Cautionary Statement: EMA RARE EARTHS SCOPING STUDY

This Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential development of the Ema Rare Earth deposit. It is a preliminary technical and economic study of the potential viability of the Ema Project. The Scoping Study outcomes, production target and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before BCM will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.

Of the Mineral Resources scheduled for extraction in the Scoping Study production plan are approximately 80% are classified as Indicated and 20% as Inferred. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Inferred Resources comprise 0% of the production schedule in the first year of operation and an average of 0% over the first sixteen years of operation. BCM confirms that the financial viability of the Ema Project is not dependent on the inclusion of Inferred Resources in the production schedule.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found in the ASX release dated 21 February 2025. For full details of the Mineral Resources estimate, please refer to ASX release dated 21 February 2025, Ema MRE Delivers Significant Increase in Indicated Resource. BCM confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

This release contains a series of forward-looking statements. Generally, the words "expect," “potential”, "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this release regarding BCM's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of rare earths, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe BCM's future plans, objectives or goals, including words to the effect that BCM or management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by BCM, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

BCM has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this release. This includes a reasonable basis to expect that it will be able to fund the development of the Ema Project upon successful delivery of key development milestones and when required. The detailed reasons for these conclusions are outlined throughout this ASX release and the original Scoping Study (February 2025) release. While BCM considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved and are considered preliminary in nature.

To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in excess of US$55M may be required. There is no certainty that BCM will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of BCM's shares. It is also possible that BCM could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Ema Project. This could materially reduce BCM's proportionate ownership of the Ema Project.

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX release.

BRAZILIAN CRITICAL MINERALS

Ema Rare Earths Scoping Study Confirms Potential for Ultra Low CAPEX and OPEX Project, Showing Strong Financial Returns at Current Commodity Prices

Brazilian Critical Minerals Ltd (**BCM** or the **Company**) (ASX: BCM) advises of completion of a Scoping Study on its 100%-owned EMA Rare Earths Project (**Ema Project**) in southeastern Amazonas, Brazil.

The Scoping Study was completed utilising industry recognised experts in the Australian engineering group, Ausenco Pty Ltd (Ausenco), to assist with engineering and process flowsheet development, capital and operating costs as well as pre-tax financial modelling.

Brazilian GE21 completed the mineral resource estimation (MRE) and supervised the large drill program during 2024. The Australian Nuclear Science & Technology Organisation, ANSTO, was engaged for metallurgical work development from leaching recoveries, impurity removal, precipitation and final product MREC production, whilst international engineering group, WSP, were contracted for hydrogeological development, modelling and well field design.

SCOPING STUDY HIGHLIGHTS

- **Sustained, operating scale: 4,800t pa of TREO** production (average LOM) within a high-grade (55.3%) 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$55M (inclusive of 35% contingency):** Industry low capital requirement to produce MREC in Western world
- **Post-tax NPV$_{8\%}$ of US$498M:** at LOM prices of US$74/kg NdPr
- **Post-tax IRR of 55%**: payback period calculated to 28 months

The Scoping Study incorporates the recent Ema Project mineral resource upgrade[1] into the mine schedule to drive project simplification, permitting efficiency and development fast-tracking. It also incorporates capital and operating cost estimates. All other key input parameters were developed from first principal calculations and assumptions from existing referenced operations and were applied to the Scoping Study.

The Scoping Study delivers a post-tax NPV$_8$% (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. This 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

KEY OPPORTUNITIES

- **Higher product yield.** 55.3% Mixed Rare Earth Carbonate and high MREO (NdPrDyTb) composition of 37.9% within the TREO generating superior revenue per kg of final product coupled with high recovery yields drives the NPV at spot prices
- **Rare Earth Price:** Conservative spot Rare Earth benchmark price of US$60/kg NdPr and US$74/kg NdPr LOM
- **Imminently Scalable:** Substantial further Inferred Resource over 82km^2 potential exists across the entire Ema Project tenement base, of which conversion from Inferred to Indicated could be realised
- **Ema expansion / extension options.** Clear potential for Ema to be permitted and mined in the future as an expansion development and/or mine life extension for the Ema Project

[1] For full details of the Mineral Resources estimate, please refer to ASX release dated 21 *February 2025, Ema MRE Delivers Significant Increase in Indicated Resource*. BCM confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

Andrew Reid, Managing Director, commented:

"The results from this scoping study are so good that in terms of Capex, Opex and NPV at current spot prices this project has few peers compared to those looking to develop rare earth projects in the western world.

*The team at BCM have developed a project leveraging the unique characteristics of the Ema mineralisation through ISR extraction and delivered a project with a CAPEX of only $55M whilst able to produce a high value mixed rare earth carbonate. OPEX at **US$6.15/kg** TREO is uniquely low and positioned in the very lowest portion of the cost curve.*

Capital Efficiency, IRR and NPV at current spot prices generate outstanding, meaningful and solid returns with good cash flows.

The ISR extraction technique, prevalent throughout China, Myanmar and other parts of SE-Asia is simple, effective, quick to build, and when coupled with the use of magnesium sulfate turns the Ema Project into a highly compliant ESG project with little disturbance to the local environment, local biodiversity and ecosystems when coupled with ZERO mine waste, tailings, air pollution, noise and hazardous substances to contend with.

We will now forge on with field pilot trials to test permeability, complete environmental baseline assessments and commence engineering studies as part of a larger more detailed next study phase which we aim to complete throughout 2025.

A big thank you to the team, our consulting partners and everyone involved in pulling this unique project together, which will be a first of its kind for rare earths in the western world, but common elsewhere."

Figure 1. Location of the Ema project in Brazil

Key physical outcomes

Scheduled production is sourced solely from the central Ema starter zone area throughout the Scoping Study project operating life with a Mineral Resource Estimate of 341Mt @746ppm for approximately 104,000t TREO recoverable.

The Scoping Study contemplates a nameplate processing capacity of 2,660tpa TREO (approximately 4,800tpa of shipped MREC), for the first full three years (year 1 ramp-up, year 2-3 full production) which will then follow in year 4 with an expansion which will take TREO production to approximately 5,300tpa (approximately 9,600tpa of shipped MREC) from year 5.

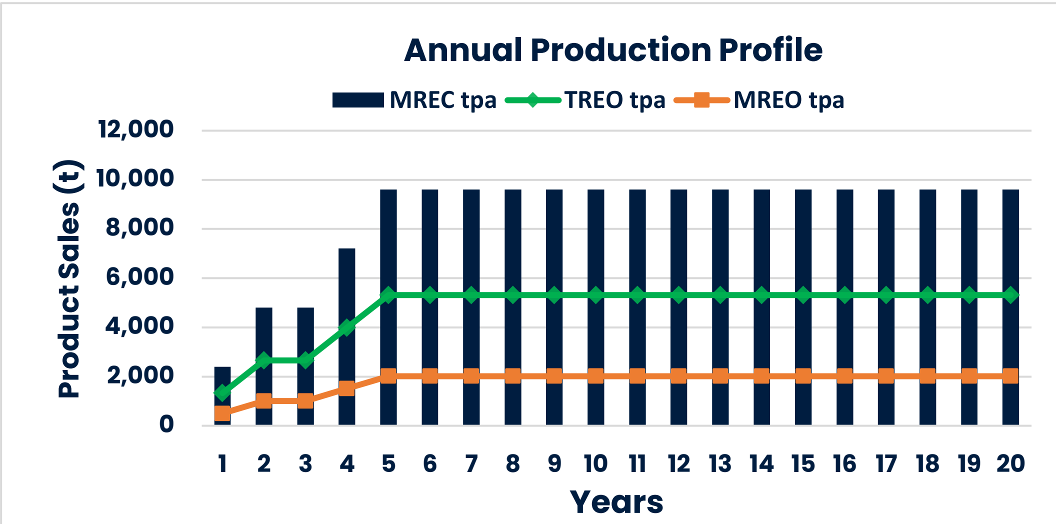

Figure 2: Scoping Study Production Profile from the Central Starter Zone MRE

The initial life-of-mine production capacity is approximately 2,660tpa TREO which will increase to 5,314tpa TREO during year 4, resulting in a 20-year operation (Figure 2). MREC production per annum over the LOM averages 8,740t. The Scoping Study retains a conservative production ramp-up (in-line with referenced operations currently in production) with nameplate production not forecast to be reached until Year 5.

