

QUARTERLY ACTIVITIES REPORT

For the period ending 31st March 2025

Highlights

- Scoping Study highlights: **4,800tpa** of TREO production (average LOM) within a high-grade (**55.3% TREO**) final MREC
 - Simplified, low-risk, low-cost, fast-tracked project: sole focus on Ema deposit to drive development efficiency
 - Unit cash operating costs of **US\$6.15/kg** LOM TREO: Industry low TREO Opex
 - Unit cash operating costs of **US\$16.95/kg** LOM NdPr: Industry low NdPr Opex
 - Pre-production capital cost of **US\$55M** (inclusive of 35% contingency): Industry low capital requirement to produce MREC in Western world
 - Post-tax NPV8% of **US\$498M**: at LOM prices of **US\$74/kg** NdPr
 - Post-tax IRR of **55%**: payback period calculated to **28 months**
- Mineral Resource Estimate (MRE) starter zone now contains 73% or **248Mt @ 759ppm** TREO in the Indicated category an increase of 97% over previous estimate
 - Total starter zone Indicated and Inferred MRE is **341Mt @ 746ppm** TREO
 - Global MRE (Indicated and Inferred) now **943Mt @ 716ppm** TREO
- 74% magnet (MREE) recovery and 62% (TREE + Y) recovery from ISR (in-situ recovery) column test at ANSTO (Australian Nuclear Science and Technology Organisation) significantly higher than recent scoping study base parameters
- ISR test was designed to mimic conditions of density, pressure and moisture measured in the ground and expected during eventual production
- Individual final calculated MREE recoveries;
 - Praseodymium 85%
 - Neodymium 72%
 - Terbium 70%
 - Dysprosium 63%
- ISR recoveries were achieved over only 28 days of leaching, resulting from permeability flow rates sufficient for commercial extraction
- Assays returned during the quarter from 108 holes received from the 2024 Mineral Resource infill drilling program;
 - Results continue to show excellent shallow grades and thicknesses in line with previous results;

Significant results >1,000ppm include:

- 10m@1,273ppm TREO from 7m (EMA-TR-319), ending in 1,183ppm TREO
- 10m@1,214ppm TREO from 6m (EMA-TR-347), ending in 824ppm TREO
- 8m@1,189ppm TREO from 11m (EMA-TR-350), ending in 466ppm TREO

- 9m @ 1,065ppm TREO from 12m (EMA-TR-397), ending in 949ppm TREO
- 5m @ 985ppm TREO from 8m (EMA-TR-395), ending in 507ppm TREO
- 5m @ 858ppm TREO from 12m (EMA-TR-381), ending in 1,150ppm TREO
- The Amazonas state Environmental Protection Institute (IPAAM) has granted BCM a water usage permit valid for the field trials for a 2-year period
- Cash and cash equivalents as of March 31st 2025 of A\$0.64M

To watch an accompanying video of this announcement from the MD, please visit:

<https://braziliancriticalminerals.com/link/KyzaLP>

Brazilian Critical Minerals Limited (**ASX: BCM**) ("**BCM**" or the "**Company**") is pleased to provide details activities during the quarter ended 31 March 2025 in the Apuí region of Brazil (Figure 1).



Figure 1. Location of the Ema Project, Brazil.

Safety

No accidents or incidents were reported during the quarter.

Scoping Study

Scoping Study¹ delivers a post-tax NPV8% (US\$498M), driven by producing a high-value mixed rare earth carbonate (MREC) product, low capital costs, minimal product extraction costs, simple low-cost processing infrastructure through a long-life Mineral Resource. Scoping Study places the Ema Project as the western world's lowest cost Rare Earth Project producing an MREC amenable for downstream processing.

Table 1: Scoping Study key outcomes

Production Metrics	Unit	Years 1-4	LOM
Life of Mine	years		20
Total TREO produced	t	10,627	95,651
Total MREO produced	t	4,028	36,252
Spot Price – NdPr	US\$/kg	60	60
LOM average Price - NdPr	US\$/kg	60	74

NPV, returns and key metrics		Spot	LOM
NPV _{8%} (post-tax, ungeared)	US\$M	355	498
IRR (post-tax, nominal basis)	%	52	55
Payback period (pre-tax, from first production)	months	28	28
Pre-production capital expenditure	US\$M	55	55
Unit cash operating costs			
Operating Cost – TREO	US\$/kg	6.15	6.15
Operating Cost - NdPr	US\$/kg	16.95	16.95
Payability	%	70	70

