

<b>Ticker:</b> IXR AU	<b>Cash (PF):</b> A\$11.3m	<b>Project:</b> Makuutu
<b>Market cap:</b> A\$102m	<b>Price:</b> A\$0.022/sh	<b>Country:</b> Uganda
REC. (unc): BUY	TARGET (unc): A\$0.05/sh	RISK RATING (unc): HIGH

*Ionic's consolidation of a further 34% project stake in Makuutu is another positive step. In our view, the mining license, consolidating the minorities, and a successful pilot plant are the three major key deliverables needed before the build. While we think higher prices are needed to secure the financing for Makuutu development, Ionic has done well to advance all three deliverables despite a difficult market. On valuation, we think the price paid is fair: the 425m shares equate to an implied A\$26m project value, while the up to 825m performance shares (contingent on mine licence receipt, mine financing, and both subject to IXR share price >A\$0.05/sh) provides upside to the vendor. Updating our model for 94% ownership, up from 60%, and for the recent A\$5m at A\$0.021/sh equity financing, our modelled NAVPS (based on 1% of insitu value for Makuutu at our LT US\$120-400-1500/kg NdPr-Dy-Tb prices), increases by 18% to A\$0.074/sh – this is before accounting for mine build dilution. **After applying our 0.75x target multiple, we maintain our Buy rating and A\$0.05/sh price target.** The key next steps are finalizing land acquisition which enables final granting of the mine license, and ideally negotiating a fiscal stability agreement. Such agreements are common for developing African mining projects as they protect the company against subsequent changes in tax and fiscal legislation. The thesis here remains that Makuutu remains an early mover levered to heavy rare earth prices, although admittedly we think higher prices are needed for IXR given lower grades than peers in Latin America.*

### **34% stake in Makuutu acquired for 425m shares (A\$9m) plus up to 835m shares on milestones**

Makuutu consolidation: Ionic announced agreement to acquire a further 34% interest in Makuutu from vendor Rare Earth Elements Africa (REEA). Consideration includes an initial 425m shares in Ionic plus i) 350m performance rights on issue of the Stage One mining license for Makuutu within 3-years of transaction completion; and ii) 350m performance rights vesting on Ionic obtaining binding funding commitments (debt or equity) to fund construction at Makuutu within 5-years of completion. Both performance rights are subject to IXR shares trading at a 30-day VWAP exceeding A\$0.05/sh. If both performance rights vest, REEA will gain a further 135m share bonus or cash equivalent at IXR's option. REEA will hold ~9% of outstanding fully diluted capital of IXR on completion (before vesting of any performance rights). Completion is expected to occur in 1Q24 subject to approval from other project minority partners, IXR shareholders, regulatory approvals in South Africa in Uganda, and FIRB (Australia) voluntary notification.

Raise: On 20<sup>th</sup> November, Ionic announced firm commitments for a 280.9m share at A\$0.021/sh capital raise for gross proceeds of A\$5.9m. In addition, an SPP for up to A\$2m was announced which is open until 15 December (Friday).

**Why we like Ionic**

1. Large ionic clay resource with enriched Dy and Tb content to directly supply HREEs to Western end users
2. Early mover with DFS completed; mine licence and land access nearly completed, and head start on supply chain integration with agreements with Ford and LGIM
3. Excellent infrastructure including highway, hydropower and reagents
4. Opportunity to become an integrated upstream and midstream supplier

**Catalysts**

- 1Q24: SCPe pilot plant, trial mining
- 2024 or market dependent: Updated DFS
- 2025 earliest or market dependent: Construction