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$22.1M** in year 4 to be sourced from cash flow
- Post tax$_8$NPV **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

Royalties in the financial model were set at either 3% or 6% of revenue reflecting agreements over different tenements. All capital and operating cost forecasting is structured on an owner operator basis, with all equipment purchased outright. Project capital costs have been assessed to a Class 5 Engineering Standard with the estimation accuracy of the Scoping Study being -30%/+50%.

Table 3: Key financial forecasts

Key financial outcomes	Unit	Spot	LOM
Price inputs (LOM average)			
R$/US$ (long term forecast)		0.174	0.174
TREO price forecast	US$/kg	30	37
NdPr price forecast	US$/kg	60	74
Cashflow & Earnings Metrics			
Annual Revenue	US$M	143	182
Revenue	US$M	2,869	3,634
Project net cashflow (post-tax)	US$M	911	1,279
NPV, returns and key metrics			
$NPV_{8\%}$ (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 12.02.25 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%**

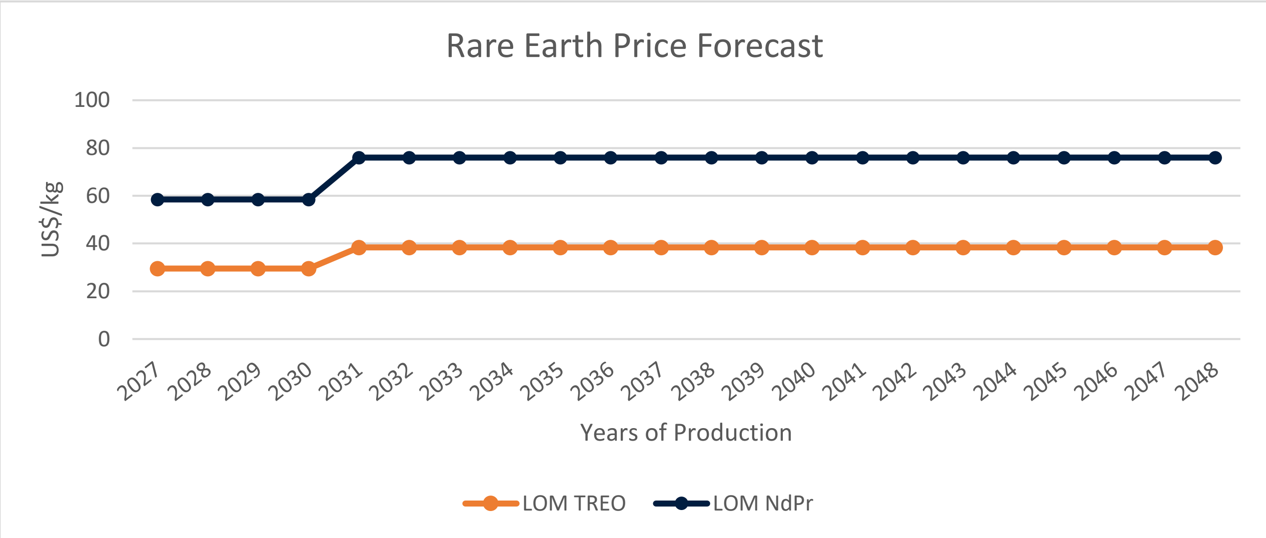

Figure 4: Ema Rare Earth Basket Prices Utilised in Financial Modelling. Average LOM prices used were US$37/kg TREO and $74/kg NdPr for the base financial case and applied without indexation over the LOM.

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.

MREC is most typically priced based on the Asian Metals referenced price **https://www.asianmetal.com/** and over the last 18 months prices have been low but relatively stable on the back of large Chinese supply into the market. As a result, the company has taken an extremely conservative approach to pricing and forward price projections adopting the current spot price with a moderate increase after year 5 (Figure 4).

Table 5: Ema MREC Rare Earth Basket Price as of the 12 February 2025

SPOT MREC BASKET			BCM	
	Head Grade (ppm)		965	
	Reagent		Magnesium Sulfate	
	Leaching Time		30 Minutes	
	pH		4.5	
	Product		MREC	
Oxide		Price (12.02.25) USD/kg	%	Basket $
La2O3	$	0.53	34.7	$ 0.18
CeO2	$	1.14	8.9	$ 0.10
Pr6O11	$	62.47	7.1	$ 4.45
Nd2O3	$	61.36	29.1	$ 17.88
Sm2O3	$	2.09	4.6	$ 0.10
Eu2O3	$	27.19	0.5	$ 0.15
Gd2O3	$	23.15	2.9	$ 0.67
Tb4O7	$	859.02	0.3	$ 2.33
Dy2O3	$	242.64	1.4	$ 3.33
Ho2O3	$	66.24	0.2	$ 0.16
Er2O3	$	41.14	0.7	$ 0.29
Tm2O3	$	112.40	0.1	$ 0.11
Yb2O3	$	14.08	0.6	$ 0.08
Lu2O3	$	718.17	0.1	$ 0.60
Y2O3	$	5.72	8.7	$ 0.50
Basket Price US$/kg (TREO)			**$**	**30.93**
Basket Price US$/kg (NdPrDyTb)			**$**	**27.99**
MREO %			37.9	
TREO %			100.0	

The MREO value of the Ema basket at spot prices represents 90% of the calculated TREO $/kg basket price.

In addition to the prices utilised above, a further flat 30% discount (70% payability) for TREO within all Ema MREC product has been applied to all prices calculated above to account for China VAT and discounts required by customers. A R$/US$ exchange rate of 0.174 has been utilised over the LOM. Royalty unit costs of 3% and 6% of gross revenue have been accounted for in the cash flow model where required.

Scoping Study parameters

The Scoping Study is a preliminary assessment based on Class 5 Association for the Advancement of Cost Engineering (AACE) compliant cost development -30% +50% and includes a contingency factor of 35%.

Leading Engineering firm, Ausenco Pty Limited, was the external study manager for the Scoping Study to assist with engineering and process flowsheet development, capital and operating costs as well as pre-tax financial modelling.

The Australian Nuclear Science & Technology Organisation (ANSTO) test work development results were utilised for leaching recoveries, impurity removal, precipitation and final product MREC production. WSP were engaged for hydrogeological development, modelling and well field design and costing.

This release contains requisite information with respect to the selected modifying factors and outcomes.

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. 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 3) 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.

