https://braziliancriticalminerals.com/
Investor Hub: https://braziliancriticalminerals.com/auth/signup

Ema Rare Earth Project - Bankable Feasibility Study Delivering Exceptional Economics

Post-Tax NPV_8 US$1.47B | IRR 105%
US$74M Capex | 6 months payback
US$8.84/kg TREO Opex | Among the Lowest Globally

BANKABLE FEASIBILITY STUDY HIGHLIGHTS

- **Stage 1: US$74M Capex,** inclusive of
  - New US$19M CO_2 capture storage system for Stage 1 & 2 production volumes
  - Year 1 Wellfield development costs; and
  - 14.4% contingency
- **Stage 1**: BFS vs Scoping Study Capex on like for like basis is **US$51M** vs **US$55M,** a 7% reduction
- **Stage 2: US$27M** Capex for 100% expansion
- **Post-tax NPV_8 of US$1.47B:** at Base Case (LOM) prices averaging **US$108/kg NdPr**
- **Post-tax IRR: 105%**:
- **Payback period:** calculated to 6 months
- **Operating Costs (C1): US$8.84/kg TREO** (average LOM)

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

The BFS confirms Ema as a long-life, economically resilient rare earth project, advancing BCM's pathway toward development and strengthening its exposure to critical minerals underpinning global electrification trends.

The BFS incorporates a comprehensive suite of technical, operational and engineering initiatives designed to optimise project economics, de-risk future development pathways and support progression toward a disciplined Final Investment Decision (FID). The study follows a pivotal year for the Ema development team, including the successful completion of an extensive three-month in-situ recovery field trial program.

The Bankable Feasibility Study utilises the upgraded Ema Project Mineral Resource **(ASX: BCM 22 Apr 26)** within the production schedule to optimise project design, support permitting efficiencies and facilitate a disciplined pathway toward accelerated development. The BFS also incorporates detailed capital and operating cost estimates, while all other major technical and economic assumptions were established using first-principles calculations and benchmarking from comparable industry operations.

The BFS outlines robust project economics, generating a post-tax NPV8 of US$1.47 billion through a combination of low development capital, low operating costs, simplified processing flowsheets and the production of a premium mixed rare earth carbonate (MREC) product from a long-life Mineral Resource. The study highlights Ema's potential to emerge as one of the Western world's lowest-cost rare earth projects supplying downstream-compatible MREC product.

Table 1: Bankable Feasibility Study key outcomes

Production Metrics	Unit	LOM	
Life of Mine	years	20	
Average Annual TREO produced	t	5,500	
Average Annual MREO produced	t	1,900	
TREO (in final MREC)	%	52%	
Base Case Price – NdPr	US$/kg	108	
High Case Price – NdPr	US$/kg	130	
NPV, returns and key metrics		**Base Case**	**High Case**
NPV$_{8\%}$ (post-tax, ungeared)	US$M	1,465	1,856
IRR (post-tax, nominal basis)	%	105	124
Total Cash Flow (post-tax)	US$M	3,369	4,239
EBITDA (LOM Avg)	US$M	219	271
Payback period (pre-tax, from first production)	months	6	3
Pre-production capital expenditure	US$M	74	74
Unit cash operating costs			
C1 Operating Cost – TREO	US$/kg	8.84	8.84
C1 Operating Cost - MREO	US$/kg	22.44	22.44
Payability	%	70	70

The production target in this BFS contains 16% Inferred Mineral Resources. To the extent a production target is based on those Inferred Mineral Resources, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that future exploration work will result in the determination of inferred mineral resources or that the production target itself will be realised

Andrew Reid, Managing Director, commented:

"The results of the Bankable Feasibility Study further reinforce our belief that Ema has the potential to emerge as one of the most compelling rare earth development projects globally.

The study highlights a combination of low capital intensity, low operating costs, strong projected cashflow generation and robust financial returns, positioning Ema favourably amongst both existing producers and emerging rare earth projects worldwide.

Importantly, these outcomes are underpinned by the successful application of in-situ recovery (ISR), a development approach that significantly reduces mining intensity, lowers infrastructure requirements and provides a scalable lower risk pathway to long-term production.

Ema's financial performance is particularly significant given the conservative assumptions incorporated within the study and the substantial remaining upside associated with resource expansion, wellfield optimisation, reagent recycling initiatives and future production growth.

Beyond the financial metrics, the study confirms Ema's strategic importance as a potential long-term source of magnet rare earths outside China at a time when governments, manufacturers and downstream processors are increasingly focused on securing diversified supply chains.

We believe Ema is uniquely positioned at the intersection of low-cost production, scalability and strategic relevance, providing a strong foundation as we advance toward project financing, permitting and a Final Investment Decision.

The completion of this study is not the end point for Ema, but rather the beginning of what we believe can become one of the world's most significant ionic clay rare earth developments outside of China."

