Chilwa Minerals CHW.AX

Equity Research Australia | Materials

TRIM CAPITAL

23 March 2026

Emerging critical mineral play in Malawi

Chilwa Minerals' mining project has significant economic potential given presence of multiple critical minerals and is poised for commercial production within five years, given confluence of various factors. **We initiate coverage with a valuation of A$1.53 per share.**

Key Messages

Promising project due to multiple commodities: CHW owns 100% of Lake Chilwa project, containing heavy mineral sands (HMS), niobium, and rare earth elements (REE) across various sources such as monazites, ionic clays, and carbonatites. Samples from Mposa deposit had ilmenite (76%), zircon (9.5%), and monazite (2-3%). Meanwhile, exploration of Mpyupyu deposits indicated the presence of potentially high-grade REE carbonatites.

Growing demand for critical minerals: There is growing demand for ilmenite and rutile since they are feedstocks for titanium, which has strategic uses in aerospace, defense, and medical industries. Niobium is commonly used in steelmaking for aerospace, defense, and electronics. Zircon has emerging applications in nuclear plants and EV batteries. Rare earths (REE) demand is rapidly increasing (prices ~2x over past year) as countries transition towards EV and renewable energy. All these minerals and elements are designated as critical by the US, Australia, and Europe.

Project advancing to the next stage: CHW has Mota-Engil as their strategic shareholder (30% stake) and project partner (service agreement), giving them access to key equipment and construction capabilities given the firm's long history (~50 years) of operations in Africa. With this, CHW's exploration activities are progressing quickly and moving towards scoping/feasibility studies in 2026. We see the project eventually moving to commercial production within 4 years, given management execution and targets (decision to mine by June 2028), government/local community support, infrastructure development (proposed Liwonde Dry Port by Mota-Engil), and potential funding from US entities.

Forecast & Valuation

Valuation of $1.53: We valued CHW using a target EV/Resource multiple. CHW's mineral resource estimate of 113 Mt is multiplied by the target multiple of 1.27x (average of ASX-listed HMS+REE mining firms and Malawi mining firms), resulting in an implied share price of A$1.53, providing a 103.3% upside from current prices.

Catalysts and Risks

NASDAQ IPO: CHW is planning to conduct an IPO in NASDAQ by 2Q26, with expected proceeds of US$10m (~A$14.3m) that would be enough to fund at least a year (or 4 quarters) of exploration activity or until 30 June 2027. This will also give them better access to capital markets for subsequent funding rounds.

Risk to investment thesis: Some of the key risks that CHW faces are uncertainty on exploration results, mining regulations imposed by Malawi government, and potential for significant dilution given need for further capital raises.

Chilwa Minerals

Chilwa Minerals Limited is an Australian company focused on the development of the Lake Chilwa Project (100% owned), located in Malawi, Africa. Exploration activities have led to the discovery of heavy mineral sands (ilmenite, rutile, zircon, garnet, and monazite) and rare earth elements across various deposits in their tenement area.

https://www.chilwaminerals.com.au/

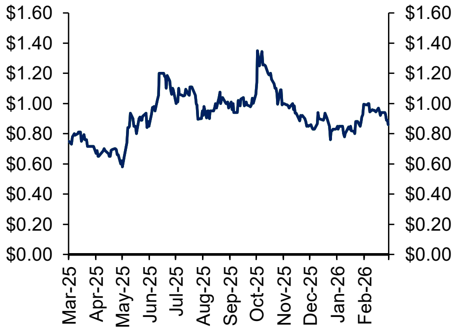
Key Data

Valuation (A$)	1.53
Current Price (A$)	0.755
Market Cap (A$)	73.9
30D Ave Turnover (A$)	35,199

Trim Capital forecasts

FY Year End	23A	24A	25E	26E
NPAT ($m)	(2)	(3)	(4)	(4)
EPS (c)	(2.6)	(4.4)	(3.9)	(3.7)
EPS gwth (%)	(82.3)	45.2	(10.9)	1.4
PE (x)	(37.2)	(25.6)	(28.8)	(28.4)
DPS (c)	-	-	-	
Div yield (%)	-	-	-	
ROE (%)	(36.3)	(24.3)	(17.5)	(13.6)
PB (x)	5.7	4.0	3.2	2.6

12- Month Share Price Performance



Source: LSEG

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Financial Summary

CHILWA MINERALS LTD — CHW-AX

Year end 30 June, A$

12-MONTH SHARE PRICE PERFORMANCE

MARKET DATA		
Price	A$	$0.76
Valuation	A$	$1.53
52 week low - high	A$	0.58 - 1.50
Market capitalisation	A$m	74
Shares on issue (basic)	m	98
Options / rights (currently antidilutive)	m	21
Other equity	m	0
Shares on issue (fully diluted)	m	119

PROFIT AND LOSS		FY23A	FY24A	FY25A	FY26E	FY27E
Revenues	**A$m**	**0.0**	**0.2**	**0.1**	**0.1**	**0.1**
Administration expenses	A$m	-0.1	-0.3	-0.5	-0.5	-0.6
Compliance and regulatory expenses	A$m	-0.2	-0.2	-0.5	-0.6	-0.8
Consulting expenses	A$m	-0.4	-0.3	-0.5	-0.6	-0.8
Employee benefits	A$m	-0.3	-0.8	-0.9	-1.0	-1.0
Exploration and evaluation expenditure	A$m	-0.1	0.0	0.0	0.0	0.0
Total Operating expenses	A$m	-1.0	-1.7	-2.4	-2.7	-3.2
EBITDA	**A$m**	**-1.0**	**-1.5**	**-2.3**	**-2.6**	**-3.1**
Depreciation	A$m	0.0	0.0	-0.1	0.0	0.0
Share-based payments	A$m	0.0	-0.2	-0.8	-0.9	-0.9
Taxes	A$m	0.0	0.0	0.0	0.0	0.0
Reported NPAT	**A$m**	**-1.0**	**-1.7**	**-3.2**	**-3.5**	**-4.0**
Cash NPAT	A$m	-1.0	-1.5	-2.3	-2.6	-3.1
Weighted average diluted shares	m	8.2	67.0	72.5	115.0	128.6

INVESTMENT FUNDAMENTALS		FY23A	FY24A	FY25A	FY26E	FY27E
EPS - diluted reported	cps	-12.5	-2.6	-4.4	-3.9	-3.7
EPS - diluted cash	**cps**	**-12.5**	**-2.2**	**-3.2**	**-2.8**	**-2.9**
EPS growth	%	n.a.	-82%	45%	-11%	1%
PE	x	-6.1	-34.3	-23.6	-26.5	-26.1
DPS	cps	0.00	0.00	0.00	0.00	0.00
Franking	%	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend yield	%	0%	0%	0%	0%	0%
Payout ratio	%	0%	0%	0%	0%	0%
Operating cash flow per share	cps	-0.08	-0.03	-0.03	-0.03	-0.03
Free cash flow to equity per share	cps	0.90	-0.06	-0.05	0.00	-0.01
FCF yield	%	119%	-8%	-6%	1%	-1%
Enterprise value	$m	65.9	69.8	73.2	72.7	74.0
EV/Total Revenue	x	n.a.	344.0	581.0	726.6	740.5
EV/EBITDA	x	-64.4	-47.3	-31.6	-27.9	-23.9
EV/EBIT	x	-64.4	-40.0	-23.0	-20.6	-18.4
NAV per share	A$	-0.1	0.1	0.2	0.3	0.3
Price / NAV	x	-13.2	5.0	3.5	2.8	2.2
NTA per share	A$	-0.1	0.1	0.2	0.3	0.3
Price / NTA	x	-13.2	5.0	3.5	2.8	2.2

BALANCE SHEET		FY23A	FY24A	FY25A	FY26E	FY27E
Cash and cash equivalents	A$m	8.0	4.2	0.7	1.2	-0.2
Receivables	A$m	0.2	0.1	0.1	1.2	2.8
Property, plant and equipment	A$m	0.0	0.1	1.1	1.1	1.1
Right of use assets	A$m	0.0	0.1	0.1	0.1	0.1
Exploration and evaluation	A$m	0.0	6.9	16.3	24.7	35.7
Other assets	A$m	0.0	0.0	0.0	0.0	0.0
Total Assets	**A$m**	**8.2**	**11.2**	**18.2**	**28.2**	**39.4**
Trade and other liabilities	A$m	1.1	1.0	2.0	2.0	2.0
Borrowings	A$m	0.0	0.0	0.0	0.0	0.0
Other liabilities	A$m	7.7	0.1	0.1	0.1	0.1
Total Liabilities	**A$m**	**8.7**	**1.1**	**2.1**	**2.1**	**2.1**
Net assets	**A$m**	**-0.5**	**10.1**	**16.1**	**26.1**	**37.3**
Net tangible assets	**A$m**	**-0.5**	**10.1**	**16.1**	**26.1**	**37.3**
Invested capital	**A$m**	**-8.5**	**6.0**	**15.4**	**24.9**	**37.4**
Tangible invested capital	**A$m**	**-8.5**	**6.0**	**15.4**	**24.9**	**37.4**
Contributed equity	A$m	0.8	11.9	19.0	31.2	45.7
Reserves	A$m	0.0	1.2	3.4	3.4	3.4
Retained earnings/accumulated losses	A$m	-1.3	-3.0	-6.2	-9.7	-13.8
Total equity	**A$m**	**-0.5**	**10.1**	**16.1**	**24.8**	**35.3**
Basic shares on issue	m	8.2	67.2	75.8	96.4	110.9

KEY RATIOS		FY23A	FY24A	FY25A	FY26E	FY27E
NTA/Net Receivables	%	-216%	19712%	11383%	2154%	1340%
ROE - reported	%	-2423%	-36%	-24%	-17%	-13%
ROE - cash	%	-2423%	-31%	-18%	-12%	-10%
Net debt	**A$m**	**-8.0**	**-4.1**	**-0.7**	**-1.2**	**0.2**
Interest cover	x	n.a.	n.a.	n.a.	n.a.	n.a.
Gearing (net debt / EBITDA)	x	7.8	2.8	0.3	0.5	-0.1
Leverage (net debt / invested capital)	x	0.9	-0.7	0.0	0.0	0.0

DUPONT ANALYSIS		FY23A	FY24A	FY25A	FY26E	FY27E
Net Profit Margin	%	n.a.	n.a.	n.a.	n.a.	n.a.
Asset Turnover	x	0	0	0	0	0
Return on Assets	%	-23%	-18%	-22%	-15%	-12%
Financial Leverage	x	105.5	2.0	1.1	1.1	1.1
Return on Equity	%	-2423%	-36%	-24%	-17%	-13%

KEY PERFORMANCE INDICATORS		FY23A	FY24A	FY25A	FY26E	FY27E
HMS mineral resource estimate (MRE)	Mt	n.a.	n.a.	n.a.	n.a.	n.a.
HMC produced	Kt	n.a.	n.a.	n.a.	n.a.	n.a.
HMC sold	Kt	n.a.	n.a.	n.a.	n.a.	n.a.
Average realised price	A$/Kt	n.a.	n.a.	n.a.	n.a.	n.a.

