strategy – using its advantages of resource size (long-life) and permit lead time (early mover) on the mining side as leverage to capture greater margin by going downstream to separated oxides. Execution and timing, of course, are key, noting the increase in Australian clay-hosted projects (~700-800ppm), and new higher grade (1,500ppm+) projects in Brazil, listing on ASX. **We maintain our BUY rating but lower our price target to A\$0.15/sh 0.75x NAV_{8%} and unchanged LT prices of US\$150/kg NdPr, US\$500/kg Dy and US\$2,200/kg Tb.** Stepping back, we think there will be room for 2-3 HREE clay projects (ex-China) in the near term, and 3-5 by 2030, with a pull factor in Dy and Tb prices given the lack of new projects, so the macro remains strongly supportive. After the current price pullback, we think IXR is good value and one of the names to hold, noting it is the closest to development and could secure both the Makuutu mining license and substantially advance the (likely US) separation facility by mid-2023.

DQ22 –Mining Lease + refinery study on track for 1Q23, maiden ESG rating, A\$20m cash balance

Ionic released its DQ22 quarterly activities + cash flow report.

Financial: IXR ended the quarter with A\$19.6m of cash and no debt with A\$2.0m used in operating activities, A\$2.7m used in investing and A\$1.3m inflows from option exercises during the quarter.

Makuutu: the MLA is expected to be finalised imminently, pending internal approval of the feasibility study, and Ionic expects award of the MLA later this quarter. The resettlement action plan is in advanced stages – all project affected persons (PAPs) have been identified, the ESIA was approved by the Govt, and the project is entering MOUs with PAPs to support land access.

US/UK: The Belfast recycling demonstration plant is on track for 1Q23 completion and first REO products in 2Q23 targeting 10 tonnes/year of separated magnet REO products. The downstream refinery study is in final stages and expected to be completed in Q1. The US is the preferred jurisdiction with several sites reviewed and a preferred location identified.

ESG: Ionic achieved an initial overall Digbee ESG rating of BB including BB for the Makuutu project and B for corporate. The company also was accepted as a member of the United Nations Global Compact, the world's largest corporate sustainability initiative.

Model Changes: Update FX, lift unit costs, new PT A\$0.15/sh (prev A\$0.17/sh), maintain BUY

Updating cash for quarter end (A\$19.6m), spot FX (1 AUD = 0.707 USD, prev 0.65), and updating our Makuutu unit costs to US\$3.3/t mined, US\$8/t processed and US\$2/t G&A (prev US\$2.75/t, US\$6.00/t and US\$0.70/t, respectively) to account for cost inflation, we trim our NAV estimate by 9.4%, and retain our BUY rating with a price target of A\$0.15/sh based on unchanged multiples of 0.75x NAV_{8%}.

Why we like Ionic

- The largest ionic clay deposit available to directly supply HREEs to Western end users
- Able to get into production by SCPE 2025
- Excellent infrastructure including highway, hydropower and reagents
- Opportunity to become an integrated upstream and midstream supplier

Catalysts

- 1Q23: Mining Permits and refinery scoping study
- 2023: SCPe pilot plant, trial mining
- 2024: SCPe first production and ramp up
- 2025: SCPe steady state production