KEY OPPORTUNITIES

- **Create one of the first large-scale Western ISR rare earth operations:** Lower capital intensity, lower operating costs, faster scalability, lower environmental footprint is particularly important because globally, the lowest-cost ionic clay operations utilise similar extraction approaches
- **Become a strategic upstream supplier into Western rare earth supply chains:** Brazilian jurisdiction, western aligned, large-scale resource base[1], magnet-rich REE exposure (NdPr, Dy, Tb). Ema is already being positioned around supply chain diversification, which is becoming increasingly valuable as Western governments and manufacturers seek alternative sources
- **Develop a multi-decade rare earth production platform rather than a single mine:** Longer mine life, larger production optionality, ability to stage development, greater strategic value for offtake partners
- The inclusion of a diesel generator off-gas CO_2 carbon capture storage unit significantly reduces operating costs. With reuse of the CO_2 into manufacturing magnesium bicarbonate transforms the project into one with very high ESG credentials

[1] For full details of the Mineral Resources estimate, please refer to (ASX: Apr 2026). 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.

Figure 1. Location of the Ema project in Brazil

Key physical outcomes

In-situ recovery (ISR) has emerged as the dominant method for extracting rare earth elements (REE's) from ionic adsorption clay deposits, particularly within southern China where it has been deployed at commercial scale for decades. BCM has designed an integrated engineering framework for ISR development, focusing on leaching system design, recovery modelling, and permeability enhancement.

By coupling metallurgical recovery curves with hydrogeological models, the study demonstrates how solution flow and recovery can be predicted throughput and translated into operational timelines.

The production profile in Figure 2 assumes that a series of pods are leaching sequentially and in parallel over the 20-year life of mine, with those pods closest to the processing plant being developed first. Scheduled production was sourced from April 2026 updated Mineral Resource Estimate (MRE >500ppm TREO) and >130m elevation criteria which are considered ideal for ISR extraction. 16% of the total production is sourced from the Inferred category of the MRE.

The BFS contemplates a LOM average processing capacity averaging 5,500tpa TREO (approximately 10,500tpa of shipped MREC) over the life-of-mine, through a 2-stage processing development. Stage 1 will be developed over the first 2 years followed by an expansion of 100% to Stage 2 and full nameplate capacity in year 4, as outlined in figure 2 below.

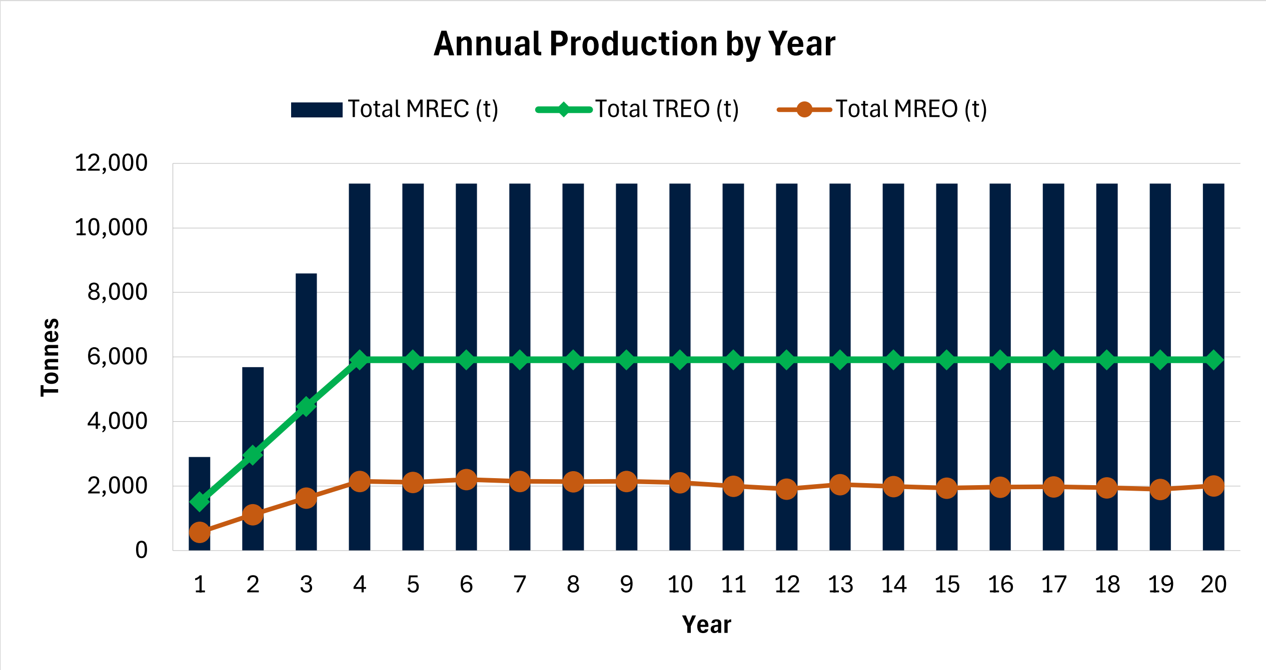


Figure 2: BFS Production profile over life of mine 20 years.

The Stage 1 process plant has designated production of 2,960tpa TREO containing approximately 35-40% by mass magnet rare earth oxides (MREO) equal to approximately 1,020tpa. Once Stage 1 leaching development is under full irrigation, Stage 2 construction at the same capacity as Stage 1 (2,960tpa TREO) is planned to commence construction in year 2 ahead of commissioning and ramp-up towards nameplate in years 3 and 4.