CASH FLOW		FY23A	FY24A	FY25A	FY26E	FY27E
Net operating cashflow	**A$m**	**-0.6**	**-1.8**	**-2.1**	**-3.4**	**-3.4**
Capital expenditure	A$m	0.0	-0.1	-1.1	0.0	0.0
Exploration and evaluation	A$m	0.0	-1.7	-7.3	-8.4	-11.0
Net investment cashflow	**A$m**	**0.0**	**-1.8**	**-8.4**	**-8.4**	**-11.0**
Equity	A$m	8.0	-0.4	7.1	12.3	13.1
Debt	A$m	0.0	0.0	0.0	0.0	0.0
Net financing cashflow	**A$m**	**8.0**	**-0.4**	**7.1**	**12.2**	**13.1**
Net cash flow	**A$m**	**7.4**	**-3.9**	**-3.4**	**0.5**	**-1.3**
Free cash flow to equity	A$m	7.4	-3.8	-3.4	0.5	-1.3

HALF YEARLY DATA		1H22A	2H22A	1H23A	2H23A	1H24A
Reported NPAT	A$m	0.0	-0.3	-0.5	-0.5	-0.9
Cash NPAT	A$m	0.0	-0.3	-0.5	-0.5	-0.8
EPS - diluted cash	**cps**	n.a.	n.a.	-0.1	-0.1	0.0
EPS - diluted reported	cps	n.a.	n.a.	-0.1	-0.1	0.0
DPS	cps	0.0	0.0	0.0	0.0	0.0

Source: CHW reports, Trim estimates

Investment Thesis

- **Promising project due to multiple commodities:** Chilwa Minerals owns 100% of the Chilwa Critical Minerals project which contains heavy mineral sands (HMS), niobium, and rare earth elements (REE) across various sources such as monazites, ionic clays, and carbonatites. Samples extracted from the Mposa deposit (late-stage exploration) had demonstrated a high percentage of valuable heavy minerals (VHM) at ~ 90% including ilmenite (76%), zircon (9.5%), rutile (1.4%), garnet (1.6%) and monazite (2-3%). Early-stage exploration in Mpyupyu deposits have indicated the presence of carbonatites that are rich in REE and are speculated to be high-grade (considering the proximity to Kangankunde REE project by Lindian Resources). The presence of multiple commodities increases the prospects and economics of the overall project, which is why the company is expediting its exploration and evaluation activities by running simultaneous drilling programs for HMS (sonic drilling) and REE (diamond drilling).

- **Growing demand for critical minerals:** Titanium has been designated as a critical mineral by major economies (US, EU, UK, Canada, Australia, Japan) due to its wide application across industries (coatings and pigments for industrial/consumer, metal for construction, energy, aerospace, EVs). Ilmenite and rutile, which form majority of resources in CHW's Mposa deposit, are feedstocks for titanium. There is also zircon, mostly used in the ceramics market but has emerging applications for nuclear plants (for powering data centres) and EV batteries. Overall, global demand for these minerals (ilmenite, rutile, zircon) are expected to grow over the medium-to-long term. While there are current oversupply concerns in the global market, TZMI (global consultant in mining industry) expects there will eventually be lower supply in a few years due to continued depletion and shorter mine life. Niobium is commonly used in steelmaking for aerospace, defense, and electronics. Meanwhile, global demand for REE is rapidly increasing (prices ~2x over past year) as countries continue to transition towards EV and renewable energy. All these minerals and elements are designated as critical by the US, Australia, and Europe.

- **Project poised to advance to the next stage**: CHW has the distinct advantage of having Mota-Engil as their strategic shareholder (30% stake) and project partner (through a service agreement). Equipment (drill rigs, vehicles), facilities (accommodation, offices, storage), and personnel (technical and admin) are provided by Mota-Engil 'at-cost', made possible by the firm's long history (~50 years) of operations in mining, construction, and infrastructure across Africa. With this, CHW's exploration activities are progressing quickly, and they are already working on scoping/feasibility studies for 2026. CHW's ultimate target is to obtain a mining license (transition from exploration) within 2 years and have a decision-to-mine/commercial production within 4 years. We expect this to be attainable given the government/local community support (pro-mining), infrastructure development (proposed Liwonde Dry Port that connects to Nacala Port in Mozambique wherein Mota-Engil has the right to build), and potential funding from US entities (CHW managing director in talks with US officials; mining projects operating near CHW had secured funding from US DFC and IFC).

Catalysts

	Expectation	Timing
NASDAQ IPO	• This will broaden the company's investor base and provide them greater access to funding. It will also give opportunities for partnerships, offtake agreements, and access to government funding/grants.	• It is expected to happen sometime between May and June 2026.
Definitive Feasibility Study	• The company will come up with a detailed mine plan, environmental approvals, and a financial model showing a clear Internal Rate of Return (IRR) for the project.	• The company is aiming to start pre-feasibility studies (PFS) by mid-2026. We expect it may take around 12 months or more until we see a finalisation into a definitive feasibility study.
Mining Development Agreement	• The company currently holds an exploration license and is aiming to transition into a mining license once the project is deemed economically feasible. Transition into this phase will boost investor confidence and upside prospects.	• The company is currently meeting with the Malawi government and is in the early stage works for preparing the application for a mining development agreement / mining license. We expect to see progress on this by 2027 (at the earliest) or 2028.

SWOT Analysis

	Internal		
Positive	**Strengths** • **Multi-commodity project.** Lake Chilwa project contains heavy mineral sands (HMS), rare earth elements (REE) across multiple deposits, which increases the prospects and economic feasibility of the overall project. Metallurgical test results show that ilmenite and zircon (from HMS) were at/near market specification. Meanwhile, the REE in the carbonatites (Mpyupyu deposits) are speculated to be high-grade, considering the proximity to Kangankunde REE project by Lindian Resources. Moreover, recent drilling activities in the Mpyupyu deposit had shown the presence of potentially high-grade niobium. • **Mota-Engil partnership:** CHW has the distinct advantage of having Mota-Engil as their strategic shareholder (30% stake) and project partner (through a service agreement). Equipment (drill rigs, vehicles), facilities (accommodation, offices, storage), and personnel (technical and admin) are provided by 'at-cost', made possible by the firm's long history (~50 years) of operations in mining, construction, and infrastructure across Africa.	**Weakness** • **Negative cash flows:** The company currently has no revenues as it is still actively working on the exploration and evaluation of its mineral resources (HMS and REE). There is heavy reliance on equity issuances to finance exploration and administrative outlays, which brings dilution risk to existing shareholders. • **Dilution risk:** Aside from prospective equity issuances (i.e. NASDAQ US$10m IPO), we also note of outstanding performance rights (18.75 million) and options (2.5 million) that could convert to common shares upon meeting certain thresholds.	Negative
	Opportunities • **NASDAQ IPO**: This will broaden the company's investor base and provide them greater access to funding. It will also give opportunities for partnerships, offtake agreements, and access to US government funding/grants. • **Potential US funding:** CHW's managing director has recently been in talks with US Consulate in Malawi, representatives of US State Department, and with the US Department of Finance Corporation. • **Niobium and REE Ionic clay:** CHW is assessing the presence of REE Ionic Clay material and niobium within their project area. If these are proven to be economically feasible to mine/extract, then this will boost the Chilwa project economics through additional revenue streams, diversification, and efficiencies from shared infrastructure.	**Threats** • **Exploration uncertainty**: There is no guarantee that the company's exploration activities would be successful and result in an economically feasible project. Weather-related factors may also cause delays in the exploration/ project timeline. • **Sovereign risk:** Malawi is subject to differing legal and political systems. Possible risks include changes in the terms of mining legislation, changes to royalty arrangements, changes to taxation rates and concessions and changes in the ability to enforce legal rights. The newly elected President of Malawi, Peter Mutharika, had imposed an order that prohibits exposrt of raw minerals from the country.	
	External		