Research

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Ticker:	IXR AU	Price / mkt cap:	A\$0.03/sh, A\$132m	Market P/NAV:	0.09x	Assets:	Makuutu
Author:	J Chan / E Magdzinski	Rec / PT:	BUY / A\$0.15	1xNAV FD:	A\$0.27/sh	Country:	Uganda
Group-level SOTP valuation							
		4Q22	1Q23				
		US\$m	O/ship	NAVx	A\$/sh		
Makuutu (60%) NPV 1Q23		222	60%	0.75x	0.08		
Makuutu MRE outside mine plan (2.5% insitu value)		166	60%	0.75x	0.04		
Downstream		415	100%	0.75x	0.11		
Central SG&A & fin costs 1Q23		(50)	-	0.75x	(0.01)		
Cash and restr. cash 4Q22		20	-	0.75x	0.01		
Cash from options		6	-	0.75x	0.00		
Debt 4Q22		-	-	0.75x	-		
1xNAV8% spot fully diluted, pre-funded		778			0.22		
Assumed equity raised		150		0.75x	0.02		
1xNAV8% spot fully funded		928			0.15		
1x fully funded NAVPS sensitivity to gold price and discount / NAV multiple							
Valuation (A\$/sh)		\$100/kg	\$125/kg	\$150/kg	\$175/kg	\$200/kg	
0.50xNAV		0.06	0.08	0.10	0.12	0.14	
0.60xNAV		0.08	0.10	0.12	0.14	0.16	
0.75xNAV		0.10	0.12	0.15	0.18	0.21	
1.00xNAV		0.13	0.17	0.20	0.24	0.28	
Makuutu NPV8% (US\$m)		\$100/kg	\$125/kg	\$150/kg	\$175/kg	\$200/kg	
12% discount		22	78	134	189	245	
10% discount		40	106	172	238	304	
8% discount		63	143	222	301	380	
6% discount		93	189	285	381	477	
5% discount		111	217	324	430	536	
Makuutu 1xNAV sensitivity to recovery and payability							
Makuutu NPV8% (US\$m)		Recov: 45.0%	50.0%	55.0%	60.0%	65.0%	
Payability: 60%		-36	28	89	146	202	
Payability: 70%		89	155	222	288	355	
Payability: 80%		201	278	354	431	508	
Payability: 90%		313	400	487	574	661	
Payability: 100%		425	522	619	716	813	
Valuation over time							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Makuutu NPV (US\$m)		210.3	229.6	308.4	358.0	389.4	
Downstream		367.0	396.3	428.0	462.3	607.2	
Exploration and in-situ tonnes		166.0	166.0	166.0	166.0	166.0	
Cntrl G&A & fin costs (US\$m)		(50.3)	(50.6)	(52.1)	(45.0)	2.3	
Net cash at 1Q (A\$m)		19.6	86.8	41.8	26.3	(156.9)	
1xNAV (US\$m)		712	828	892	967	1,008	
P/NAV (x):		0.12x	0.13x	0.14x	0.14x	0.15x	
1xNAV share px FD (A\$/sh)		0.29	0.26	0.25	0.24	0.22	
ROI to equity holder (% pa)		750%	177%	94%	63%	46%	
Sources and uses of cash							
SCPe evaluation costs	A\$10m		SCPe current cash + options	A\$36m			
SCPe capex (US\$150m @ 60%)	A\$119m		Debt package	A\$102m			
SCPe contingency	A\$48m		Equity Raised	A\$62m			
SCPe G&A + fin. cost to prodn	A\$16m						
SCPe working capital	A\$6m						
	Total uses	A\$200m		Total proceeds	A\$200m		
Production (100%)							
		Jun '24	Jun '25	Jun '26	Jun '27	Jun '28	
Makuutu (t REE)	--	929	2,149	2,901	3,868		
Makuutu (t Nd+Pr)	--	260	602	812	1,083		
Makuutu (t Dy)	--	28	64	87	116		
Makuutu (t Tb)	--	6	13	17	23		
Makuutu revenue (US\$/kg REE)	--	67	64	65	65		
Makuutu cash cost (US\$/kg REE)	--	48	30	35	33		
Makuutu AISC (US\$/REE)	--	67	46	51	49		
Refinery (TREO produced)	--	--	1,722	3,110	4,311		
Refinery (t Nd+Pr)	--	--	898	1,259	1,726		
Refinery (t Dy)	--	--	75	97	123		
Refinery (t Tb)	--	--	22	34	47		
Refinery share of Makuutu feed (%)	--	--	49%	62%	61%		
Refinery EBITDA margin (%)	--	--	20%	19%	20%		