**Research**

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Ticker: IXR AU		Price / mkt cap: A\$0.02/sh, A\$102m		Market P/NAV: 0.17x		Assets: Makuutu	
Author: J Chan / E Magdzinski / K Ko		Rec / PT: BUY / A\$0.06		1xNAV FD: A\$0.09/sh		Country Uganda	
<b>Group-level SOTP valuation</b>				3Q23	4Q23		
				US\$m	O/ship	NAVx	A\$/sh
Makuutu (94%) NPV 4Q23				-	94%	0.75x	-
Makuutu (1.0% insitu value at SCPe LT prices)				307	94%	0.75x	0.07
<b>Makuutu valuation (1% insitu value)</b>				<b>307</b>	<b>94%</b>	<b>0.75x</b>	<b>0.07</b>
Downstream				70	100%	0.75x	0.02
Central SG&A & fin costs 4Q23				(79)	-	0.75x	(0.02)
Cash and restr. cash 3Q23				8	-	0.75x	0.00
Cash from options				1	-	0.75x	0.00
Debt 3Q23				-	-	0.75x	-
<b>1xNAV8% spot fully diluted, pre-funded</b>				<b>306</b>			<b>0.07</b>
Assumed equity raised				60		0.75x	0.01
<b>1xNAV8% spot fully funded</b>				<b>366</b>			<b>0.06</b>
<b>1x fully funded NAVPS sensitivity to Dy price and discount / NAV multiple</b>							
<b>Valuation (A\$/sh)</b>		Dy: \$300/kg		\$400/kg	\$500/kg	\$600/kg	\$700/kg
0.50xNAV		0.03	0.03	0.03	0.04	0.04	
0.60xNAV		0.03	0.04	0.04	0.04	0.05	
0.75xNAV		0.04	<b>0.05</b>	0.05	0.06	0.06	
1.00xNAV		0.06	0.06	0.07	0.07	0.08	
<b>Makuutu NPV8% (US\$m)</b>		Dy: \$300/kg		\$400/kg	\$500/kg	\$600/kg	\$700/kg
12% discount		-	-	-	10	21	
10% discount		-	-	5	18	30	
8% discount		-	-	12	28	43	
5% discount		-	3	27	48	69	
<b>Makuutu 1xNAV sensitivity to recovery and payability</b>							
<b>Makuutu NPV8% (US\$m)</b>		Recov: 20%	25%	27%	30%	35%	
<b>Payability: 60%</b>		-	-	-	-	-	
<b>Payability: 70%</b>		3	-	-	-	-	
<b>Payability: 80%</b>		60	47	44	43	44	
<b>Payability: 90%</b>		111	95	92	90	91	
<b>Payability: 100%</b>		161	143	139	136	137	
<b>Valuation over time</b>		44,742	45,107	45,473	45,838	46,203	
Makuutu NPV (US\$m)		(19.9)	(20.8)	(20.5)	18.3	60.3	
Downstream		57.6	62.2	67.2	72.6	78.4	
Exploration and in-situ tonnes		307.5	307.5	307.5	307.5	307.5	
Cntrl G&A & fin costs (US\$m)		(76.0)	(78.3)	(80.7)	(90.9)	(81.8)	
Net cash at 1Q (A\$m)		8.0	20.3	18.5	76.1	1.5	
1xNAV (US\$m)		277	291	292	384	366	
P/NAV (x):		0.18x	0.23x	0.25x	0.18x	0.19x	
1xNAV share px FD (A\$/sh)		0.12	0.10	0.09	0.13	0.12	
ROI to equity holder (% pa)		450%	108%	59%	54%	40%	
<b>Sources and uses of cash</b>							
SCPe evaluation costs		A\$10m	SCPe current cash + options		A\$12m		
SCPe capex (US\$121m @ 60%)		A\$103m	Debt package		A\$0m		
SCPe contingency		-A\$26m	Equity Raised		A\$75m		
SCPe G&A + fin. cost to prodn		A\$13m					
SCPe working capital		-A\$13m					
Total uses		A\$87m	Total proceeds		A\$87m		
<b>Production (100%)</b>							
		Jun '24	Jun '25	Jun '26	Jun '27	Jun '28	
Makuutu (t REE)		--	--	281	1,635	1,547	
Makuutu (t Nd+Pr)		--	--	50	437	414	
Makuutu (t Dy)		--	--	5	65	64	
Makuutu (t Tb)		--	--	1	10	10	
Makuutu revenue (US\$/kg REE)		--	--	55	59	60	
Makuutu cash cost (US\$/kg REE)		--	--	59	38	40	
Makuutu AISC (US\$/REE)		--	--	79	52	54	
Refinery (TREO produced)		--	--	--	--	--	
Refinery (t Nd+Pr)		--	--	--	--	--	
Refinery (t Dy)		--	--	--	--	--	
Refinery (t Tb)		--	--	--	--	--	
Refinery share of Makuutu feed (%)		--	--	--	--	--	
Refinery EBITDA margin (%)		--	--	--	--	--	
Refinery revenue (US\$/kg REO)		--	--	--	--	--	
<b>Resource / Reserve</b>							
		Mt	pm	TREO	00t	RE\$m	insituEV/insitu