Risk Assessment

Risk Scorecard

Comfort Level	Comment	Reference
Country Risk	CHW's Lake Chilwa project is in Malawi, an emerging mining jurisdiction in South Africa. While current government is supportive of mining and political climate is stable, it is a land-locked country with inadequate roads, electricity, communications, water supply, and healthcare infrastructure. There is a scarcity of skilled and semi-skilled labour.	Page 13
Resource Estimates	JORC Mineral Resource Estimate (MRE) of 113 million tonnes (Mt) for heavy mineral sands (HMS) containing ilmenite (76%), zircon (9.5%), and monazite (2-3%). While resource has economic potential, conversion to proven reserves is pending the completion of a Pre-Feasibility Study (PFS) and definitive metallurgical testing. Rare earth elements (REE) have been found in monazite below the HMS and, also in carbonatites in other deposits. However, it is still undergoing resource estimation.	Page 7
Commodity Pricing	CHW have yet to sign any offtake agreements, exposing them to price risks for titanium (ilmenite, rutile) and zircon, both of which are currently facing oversupply conditions. However, TZMI expects there will eventually be structural supply deficits due to the depletion of Tier-1 deposits globally. When CHW enters production stage (in next 5 years), the supply-demand situation may have improved by then.	Page 7
Management	Directors and executives have extensive experience (20+ years) in mining operations and were the ones that established the company (Chairman Alexander Shaw, Managing Director Cadell Buss, Director Jose Martins). Manuel Mota, the current deputy CEO of Mota-Engil Group, sits at the CHW board.	Page 14
Execution	There is no guarantee that CHW's exploration activities would result to an economically feasible project. It will depend on the scoping and feasibility studies planned in 2026. This risk is somehow mitigated by the considerable holdings (common shares, performance rights) of key stakeholders (management/board, Luso Mining, Mota Family), and their efforts to provide/secure funding.	Page 10
Operational	Current and future activities rely heavily on its service agreement with Mota-Engil, which is also a substantial owner in the company (31% stake through Luso Global Mining). In the scenario that this agreement is terminated, CHW may experience losses and incur higher-than-expected costs to achieve the same level of operations.	Page 9
Cost Management	Operating cash burn is ~A$3.55m per quarter for payroll (staff and admin) and exploration activities (drilling rigs). Activities are being done at a cost-efficient manner, given most employees are sourced locally (Malawi) and equipment/technical personnel are provided 'at-cost' by project partner Mota-Engil.	Page 9
Funding & Dilution	Current cash of A$3.59m (as of 31 December 2025) and A$2.05m received in January 2026 (Tranche 2 of the last placement) will last 1 quarter or until 31 June 2026. While there is some uncertainty over liquidity, CHW is planning a NASDAQ IPO by 3Q 2026 for US$10m (~A$14.3m), which will be enough to fund at least a year of exploration activity (until June 2027). Moreover, they are in talks with the US DFC for additional funding.	Page 10
Environmental Impact	Assessment of potential environmental impact of planned mining activities is under way. Extraction of HMS is not expected to have major impact given rehabilitation can be immediately done on the displaced sands. CHW is also implementing measures to reduce impact on the environment and local community.	Page 16

Comfort level:

High *Medium* *Low*

Business Model

Company History

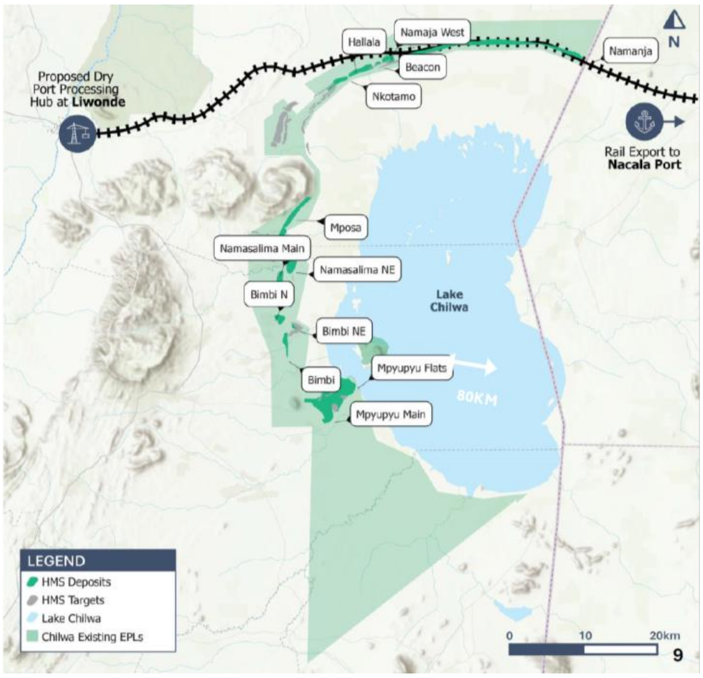
Chilwa Minerals Ltd (CHW) was incorporated on 1 February 2022 for the purpose of acquiring the Lake Chilwa Heavy Mineral Sands Project in Malawi, Africa from Luso Global Mining BV (Luso), which is the mining subsidiary of Mota-Engil. CHW currently owns the Chilwa project, which is located around the northern, western and southern shores of Lake Chilwa in southern Malawi.

A mineral resource estimate (MRE) was done in 2012, which had an initial estimate of 2.4Mt of contained THM (1.0% cutoff, Inferred per JORC classification). Further drilling, metallurgical and process test work studies were completed in 2014 and 2015 across the key deposits of Mpyupyu, Bimbi, Mposa, and Halala. However, failures in the primary laboratory resulted in an incorrect assay of samples, overstated slimes and slightly understated THM values. The project is currently covered by 2 exploration licenses EL0670/22 and EL0671/22, which were granted on 26 and 27 September 2022 respectively for a 3-year term (renewable).

Figure 1: Location of Malawi in Africa

Source: Company reports

Figure 2: Company's mine sites/deposits in the project area



Source: Company reports

Since the IPO / acquisition in mid-2023, activities and efforts had been focused on increasing the confidence level of the deposits (Inferred to Measured), search for further mineralisation, and drilling of the Mposa deposit, which has the biggest estimated resource of the whole project (30%). The company has used sonic drilling to improve sample recovery rates, conducted aeromagnetic and radiometric surveys to identify high priority areas, and purchased a Separation Lab from ALS to significantly improve assay turnaround times (vs shipping samples to Perth, Australia).

These activities were possible due to the expertise of Mota-Engil, a Portuguese multinational organisation with operations spanning 3 continents and 28 countries that focuses on construction and infrastructure management in areas that include energy and mining. CHW currently has a service agreement with the group, which covers drill rigs, offices, accommodation, camp, vehicles, storage shed and personnel (technical and admin) 'at cost'. It also retains a 30% stake in CHW as a major shareholder / strategic investor.

Mineral Resources

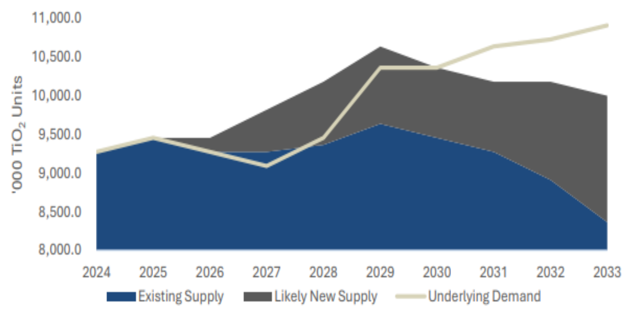
Heavy Mineral Sands (HMS): Exploration activities have identified the presence of HMS across various deposits within the project area, mostly in the Mposa and Mpyupyu deposits. Samples from the Mposa deposit had demonstrated a high percentage of valuable heavy minerals (VHM) at ~ 90% including ilmenite (76%), zircon (9.5%), rutile (1.4%), garnet (1.6%) and monazite (2-3%). Metallurgical results disclosed on 30 September 2025 indicate that the ilmenite and zircon were at/near market specification.

Figure 3: Metallurgy of Mposa samples

Source: Company Presentation

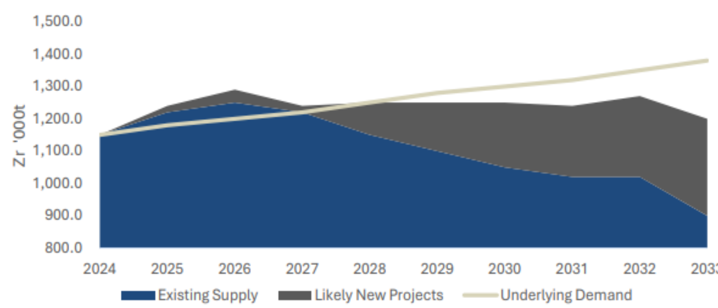
- Ilmenite and rutile are minerals from which titanium dioxide is derived. According to Kenmare Resources (major player in HMS with 6% global share), around 8.5Mt of titanium dioxide are produced globally and ~88% are used in the pigments industry (coatings for industrial, house, car, ship, electronics, furniture, toys, and household items) while the rest are for titanium metals (welding rods, aerospace components). Global demand for these minerals is stable and growing, particularly from Europe and the United States which have designated titanium as a critical mineral. However, market prices for these titanium feedstocks have been volatile due to supply dynamics, particularly surplus from China.
- Zircon is a mineral with various applications across consumer, commercial, industrial, and medical sectors. It typically provides high value at low input cost, with few substitutes. More than 50% of global production is consumed in the ceramics market (kitchen and bathroom tiles, dinnerware, decorative ceramics, dentistry). Given these, market prices for zircon are sensitive to economic cycles, particularly in the construction and property industry. There appears to be a current oversupply situation in the global market, resulting in depressed prices. If processed further, zirconium could be derived and it is a material often used in nuclear reactors and other high-temperature applications.
- Monazite is a mineral where rare earth elements can be extracted and be used for magnets in high-tech consumer goods, wind turbines, and vehicle motors.

Figure 4: Titanium supply and demand forecasts



Source: TZMI data, Astron Presentation

Figure 5: Zircon supply and demand forecasts



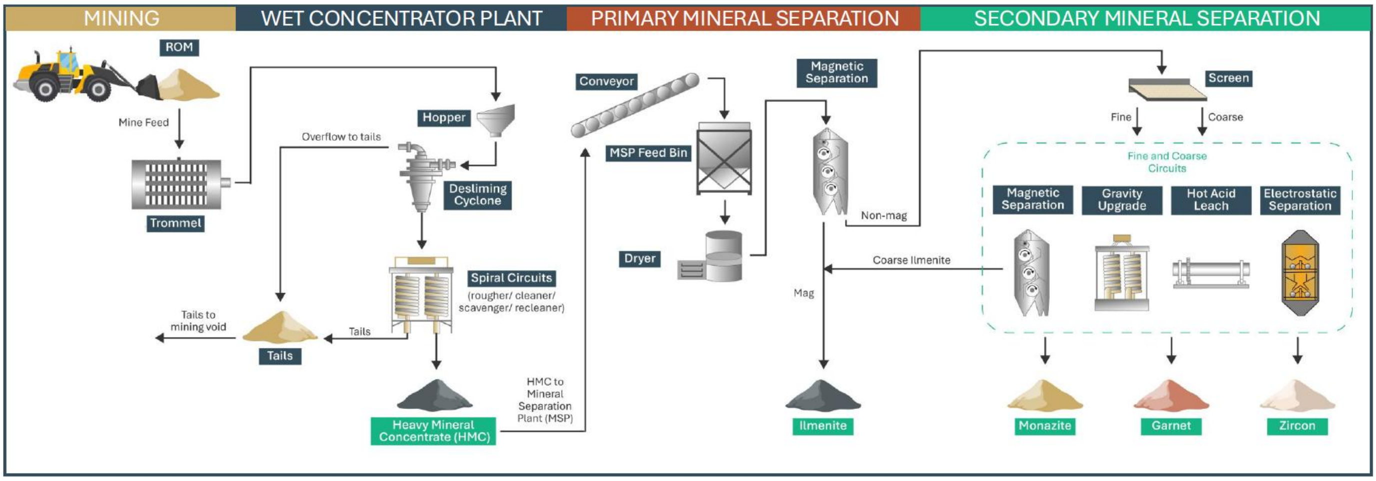
Source: TZMI, Astron Presentation

Figure 6: Chilwa Minerals' JORC Table Mineral Resources at 1.0% THM as at 25 November 2025