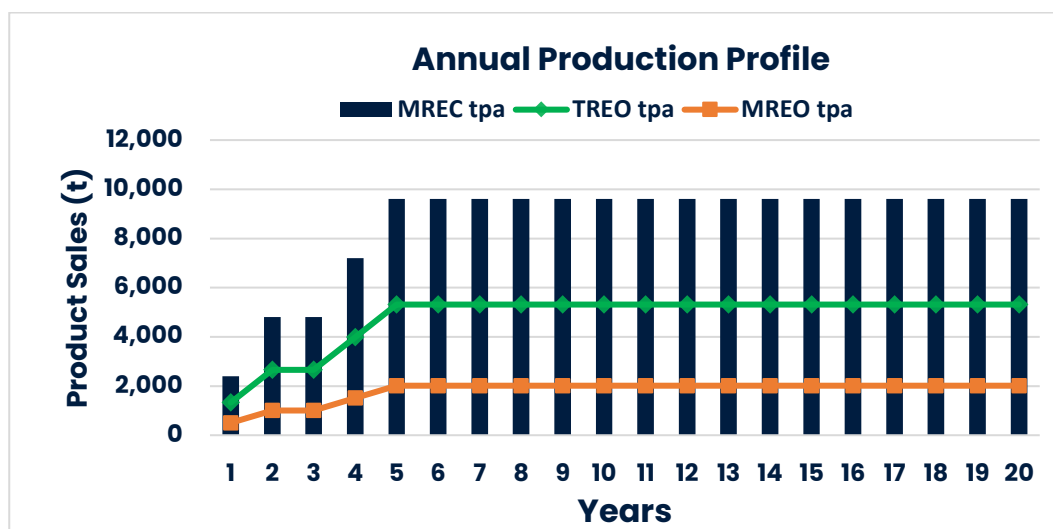


Figure 2: Scoping Study Production Profile from the Central Starter Zone MRE

Table 2: Scoping Study key physical outcomes for Starter MRE zone only

Production Metrics	Unit	Years 1-4	LOM
Life of Mine	years		20
Total MREC produced	t	19,217	172,967
Total TREO produced	t	10,627	95,651
Total MREO produced	t	4,028	36,252
Average TREO feed Grade	ppm	1,113	1,113
TREO Recovery	%	48	48
MREO Recovery	%	62	62
TREO in MREC	%	55.3	55.3

Key economic outcomes

Projected economics for the Ema Project from the Scoping Study are outlined in Table 2.

- Ultra-low start-up capital requirements of **\$US55M** inclusive of **35%** contingency pre-production with capital ramp-up costs of **US\$22.1M** in year 4 to be sourced from cash flow
- Post tax₈NPV **US\$498** over 20 years – IRR **55%** - **28-month** payback
- Operating Cash Cost LOM: **US\$6.15/kg** of recovered Total Rare Earth Oxides (TREO)
- All in sustaining Cash Cost LOM: **US\$6.69/kg** of recovered Total Rare Earth Oxides (TREO)
- High Grade high value MREC containing **55.3%** TREO over Life of Mine
- Low-cost Magnesium Sulfate (MAGSUL) leach extraction
- Simple, quick and effective design, planning and construction to allow for rapid advance towards first product
- Annualised production of **~4,800t** TREO over LOM average production comprising approximately **~1,800t** MREO

Table 3: Key financial forecasts

Key financial outcomes	Unit	Spot	LOM
<i>Price inputs (LOM average)</i>			
R\$/US\$ (long term forecast)		0.174	0.174
TREO price forecast	US\$/kg	30	37
NdPr price forecast	US\$/kg	60	74
<i>Cashflow & Earnings Metrics</i>			
Annual Revenue	US\$M	143	182
Revenue	US\$M	2,869	3,634
Project net cashflow (post-tax)	US\$M	911	1,279
<i>NPV, returns and key metrics</i>			
NPV ₈ % (pre-tax, ungeared)	US\$M	355	667
NPV ₈ % (post-tax)	US\$M	354	474
IRR (pre-tax, nominal basis)	%	57	63
IRR (post-tax, nominal basis)	%	52	55
Payback period (pre-tax, from first production)	months	28	28
Capital efficiency (pre-tax NPV / capex)	%	573	806

Pre-production capital expenditure	US\$M	55	55
LOM sustaining capital expenditure	US\$ / year	1.59	1.59
Unit cash operating costs			
Annual operating cost	US\$M	29.4	29.4
Annual operating cost	US\$/kg TREO	6.15	6.15
Annual AISC	US\$/kg TREO	6.69	6.69

Spot Price: Weighted Average price based on MREC basket composition and spot prices as of 15.01.25
www.giti.sg/markets

LOM Price: Weighted Average price based on MREC basket composition (12.02.25 Spot Price nominal for 4 Years + 12.02.25 Spot Price Years x 30% for 16 years)

Pre-Production Capital Expenditure is inclusive of 35% contingency

Pricing Strategy

The Scoping Study pricing utilised very conservative forward estimates with spot prices utilised as of 12.02.2025 flatlined for the first four years of production. Current spot rare earth oxide prices were sourced from **www.giti.sg** averaging US\$60/kg NdPr based on the Ema basket weighting. All prices quoted are inclusive of Chinese VAT and are on delivery base Ex-Works China.

The spot TREO price was calculated from the weighted basket of elements multiplied by the spot TREO price as listed in Table 4 below.

The forecasted LOM TREO and NdPr price is based on the spot prices (Table 4) for the first four years and subsequently escalated by 30% commencing year 5 of the production schedule resulting in a LOM average price of **US\$37/kg TREO** or **US\$74/kg NdPr** (Figure 3).

Table 4: Ema Rare Earth Basket Prices Utilised in Financial Modelling

	Spot Price (12.02.25)	LOM Price Average
Basket Price - US\$/kg TREO	\$30	\$37
Basket Price - US\$/kg NdPr	\$60	\$74
Payability	70%	70%