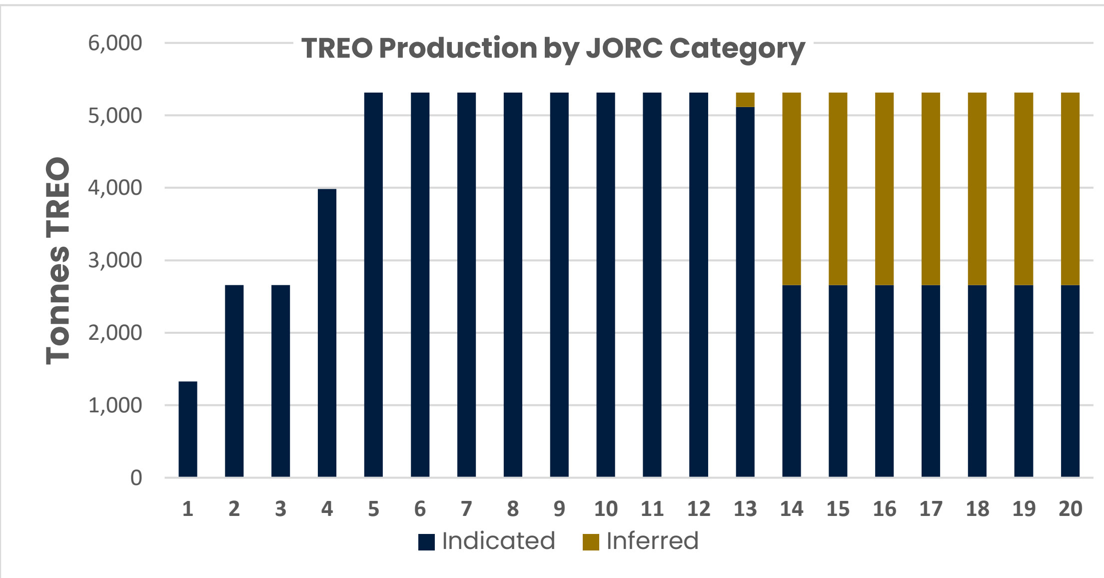

Figure 3: Mine Schedule by year and JORC Category

Table 6: Updated Ema Mineral Resource – starter zone area only (February 2025)

Ema – central starter zone	Cut-off TREO ppm	Tonnes Mt	TREO ppm	NdPr Mt	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**

Notes:

1. TREO = total rare earth oxides (CeO_2, Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, La_2O_3, Lu_2O_3, Nd_2O_3, Pr_6O_{11}, Sm_2O_3, Tb_4O_7, Tm_2O_3, Yb_2O_3) + Y_2O_3
2. NdPr=Pr_6O_{11}+Nd_2O_3
3. DyTb= Dy_2O_3 + Tb_4O_7
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.

Total Ema Project resources now stand at 943 Mt (248 Mt Indicated and 694 Mt Inferred). Following the substantial classification upgrade to the Ema central starter zone, higher confidence Indicated resources now comprise 73% of the total Ema Project resource tonnage base within the central starter area.

Regulatory and social licence to operate

The recent learnings from the adjacent Tres Estados permitting process, which has similar or identical environmental, social, and geological settings, are being actively applied and utilised for baseline studies, stakeholder engagement, impact assessment and permit applications with respect to the Ema Project.

There is no prior First Nations habitation in the vicinity of the Ema Project, and BCM has already undertaken early engagement with, government, communities and other relevant stakeholders in relation to development of the Ema Project. Ownership of all regulatory applications and early, proactive engagement of federal and state regulators remains an ongoing focus.

BCM commenced a comprehensive environmental study program in 2024 and has continued detailed baseline work through the 2024 dry season field program which will continue into early 2025 wet season. The results of the baseline program will form the foundation for mine planning, impact assessment and environmental licensing applications.

The southern limit of the Ema Project tenement straddles and in places overlaps the 3km wide buffer zone between the Mineral Resource area and the Jutuarana National Forest. Whilst mining activities within buffer zones are permitted and may be undertaken upon completion of an Environmental Impact Assessment, BCM does not plan at this stage to conduct any exploration activities or to submit any plans for mining within the buffer zone.

Key opportunities

Several opportunities exist to potentially significantly enhance the outcomes presented in the Updated Scoping Study.

1. Rare Earths pricing

The rare earths pricing US$/kg inputs utilised for the Scoping Study are conservative current prices with moderate escalation flatlined over the life of mine after year 5.

Utilising a 10% higher benchmark LOM price input (US$41/kg TREO equivalent to approximately US$80/kg NdPr) increases the Scoping Study Ema project NPV to approximately **US$764M**, an approximate 61% increase from the base case pre-tax spot NPV of US$474M.

There is material uncertainty to any benchmark price forecast going forward as China currently enjoys monopolistic advantages in the extraction, separation and metallic conversion of REEs into magnets compared to the rest of the world. The company therefore determined it was prudent to utilise prices in line or only slightly higher than prevailing market spot prices as outlined above.

A series of five individual stress tests was performed on the final financial model (Table 7) and compared to the base financial post-tax model. In each scenario the Ema project maintained a healthy NPV and IRR and results after increasing Capex and then Opex by 50% showed that the Ema project was not sensitive to major cost increases in these areas.

Table 7: Post-tax NPV sensitivity analysis with US$ inputs

Post-tax	Base case (NPV US$498, IRR 55%) US$M				
(US$M)	$53/kg NdPr	$60/kg NdPr flat	$53/kg NdPr flat	Opex 50% higher	Plant Capex 50% higher
NPV	394	355	265	398	461
Discount Rate	8%	8%	8%	8%	8%
IRR	47%	52%	40%	45%	41%
CE (NPV/Capex)	476%	428%	321%	481%	376%

All prices for this study in US dollars. Prices sourced from Australia were converted A$/US$ at 0.65 and inputs from Brazil Real R$/US$ at 0.174. These exchange rates drive all US$ cost assumptions in the Scoping Study that are denominated in US$ comprising the bulk of the forecast Ema operating and capital cost base.

2. Exploration upside and multiple developments

Substantial resource upside exists across the entire Ema project tenement base, particularly outside of the central starter zone where drilling is either widely spaced at 800m centres or not drilled at all. Approximately 55% of the existing tenement package has not been drilled.

Further resource delineation has the clear potential to supplement the currently planned Ema project development by extending operating life, delivering expansion potential and/or lowering average production costs.

Key processing assumptions

Processing requirements

Ausenco was engaged to provide a conceptual design and capital expenditure estimates for rare earth handling and processing requirements. The processing design for the Ema Project is based on a single processing plant, consistent with other mines and projects targeting ISR rare earths with a plant expansion doubling capacity forecast for construction during year 4.

The Ema Project design basis incorporates in-situ recovery of the rare earths followed by the above ground stages of impurity removal, precipitation and filtration to a lower moisture content to be bagged in 1t bulka bags ready for shipment. While several options were analysed, the selected processing plant is based on a throughput capacity of 2,660tpa of TREO in years 1-4 expanded to 5,314tpa from year 5 onwards.

Design objectives

To develop the capital and operating costs, a high-level flowsheet was initially established, including hydrogeological modelling of the in-situ leaching, completed by WSP Adelaide (Figure 5). PLS solution handling, the rare earths preparation plant to remove impurities and final precipitation and filtration and product handling capabilities. Based on these flowsheets, high-level capital and operating cost estimates were developed. A baseline MREC quality product containing 55.3% TREO was assumed.

The following principal design objectives were applied for the proposed processing plant:

- Facilities are designed for a nominal 20-year mine life, operating 24 hours per day, 7 days per week, with assumed operating hours of 8,000 hours per year excluding wear and tear.
- Facilities are based on safe, economical, durable and functional designs.
- The processing plan is based on in-situ leaching followed by standard industry impurity removal and precipitation, filtration and product packaging.