Deposit	Category	Volume (million m^3)	Tonnes (million t)	THM (%)	HMC (million t)	Mineral in ROM							Oversize (%)	RD
						Ilmenite (%)	Zircon (%)	Leucoxene (%)	Rutile (%)	Garnet (%)	Monazite (%)	Slimes (%)		
Mposa (Main)	Measured	12.5	21.3	4.4	0.95	3.00	0.39	0.40	0.04	0.12	0.02	19.9	15.9	1.7
Mposa (Main)	Indicated	1.8	3.1	2.8	0.09	1.85	0.26	0.25	0.02	0.08	0.01	31.2	14.0	1.7
Mposa (North)	Indicated	0.7	1.2	2.3	0.03	0.88	0.18	0.14	0.03	0.22	0.00	13.7	39.9	1.7
Bimbi	Indicated	3.0	5.1	4.55	0.23	3.85	0.25	N/A	0.11	N/A	N/A	22.4	18.0	1.7
	Inferred	1.4	2.4	3.79	0.09	3.21	0.21	N/A	0.09	N/A	N/A	24.4	16.5	1.7
Bimbi NE	Inferred	7.4	12.5	2.57	0.32	2.18	0.14	N/A	0.06	N/A	N/A	20.2	5.0	1.7
Mpyupyu (Dune)	Indicated	5.4	9.2	6.21	0.57	5.37	0.22	N/A	0.15	N/A	N/A	29.0	9.4	1.7
Mpyupyu (Flat)	Indicated	9.4	15.9	4.52	0.72	3.86	0.19	N/A	0.12	N/A	N/A	24.0	5.8	1.7
	Inferred	15.3	26.0	3.61	0.94	3.08	0.16	N/A	0.10	N/A	N/A	19.0	5.8	1.7
Nkotamo	Indicated	1.6	2.4	3.70	0.09	2.23	0.23	N/A	0.10	N/A	N/A	19.1	24.8	1.5
Halala	Indicated	5.8	8.7	3.79	0.33	2.28	0.19	N/A	0.09	N/A	N/A	9.0	3.0	1.5
Beacon	Indicated	0.7	1.0	2.63	0.03	1.82	0.16	N/A	0.08	N/A	N/A	10.5	10.9	1.5
Namanja West	Indicated	3.0	4.5	3.66	0.16	2.63	0.25	N/A	0.10	N/A	N/A	7.0	4.4	1.5
Sub Total	**Measured**	**12.5**	**21.3**	**4.44**	**0.95**	**3.00**	**0.39**	**N/A**	**0.04**	**N/A**	**N/A**	**19.9**	**15.9**	**1.7**
Sub Total	**Indicated**	**31.4**	**51.1**	**4.40**	**2.2**	**3.45**	**0.21**	**N/A**	**0.11**	**N/A**	**N/A**	**20.4**	**9.4**	**1.6**
Sub Total	**Inferred**	**24.1**	**40.9**	**3.30**	**1.35**	**2.81**	**0.16**	**N/A**	**0.09**	**N/A**	**N/A**	**19.7**	**6.2**	**1.7**
Grand Total		**68.0**	**113.4**	**4.01**	**4.54**	**3.13**	**0.23**	**N/A**	**0.09**	**N/A**	**N/A**	**20.1**	**9.5**	**1.67**

Source: Company Presentation

Figure 7: CHW flowsheet for Heavy Mineral Sands (HMS)



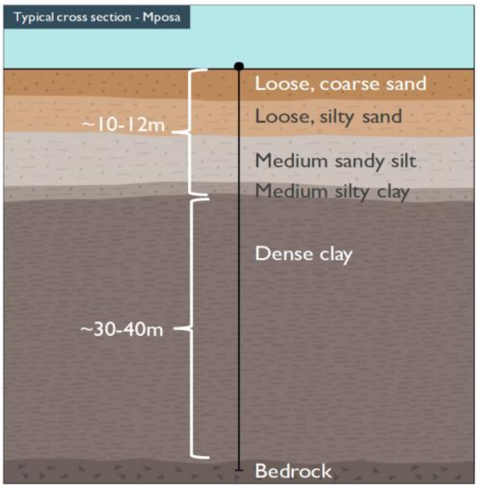
Source: Company Presentation

Rare Earth Elements (REE): Aside from the rare earth elements in the monazites found in HMS, further exploration/drilling activities led to the identification of REE in the clay material below the mineral sands. These are ionic adsorption clays, where metals physically/chemically bond to the surface of clay minerals and are a typical source of low-grade REE. The rare earth oxides found in monazites and clays were a mix of light rare earths (neodymium, cerium, lanthanum, praseodymium, europium, gadolinium, samarium) and heavy rare earths (ytterbium). There is significant demand for these REE given designation as critical minerals by the US, EU, and Australia. There are coordinated efforts to increase/secure these elements from non-Chinese sources.

- Neodymium is considered one of the most critical since it is used in everything from mobile phones and electric cars to medical equipment. It is also the main light rare earth used in the creation of permanent magnets that are heavily used in data storage systems and wind turbines.
- Praseodymium is another significant light rare earth metal that is used in alloys with magnesium to form aircraft engines, and it also finds use in the film industry for studio lighting and other projects. Like many rare earth metals, praseodymium plays a role in creating permanent magnets.

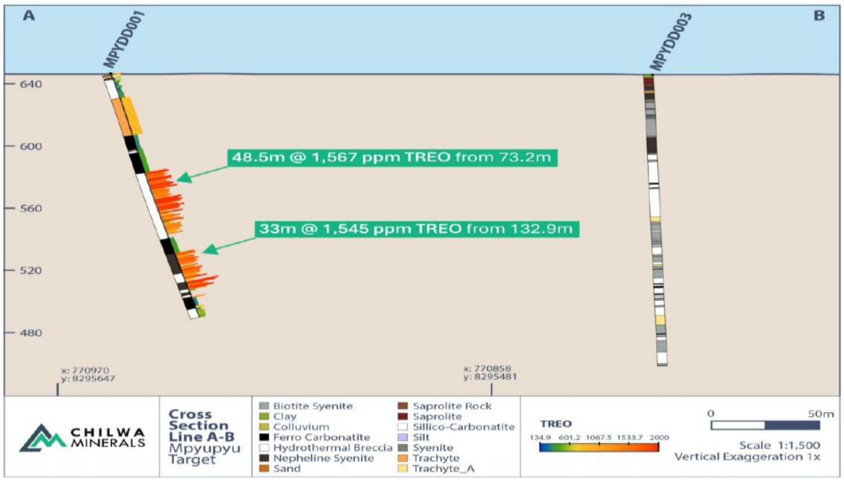
Exploration (using sonic drilling) is still at the early stages, with the company still in the process of assessing grade distribution and economic potential. But it is good to note that extraction of such ionic adsorption clays is less costly and less complex compared to other sources of REE (monazite, bastnaesite, carbonatites). The discovery of REE beneath the HMS increases the overall project viability since multiple minerals can be extracted during operations and there will be better economics due to shared infrastructure.

Figure 8: Profile of Mposa deposit



Source: Company reports

Figure 9: Drill samples in Mpyupyu deposit (for REE)



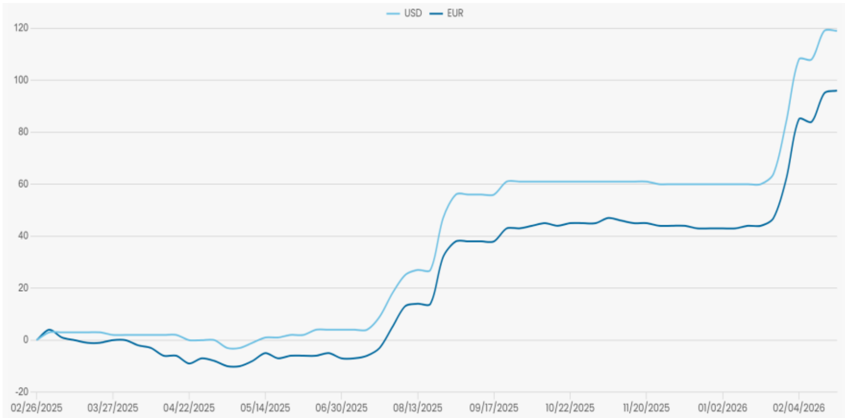
Source: Company reports

Other sources of REE were discovered in multiple areas (47 targets) of the project site but in the form of carbonatites, which are hard rocks typically associated with primary rare earth mineralisation. Exploration (using 2 diamond drills) and testing activities are ongoing at the Mpyupyu deposit and other areas to assess the 'style' of carbonatites and deposit profiles.

Figure 10: What neodymium looks like

Source: Rareearths.com

Figure 11: Neodymium price chart (1-year)



Source: Strategicmetalsinvest.com

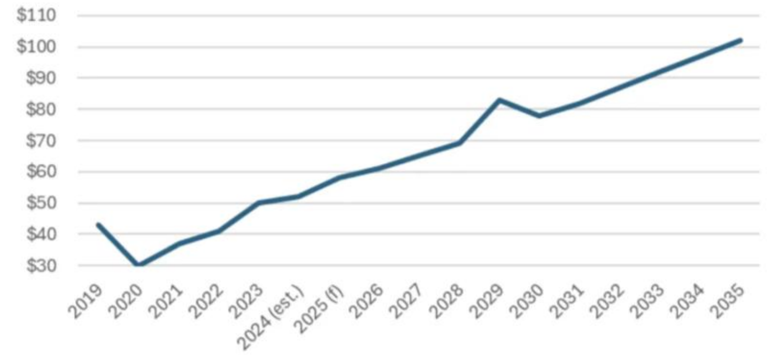
Niobium: Found in recent drilling activities in Mpyupyu deposit, niobium is a transition metal with various applications in aerospace, defense, batteries, and electronics. It is estimated that 90% of all niobium produced globally goes into the steel industry, largely as a micro-alloy with iron. The addition of niobium in steel results in significantly increased strength and reduced weight of steel products for use in construction, oil and gas, and the automotive industries. Moreover, its resistance to heat and corrosion provides various use cases such as blades for jet engines/gas turbines, camera lenses, jewellery, medical implants, cutting tools, magnets for MRI scanners, nuclear magnetic resonance (NMR) equipment, and particle accelerators.