Over the 20-year life-of-mine, extraction of 109,500t of TREO is anticipated containing 38,000t of MREO. Only a single final product will be produced, a mixed rare earth carbonate or MREC. This MREC, on average produces a composition containing approximately 52% TREO, but can vary throughout the different pods of clay mineralisation that are being leached over the LOM.

Table 2: BFS key physical outcomes. Numbers are rounded.

Production Metrics	Unit	Years 1-5	LOM
Life of Mine	years		20
Total MREC produced	t	39,900	210,500
Total TREO produced	t	20,800	109,500
Total MREO produced	t	7,300	38,020
Average TREO plant feed Grade	ppm	1,184	1,184
MREO Recovery	%	55	55

Key economic outcomes

Projected economics for the Ema Project from the BFS Base Case pricing are outlined in Table 3.

- Low start-up capital requirements of **$US74M** inclusive of 14.4% contingency pre-production, and inclusive of wellfield development costs of US$8.8M for the first year of wellfield development costs.
- Post tax NPV8: **US$1.47B** over 20 years
- Post-tax IRR: **105%** over 20 years
- **6-month** payback
- Operating Cash Cost LOM (C1): **US$8.84/kg** of recovered TREO
- All in sustaining Cash Cost LOM: **US$13.02/kg** of recovered TREO
- Operating Cash Cost LOM (C1): **US$22.44/kg** of recovered MREO
- High Grade high value MREC containing **52%** TREO over Life of Mine
- Stage 2 capital ramp-up costs of **US$27M** expected in year 2
- Annualised average production of **~5,500t** TREO over LOM average production comprising **~1,900t** MREO

Table 3: Key financial forecasts

Key financial outcomes	Unit	Base Case	High Case
Price inputs (LOM average)			+20%
R$:US$ (long term forecast)		**5.15**	5.15
NdPr price forecast – average LOM	US$/kg	**108**	130
Dy price forecast – average LOM	US$/kg	**1,583**	1,900
Tb price forecast – average LOM	US$/kg	**3,869**	4,643
Cashflow & Earnings Metrics			
Annual Revenue	US$M	**265**	318
Total Revenue	US$M	**5,436**	6,526
Project net cashflow (post-tax)	US$M	**3,369**	4,239
NPV, returns and key metrics			
$NPV_{8\%}$ (pre-tax, ungeared)	US$M	**1,785**	2,258
$NPV_{8\%}$ (post-tax)	US$M	**1,465**	1,856
IRR (pre-tax, nominal basis)	%	**120**	142
IRR (post-tax, nominal basis)	%	**105**	124
Payback period (pre-tax, from first production)	months	**6**	3
Capital efficiency (pre-tax NPV / capex)	multiple	**16.2x**	20.5x
Pre-production capital expenditure	US$M	**74**	74
LOM sustaining capital expenditure	US$M / year	**12.95**	12.95

Key financial outcomes	Unit	Base Case	High Case
Unit cash operating costs			
Annual operating cost	US$M	**42.4**	42.4
Annual operating cost	US$/kg TREO	**8.84**	8.84
Annual AISC	US$/kg MREO	**37.50**	37.50

Base Case: Weighted Average price based on Benchmark Intelligence commissioned pricing. High Case: Weighted Average price based on Benchmark Intelligence commissioned pricing and escalated by 20% by BCM. Pre-Production Capital Expenditure is inclusive of 14.4% contingency. Annual revenue is inclusive of the 70% payability and FOB Manaus.

Project Overview

The Ema Rare Earth Project is in the Apuí region of Amazonas State, northern Brazil, and represents Brazilian Critical Minerals' flagship ionic clay-hosted rare earth development opportunity. The project is situated within a large weathered felsic volcanic terrain that has developed extensive clay-rich saprolite horizons enriched in rare earth elements, including the high-value magnet rare earths neodymium, praseodymium, dysprosium and terbium. The scale of the mineralised system, combined with favourable leach characteristics and the potential application of low-impact in-situ recovery methods, positions Ema as one of the most significant emerging ionic clay rare earth projects outside China. Through the completion of resource definition, metallurgical testwork, environmental studies and feasibility activities, BCM is advancing Ema toward development as a long-life, strategically important source of rare earth supply for global clean energy, advanced manufacturing and defence supply chains.

The project comprises the Ema and Ema East tenement areas, covering approximately 189km² of prospective felsic volcanic terrain that has developed extensive weathered clay-rich saprolite profiles enriched in rare earth elements. The large tenement holding provides BCM with a substantial exploration and development platform, supporting both the current resource base and the potential for future resource growth as only 45% of the tenement area has been explored to date. The scale of the project area also provides flexibility for staged development, allowing initial production to be focused on priority starter zones while preserving a broader pipeline of mineralised areas for future life-of-mine expansion. Combined with favourable leach characteristics, strong magnet rare earth content and the potential application of low-impact in-situ recovery methods, the Ema Project is positioned as one of the most significant emerging ionic clay rare earth projects outside China.

Study Parameters

The BFS is intended to present an advanced study level assessment and has been prepared to a standard generally consistent with an industry Class 3 estimate basis, with an expected overall capital cost accuracy range of approximately -15% to +15%, subject to the assumptions, exclusions, and qualifications contained within this report. The degree of confidence varies between individual workstreams depending on the maturity of available data, engineering definition, and external inputs.