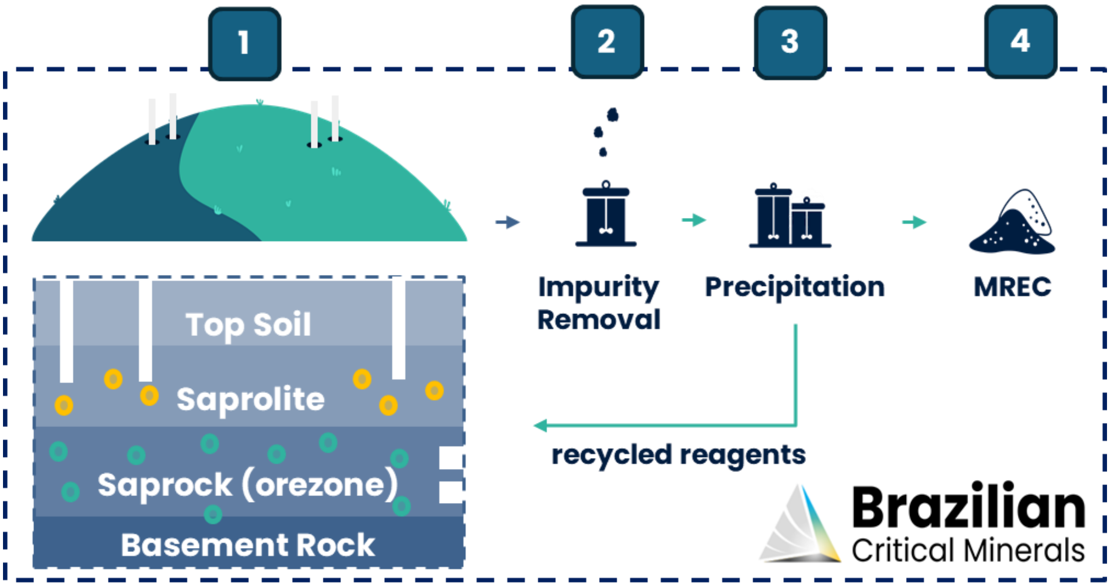

Figure 5: Ema Rare Earth Simplified Process Flow Sheet

Table 8: Rare Earth leach recoveries and composition % in final product MREC

Elements	Recovery to MREC	TREO in MREC
	Extraction (%) Average	***Composition (%) Average***
La	61.4	34.7
Ce	15.8	8.9
Pr	60.6	7.1
Nd	64.4	29.1
Sm	60.0	4.6
Eu	56.9	0.5
Gd	56.3	2.9
Tb	47.0	0.3
Dy	41.8	1.4
Ho	42.5	0.2
Er	37.1	0.7
Tm	36.6	0.1
Yb	30.4	0.6
Lu	31.0	0.1
Y	43.5	8.7
Total	48.1	100.0
MREO	62.3	37.9

Key infrastructure

On site infrastructure

The Project will require onsite surface facilities to support mine operations that includes the following:

- Administration facilities including offices, training and meeting, first aid, emergency response facilities as well as workers' shift change and sanitary facilities.
- Warehouse facilities.
- ISR equipment workshop facilities and fuel facilities.
- ISR Solution transfer tanks with associated piping and solution injecting capabilities
- Surface REE handling and processing plant including PLS storage ponds stockpiles
- Final product (MREC) filtration and storage facilities.
- Services and associated facilities for fresh water supply and treatment, waste-water treatment, water storage for fire and process water
- Sewage treatment plant
- Electrical reticulation and communications
- First aid and Emergency Response facilities

Power supply

A low voltage power transmission line runs to the project tenements. However, power supply for the Ema Project will be sourced from standalone generators to ensure on demand power is available 24/7.

Water source

Water licenses or allocations for leaching processing are to be permitted through the National Water Agency where water licence may be granted to mining licence holders. BCM has engaged specialty water resource management consultant, CERN, to assist in identifying the best option for water licenses, and this evaluation work will feed into a future feasibility study. Possible water intake locations have been identified for the Scoping Study with details to be further examined during the feasibility. BCM plans to employ industry best practices in water conservation and water management in designing and operating the Ema Project, where site water retention, recycling and re-use will be maximised.

Operating Expenditure (Opex) Estimate

The Study Opex estimate is assessed to have an accuracy of - 30% +50%, as per the Capex estimate. The Opex is presented in terms of average unit rates per kilogram of elemental oxide produced over the modelled life of the Stage 1 plant of 2,660tpa TREO capacity expanded to 5,314 tpa TREO during year 4. Processing Opex is split into various sub-areas of the process to reflect the optionality and potential staging of processes (Table 9).

Table 9: Operating Cost breakdown by category

Operating Costs (Real LOM)	$US/kg TREO	Average Annual Cost (US$M)	Total Cost (US$M)
Well Field Drilling	0.074	0.34	8
Well Field Pumping	0.14	0.67	14
Process Plant			
Fixed – Average LOM	1.62	7.62	155
Variable – Average LOM	3.59	17.36	347
G & A – Average LOM	0.43	2.00	41
Product Transportation (MREC)	0.30	1.44	29
Total	6.15	29.43	594

Owner operator is assumed for all aspects of the operation from leaching through to final product production.

Transportation of the final product MREC from the mine gate to the final port destination will be handled through contractors and has been calculated on a CIF Asia cost basis.

Opex costs incurred prior to production have been treated as pre-production Capex. All other costs incurred after commencement of production are treated as Opex. Owner costs include the purchase and maintenance of drilling, piping and pumping equipment and are treated as sustaining capital.

Operating costs per kilogram of TREO varies based on the grade of ore being leached. Over the LOM the annual average cost per kg of TREO is **US$6.15/kg** with an all-in-sustaining (AISC) cost of **US$6.69/kg** based on the average grades mined within the central starter zone.

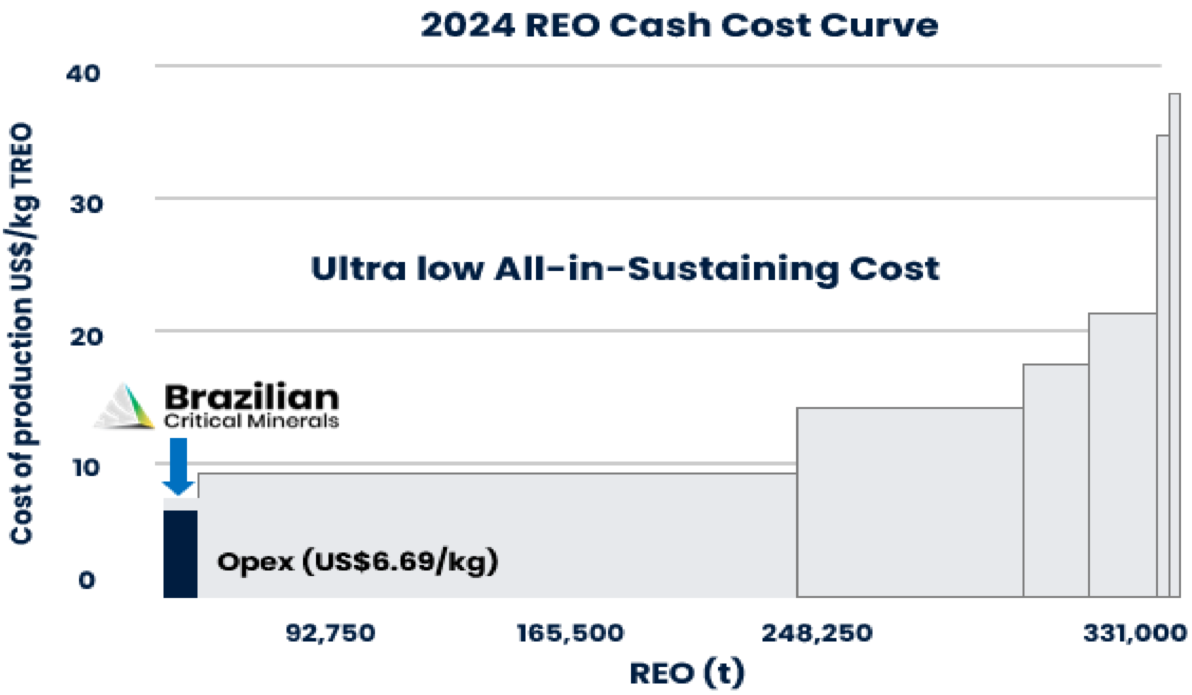

Figure 6: 2024 Rare Earth industry MREC cost curve CIF (source: Project Blue Consulting)