Global production is primarily derived from just three mines: Araxa mine in Brazil (Companhia Brasileira de Metalurgia e Mineracao), Boa Vista mine in Brazil (CMOC Group., HKG:3993), and Niobec mine in Canada (Magris Performance Materials). It is estimated that Brazilian mines produce 65%-85% of the global niobium supply. Due to supply concentration, many countries (US, Australia, EU) designate niobium as a critical mineral. Prices of niobium have risen in recent years due to strong demand across Asia-Pacific (particularly China), Americas, and Europe.

Figure 12: What niobium looks like

Source: *Wikipedia*

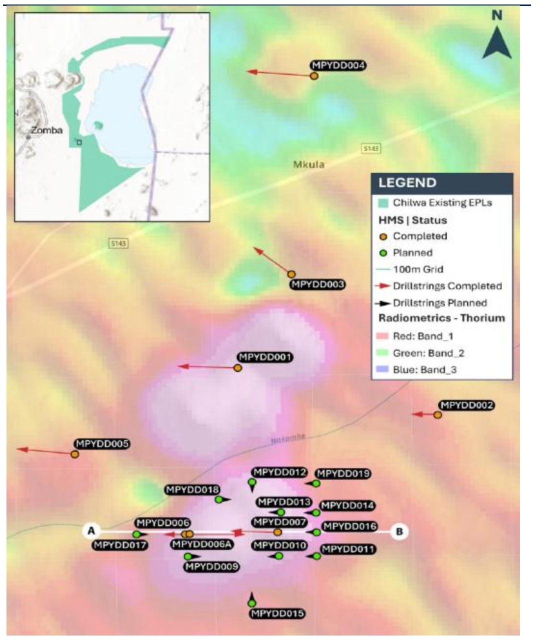
Figure 13: Niobium Oxide global prices (US$ per kg)



Source: *Mining.com.au*

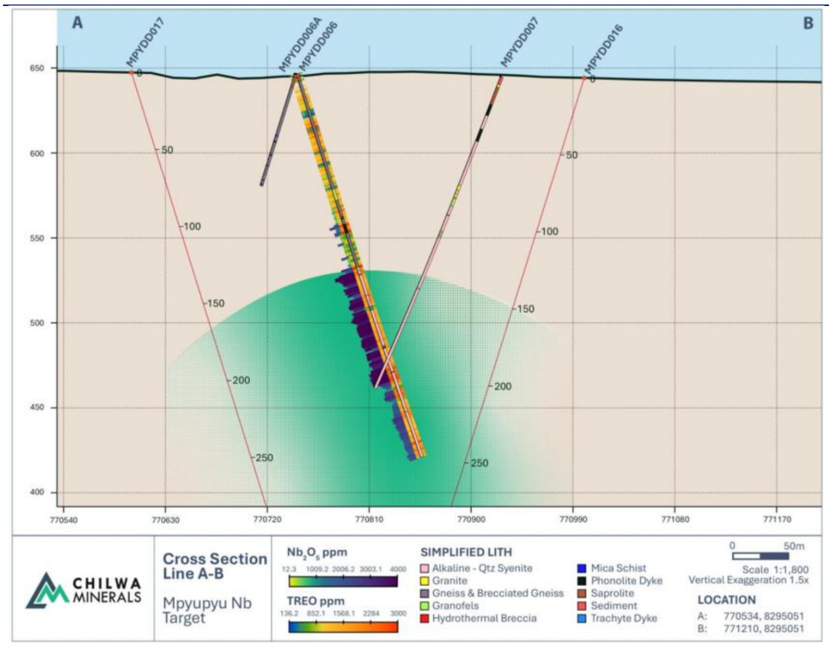
Exploration for niobium at Chilwa's project site is still in the very early stages but there are indications of potential high-grade niobium (0.31% over 126.1m from 125m downhole, 0.41%-0.57% in other intervals). If proven to be economically feasible, it will be another major source of resources, revenues, and profitability. We note that extraction and processing for niobium involves a different process compared to HMS and REE so there will likely be further capex needed for this venture. However, there may likely be some degree of synergies from shared resources such as infrastructure, equipment, and manpower.

Figure 14: Drilling activities in Mpyupyu



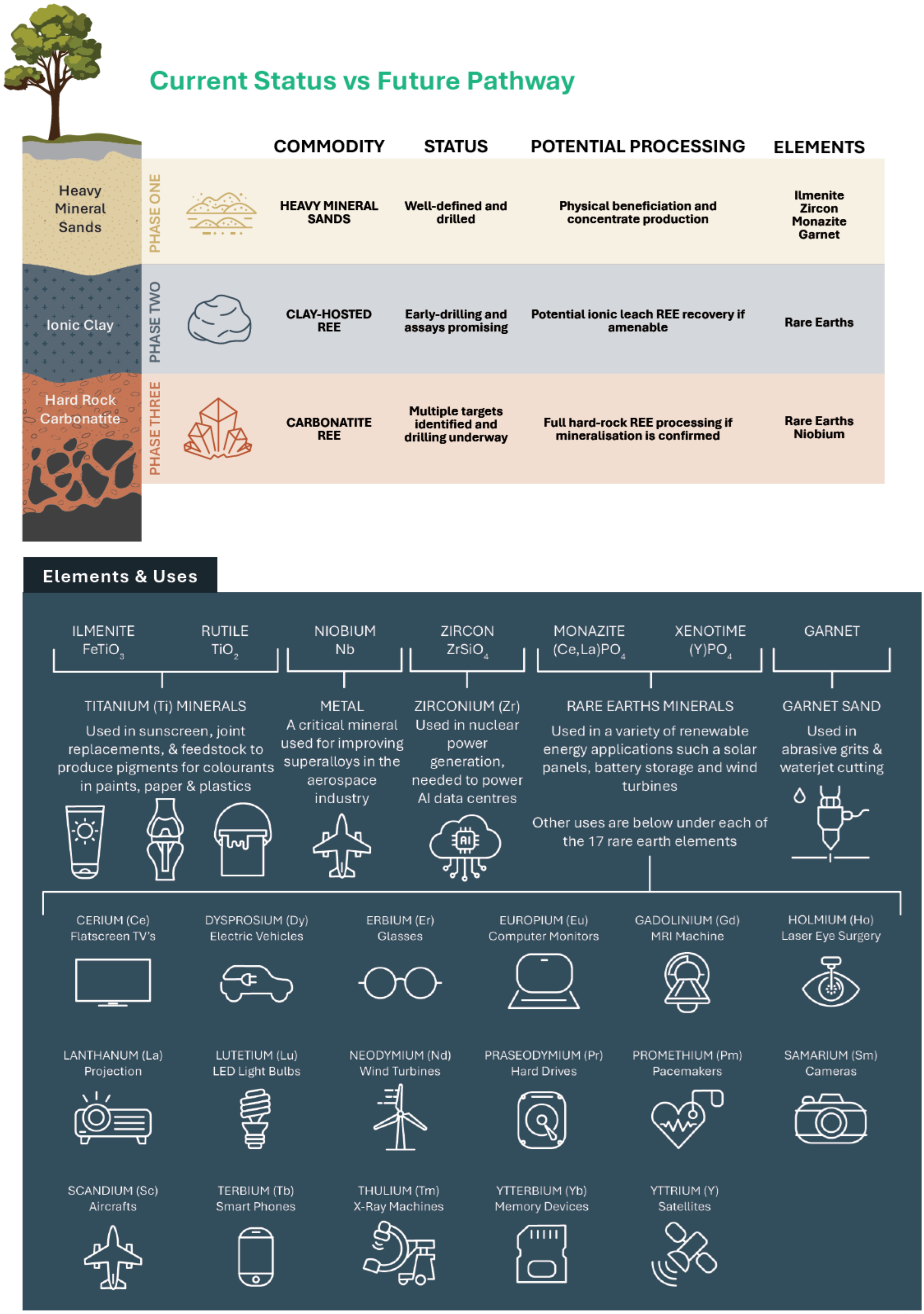
Source: *Company reports*

Figure 15: Drilling results in Mpyupyu (potential niobium = green)



Source: *Company reports*

Figure 16: Summary of Chilwa Minerals' resources, project status, and its respective applications



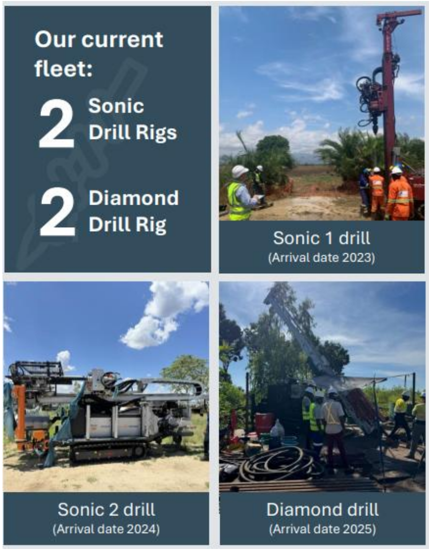
Source: Company Disclosures

Mining Operations

Exploration & Drilling activities are being carried out with the help of the service agreement with Mota-Engil, who has been operating in Africa for over 50 years particularly in the mining industries. CHW currently has a twin, parallel strategy for the overall project, with dedicated teams focused on exploration of HMS and REE potential.