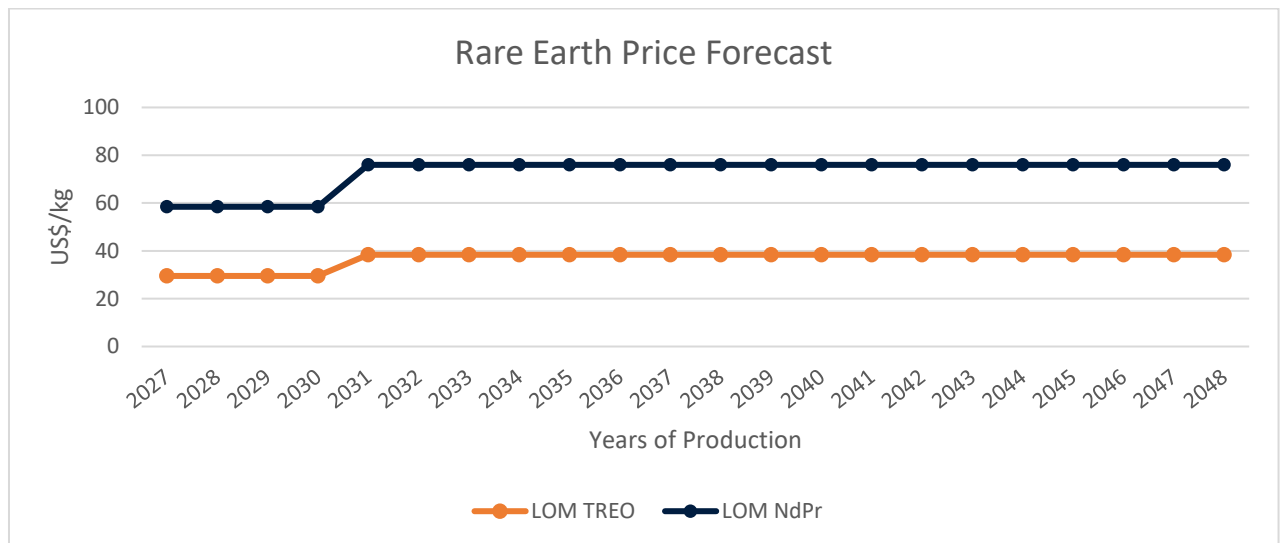


Figure 3: Ema Rare Earth Basket Prices Utilised in Financial Modelling. Average LOM prices used were US\$37/kg TREO and \$74/kg NdPr for the base financial case and applied without indexation over the LOM.

It is assumed that the company is selling an MREC product containing 15 elements that will be payable in the offtake products.

Early-stage discussions with potential customers and indicative terms provided have formed the basis of the offtake assumptions for the MREC. The indicative payability terms of **70%** were applied to the prices outlined in Table 4 given the low deleterious elements within the MREC specification. Further testwork and refinement of the specification will continue during the next phase of studies.

Mine schedule incorporating upgraded Ema Mineral Resource

The Scoping Study incorporates the recent updated Mineral Resource into the process schedule. The resource update followed the 2024 drilling program at the Ema Project, which focused solely on the central starter zone. This program comprised 244 auger holes drilled on nominal 300m centres.

The updated estimate saw total Ema resources of 943Mt @ 716ppm including 341Mt @ 746ppm within the central starter zone (Table 6). Critically, and in-line with the core objective of the program, indicated (I) resources at Ema were estimated to be 248Mt with 100% of this material contained within the Central Starter zone area (Table 6).

Approximately 74% of the central starter area mined is within the indicated JORC category (Figure 4) over the LOM with 50% of production sourced from the inferred category from years 14-20. Further drilling to expand the indicated portion of the current MRE is being planned for the 2025 drill season.

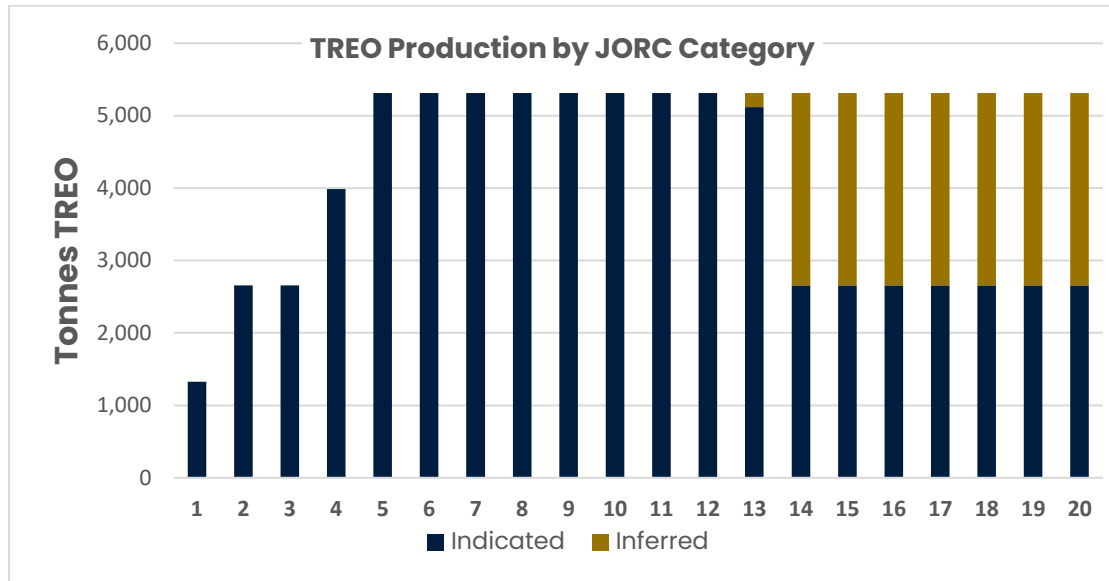


Figure 4: Mine Schedule by year and JORC Category

Mineral Resource Estimate Update

The updated Mineral Resource Estimate² was undertaken by GE21 Consultaria Mineral in Brazil and incorporates the assay results from the priority 2 and 3 areas of the recently completed 2024, 244-hole drill program (Figure 5).