Capital and operating cost estimates have been developed using a combination of quantity take-offs, budget quotations, historical pricing, benchmark data, vendor budget inputs, local market intelligence, and engineering judgement. Certain specialised packages and owner-managed costs remain subject to future tendering, negotiation, or confirmation.

The study incorporates a number of assumptions considered reasonable and appropriate to the level of study. Key assumptions include, but are not limited to, the following:

Mineral Resource, Production and Mine Life

- Mineral Resource, and production schedule inputs supplied by relevant specialists are materially representative of the planned operation.
- The Project can sustain nominal production over an assumed operating life of approximately 20 years, subject to staged wellfield development.
- Sufficient additional wellfield areas can be progressively developed to maintain production continuity.

Hydrogeology and Wellfield Performance

- Field trial results and available hydrogeological data are representative of broader production areas.
- Groundwater and solution flow behavior can be managed in accordance with the proposed wellfield operating strategy.
- Solution recovery, recycle rates, and losses remain within ranges adopted for the Scoping Study.
- Injection and extraction infrastructure can be progressively installed in line with the production schedule.

Metallurgy and Process Recovery

- Metallurgical testwork results are representative of expected operating performance.
- Process plant recoveries, reagent consumptions, and product quality assumptions adopted in the mass balance are achievable on a commercial scale.
- Mixed Rare Earth Carbonate (“MREC”) product specifications are acceptable to target customers.

Infrastructure and Utilities

- Site access, construction conditions, and logistics pathways remain broadly consistent with current understanding.
- Power generation, fuel supply, water supply, communications, and supporting services can be established in accordance with the proposed implementation plan.
- Climatic conditions, including seasonal rainfall, can be managed through appropriate operational and engineering controls.

Environmental and Permitting

- Required permits, licences, land access, and approvals can be obtained within the assumed development schedule.

- No material environmental or social constraints emerge beyond those currently identified.

Commercial and Financial

- Product pricing, exchange rates, taxation settings, royalties, freight costs, and other financial inputs remain within reasonable forecasting ranges.
- Markets exist for the proposed MREC product on terms generally consistent with study assumptions.

Updated Mineral Resource Estimate

The Mineral Resource Estimate ("MRE") for the Ema Project was updated by GE21 Consultoria Mineral on behalf of the Company in accordance with the JORC Code (2012 Edition). The estimate is based on geological interpretation, weathering domain modelling, assay data obtained from drilling programs completed between 2023 and 2025, and geostatistical estimation techniques appropriate for ionic clay-hosted rare earth deposits.

The Mineral Resource update followed the 2025 drilling program at the Ema Project, which focused solely on the eastern mineralised extensional zones. This program comprised 101 auger holes drilled on nominal 300 m centres.

Table 4: 2026 Mineral Resource Estimation completed by GE21

JORC Category	cut-off ppm TREO	Tonnes Mt	TREO ppm	NdPr ppm	DyTb ppm	MREO ppm	MREO:TREO %
Indicated	500	392	773	184	17	**200**	25
Inferred	500	681	712	168	15	184	25
Total	**500**	**1,071**	**732**	**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.
7. Mineral Resources are reported with Effective Date of March 10, 2026. Responsible CP is Leonardo Rocha (MAIG #7623).
8. 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 January 2025.
9. Blocks estimated by ordinary kriging at support of 100 m × 100 m × 4 m with sub-blocks 25 m × 25 m × 2 m.
10. The results are presented in situ and undiluted, are constrained within an eventual 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; Metallurgical Efficiencies estimated by element.

The MRE now has 1,071Mt @ 732ppm for a contained 785,436t of total rare earth oxides.

This revised MRE contains new drill hole data and updated domain wireframes as the April 2026 Resource Estimate **(ASX: Apr 2026)**, otherwise all other assumptions remain unchanged.

Leaching schedule incorporating upgraded Ema Mineral Resource Estimate

Nameplate capacity once both processing plants are up and running is approximately 6,000tpa TREO, Figure 3.

Production is scheduled to occur in a series of pods sequentially to maintain a suitable grade going to the process plant. Material above the elevation of 130mRL and >500ppm TREO was selected as the material criteria for limiting the leaching boundaries. Grades and oxide contents inside the 500ppm boundary where then calculated >50ppm TREO to determine production scenarios as the entire profile of saprolite is leached with ISR, not just the material >500ppm.