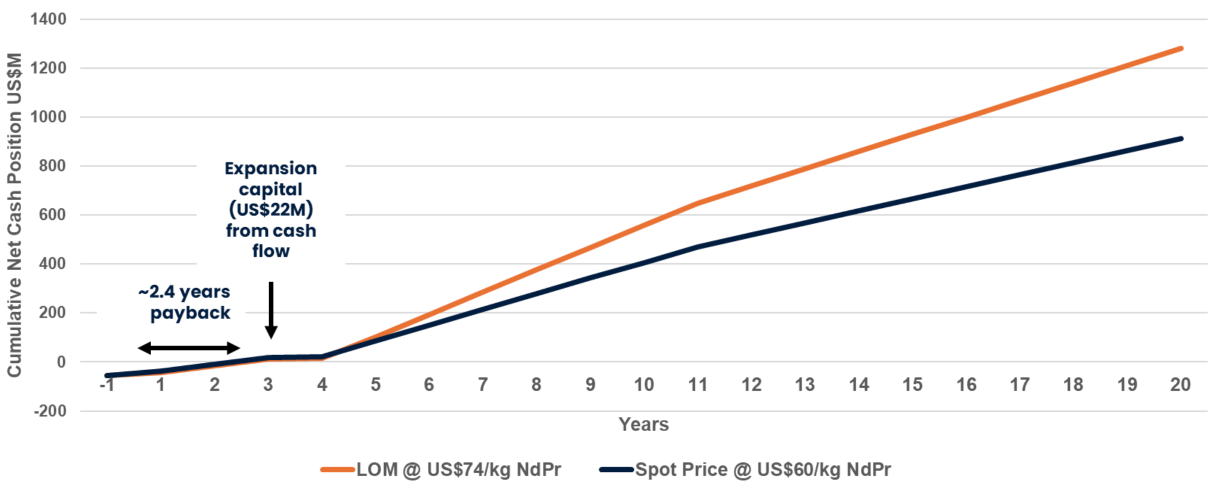

Figure 7: Cumulative Net Cash Flow after Royalties and Taxes

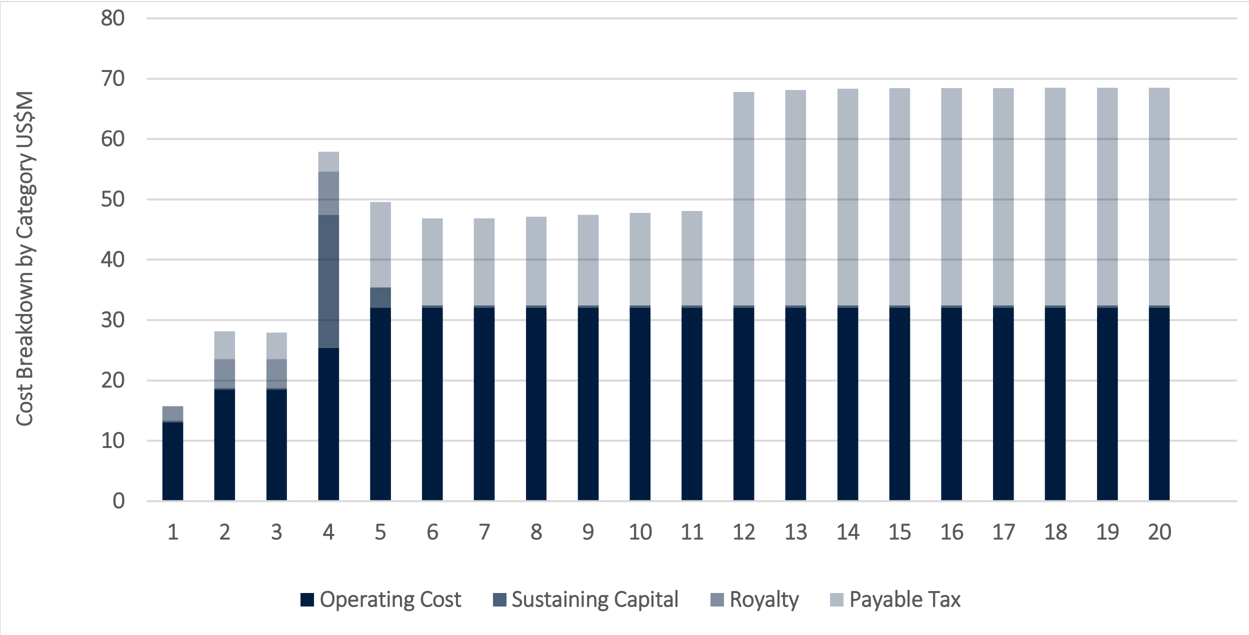

Figure 8: AISC Cost Breakdown by Major Category by Year

Capital expenditure (Capex) estimate

The Study considers a processing facility initial Capex with 2,660tpa TREO capacity and expansion Capex in year 4 to increase production to throughput to 5,313tpa TREO.

The Capex and process plant capacity has been scaled to the leaching input capacity. The economics of additional processing options beyond 5,300tpa are dependent largely on prevailing commodity prices and additional future Mineral Resource Drilling. There is optionality in phasing of this capital investment over time. This will be considered further in the Feasibility.

The Study largely utilises the cost build-up methodology from external consultants, with minor inputs from the company for some infrastructure. Both Ausenco and WSP, who assisted with hydraulic modelling and wellfield design, utilised input from their Brazilian offices in developing and/or assisting with cost estimates. The estimate base date is first quarter of calendar year 2025 (Q1 CY2025). Escalation beyond that date has not been included for this Study. Costs incurred prior to a financial investment decision are treated as sunk costs and are not included in the Capex estimates.

The Study Capex estimate is assessed to have an accuracy of - 30% +50%. A contingency allowance of 30% of the sum of the direct and indirect costs has been applied to this Study.

Table 10: Pre-Production Capex estimate breakdown by Category

CAPEX	US$M	% of total
Direct Costs		
Equipment	6.01	11.8%
Materials	1.50	2.9%
Plant Construction	17.11	33.5%
Wellfield Installation	4.72	9.1%
Indirect Costs		
EPCM	5.27	10.3%
Owner's Cost	1.46	2.9%
Other	1.83	3.6%
Contingency (35%)	13.23	25.9%
Sub-Total	51.13	100%
Year 1 – Site Establishment	4.10	
Total	55.23	

ROYALTIES, SUSTAINING CAPITAL AND TAXES

Royalties vary across the Ema Project tenements. Both tenements incur State Royalites of 2% and Landowner Royalties of 1%, however only one tenement incurs a 3% vendor royalty. All fees and royalites are based on the price forecast LOM outlined in table 1.

Annual average sustaining capital has been estimated at US$1.59M/yr with $22.1M to be incurred in year 4 as ramp up costs for final nameplate processing expansion (Figure 1).