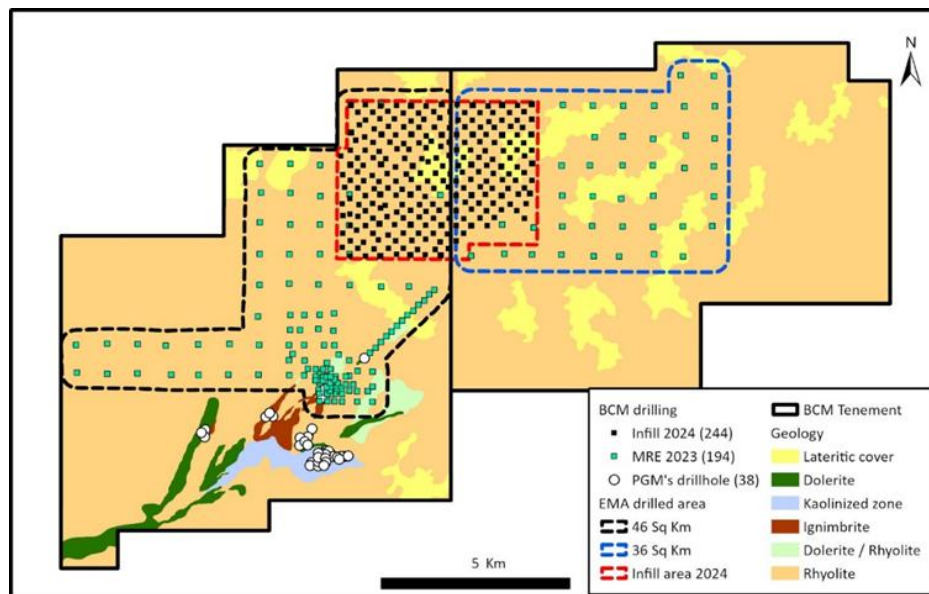


Figure 5. Central infill drilling program 2024. Black holes inside red dotted line are the 244 holes drilled.

This updated Mineral Resource Estimate for the Ema project highlights significant progress and enhanced confidence in the resource base. Key takeaways include:

1. Starter Zone Mineral Resource Estimate:

- Indicated and Inferred **341Mt @ 746ppm TREO**, using a cut-off of 500ppm TREO
- **73%** of MRE now in the higher confidence Indicated JORC classification
- Sufficient for underpinning a **long mine life** scoping study assessment

2. Global Mineral Resource Estimate:

- **Indicated Resources** now account for **248Mt (26%)** of the global MRE
- Global MRE now stands at **943Mt @ 716ppm TREO**

3. Impact on Project Development:

- The high Indicated resource portion bolsters confidence in the Scoping Study outcomes
- Strengthens the foundation for establishing a **future Ore Reserve**
- Facilitates more precise project design and economic evaluations during the feasibility study phase

This progress underscores the potential for long-term development and a strong start for the Ema project.

The Ema ionic REE project stands out as a unique and highly promising Mineral Resource in Brazil's rare earth element (REE) sector, offering several key highlights:

- **Analogous to China's iREE Deposits:** The project's similarity to the world-renowned ionic clay REE deposits in southwest China, formed over felsic volcanic rocks, sets it apart from other Brazilian REE projects
- **World-Class Potential:** China's deposits are the largest known ionic clay REE sources, emphasizing the strategic importance and potential scale of the Ema project
- **Extensive Land Area:** The project spans a vast **189 km²** of felsic volcanic terrain.
- The **similarity to Chinese iREE deposits** strengthens the confidence in the project's potential for economically viable development
- **55% of tenement area remains to be explored** and indicates the possibility of significant resource expansion as additional drilling is undertaken
- The project holds strategic importance for Brazil's REE sector, potentially positioning it as a major player in the global supply chain

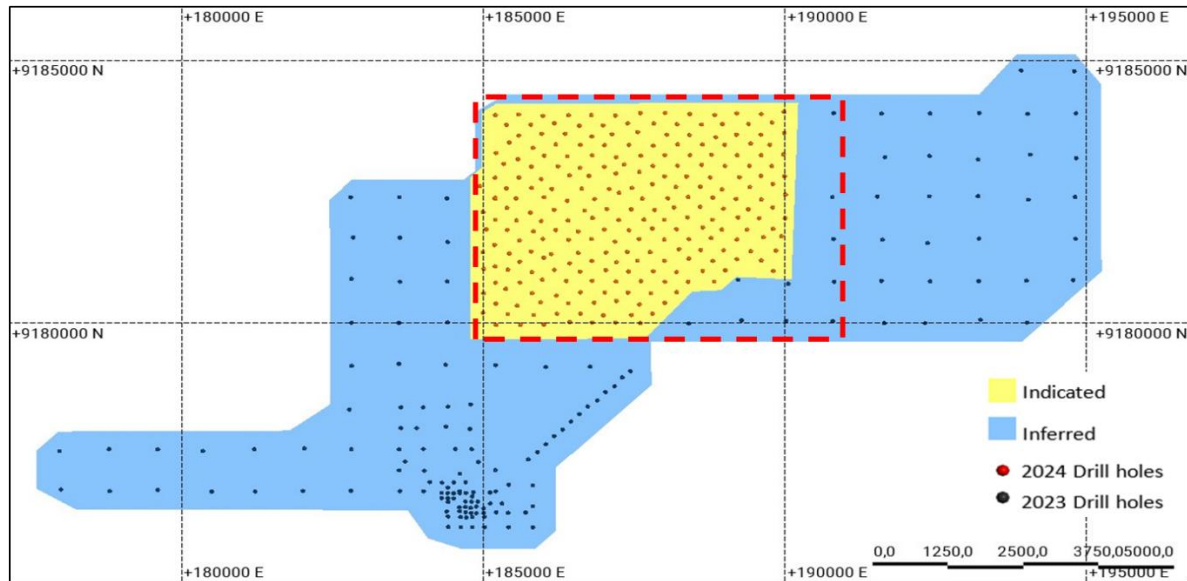


Figure 6. Mineral Resource blocks colour coded by JORC Category. Blue area outline represents Ema MRE boundary. Red dotted line is the boundary for the central starter area.