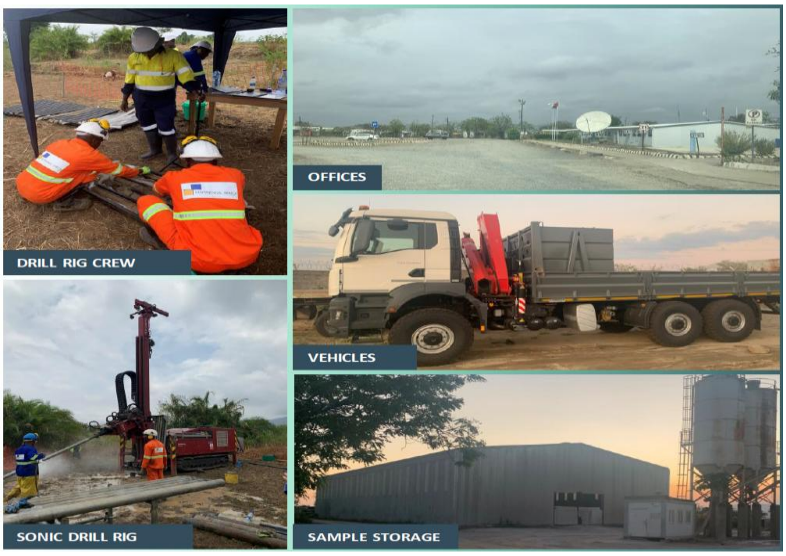
- **Facilities:** Mota-Engil Zalewa camp, which has offices, accommodation, storage shed, ALS separation lab.
- **Equipment:** 2 sonic drilling rigs (for HMS) and 2 diamond drilling rigs (for REE, one of which is outsourced).
- **Employees:** Total of 39 employees, with 3 based in Australia while 36 are based in Malawi, most of which are locals (~80%). There are other personnel not included in the count (drilling rig crew) that are sourced through Mota-Engil.
- **Cash costs:** Total cash outlays are currently ~A$3.55m per quarter, consisting of $800k for staff & administrative and $2.75m for exploration activities (estimated ~$690k per rig). This is equivalent to an annual ~A$14.2m of cash burn.
- **Outlook:** 2026 will be focused on continued exploration and resource evaluation of Mposa and Mpyupyu deposits, with the goal of advancing the former into feasibility studies. We expect 2027 activities will likely remain the same, with exploration possibly moving into other deposits (Bimbi and Namasalima).

Figure 17: Location of Malawi in Africa



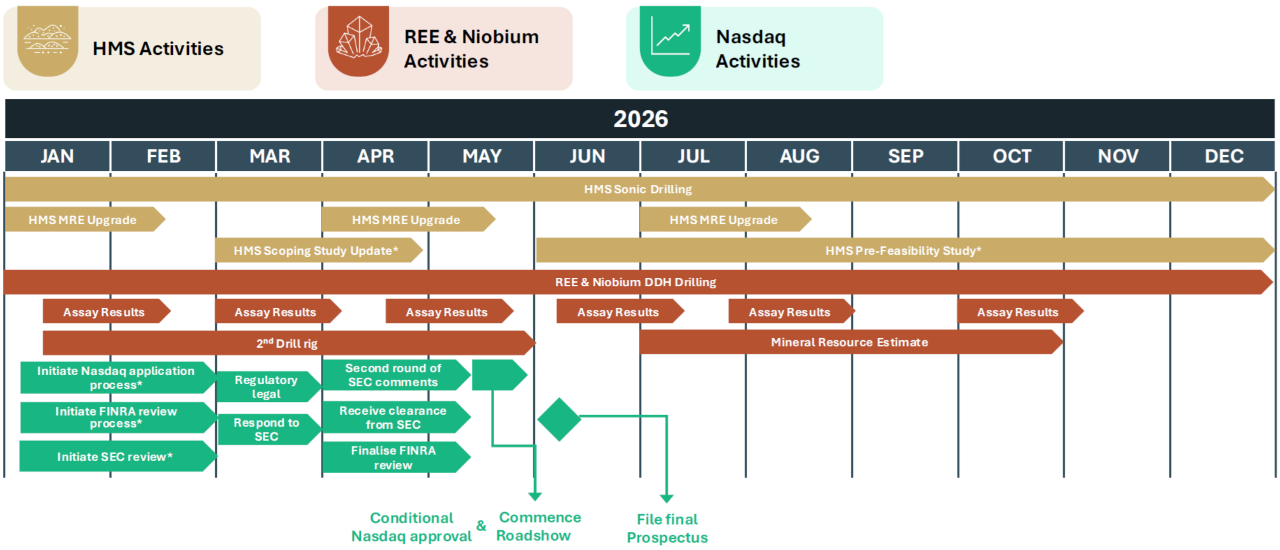
Source: Company reports

Figure 18: Company's mine sites around Lake Chilwa



Source: Company reports

Figure 19: CHW's planned activities for 2026



Source: Company Presentation

Funding & Spend Outlook

CHW has historically relied on external funding such as issuance of shares to investors such as Mota-Engil, and retail investors to fund their ongoing exploration and evaluation activities.

- A$8m initial public offering on 5 July 2023 @ $0.20 per share.
- A$6.0m capital raised from existing shareholders (incl. Luso Global Mining) on 15 Oct 2024 @ $0.86 per share.
- A$4.1m capital raise from existing shareholders on 31 July 2025 @ $1.05 per share.
- A$8.125m capital raise from existing and new shareholders (i.e. Mota family office Mota Gestão e Participações SGPS SA) on 24 Oct 2025 @ $1.20 per share.

CHW has current cash of A$3.59m (as of 31 December 2025). Given the receipt of A$2.05m in January 2026 (Tranche 2 of the last placement) and estimated cash burn of A$3.55m per quarter, this balance will last for approximately 1 quarter or until 31 June 2026. By then, CHW is planning to conduct an IPO in NASDAQ by 2rd quarter of 2026, which should provide proceeds of US$10m (~A$14.3m) that would be enough to fund at least a year (or 4 quarters) of exploration activity or until 30 June 2027.

Aside from raising funds from investors, CHW management are currently in talks with the US International Development Finance Corp (DFC) for potential grants and funding. Beyond 2027, we anticipate the company to start preparing for site development and extraction of minerals, especially as they file the definitive feasibility study, and transition into a mining license.

- CHW management expects to start extraction within 4 years.
- Performance rights (Class B, C, D) that were granted in the IPO to key management will expire on 30 June 2027 and 30 June 2028 respectively. Vesting depends on the achievement of milestones such as completion of preliminary/definitive feasibility studies and decision to mine.

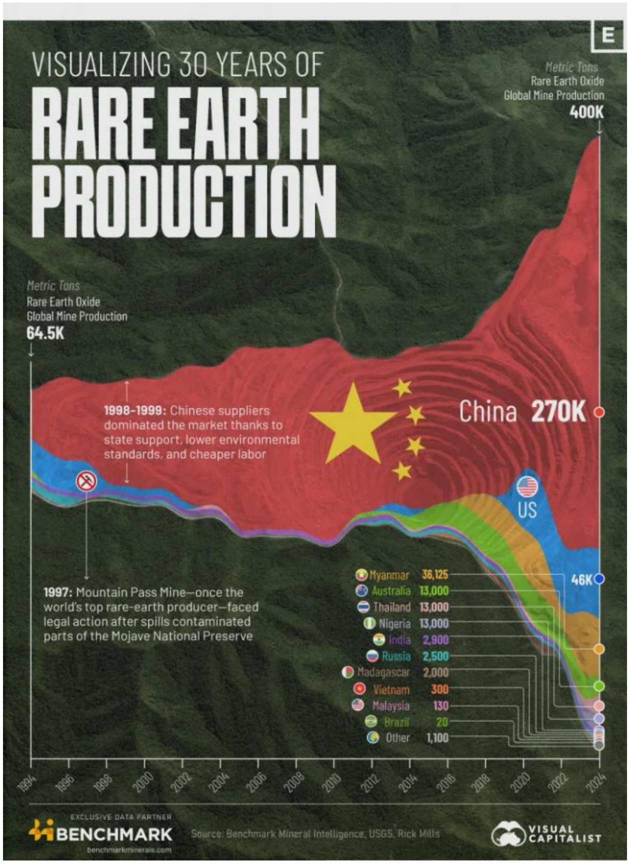
Once a decision to mine is established, CHW is expected to raise more funds (~US$100m) to establish key facilities such as wet concentrator plant (WCP), magnetic separators, and electrostatic separators. These can be found in the flowsheet that the company is currently developing with TZ Minerals (TZMI). This is still subject to change given it will depend on the grades and assemblage of minerals that is estimated to be extracted from the deposits.

There are also additional investments for infrastructure (~US$100m) such as roads, rail, equipment, and port infrastructure but these have the possibility of being financed by other entities (i.e. US DFC).

Industry Analysis: The race for critical minerals

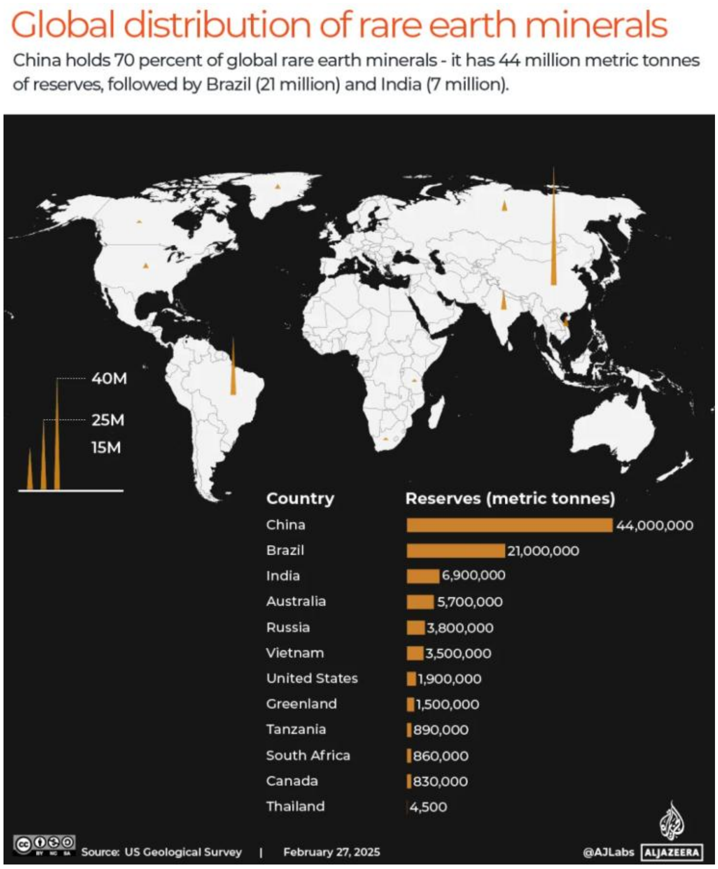
China's dominance in critical minerals: Critical minerals (nickel, cobalt, lithium, titanium, aluminium, zinc) and rare earths are essential for the most advanced technologies and will only become more important as AI, robotics, batteries, and autonomous devices transform economies. China has long been the biggest player in the global market for critical minerals/metals, given their significant reserves at home and overseas, particularly in Africa. In 2024, China accounted for 70% of the world's rare earths mining according to Benchmark Mineral Intelligence. They've become so dominant that exports curbs could be used as a tool of political coercion and supply chain disruption. This is why the US government has been actively ramping up its critical minerals program over the past year, announcing infrastructure/supply chain investments, initiating a stockpiling program (Project Vault, $12bn), making numerous MOUs and bilateral agreements with various countries that attended their 2026 Critical Minerals Ministerial held on 4 February 2026 at Washington, DC.