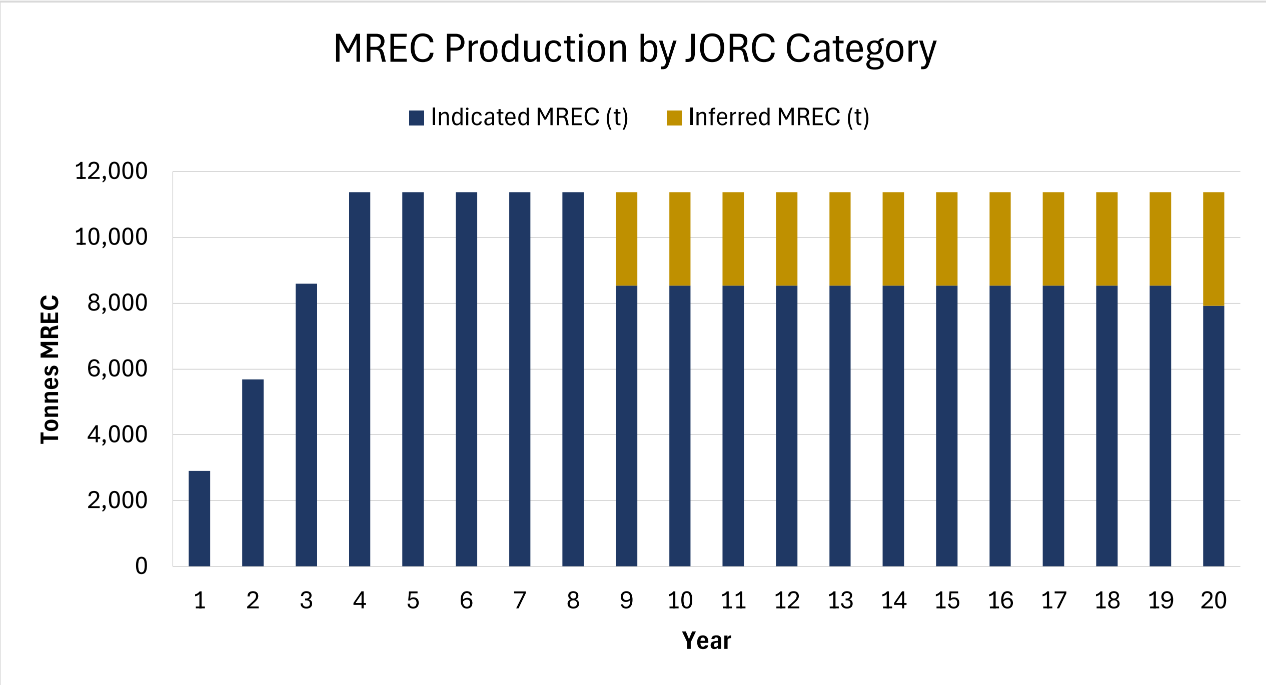


Figure 3: Mine Schedule by year and JORC Category

Over the course of the 20-year LOM, approximately 109,500 tonnes of TREO containing 38,020 tonnes of MREO will be leached. 16% of the produced MREC material is from the Inferred JORC category. No Ore reserve has been calculated for this study.

Capital Cost Estimate

Capital expenditure has been classified as either Initial Capital or Sustaining Capital. Initial Capital comprises the facilities, infrastructure, equipment, and development activities required to establish the Project and achieve first production. Sustaining Capital comprises the ongoing capital investment required to maintain production throughout the operating life of the Project, including development of future wellfield areas and replacement of selected capital equipment.

The updated capital estimate highlights the low-capital intensity of the Ema development pathway, with the base case capital requirement of **US$74 million**, incorporating the new on-site carbon capture and storage system (CCS) for the production of magnesium bicarbonate. The CCS system value is US$19M and is included as a key piece of infrastructure because of it's potential to deliver substantial operating, reagent and sustainability cost reductions through reduction of trucking costs.

Table 5: Capital Summary Expenditure

CAPEX Summary	Cost (US$M)	Contingency %	Total Incl. Contingency Cost (US$M)
TOTAL INDIRECT COSTS:	6.19	15.0%	7.12
TOTAL DIRECT COSTS:	58.24	14.3%	66.59
TOTAL	64.43	14.4%	73.71

First year of Wellfield development costs totaling US$8.8M are included in Table 5 numbers.

Comparison to Scoping Study

The Company continues to evaluate costs and infrastructure options which were identical to those developed in Scoping Study, however at this stage it is leaning heavily towards the CCS on-site option outlined above Table 5. If however this option was to be developed, the costs in Table 6 show a comparison vs the scoping study on a like-for-like basis. This includes the removal of the CCS and wellfield development costs for Year 1.

Table 6: Optional Capital Summary Expenditure, BFS vs Scoping Study

CAPEX Summary	BFS (like for like) Cost (US$M)	Scoping Study Cost (US$M)	% Difference
CAPITAL COSTS	44.74	41.9	6.8%
CONTINGENCY	6.32	13.23	-52.2%
TOTAL CAPITAL COSTS:	51.06	55.13	-7.4%

Basis of Estimate & Accuracy

The estimate has been prepared generally in accordance with the principles of an AACE International Class 3 estimate, which is considered appropriate for the level of engineering definition associated with a BFS. The expected accuracy range of the estimate is approximately ±15%, subject to the assumptions, exclusions, and qualifications identified.

The capital cost estimate base date was April 2026. Costs are presented in Brazilian Real ("BRL") as the primary estimating currency, with conversion to United States Dollars ("USD") provided for reporting purposes. No allowance has been included for escalation beyond the estimate base date.

The estimate accuracy reflects the combined maturity of engineering definition, quantity development, pricing information, and project execution assumptions available at the time of preparation.