Measured, ind. & inf.		532	640	340	21,656	0.29%	
SCPe Mine Inventory		173	855	148	6,019	1.03%	
<b>Commodity price</b>							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
NdPr price (US\$/kg)		143	113	120	120	120	
<b>Share data</b>							
Basic shares (m):		4643.0	D + options (m):		4,679.7	FD/FF	7,020.0
<b>Ratio analysis</b>							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
FD shares out (m)		3,873	5,378	4,643	4,673	4,673	
EPS (US\$/sh)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
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)	(0.00)	0.01	0.00	
FCF/sh (US\$/sh)		(0.00)	(0.00)	(0.00)	(0.01)	(0.02)	
FCF yield pre growth (US\$/st)		3%	(4%)	(3%)	39%	11%	
FCF yield (%)		(15%)	(5%)	(8%)	(47%)	(73%)	
EBITDA margin (%)		-	-	-	-	(50%)	
FCF margin (%)		--	--	--	--	(569%)	
ROA (%)		(9%)	(11%)	(11%)	(4%)	(5%)	
ROE (%)		(10%)	(12%)	(11%)	(7%)	(9%)	
ROCE (%)		(10%)	(12%)	(11%)	(2%)	(4%)	
PER (x)		(17x)	(20x)	(22x)	(13x)	(11x)	
P/CF (x)		(26x)	(24x)	(20x)	(13x)	(12x)	
EV/EBITDA (x)		(13x)	(20x)	(17x)	(5x)	(15x)	
<b>Income statement</b>							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Revenue (US\$m)		--	--	--	--	13	
COGS (US\$m)		--	--	--	--	(15)	
<b>Gross profit (US\$m)</b>		--	--	--	--	<b>(2)</b>	
Expenses (US\$m)		(3)	(4)	(1)	(2)	(5)	
Impairment & other (US\$m)		--	--	--	--	--	
Net finance costs (US\$m)		0	--	--	(3)	(2)	
Tax (US\$m)		--	--	--	--	--	
Minority interest (US\$m)		--	--	--	--	--	
<b>Net income attr. (US\$m)</b>		<b>(3)</b>	<b>(4)</b>	<b>(1)</b>	<b>(5)</b>	<b>(8)</b>	
EBITDA (US\$m)		(5)	(5)	(5)	(5)	(7)	
<b>Cash flow</b>							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Profit/(loss) after tax (US\$m)		(5)	(5)	(5)	(8)	(10)	
Add non-cash items (US\$m)		1	--	(0)	--	1	
Less wkg cap / other (US\$m)		(0)	--	(0)	13	(14)	
<b>Cash flow ops (US\$m)</b>		<b>(4)</b>	<b>(5)</b>	<b>(5)</b>	<b>5</b>	<b>(23)</b>	
PP&E (US\$m)		--	(1)	(3)	(53)	(51)	
Other (US\$m)		(2)	(1)	--	--	--	
<b>Cash flow inv. (US\$m)</b>		<b>(11)</b>	<b>(1)</b>	<b>(3)</b>	<b>(53)</b>	<b>(51)</b>	
Debt draw (repayment) (US\$m)		--	--	--	102	--	
Equity issuance (US\$m)		30	--	6	76	--	
Other (US\$m)		--	--	--	--	--	
<b>Cash flow fin. (US\$m)</b>		<b>30</b>	<b>--</b>	<b>6</b>	<b>178</b>	<b>--</b>	
Net change post forex (US\$m)		16	(6)	(2)	130	(75)	
FCF (US\$m)		(13)	(6)	(8)	(48)	(75)	
<b>Balance sheet</b>							
		Jun '22	Jun '23	Jun '24	Jun '25	Jun '26	
Cash (US\$m)		27	20	19	148	73	
Accounts receivable (US\$m)		1	1	1	--	2	
Inventories (US\$m)		--	--	--	--	2	
PPE & exploration (US\$m)		13	14	17	70	120	
Other (US\$m)		9	9	9	9	9	
<b>Total assets (US\$m)</b>		<b>49</b>	<b>44</b>	<b>45</b>	<b>227</b>	<b>206</b>	
Debt (US\$m)		--	--	--	102	102	
Other liabilities (US\$m)		1	1	0	13	2	
Shareholders equity (US\$m)		77	77	83	159	159	
Retained earnings (US\$m)		(29)	(34)	(39)	(47)	(56)	
Minority int. & other (US\$m)		--	--	--	--	--	
<b>Liabilities+equity (US\$m)</b>		<b>49</b>	<b>44</b>	<b>45</b>	<b>227</b>	<b>206</b>	
Net cash (US\$m)		27	20	19	46	(28)	
Net debt to NTM EBITDA (x)		5.4x	4.1x	3.7x	7.0x	1.4x	

Source: SCP estimates

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**TENDER:** The analyst recommends tendering shares to a formal tender offering

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

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