A corporate tax rate of 15.25% has been assumed for the first 10 years of production post capital payback. The tax incentive SUDAM reduces corporate tax by 55% for a 10-year period. For the remaining LOM taxation at 34% has been applied.

PRODUCT MARKETING AND OFFTAKE STRATEGY

The in-situ leaching followed by impurity removal, REE precipitation and filtration is expected to produce:

- A Mixed Rare Earth Carbonate (MREC) containing on average 55% TREO for offtake to any international REE separation facility;

The Ema Project is focused on providing a critical mineral to party or parties that are deficient in raw material supply for the generation of permanent magnets. Given the dominance of China in the Rare Earth supply chain, the Ema MREC product, project establishment and pricing through either longer-term offtake or spot sales will enable sales into western or non-western markets.

No offtake agreements have been signed for the Project and as such products are 100% uncommitted.

PROJECT FUNDING SOURCES AND STRATEGY

Given the technical and economic attractiveness of the Study, BCM has reasonable grounds to believe the Project could be financed via a combination of debt and equity. To achieve this pre-production capital in the order of US$55m is required prior to reaching production.

At this stage of the Project, no formal discussions have yet commenced with potential financiers. Given the extremely low amounts of capital required, BCM believes debt could potentially be secured from a range of sources including the high yield bond market, resource credit funds, export credit agencies, Government agencies, or in conjunction with product sales or offtake agreements.

The company also believes a formal strategic partnering process could be attractive whereby alternative funding options, including undertaking a corporate transaction, a joint venture partnership, a partial asset sale and/or offtake pre-payment, could be undertaken if it maximises shareholder value over the long term.

Given the early stage of the Project, there is no certainty that BCM will be able to source funding as and when required. It is also possible that required funding may only be available on terms that may be dilutive to or otherwise affect the value of BCM's existing shares.

BCM has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required based on the following:

- BCM has a strong track record of raising equity funding for the advancement of the Project. ~A$10 million has been raised from equity capital markets since the discovery of the Ema Deposit in 2023.
- Demand for critical green metals needed for decarbonisation is expected to be strong and funding for quality resource projects delivering production of these metals is likely to be available. The Project has the potential to become a rare, large-scale, low-carbon, low-cost green metals mine in a jurisdiction which is expected to attract a range of financiers and

partners.

- The Project is in Brazil, one of the world's best mining jurisdictions with a stable political and regulatory environment. This is highly attractive for financiers and partners due to the low levels of sovereign, legal, operational and financial risk.
- Economic viability at this early stage of the Project, in a range of scenarios post-tax, has been demonstrated by strong free cashflow and a short capital investment payback period of ~2 years as outlined in the Study.

DEVELOPMENT TIMELINE

BCM now intends to assess the Scoping Study development through a feasibility study with the aim to maximise value and optionality and minimises risk.

Based on the positive results of the Study, the Company will commence the regulatory approvals process in H1 2025 and the next phase of study, which will commence in Q2 2025 dependant on sufficient and available funds.

Appendix A

The information in this announcement that relates to Mineral Resource Estimates at Ema project was prepared by GE21 Consultoria Mineral Ltda and released on ASX platform on 21 February 2025. The Company confirms that is not aware of any new information or data that materially affects the Mineral Resources in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the GE21 Consultoria Mineral Ltda findings are presented have not been materially modified.

This release includes exploration results and estimates of Mineral Resources. The Company has previously reported these results and estimates in ASX announcements dated 22 May 2023, 17 July 2023, 19 July 2023, 31 July 2023, 13 September 2023, 19 October 2023, 06 December 2023, 06 February 2024, 22 February 2024, 13 March 2024, 02 April 2024, 08 October 2024 19 November 2024, 21 January 2025, 17 February 2025 and 21 February 2025. The Company confirms that is not aware of any new information or data that materially affects the information included in previous announcements (as may be cross reference in the body of this announcement) and that all material assumptions and technical parameters underpinning the exploration results and Mineral Resource estimates continue to apply and have not materially changed.

Some statements in this document may be forward-looking statements. Such statements include, but not limited to, statements with regard to capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as “will”, “expect”, “anticipate”, “believe” and “envisage”.

By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside Brazilian Critical Minerals’ control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operational problems, political uncertainty and economic conditions in relevant areas of the word, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation.

References

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

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

Enquiries

For more information please contact:

Andrew Reid

Managing Director

Brazilian Critical Minerals Limited

Andrew.reid@braziliancriticalminerals.com

Appendix B

The following Table and Sections are provided to ensure compliance with JORC Code (2012 Edition).

JORC (2012) Table 1 – Section 1: Sampling Techniques and Data for auger hole drilling

Item	JORC code explanation	Comments
Sampling Techniques	• Nature and quality of sampling (eg cut channels. random chips. or specific specialised industry standard measurement tools appropriate to the minerals under investigation. such as down hole gamma sondes. or handheld XRF instruments. etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required. such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Exploration results are based on auger drilling conducted by BCM´s exploration team. • The data presented is based on the assay of soils and saprolite by auger drilling at 1m sample intervals. • Sampling was supervised by a GE21 geologist and two mining technicians. • Every 1-metre sample was collected in a big plastic bag in the field and transported to the exploration shed to be dried in the muffle. prior to homogenisation. • Samples were homogenised and subsequently riffle split with about 1 kg sent to SGS for analysis and a similar amount stored. • 1 certified blank sample. 1 certified reference material (standard) samples and 1 field duplicate sample were inserted into the sample sequence for each 25 samples.
Drilling Techniques	• Drill type (eg core. reverse circulation. open-hole hammer. rotary air blast. auger. Bangka. sonic. etc) and details (eg core diameter. triple or standard tube. depth of diamond tails. face-sampling bit or other type. whether core is oriented and if so. by what method. etc).	• Auger drilling was completed by a hand held-mechanical auger with a 3" auger bit. The drilling is an open hole. meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• No recoveries are recorded. • The operator observes the volume of each metre and notes any discrepancy. • No relationship is believed to exist between recovery and grade.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation. mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography.	• All holes were logged by GE21 geologist. detailing the colour. weathering. alteration. texture and any geological observations. Care is taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that would support a Mineral Resource Estimate. • Qualitative logging with systematic photography of the stored box. • The entire auger hole is logged.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>The total length and percentage of the relevant intersections logged.</td><td></td></tr>
<tr><td>Sub-Sampling Techniques and Sampling Procedures</td><td>
If core. whether cut or sawn and whether quarter. half or all core taken.
If non-core. whether riffled. tube sampled. rotary split. etc and whether sampled wet or dry.
For all sample types. the nature. quality and appropriateness of the sample preparation technique.
Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.
Measures taken to ensure that the sampling is representative of the in-situ material collected. including for instance results for field duplicate/second-half sampling.
Whether sample sizes are appropriate to the grain size of the material being sampled.
</td><td>
Auger sampling procedure is completed in the exploration shed in Apui.
The entire one metre sample is bagged on site. in a big plastic bag, which is transported to the exploration shed. where it is dried at 70-90C prior to homogenisation. then quartered to about 1kg to go to SGS and another 1kg to store on site.
Sample preparation for the auger samples was conducted at SGS Vespasiano (greater Belo Horizonte) comprising oven drying at 105C. crushing of entire sample to 75% < 3mm followed by rotary splitting and pulverisation of 250 to 300 grams at 95% minus 150#
The <3mm rejects and the 250-300 grams pulverised sample were returned to BCM for storage.
Only the last 10 metres of each hole were sent to assay. the samples above will be sent if required.
</td></tr>
<tr><td>Quality of Assay Data and Laboratory Tests</td><td>
The nature. quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
For geophysical tools. spectrometers. handheld XRF instruments. etc. the parameters used in determining the analysis including instrument make and model. reading times. calibrations factors applied and their derivation. etc.
Nature of quality control procedures adopted (eg standards. blanks. duplicates. external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established
</td><td>
1 blank sample. 1 certified reference material (standard) sample and 1 field duplicate sample were inserted by BBX into each 25-sample sequence.
Standard laboratory QA/QC procedures were followed. including inclusion of standard. duplicate and blank samples.
The assay results of the standards fall within acceptable tolerance limits and no material bias is evident.
The assay technique used for REE was Lithium Metaborate Fusion ICP-MS (SGS code ICP95A and IMS95A). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:

<table>
<tr><td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr>
<tr><td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Nb</td><td>Nd</td><td>Pr</td></tr>
<tr><td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr>
<tr><td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td>Zn</td><td>Co</td></tr>
<tr><td>Cu</td><td>Ni</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
The sample preparation and assay techniques used are industry standard and provide total analysis.
The ICP95A reports the major elements oxides used to calculate the Chemical Index of Alteration (CIA) at % levels included:
<table>
<tr><td>Al2O3</td><td>CaO</td><td>Cr2O3</td><td>F2O3</td></tr>
<tr><td>K2O</td><td>MgO</td><td>MnO</td><td>Na2O</td></tr>
<tr><td>P2O5</td><td>SiO2</td><td>TiO2</td><td></td></tr>
</table>
The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited.
</td></tr>
</table>

Item	JORC code explanation	Comments
		• Analytical standard for REE ITAK-713 and 714 were used as CRM material in the batches sent to SGS. • The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • The blanks used contain some REE. with critical elements Ce. Nd. Dy and Y present in small quantities. • Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. Variability between duplicate results is considered acceptable and no sampling bias is evident. • Laboratory inserted standards. blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.
Verification of Sampling and Assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data. data entry procedures. data verification. data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Apart from the routine QA/QC procedures by the Company and the laboratory. there was no other independent or alternative verification of sampling and assaying procedures. • Analytical results for REE were supplied digitally. directly from the SGS laboratory in Vespasiano to the BCMs Exploration Manager in Rio de Janeiro. • No twinned holes were used. • Geological data was logged onto paper and transferred to Excel spreadsheets at end of the day and then transferred into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data integrity checks. All assay data is imported directly into the Microsoft Access database. • No adjustments were made to the data. • All REE assay data received from the laboratory in element form is unadjusted for data entry. • Conversion of elements analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source:https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors).

Element ppm	Conversion Factor	Oxide Form
Ce	1.2284	CeO_2
Dy	1.1477	Dy_2O_3
Er	1.1435	Er_2O_3
Eu	1.1579	Eu_2O_3
Gd	1.1526	Gd_2O_3
Ho	1.1455	Ho_2O_3
La	1.1728	La_2O_3
Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.2082	Pr_6O_{11}

Item	JORC code explanation	Comments
		Sm | 1.1596 | Sm_2O_3 Tb | 1.1762 | Tb_4O_7 Tm | 1.1421 | Tm_2O_3 Y | 1.2699 | Y_2O_3 Yb | 1.1387 | Yb_2O_3 Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$ LREO (Light Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3$ HREO (Heavy Rare Earth Oxide) = $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$ CREO (Critical Rare Earth Oxide) = $Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3$ (From U.S. Department of Energy. Critical Material Strategy. December 2011) MREO (Magnetic Rare Earth Oxide) = $Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3$ NdPr = $Nd_2O_3 + Pr_6O_{11}$ DyTb = $Dy_2O_3 + Tb_4O_7$ In elemental from the classifications are: TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
Location of Data Points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys). trenches. mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• The UTM WGS84 zone 21S grid datum is used for current reporting. The drill holes collar coordinates for the holes reported are currently controlled by hand-held GPS.
Data Spacing and Distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Auger holes were in lines 400m apart with holes with 300m centers, designed for testing iREE mineralization over the mapped felsic volcanics. • The data spacing and distribution is sufficient to establish the level of REE elements present in the target area and its continuity along the regolith profile appropriate for a Mineral Resource. • No sample composition was applied.
Orientation of Data in relation to	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the	• The location and depth of the sampling is appropriate for the deposit type.

Item	JORC code explanation	Comments
Geological Structure	extent to which this is known. considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias. this should be assessed and reported if material.	• Relevant REE values are compatible with the exploration model for ionic REEs. • No relationship between mineralisation and drilling orientation is known at this stage.
Sample security	• The measures taken to ensure sample security.	• The auger samples in sealed plastic bags were sent directly to SGS by bus and then airfreight. The Company has no reason to believe that sample security poses a material risk to the integrity of the assay data.
Audit or Reviews	• The results of any audits or reviews of sampling techniques and data.	• The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.

JORC (2012) Table 1 - Section 2: Reporting of Exploration Results

Criteria	JORC code explanation	Commentary
Mineral Tenement and Land Tenure Status	• Type. reference name/number. location and ownership including agreements or material issues with third parties such as joint ventures. partnerships. overriding royalties. native title interests. historical sites. wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The Ema and Ema East leases are 100% owned by BCM with no issues in respect to native title interests. historical sites. wilderness or national park and environmental settings. • The company is not aware of any impediment to obtain a licence to operate in the area.
Exploration done by Other Parties	• Acknowledgment and appraisal of exploration by other parties.	• No exploration by other parties has been conducted in the region.
Geology	• Deposit type. geological setting and style of mineralisation.	• The REE mineralisation at Ema is contained within the tropical lateritic weathering profile developed on top of felsic rocks. rhyolites as per the Chinese deposits. • The REE mineralisation is concentrated in the weathered profile where it has dissolved from the primary mineral. such as monazite and xenotime. then adsorbed on to the neo-forming fine particles of aluminosilicate clays (e.g. kaolinite. illite. smectite). • This adsorbed iREE is the target for extraction and production of REO.
Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	• Auger locations and diagrams are presented in this announcement. • Details are tabulated in the announcement.

Criteria	JORC code explanation	Commentary
	◦ easting and northing of the drill hole collar ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ◦ dip and azimuth of the hole ◦ down hole length and interception depth ◦ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report. the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• In reporting Exploration Results. weighting averaging techniques. maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results. the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Weighted averages were calculated for all intercepts. • 500ppm TREO cut-off grade was applied to define the relevant intersections. • No metal equivalent values reported.
Relationship between mineralization widths and intercepted lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known. its nature should be reported. • If it is not known and only the down hole lengths are reported. there should be a clear statement to this effect (eg 'down hole length. true width not known').	• Significant values of REE were reported for the auger samples. • Mineralisation orientation is not known at this stage although assumed to be flat. • The downhole depths are reported, true widths are not known at this stage.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include. but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Maps and tables of the auger holes location and target location are inserted.

Criteria	JORC code explanation	Commentary
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable. representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Relevant REE mineralisation with grades higher than 500ppm TREO in auger holes were reported with confirmation of IAC (Ionic Adsorbed Clay) type mineralisation obtained in almost all the auger holes from phase 1. in this same geological setting.
Other substantive exploration data	• Other exploration data. if meaningful and material. should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density. groundwater. geotechnical and rock characteristics; potential deleterious or contaminating substances.	• No other significant exploration data has been acquired by the Company.
Further Work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions. including the main geological interpretations and future drilling areas. provided this information is not commercially sensitive.	• Specific Densities were collected for the High, Intermediate and Low weathered horizons for the MRE. • Additional metallurgical test work with magnesium sulfate leach. • Permeability test works under WSP co-ordination.