Estimate Methodology & Pricing Basis

The capital cost estimate has been developed using a bottom-up estimating methodology based on engineering deliverables prepared during the BFS. The estimate has been built from discipline-specific material take-offs ("MTOs"), equipment lists, and engineering calculations, with quantities measured from project design documentation wherever practical.

The estimate methodology was selected to minimise reliance on high-level factoring methods typically used during earlier stages of project development. Major components of the estimate have been derived from engineering deliverables, including:

- civil earthworks quantities developed from site layouts, grading models, and earthworks calculations;
- concrete quantities developed from foundation and structural requirements;
- structural steel quantities based on building and support structure designs;
- mechanical equipment quantities based on the mechanical equipment list;
- piping quantities developed from process layouts, P&IDs, and pipe routing information;
- electrical equipment quantities based on load lists, equipment schedules, and electrical design information; and
- wellfield quantities based on the wellfield layout, injection well count, extraction system design, and associated infrastructure requirements.

Table 7: Capital Summary by Discipline

Indirect Costs	Cost	Contingency	Total Incl. Contingency
	(US$M)	%	Cost (US$M)
Mobilisation - Personnel	0.05	15.0%	0.05
Mobilisation - Plant & Equipment	0.80	15.0%	0.92
Insurances & Bank Guarantees	0.00	15.0%	0.00
Flights & Accommodation	0.40	15.0%	0.46
Site Establishment	1.13	15.0%	1.30
Site Management	0.64	15.0%	0.74
Off-Site Management	1.65	15.0%	1.89
Site Support - Indirects	0.80	15.0%	0.92
Demobilisation & Site Cleanup	0.73	15.0%	0.84
TOTAL INDIRECT COSTS:	6.19	15.0%	7.12
Direct Costs	Sub-Total	Contingency	Total Incl. Contingency

	Cost (US$M)	%	Cost (US$M)
Engineering	3.13	15.0%	3.60
Earthworks	5.60	12.6%	6.31
Concrete	1.13	14.5%	1.30
Architectural	1.09	15.0%	1.25
Structural	6.08	15.0%	6.99
Platework	0.32	15.0%	0.36
Mechanical	25.08	15.0%	28.84
Piping	6.17	11.0%	6.85
Electrical	5.45	15.0%	6.26
Commissioning	0.75	15.0%	0.86
Construction Management	1.96	15.0%	2.25
Plant & Equipment	1.49	15.0%	1.71
TOTAL DIRECT COSTS:	58.24	14.3%	66.59
TOTAL	64.43	14.4%	73.71

Initial Capital includes all facilities and infrastructure required to establish the Project and commence commercial production. This includes development of the initial production wellfield, construction of the process plant, process ponds, water management infrastructure, power generation facilities, buildings, roads, and supporting site infrastructure.

The largest capital cost components are associated with the process plant, wellfield development, earthworks, water management infrastructure, and power generation facilities. Due to the remote location of the Project, allowances for logistics, mobilisation, site establishment, and construction indirect costs also represent a significant portion of the total project capital.

Table 8: Direct Cost Summary by Area

Direct costs	Sub-total	Contingency	Sub-total incl. Contingency	Proportion of direct costs
	Cost (US$M)	%	Cost (US$M)	%
Wellfield (Year 1)	7.85	11.8%	8.78	13.2%
Process Plant	16.18	14.1%	18.47	27.7%
Non-Process Infrastructure	5.19	15.0%	5.96	9.0%
Water Services & Dams	0.74	16.0%	0.86	1.3%
Power Generation	2.71	15.0%	3.11	4.7%
Carbon Capture System	19.70	15.0%	22.65	34.0%
Roads	0.05	15.0%	0.05	0.1%
EPCM Services	5.83	15.0%	6.71	10.1%
TOTAL DIRECT COSTS:	58.24	14.3%	66.59	100.0%

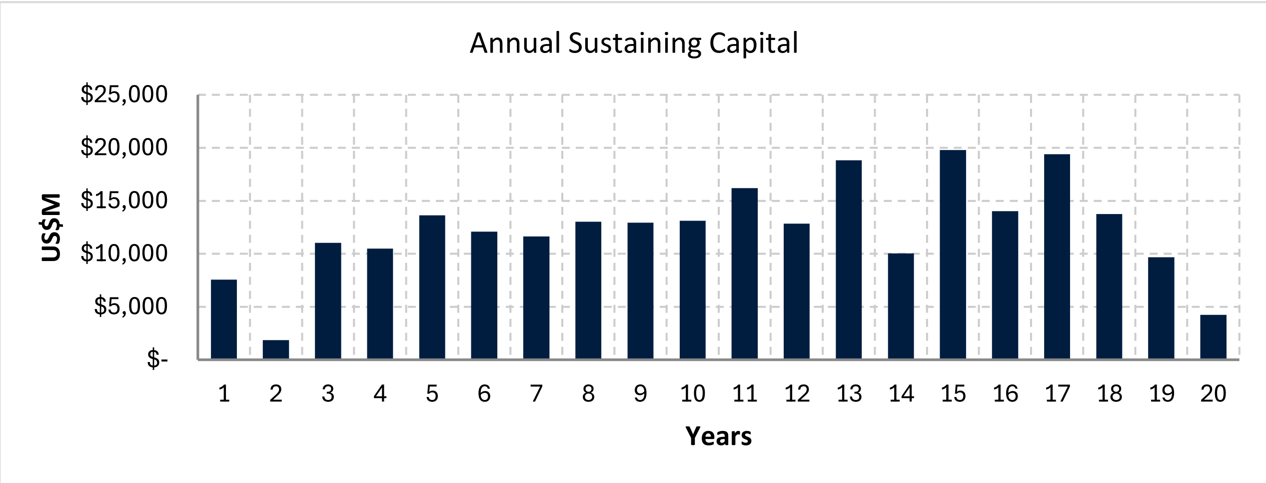
Wellfield Development Cost Basis

Due to the nature of the extraction method wellfield pre-development activities have been treated as sustaining capital costs and applied progressively at the time they are expensed (Table 8).