Table 5. Ema REE Project 2025 (starter zone) Mineral Resource Estimate @ COG 500ppm TREO

JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO:TREO %
Indicated	500	248	759	176	16	192	25
Inferred	500	93	712	168	16	185	26
Total	500	341	746	174	16	190	25

Table 6. Ema REE Project 2025 Global Mineral Resource Estimate @ COG 500ppm TREO

JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO:TREO %
Indicated	500	248	759	176	16	192	25
Inferred	500	695	701	165	16	181	26
Total	500	943	716	168	16	184	26

Notes:

- TREO = total rare earth oxides (CeO₂, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, La₂O₃, Lu₂O₃, Nd₂O₃, Pr₆O₁₁, Sm₂O₃, Tb₄O₇, Tm₂O₃, Yb₂O₃) + Y₂O₃
- NdPr=Pr₆O₁₁+Nd₂O₃
- DyTb= Dy₂O₃ + Tb₄O₇

4. Totals may not balance due to rounding of figures.
5. The estimate of Mineral Resources are not Ore Reserves as they have not demonstrated economic viability and may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant factors.
6. Mineral resources were classified as Indicated and Inferred only.
7. Mineral Resources were prepared in accordance with Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012) incorporating drilling data acquired by 2023 and 2024.
8. Blocks estimated by ordinary kriging at support of 100 m × 100 m × 4 m with sub-blocks 25 m × 25 m × 2m.
9. The results are presented in-situ and undiluted, are constrained within optimized open pit shell, and are considered to have reasonable prospects of economic viability, using the following parameters:
 - a. Pit slope angle: 25°.
 - b. Selling Prices: estimated by element oxide.
 - c. Costs: Mining: 2.13US\$/t mined; Process: 7.23 US\$/t processed; Royalties: 2% of revenue; Selling costs: 7.03US\$/kg REO.
 - d. Metallurgical Efficiencies estimated by element.

2024 Infill Drilling Program

Assay results have now been received for 244 holes^{3 & 4} (90%) of the 270 originally planned holes. The remaining 26 holes were not drilled due to the start of heavy rains and will be completed during the 2025 drill season. Results generally returned thick mineralised intercepts with the highest grades of NdPr being found directly above the fresh rock interface.

Drilling was designed on 300m centres within the high priority starter zone (red dashed line area Figure 2) which comprises approximately 24% of the previously announced indicated and inferred **977Mt¹** MRE area. Drilling commenced on the western portion of this area (Figure 7) with assays now received for all 244 holes drilled.

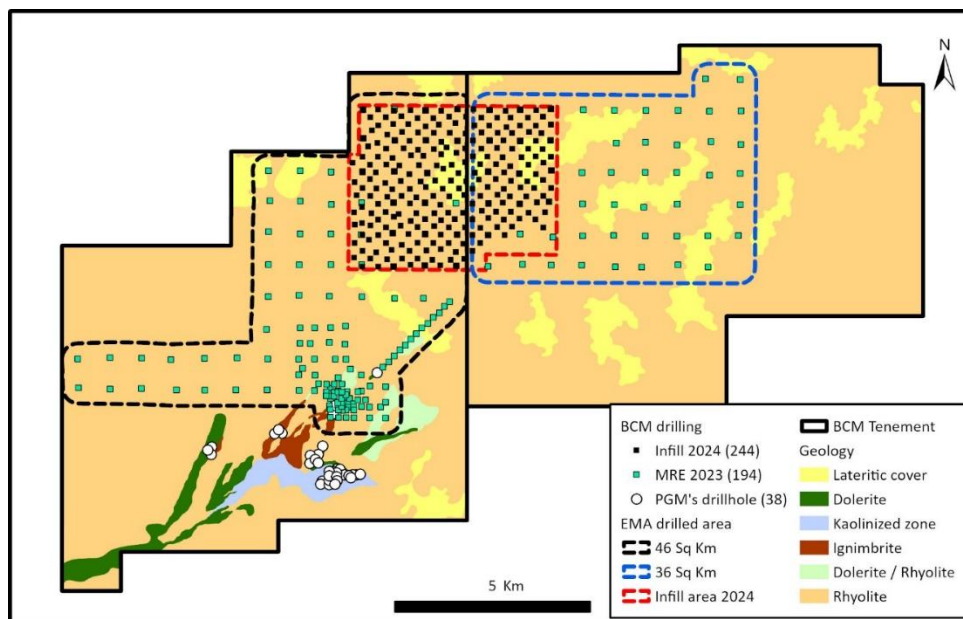


Figure 7 - Ema REE project – Mineral Resource covering 82 km² with auger holes on 800m spacing and infill auger holes on 300m centres over 21 sq km (within red dotted line).