Refinery revenue (US\$/kg REO)	--	--	114	98	110		
Resource / Reserve							
Measured, ind. & inf.		532	640	340	21,656	0.37%	
SCPe Mine Inventory		300	725	218	8,854	0.90%	
Commodity price							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
NdPr price (US\$/t)		143	113	154	154	154	
Share data							
Basic shares (m):	3872.6		FD + options (m):	4,085.1	FD/FF	6,561.3	
Ratio analysis							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
FD shares out (m)		3,873	5,111	5,111	6,349	6,349	
EPS (US\$/sh)		(0.00)	(0.00)	(0.00)	(0.00)	0.01	
CFPS before w/c (US\$/sh)		(0.00)	(0.00)	(0.00)	(0.00)	0.00	
FCFPS pre growth (US\$/sh)		0.00	(0.00)	0.01	(0.02)	(0.02)	
FCF/sh (US\$/sh)		(0.00)	(0.00)	(0.02)	(0.03)	(0.03)	
FCF yield pre growth (US\$/sh)		2%	(2%)	29%	(63%)	(52%)	
FCF yield (%)		(10%)	(5%)	(47%)	(88%)	(85%)	
EBITDA margin (%)		-	-	-	14%	27%	
FCF margin (%)		--	--	--	(356%)	(46%)	
ROA (%)		(9%)	(4%)	(5%)	(1%)	10%	
ROE (%)		(10%)	(4%)	(11%)	(3%)	22%	
ROCE (%)		(10%)	(4%)	(2%)	1%	18%	
PER (x)		(26x)	(31x)	(14x)	(26x)	3x	
P/CF (x)		(39x)	(35x)	(14x)	(57x)	3x	
EV/EBITDA (x)		(23x)	(17x)	(26x)	25x	3x	
Income statement							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Revenue (US\$m)		--	--	--	53	396	
COGS (US\$m)		--	--	--	(41)	(283)	
Gross profit (US\$m)		--	--	--	13	112	
Expenses (US\$m)		(3)	(4)	(1)	(2)	(5)	
Impairment & other (US\$m)		--	--	--	--	--	
Net finance costs (US\$m)		0	--	(7)	(8)	(5)	
Tax (US\$m)		--	--	--	(3)	(31)	
Minority interest (US\$m)		--	--	--	--	--	
Net income attr. (US\$m)		(3)	(4)	(9)	(1)	72	
EBITDA (US\$m)		(5)	(5)	(5)	8	107	
Cash flow							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Profit/(loss) after tax (US\$m)		(5)	(5)	(12)	(8)	62	
Add non-cash items (US\$m)		1	--	--	4	10	
Less wkg cap / other (US\$m)		(0)	--	9	(1)	(57)	
Cash flow ops (US\$m)		(4)	(5)	(3)	(5)	15	
PP&E (US\$m)		--	(3)	(79)	(184)	(198)	
Other (US\$m)		(2)	(2)	--	--	--	
Cash flow inv. (US\$m)		(11)	(6)	(79)	(184)	(198)	
Debt draw (repayment) (US\$m)		--	--	102	170	--	
Equity issuance (US\$m)		30	71	7	124	--	
Other (US\$m)		--	--	--	--	--	
Cash flow fin. (US\$m)		30	71	109	294	--	
Net change post forex (US\$m)		16	60	27	104	(183)	
FCF (US\$m)		(13)	(8)	(82)	(189)	(183)	
Balance sheet							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Cash (US\$m)		27	87	114	218	35	
Accounts receivable (US\$m)		1	1	1	7	49	
Inventories (US\$m)		--	--	--	7	35	
PPE & exploration (US\$m)		13	18	97	278	466	
Other (US\$m)		9	9	9	9	9	
Total assets (US\$m)		49	115	221	520	594	
Debt (US\$m)		--	--	102	272	272	
Other liabilities (US\$m)		1	1	10	23	35	
Shareholders equity (US\$m)		77	148	155	279	279	
Retained earnings (US\$m)		(29)	(34)	(46)	(53)	9	
Minority int. & other (US\$m)		--	--	--	--	--	
Liabilities+equity (US\$m)		49	115	221	520	594	
Net cash (US\$m)		27	87	12	(53)	(236)	
Net debt to NTM EBITDA (x)		5.4x	17.4x	(1.6x)	0.5x	1.6x	

Source: SCP estimates

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Summary of Recommendations as of January 2023	
BUY:	53
HOLD:	1
SELL:	0
UNDER REVIEW:	1
TENDER:	0
NOT RATED:	0
TOTAL	55

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