Over the 20-year LOM, US$258M in total sustaining capital costs have been included (Table 8). On a per kg TREO basis, this contributes approximately US$2.25/kg TREO over the LOM.

Wellfield costs include the installation of injection wells, extraction laterals, solution distribution piping, collection infrastructure, and associated wellfield support systems. The cost basis for wellfield development has been established using a first-principles assessment of labour, consumables, fuel, equipment utilisation, and maintenance requirements associated with development of new production areas.

Table 9: Annual Sustaining Wellfield Development Costs.



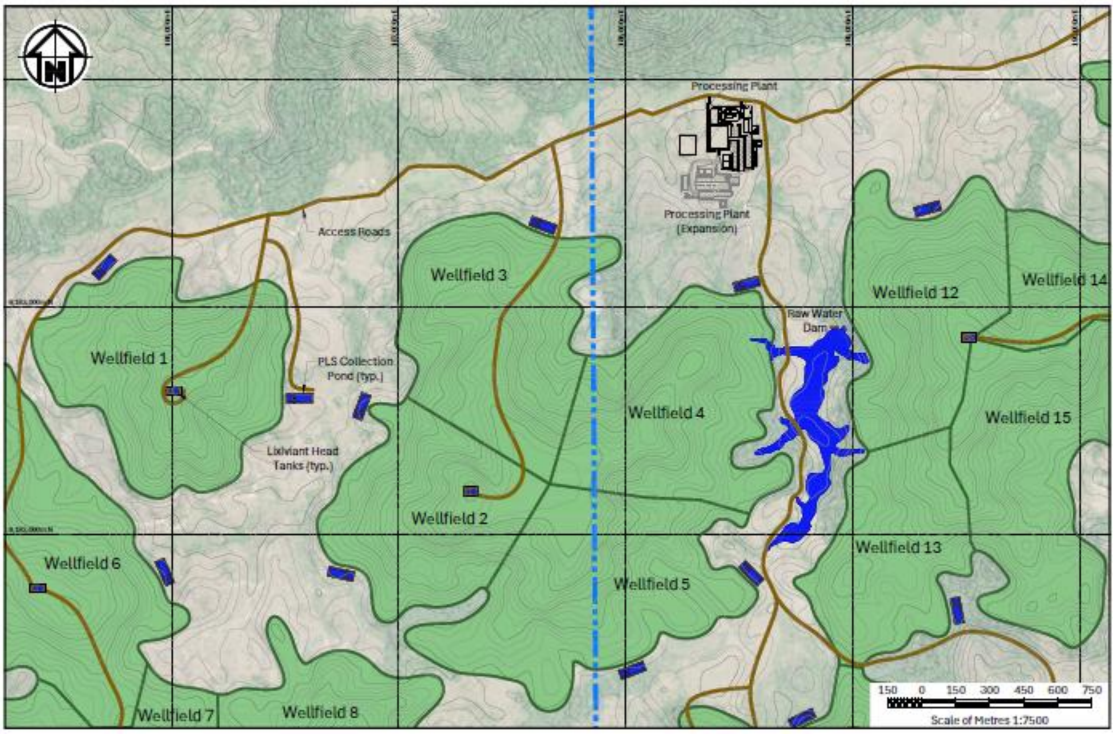


Figure 4: Location of Process Plant (Stage 1 & 2) and associated infrastructure during the first years of production.

Scope Estimate

The capital cost estimate includes the facilities and infrastructure required to develop, construct, and commission the Ema Rare Earth Project to the design production capacity defined within the BFS.

The estimate includes the following major scope areas:

- Wellfield development, including injection wells, extraction laterals, lixiviant distribution systems, pregnant liquor solution (PLS) collection systems, wellfield access infrastructure, development equipment, and associated installation activities;

- Process plant facilities, including equipment, structures, piping, electrical, instrumentation, control systems, and installation required for PLS processing, impurity removal, MREC precipitation, filtration, and product handling;

- Process ponds and water management infrastructure, including PLS storage, impurity removal ponds, MREC precipitation ponds, barren liquor storage, water treatment infrastructure, stormwater management, and associated pumping systems;

- Non-process infrastructure, including the raw water storage dam, site access roads, internal roads, drainage systems, power generation and distribution, compressed air, communications, workshops, warehouses, administration facilities, and site services;

- Construction and installation activities, including civil, structural, mechanical, piping, electrical, and instrumentation works required to complete the facilities; and

- Construction indirect costs, including mobilisation, temporary facilities, site management, supervision, construction support services and contractor indirect costs.