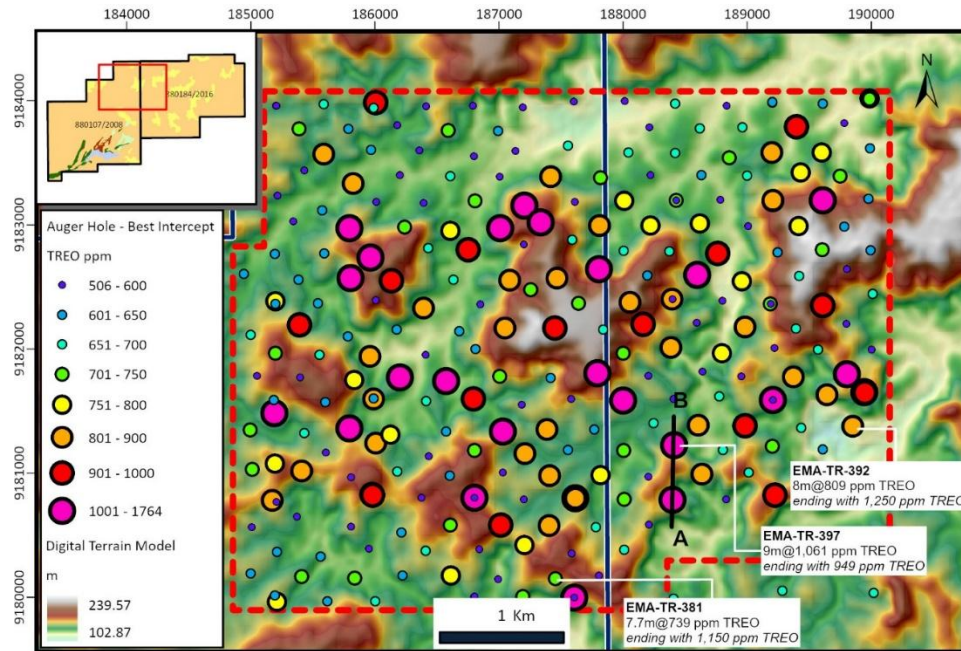


Figure 8 – Location map of the auger infill holes with assay results received to date, with cross section A-.

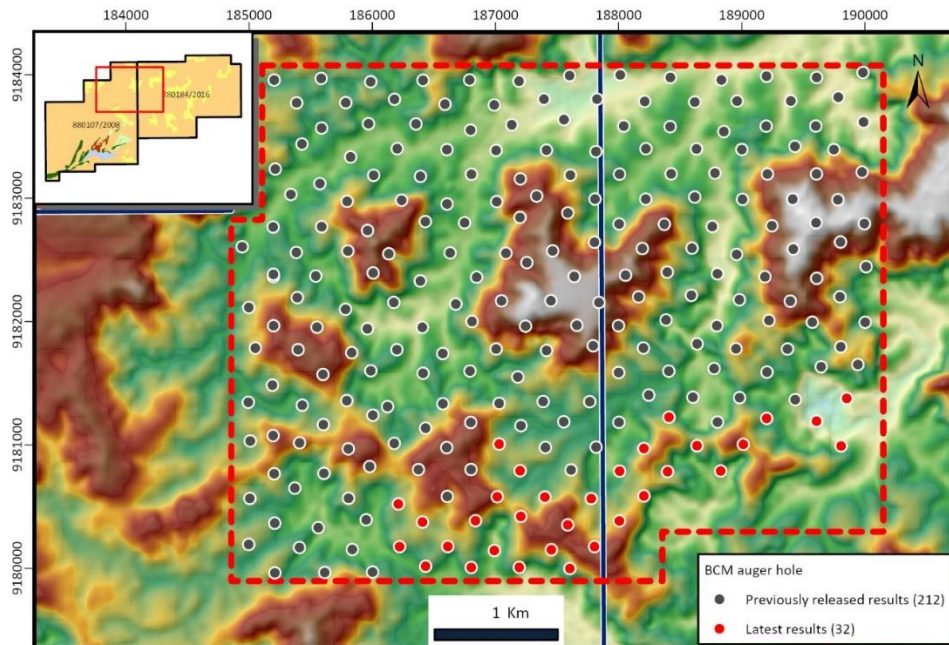


Figure 9 – Location map of the auger infill holes with assay results received to date and those left outstanding.

ANSTO Permeability Test Work

74% magnet (MREE) recovery and 62% (TREE + Y) recovery from ISR (in-situ recovery) column test at ANSTO (Australian Nuclear Science and Technology Organisation) significantly higher than recent scoping study base parameters

ISR test was designed to mimic conditions of density, pressure and moisture measured in the ground and expected during eventual production

- Individual final calculated MREE recoveries;
 - Praseodymium 85%
 - Neodymium 72%
 - Terbium 70%
 - Dysprosium 63%
- ISR recoveries were achieved over only 28 days of leaching, resulting from permeability flow rates sufficient for commercial extraction