Figure 20: China's dominance in rare earths production



Source: Benchmark Minerals, Visual Capitalist

Figure 21: China holds significant rare earth reserves



Source: US Geological Survey, Aljazeera

The importance of Africa: The African continent is set to benefit from this initiative, given it is rich in critical minerals and metals. While China has long invested in this region, the US investments are quickly catching up. They've established Development Finance Corp (DFC) in 2019, aimed at "countering China's presence in strategic regions" (according to its website). This has led to a surge in investments, helping Africa reach an all-time high of FDI in 2024 according to UNCTAD data. With the help of DFC, both private and public institutions have been deploying loans, equity investments, technical assistance grants, feasibility study funding, strategic partnerships and offtake agreements across Africa's mining sector. To date, the DFC has a portfolio in Africa exceeding $13bn.

Country Analysis: Malawi

Increasing interest from US: While much of the FDIs had been going into the Northern and Western parts of Africa, inflows to the Southern portion is also growing, particularly in Malawi. Despite being one of the poorest countries in the world (World Bank estimates 71% poverty rate) and having numerous ongoing issues (inflation, electricity, cost-of-living, infrastructure, healthcare), the US decided to invest ~US$374m into a new embassy compound, which recently finished construction in December 2025. We have also seen several US institutions provide financing and support, such as the DFC's $4.6m for the Songwe Hill rare earths project (Sept 2025) and the IFC's collaboration agreement for the Kasiya rutile project (Dec 2025). US officials have also shown interest in the Kangankunde rare earths project (Dec 2025). There are several key projects near Chilwa Minerals' site:

- Kasiya project by Sovereign Metals (SVM:ASX) which aims to produce rutile and graphite. The project is in the exploration stage, having completed their pre-feasibility studies and moving to definitive feasibility studies while securing offtake agreements. Discovered in 2019, it has an estimated 1,809 Mt of mineral resources, mostly concentrated on rutile and graphite. It has the world's largest known natural rutile deposit and second largest flake graphite deposit. Most recently (December 2025), they discovered heavy rare earth monazite concentrate from rutile tailings stream, which could potentially add a third revenue stream to the project. SVM has been able to secure funding from Rio Tinto (RIO:ASX) through an 18% stake, and also from International Finance Corporation (IFC), a member of the World Bank Group.
- Kangankunde project by Lindian Resources (LIN:ASX) which aims to produce rare earth elements. With mineral resources of 261 Mt (averaging 2.14% TREO above a 0.5% TREO cut-off grade), it is one of the world's largest, rare earths deposits and is top tier in terms of high rare earth grade. The project reached Final Investment Decision (FID) for Stage 1 and is now fully funded, with early construction works underway to reach their target commercial production by July 2026. Other things to note: (i) signed an offtake agreement with Iluka Resources (ILU:ASX) on August 2025, (ii) received A$91.5m from institutional investors on August 2025, (iii) Mota-Engil was awarded in February 2025 the contract to construct the main access road and haul roads, (iv) received US$50m funding from Gerald Group in December 2024, and (v) company's stock is also listed in the US market (LINF:OTC) on February 2024.
- Songwe Hill project by Mkango Resources (MKA:LSE) which aims to produce rare earth elements. The project (MRE is still in the exploration/evaluation stage despite having completed a Definitive Feasibility Study in July 2022 and having been exploring the area since January 2010. However, it appears things are progressing after the company secured a Project Development Funding Agreement (initial US$4.6m, potential upsize to US$100m) from the US DFC. Aside from this project, Mkango is involved in rare earth recycling and magnet production. Another thing to note is that the company is planning to be a U.S.-listed entity to provide enhanced access to capital for advancing the Songwe Hill and Pulawy Projects (other project in Poland).

Figure 22: Notable mining projects in Malawi

Source: Company Presentation

Country facing multiple challenges: We cite several excerpts and paragraphs from the 2025 Investment Climate Statements prepared by the US Bureau of Economic and Business Affairs:

- Country situation: Malawi is a land-locked country with inadequate roads, electricity, communications, water supply, and healthcare infrastructure. There is a scarcity of skilled and semi-skilled labor. An estimated 89% of Malawi's total labor force of approximately 6.6 million work in the informal sector, largely outside any regime of labor law and policies. In the formal sector, the current official minimum wage is approximately US$53 per month.
- Economic performance: Malawi's macroeconomic situation is difficult. The Malawian economy grew by just 1.8% in 2024, up from 1.5% in 2023, with an official projected growth of 3.2% in 2025 and 4.0% in 2026. However, risks remain, including inflation, which reached 30.7% in February 2025, driven by food inflation. The World Bank predicts a continued reduction in per capita GDP (increase in poverty rate). The scarcity of foreign exchange reserves poses a serious challenge and negatively affects investors' repatriation of earnings.
- Legal & Political: Political risk in Malawi is manageable, and tribal, religious, regional, ethnic, or racial tensions are minimal, but decision-making on development and land use can be fragmented and difficult. Malawi's legal system is generally unbiased but notoriously slow. Corruption remains a major problem at all levels. But it was noted that Malawi's legal, regulatory, and accounting systems are partially transparent and largely consistent with international norms.
- Investments: Malawi government is eager to attract foreign direct investment. They are focused on boosting productivity in agriculture, tourism, and mining, dubbed the "ATM strategy." There are no restrictions on ownership, size of investment, source of funds, investment sector, or whether the products are destined for export or for domestic markets. An investor can disinvest 100%, make international payments, and cannot be forced into local partnerships.
- Treaties: Malawi does not have a trade agreement or a bilateral tax treaty with the United States. In 2023, as a member of the Organization of the African, Caribbean, and Pacific States, Malawi signed a treaty with investment provisions with the European Union, but it has yet to come into force.

Mining industry still at infancy: While mining sector only accounts for 1% of GDP, the government is aiming to increase it to 20% of GDP by 2063 and make it as a crucial pillar for economic development. The government enacted the Mines and Minerals Act of 2024, establishing the Mining and Minerals Regulatory Authority to regulate the sector. The US is aware of this and has mentioned the presence of economic minerals such as rutile, graphite, uranium, and rare earth elements. Even the World Bank cited that Malawi could generate up to US$30bn from mineral exports between 2026-2040. However, there are still much to be done before the country gets there, considering the assessment by the Malawi Confederation of Chambers of Commerce and Industry (MCCCI).

- Mineral Resources**:** The full mineral potential of the country is not yet sufficiently known. Considerable basic geological work and ensuing exploration are required to respectively determine and confirm the potential since most available geological information is either outdated or inadequate. Some of the mineral resources with economic potential include uranium, phosphates (apatite), bauxite, kaolinitic, coal, kyanite, limestones, rare earths (including strontianite and monazite), graphite, sulphides (pyrite and pyrrhotite), titanium minerals, and vermiculite. However, only coal, uranium, cement limestone, iron ore, and rock aggregates are being mined currently.
- Mining Development**:** Malawi is endowed with a lot of mineral resources but it has traditionally been considered as an agricultural country because of the policies that government pursued since attaining independence in 1964. As a result, there was very minimal mineral development in the country. Consequently, there was no mining culture and little technical capacity developed. Additionally, there has been little interest by local companies to venture into mining projects and this has also been partly as a result of lack of support from financing institutions. Artisanal and Small-Scale Mining (ASM) activities in have grown considerably in recent years and are a source of livelihood for many families in rural areas
- Mineral Royalty**:** The state's ownership of mineral rights is non-negotiable, as is the state's right to collect exploration fees during prospecting as well as mineral royalties and ground rent during mining. The mineral royalty rates in Malawi are high in relation to others in the region and are generally applied to gross sales value. This may be a disincentive for foreign investment and may be one of the reasons for low investment in the sector.