JORC (2012) Table 1 – Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• The Ema drilling database was received in CSV format, and GE21 inserted the data into Leapfrog Geo and Edge. • GE21 carried out an electronic validation of the databases with Leapfrog Geo software. No errors, such as gaps or overlapping data, or other material inconsistencies were found.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• A site visit was undertaken by Leonardo Rocha to the Ema/Ema East Project between July 11th to 15th 2024. • Competent Person, Mr de Castro has planned, managed and/or conducted work programmes, including the drilling, for the Ema/Ema East Project. He has visited site on numerous occasions.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation.	• Confidence on the geological interpretation of the rare earth mineralization in saprolite rocks is very high as exploration activities were made using a regular drill spacing and conducted the assays in additional of the REE of the major oxides (ICP95A) required to define the Chemical Index of Alteration (CIA). • Supergene alteration (weathering) zones were set up using Leapfrog™ Geo software implicit method based on a

Criteria	JORC code explanation	Commentary
	• The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	geological code on the database, applying the CIA as a reference index. • GE21 interpreted the following weathering zones (which are correlated to ore grade zones): HW (High Weathering) with CIA >93, IW (Intermediate Weathering) with CIA >82, LW (Low weathering) with CIA<82 and FR (Fresh Rock) at the EOH (End of Hole). • For the REE mineralisation hosted by clays, which is difficult to visually identify in the drilling, the CIA is critical. • Alternative interpretations are unlikely to have a material impact on the global resource volumes. • All wireframes from geological model were cut by the topographic surface.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The mineralisation has been restrained in depth considering the EOH of the auger drilling as reference.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping.	• Weathering zones modelling was conducted using Leapfrog™ Geo software's implicit methods. The weathering zones were defined based on the drilling information. Where no drilling information is available the topographic morphology was used as a reference for the wireframe construction. • A 3D block model was constructed for resource estimation purposes. The block dimensions were defined as 100m x 100m x 4m and minimum sub-block dimensions were defined as 25 x 25 x 2m to assure a good adherence between the geological model and block model. The average sample spacing is 300 metres apart for the infill area and 200 to 800 metres apart for the rest. • Rare Earth Element grades were estimated individually using Ordinary Kriging in the Block Model parent cells. Leapfrog Edge™ software was used for this process. • The visual and volumetric comparison between the geological wireframes and the block model shows a good fit for modelled units, with volumetric ratio (wireframe volume/block model volume) values inside the acceptable variation limit (98% to 103%). • No top-cuts (capping) or cut-offs were applied based on the results of an exploratory data analysis (EDA). • Search ellipse ranges were based on the results of the variography along with consideration of the drillhole spacing, with the same search neighbourhood parameters used for all elements to maintain the metal balance and correlations between elements. A three-pass search strategy was used (i.e. if initial search criteria are not met, an expanded search ellipse is used). A minimum of 3 and maximum of 12 samples, considering a maximum of 2

<table>
<tr><th>Criteria</th><th>JORC code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</td><td>samples by drillhole, was applied on the neighbour search strategy for ordinary kriging interpolation.
• Grade estimates were validated against nearest neighbouring composites. The nearest neighbour was applied as the comparative value for the kriging estimates using NN-Check statistical analysis and Swath Plots along three coordinate axes. Global biases and local biases were checked, and values were considered inside acceptance limits.
• A combined TREO grade was calculated using the estimated individual grades.
• There is no operating mine, and no production data is currently available.</td></tr>
<tr><td>Moisture</td><td>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>• All tonnages have been estimated as dry tonnages.</td></tr>
<tr><td>Cut-off parameters</td><td>• The basis of the adopted cut-off grade(s) or quality parameters applied</td><td>• A set of cut-offs were applied on sample assay results and considered on the mineralisation zone modelling interpretation. Internal waste grades were locally included in mineralised intercepts.
• The Mineral Resource has been reported at a cut-off grade of 500ppm TREO, applied directly over the block model. A pit optimisation with assumptions based on REO prices, metallurgical recoveries and operating costs was applied as the limit of mineral resource classification.</td></tr>
<tr><td>Mining factors or assumptions</td><td>• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</td><td>• A conceptual mining study has been completed to support the theoretical open cut for the Ema deposit
• Mining of the open cut deposit is assumed to use conventional equipment without the need of blasting.
• The table below presents the mining factors applied on the definition of the RPEEE.
<table>
<tr><td>Selling Price</td><td>US$/kg</td><td>By element</td></tr>
<tr><td>Discount Rate</td><td>%</td><td>8</td></tr>
<tr><td>Mining Recovery</td><td>%</td><td>100%</td></tr>
<tr><td>Mining Dilution</td><td>%</td><td>0</td></tr>
<tr><td>Metallurgical Efficiency</td><td>%</td><td>By element</td></tr>
<tr><td>Concentrate Purity</td><td>%</td><td>92.7</td></tr>
<tr><td>Overall Wall Slope Angle</td><td>deg</td><td>25</td></tr>
<tr><td>Mining Cost</td><td>US$/t mined</td><td>2.13</td></tr>
</table></td></tr>
</table>

Criteria	JORC code explanation	Commentary

Processing Cost	US$/t processed	7.23
Royalties	% of revenue	2.00
Selling Cost	US$/t REO	7.03

REE	%	US$/kg REO
Y	97.0	2.66
La	97.6	0.68
Ce	86.5	0.69
Pr	96.7	144.18
Nd	91.7	150.75
Sm	91.2	2.39
Eu	90.1	27.45
Gd	89.8	71.55
Tb	90.1	1789.25
Dy	92.2	477.25
Ho	92.2	137.25
Er	89.1	59.10
Tm	88.7	0.00
Yb	87.8	19.85
Lu	88.3	834.75

Criteria	JORC code explanation	Commentary
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical	• Metallurgical test work is ongoing. Assumptions related to the metallurgical recoveries for the Mineral Resource grades were based on Aclara's Technical Report NI 43-101, 2023, and this value was applied for the pit optimisation study for Mineral Resource classification.

Criteria	JORC code explanation	Commentary
	methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• No mine waste or tailings disposal is anticipated to be created during the tenure of the operation as a result of the ISR technique • The Company will be required to obtain the necessary environmental permits and comply with environmental laws. GE21 does not have information about any factors that could affect the acquisition of environmental licences.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Average bulk density values for each weathering zone type were defined based on 57 sand replacement in situ density assays executed by the BCM technical team. Samples were collected in survey pits along auger holes, usually spaced 2 metres in depth. Density values were correlated to a specific weathering zone type based on assay results (CIA) for average density definition. • The bulk density applied in the block model was dry based.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Basis for the mineral classification was the QAQC results, style and geometry of mineralisation, sampling grid size and density of information and mining process optimisation for mineral resources. • The Mineral Resource has been classified as an Indicated and Inferred Resource based on the anisotropic average distance to samples on ordinary kriging estimation and it has been limited in depth to represent depths accessed by auger drilling. • The Mineral Resource classification appropriately reflects the view of the Competent Person, who recommends a further infill drillhole campaign to increase the confidence level of the geological model and grade estimate. The Mineral Resource Grade Tonnage table is included in the body of this announcement.

Criteria	JORC code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The current model has not been audited by an independent third party but has been subject to GE21 and BCM's internal peer review processes.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade. • The Mineral Resource has been validated both globally and locally against the input composite data using nearest neighbour estimate. The Indicate and Inferred Resource estimate are considered globally accurate. Closer spaced drilling is required to improve the confidence of the short-range grade continuity. • No production data is available for comparison with the Mineral Resource estimate at this stage.