Table 7. Comparison of Scoping Study recoveries vs ANSTO Column recoveries

	TREY (%)	MREE (%)
Scoping Study Recoveries ¹	48	62
ANSTO Column Recoveries	62	74

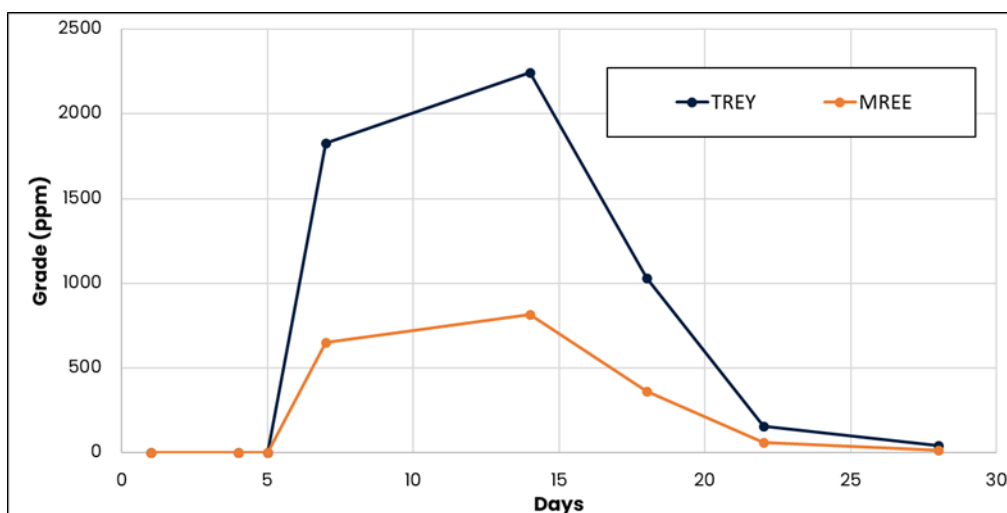


Figure 10. Solution concentration of rare earth elements in (ppm) over the 28-day test period.

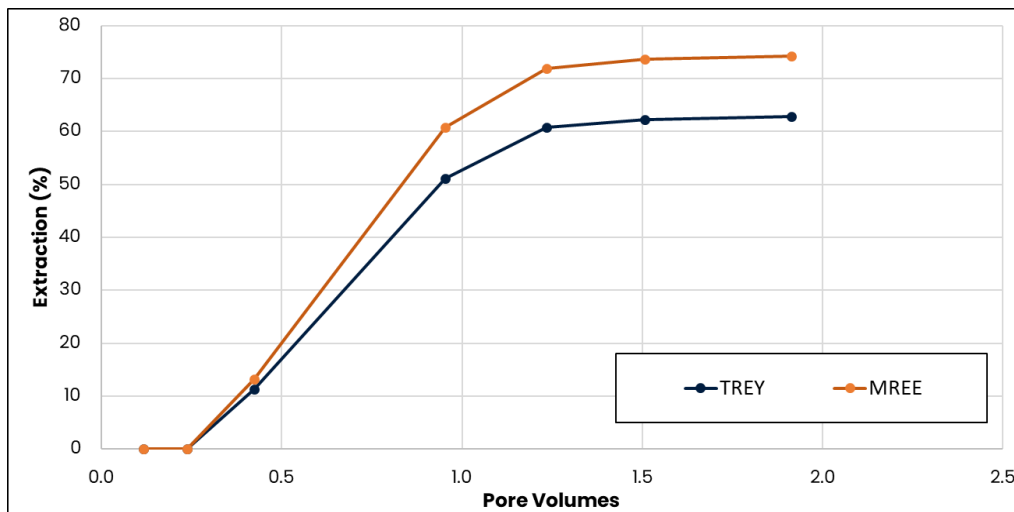


Figure 11. Cumulative extraction of rare earth elements in (%) over the 28-day test period.

Water Permit Granted

The Amazonas state Environmental Protection Institute (IPAAM) has granted BCM a water usage permit valid for a 2-year period⁵.

Permit to support;

- the commencement of a field pilot trial to assess the in-situ permeability of the clay profile hosting the rare earths; and
- hydraulic modelling to assess the residual chemistry of the leached profile post rare earth extraction

The field pilot trial is an important next step in the evolution of the Ema rare earths project which will gather important information for the next study phase. To date, the Company has completed numerous field slug tests¹ and laboratory column tests both within Brazil and at Australian Nuclear Science & Technology Organisation (ANSTO)² in Sydney. To date, all tests show there is a degree of permeability within the weathered clays that allows solution flow and the ability to ionically recover rare earths into solution.

Executes variation to funding agreement

The Company executed a variation to the Converting Loan Agreement with Drake Special Situations LLC (now Drake Private Investments LLC.) (Lender), originally announced on 19 December 2019 and as subsequently varied.

The material varied key terms being:

- Issue Price now means the lower of:
 - a 10% discount to the Recent Raising Price, being the price paid for Shares in the most recent capital raising undertaken by the Company prior to the Lender exercising its conversion rights or where the most recent capital raising was by way of alternative financing, the effective price that otherwise would be paid for Shares;
 - a 10% discount to the 5-day VWAP for the trading of Shares on ASX ending on the day prior to the Lender providing a conversion election; and
 - 2.00 cents.
 - Term has been extended to 15 December 2026 or as otherwise agreed to by the parties.
 - Interest rate of 10% per annum.
 - Under the terms of the variation the Lender has also agreed to provide an additional advance of \$300,000 on or before 20 December 2025, but in any event after 31 March 2025 (2025 Advance).
 - In return for the 2025 Advance, the Company has agreed to issued 50,000,000 options exercisable at \$0.0175 on or before 15 December 2028. The options were issued within the Company's existing Listing Rule 7.1 placement capacity.
 - The variation remains subject to shareholder approval at a shareholder meeting to be held in May 2025.