Management & Board

Figure 23: Board of Directors

Name	Background	Affiliations	Holdings
Alexander Shaw (Chairman)	- Highly accomplished geologist with +15 years of global experience in exploration and production - BSc (Hons), University of Cape Town (RSA) & DPhil, University of Oxford (UK)	- **Current:** Australian Institute of Geoscientists, Southern Africa Institute of Mining and Metallurgy, and American Institute of Professional Geologists, Society of Economic Geologists - **Past:** Former executive of BHP and First Quantum Minerals	- Ordinary shares: 290,712 - Performance Rights: 1,000,000
Cadell Buss (Managing Director)	- Senior executive with over 20 years' experience (local and international) in marketing, project development and capital markets. - Masters in Project Management, MBA, GAICD	- **Current:** Non-Executive Director of Atlas Pearls Ltd (ASX: ATP) - **Past:** Former CEO of Australian stockbroking firm DJ Carmichael, Former Project and Finance Director with Luso Global Mining (Luso)	- Ordinary shares: 2,275,536 - Performance Rights: 4,178,260
Manuel Mota (Non-Executive Director)	- Extensive experience in the construction, engineering and mining sector worldwide - Master's degree in Civil Engineering from University College London	- **Current:** Executive Vice President and Deputy CEO of Mota-Engil Group, Chairman for Mota-Engil Africa, and Executive Chairman for Latin America	- Ordinary shares: 895,279 - Performance Rights: 750,000 expiring on November 2028
Jose Martins (Non-Executive Director)	- Extensive experience in senior financial and corporate roles, particularly in resource companies operating in Africa.	- **Current:** Current Chairman of Atlas Pearls (ASX:ATP); NED at GenusPlus Group (ASX:GNP). - **Past:** Former CFO of Macmahon Holdings and Ausdrill (Perenti); Former CFO of Alliance Mining Commodities.	- Ordinary shares: 250,000 - Performance Rights: 500,000
Dennis Wilkins (Company Secretary)	- Extensive experience in corporate advisory for companies in the natural resources industry - B.Bus, MAICD, ACIS -	- **Current:** Founder and principal of DWCorporate Pty Ltd - **Past:** Former Finance Director of Lynas Corporation; Former Founding director and advisor to Atlas Iron Limited	- Ordinary shares: 0 - Performance Rights: 500,000 -

Source: Company reports,

Alignment with shareholders through ownership and rights

Total number of ordinary shares held by directors are 3.46 million, which are 3.6% of the total outstanding common shares of 96.13 million. Meanwhile, the total number of performance rights held by directors are 6,428,260, which are 34% of the issued performance rights totalling 18,750,000. Majority of the performance rights are held by Luso Global Mining, the company's significant shareholder. These performance rights issued at A$0.0001 per right and are equivalent to 1 unit of common share. They are also classified from Class A to E and will vest/expire depending on the determined milestones and deadlines.

Valuation

EV/resource multiple valuation

We valued CHW using a target EV/Resource multiple, which is a common methodology used to assess the value of mining companies in the exploration or pre-production phase. It also gives us a view of what investors are pricing-in across the industry, given differences in resources, grades, location, and development potential. We calculated it using CHW's current mineral resource estimates (THM, Mt) multiplied by a target EV/Resource multiple, derived from comparable companies.

We selected several comparable companies, particularly ASX-listed mining companies in the HMS + REE + Niobium space that are in the exploration phase (Group A) and mining companies operating in Malawi, near CHW's mine location (Group B). We used these two groups to formulate our target EV/resource multiple, assigning a 60-40 weighting to the average multiples calculated from Group A and B respectively. Several things to note are:

- We assigned a higher weighting (60%) on Group A since the HMS portion is the more advanced project and already has mineral resource estimates and assemblage. HMS companies appear to be trading at low EV/resource multiples ranging from 0.01x to 0.20x (average of 0.07x).
- Despite exploration for REE being still in the early phase and having no resource estimates yet, we assigned a 40% weighting on Group B (companies operating in Malawi). Most firms in this group have multiples (greater than 0.5x), especially those in the REE space such as Lindian Resources (LIN.AX) and Mkango Resources (MKA.TSX). Given that CHW's project area is located between LIN and MKA, there is a considerable probability that CHW's area contains REE of similar grades and/or deposit sizes, which probably why we see CHW's current EV/resource multiple (from current share price/market cap) of 0.59x being much higher than what HMS companies are being valued at (0.01x to 0.23x).

Using the target EV/resource multiple of 1.27x, we multiplied it by CHW's mineral resource estimate of 113 Mt, resulting in an implied enterprise value (EV) of A$143m and market cap of A$150m. This is equivalent to a share price of A$1.53, which provides an upside of 103.3% from current share price of A$0.755.

Figure 24: EV/resource multiples across comparable companies

						Valuation			Resource Data					
Group	Ticker	Company	Mine Site	Resources	Project Status	Mkt Cap (A$m)	EV (A$m)	EV/ Resource (x)	Resource (Mt)	Grade (%)	Ilmenite (%)	Zircon (%)	Rutile (%)	Monazite (%)
	CHW.AX	Chilwa Minerals	Malawi	HMS + REE	Exploration	73.9	67.2	0.59	113	4.01%	78.1%	5.7%	2.2%	2.0%
A)	*ASX-listed companies focused in HMS+REE*													
	VHM.AX	VHM Ltd	Australia	HMS + REE (monazite)	Exploration	90.6	91.5	0.08	1,110	3.50%	26.0%	23.3%	12.8%	3.8%
	ATR.AX	Astron Ltd	Australia	HMS + REE (monazite)	Exploration	263.7	264.4	0.20	1,317	4.60%	30.3%	18.1%	8.3%	1.8%
	IMA.AX	Image Resources NL	Australia	HMS + REE (monazite)	Exploration	47.6	68.6	0.01	6,091	2.85%	59.0%	9.5%	3.7%	0.3%
	SFX.AX	Sheffield Resources	Australia	HMS	Exploration	19.0	27.0	0.02	1,545	6.80%	27.0%	8.3%	-	-
	TSL.AX	Titanium Sands	Sri Lanka	HMS	Exploration	18.8	18.9	0.06	318	4.17%	1.9%	0.1%	0.1%	-
B)	*Malawi mining companies*													
	SVM.AX	Sovereign Metals	Malawi	HMS + REE (monazite)	Exploration	410.8	356.3	0.20	1,809	-	-	-	1.0%	-
	GBE.AX	Globe Metals	Malawi	Niobium	Exploration	69.4	73.8	1.08	68	0.29%	-	-	-	-
	LIN.AX	Lindian Resources	Malawi	REE (carbonatites)	Exploration	1,140.0	1,151.8	4.41	261	2.43%	-	-	-	-
	MKA.TSX	Mkango Resources	Malawi	REE (carbonatites)	Exploration	319.3	317.2	6.53	49	1.41%	-	-	-	-
C)	*Larger mining companies in HMS/REE industry*													
	KMR.L	Kenmare Resources	Mozambique	HMS	Production	380.4	495.2	0.07	7,538	2.60%	81.2%	5.4%	0.2%	-
	ILU.AX	Iluka Resources	Australia	HMS and REE	Production	2,530.0	2,644.6	0.77	3,443	5.60%	45.0%	14.0%	6.0%	1.7%
D)	*Other potential peers*													
	IXR.AX	Ionic Rare Earths	Uganda	REE (ionic clays)	Exploration	62.1	49.7	0.08	617	-	-	-	-	-
	VMM.AX	Viridis Mining	Brazil	REE (ionic clays)	Exploration	195.3	180.1	0.37	493	-				
	MEI.AX	Meteoric Resources NL	Brazil	REE (ionic clays) + Niobium	Development	423.3	412.4	0.28	1,497	-	-	-	-	-
	NBY.TSX	NioBay Metals	Canada	Niobium	Exploration	20.5	17.3	0.18	94	-	-	-	-	-
	REE.LSE	Altona Rare Earths	Mozambique	REE	Exploration	19.8	19.8	1.46	14	-	-	-	-	-
		Average of ASX-listed HMS+REE (Group A)						0.07						
		Average of Malawi mining peers (Group B)						3.06						
		Target EV/Resource multiple (60% of group A + 40% group B)						1.27						
		Implied valuation				150.2	143.5							
		Implied price per share				1.53								
		Upside (%)				103.3%								

Source: Trim Capital estimates

Risks

As with any investment, there are certain risks associated with operations as well as the surrounding economic and regulatory environments common to the industry.

- **Sovereign risk** – Malawi is subject to differing legal and political systems, when compared with the systems in place in Australia. Possible risks include changes in the terms of mining legislation, changes to royalty arrangements, changes to taxation rates and concessions and changes in the ability to enforce legal rights. The newly elected President of Malawi, Peter Mutharika, had imposed an order that prohibits export of raw minerals from the country.

- **Exploration uncertainty** – There is no guarantee that the company's exploration activities would be successful and result to an economically-feasible project. Weather-related factors may also cause delays in the exploration/ project timeline.

- **Mota-Engil agreement** – CHW's current and future activities rely heavily on its service agreement with Mota-Engil, which is also a substantial owner in the company (31% stake). In the scenario that this agreement is terminated, the company may experience losses and incur higher-than-expected costs to achieve the same level of technical and operational capabilities. However, we see this risk as very remote given the vested interests of the owners/family behind Mota-Engil.

- **Mineral price volatility** – Prices for HMS and REE are negotiated prices and so any substantial decline in the prices of these commodities or increase in transport or distribution costs may have a material adverse effect on the feasibility of CHW's potential projects. However, at this stage, this risk is mitigated by the fact that company have yet to sign any offtake agreements, leaving their options open.

- **Key personnel risk** – The company may be unable to retain its key talent due to its limited resources and high uncertainty of development. Any departure of key personnel may delay the development of the company's planned project.

- **Financing & dilution risk** – Having no revenues yet, CHW will need to raise substantial additional funds to continue exploration activities and develop/advance the project into production stage. The company has so far relied mostly on equity issuances (private placements). We also note of outstanding performance rights (18.75 million) and options (2.5 million) that could convert to common shares upon meeting certain thresholds.

- **Environmental risks** – Mining activities are expected to have an impact on the environment and community. CHW is expected to comply with local and international obligations regarding environmental protection and rehabilitation.

- **Occupational health and safety** – Mining is an activity that inherently carries risks of injury or fatalities. The company must extensively invest resources (training, insurance) to ensure the health and safety of employees and contractors. Otherwise, failure to adhere to these obligations may result to legal liabilities or bring risks to the overall operations.

Environmental, Social & Governance

Environment: Efforts to reduce impact on ecology

CHW is expected to use open pit methods in the extraction of HMS, which can have considerable adverse impact on the environment, ecology, and water quality (surface, ground). It could also result to emissions of greenhouse gases. Thus, CHW is implementing various efforts to reduce this impact, such as the use the use of diamond and sonic drilling, which have a less invasive impact on the environment compared to other approaches such as aircore. Soil samples are removed and holes are immediately rehabilitated. CHW has a comprehensive waste management programme is in place, along with a Water Abstraction Permit from the Malawi National Water Resources Authority, ensuring responsible water usage.

Social: Promoting local employment and building the economy

Malawi is one of the poorest countries in the world (in the top 5). Wherever possible, CHW aims to employ local Malawi personnel, particularly those who live close to the project. The company provides training and transferable skills to the Malawian workforce, while also procuring goods and services from within the local host communities.

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