Update on Environmental Baseline Assessment

Environmental Baseline Data Collection continuation and expansion of the collection of environmental baseline data to support the Ema Environmental Impact Assessment which is being conducted by CERN has been focusing on:

- Background flora, fauna and hydrological studies in both the wet and dry seasons for the preparation of the environmental impact assessment
- In-depth analysis of potential environmental impacts due to the construction and operation of the production facility, particularly focusing on potential hydrological impacts.
- Mitigation Strategies: Development of comprehensive plans to mitigate any identified environmental and social impacts, including water management plans and restoration of degraded areas.

- Stakeholder Engagement: Continued engagement with local communities and stakeholders to ensure transparency and address any concerns.

Permeability Field Trials 2025

Field trial preparations are well advanced and anticipated to commence in the next quarter. The Company has now contracted WSP Brazil to procure all remaining items required for the trial, to mobilise, establish the site and operate the wellfield to provide the hydrogeological data required.

Corporate

For the purpose of Section 6 of the Appendix 5B, all payments made to related parties have been paid in relation to director fees.

References

¹Brazilian Critical Minerals (ASX:BCM) – Ema Rare Earths Scoping Study confirms low Capex and Opex
26th February 2025

²Brazilian Critical Minerals (ASX:BCM) – Ema MRE Delivers Significant Increase in Indicated Resource
21st February 2025

³Brazilian Critical Minerals (ASX:BCM) – Strong Infill Drilling Results Confirm Ema Starter Zone 21st
January 2025

⁴Brazilian Critical Minerals (ASX:BCM) – Thick Mineralised Intercepts from Ema continues 17th February
2025

⁵Brazilian Critical Minerals (ASX:BCM) – Ema Project receives Water Permit 13th March 2025

This announcement has been authorised for release by the Board of Directors.

For more information:

Andrew Reid

Managing Director
Brazilian Critical Minerals Ltd
E: andrew.reid@braziliancriticalminerals.com
M: +61 432 740 975

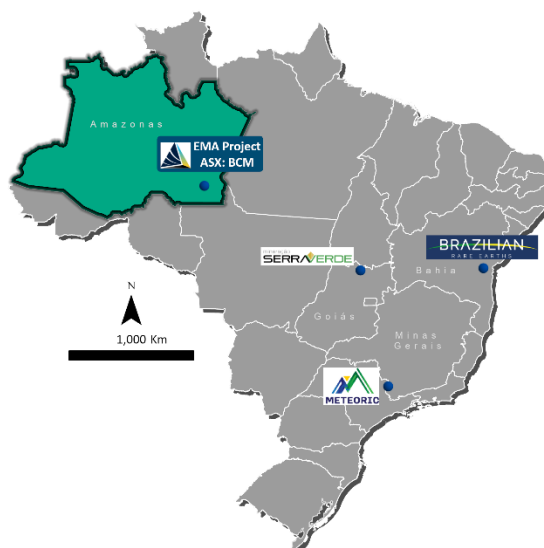
About Brazilian Critical Minerals Ltd

Brazilian Critical Minerals Limited (BCM) is a mineral exploration company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, in the Apuí region, where BCM has discovered a world class Ionic Adsorbed Clay (IAC) Rare Earth Elements deposit. The Ema IAC project is contained within the 781 km² of exploration tenements within the Colider Group.

BCM has defined an indicated and inferred MRE of 977Mt of REE's with metallurgical recoveries averaging 68% MREO some of the highest for these types of deposits anywhere in the world.

The Company is currently converting this MRE from Inferred into the Indicated category with an extensive drill program which will inform the scoping study and economic analysis released in Q1 2025.



JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO:TREO %
Indicated	500	135	763	174	16	190	25
Inferred	500	842	724	172	16	188	26
Total	500	977	729	172	16	188	26

Competent Person Statement

The information in this announcement that relates to exploration results is based on information compiled by Mr. Antonio de Castro, BSc (Hons), who is a member of Australasian Institute of Mining and Metallurgy (AusIMM), CREA, who acts as BCM's Senior Consulting Geologist through the consultancy firm, ADC Geologia Ltda. Mr. de Castro has sufficient experience which is relevant to the type of deposit under consideration and to the reporting of exploration results and analytical and metallurgical test work to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Castro consents to the report being issued in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of mineral resource estimate, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Additional Information required under Listing Rule 5.3.3

Tenements held at the end of the quarter	Area (Ha)	Percentage ownership
ANM Permit Number 880.107/08 Location Brazil (Ema)	9,839.91	100% Exploration Licence
ANM Permit 880.184/16 Location Brazil (Ema East)	9,034.00	100% Exploration Licence
ANM Permit Number 880.090.08 Location Brazil (Três Estados)	8,172.25	100% Exploration Licence
ANM Permit Number 880.025/2023 Location Brazil (Apuí iREE)	2,417.00	100% Exploration Licence
ANM Permit Number 880.026/2023 Location Brazil (Apuí iREE)	6,591.90	100% Exploration Licence
ANM Permit Number 880.027/2023 Location Brazil (Apuí iREE)	5,856.00	100% Exploration Licence
ANM Permit Number 880.259/2020 Location Brazil (Apuí iREE)	9,092.01	100% Exploration Licence
ANM Permit Number 880.149/2017 Location Brazil (Apuí iREE)	9,815.15	100% Exploration License
ANM Permit Number 880.076/2023 Location Brazil (Apuí ENE iREE)	8,475.30	100% Exploration application
ANM Permit Number 880.077/2023 Location Brazil (Apuí ENE iREE)	8,856.84	100% Exploration application