The estimate includes costs associated with construction and commissioning of the initial production facilities, together with allowances for sustaining capital associated with ongoing wellfield development over the life of mine.

Costs outside the estimate battery limits, including Owner's costs, financing costs, working capital, escalation, and other exclusions, are identified separately within the BFS.

Pricing Adjustments and Allowances

The capital cost estimate incorporates allowances for taxes, importation, logistics, contractor overheads, contractor profit, and other commercial adjustments necessary to reflect the anticipated project execution environment within Brazil.

Equipment and material pricing obtained from vendors and suppliers was reviewed and normalised to provide a consistent estimating basis. Where required, allowances were applied for freight, customs clearance, import duties, inland transportation, and delivery to site. Imported equipment pricing was adjusted to reflect the anticipated procurement route and the Project's remote location within the Amazonas region.

Construction pricing developed from Brazilian cost databases and first-principles estimates incorporates the applicable labour burdens, statutory obligations, and construction market allowances associated with execution of the works within Brazil. Taxation and commercial allowances have been applied in a manner consistent with the anticipated procurement and contracting strategy adopted for the Project.

A Benefícios e Despesas Indiretas ("BDI") allowance has been applied where appropriate to reflect contractor overheads, administration, insurances, financing costs, taxes, and profit margins typically associated with construction contracts in Brazil. The application of BDI was assessed on a scope-specific basis having regard to the anticipated supply and installation responsibilities of each contract package.

Indirect Costs

Indirect costs have been developed to reflect the requirements associated with construction of a remote greenfield project in the Amazonas region of Brazil. These costs represent the resources, facilities, and support services required to execute the project, but which cannot be directly attributed to individual items of installed equipment or infrastructure.

The indirect cost estimate has been developed using a bottom-up methodology based on the proposed project execution strategy, construction schedule, anticipated workforce profile, and site logistics requirements. The estimate is based on an approximately 10-12 month construction and commissioning period from mobilisation through completion of construction activities.

Contingency

A contingency allowance has been applied to the capital cost estimate to account for residual uncertainty associated with project definition, procurement, construction, commissioning, and market conditions at the time of estimate preparation. The overall contingency on all capital items is approximately 14.40%.

The overall contingency allowance adopted for the BFS is considered appropriate for the level of project definition and estimate maturity and provides a reasonable basis for project evaluation and financial assessment. The contingency allowance is reported separately within the capital cost estimate and is distinct from contractor overheads, profit margins, indirect costs, escalation, financing costs, and Owner's costs.

Operating Cost Estimate

The average annual operating costs for the processing plant have been summarised in Table 10 below for a Class 3 estimate accuracy (±15%).

The following information sources were used to arrive at the operating cost estimate:

- All costs listed have been calculated to a 3,188 dry t/a TREO per plant product throughput basis.
- Wellfield operation costs are determined as an all-in rate in G&A over LOM
- Process plant design criteria and mass balance
- Mechanical equipment list
- Electrical load list
- Reagent costs supplied by BCM, database, or direct supplier pricing where applicable
- Labour costs supplied BCM for local Brazilian rates, coupled with agreed benchmarked database rates
- Labour on-costs include social charges, payroll taxes and insurances
- Administration and overhead costs, defined by BCM
- Consumables costs supplied by vendor quotes or in-house consumption estimates

Table 10: Summary of Stage 1 Process Plant Operating Costs inclusive of Carbon Capture Storage System

OPERATING COSTS - BY COST CENTRE				
COST CENTRE	ANNUAL COST	PRODUCTION BASIS	PRODUCTION BASIS	DISTRIBUTION
	US$M/a	$/kg TREO	$/t MREC	%
Labour	3.13	0.98	540	15%
Miscellaneous	0.61	0.19	106	3%
Maintenance	1.76	0.55	304	9%
G & A	1.05	0.33	180	5%
Reagents	6.79	2.13	1,172	34%
Logistics & Disposal	0.03	0.01	5.00	0%
Electrical Power	6.58	2.07	1,136	33%
Consumables	0.30	0.09	51	1%
TOTAL	**20.25**	**6.35**	**3,494**	**100%**

Operating costs in Table 10 are presented on a single Stage 1 process plant basis at the design throughput of 3,188 dry tonnes per annum TREO. LOM unit cash operating costs (C1) of US$8.84/kg TREO reported in Table

3 are calculated on total site operating costs across Stage 1 & 2, divided by LOM average TREO of 5,500 tonnes per annum, inclusive of ramp-up periods.

Table 11: Summary of Overall Operating Costs split by fixed vs variable, Stage 1.

FIXED VS. VARIABLE COST				
COST CENTRE	ANNUAL COST US$M/a	PRODUCTION BASIS $/kg TREO	PRODUCTION BASIS $/t MREC	DISTRIBUTION %
Fixed Costs				
Labour	3.13	0.98	540	15%
Miscellaneous	0.61	0.19	106	3%
Maintenance	1.76	0.55	304	9%
G & A	1.05	0.33	180	5%
Subtotal	**6.55**	**2.06**	**1,130**	**32%**
Variable Costs				
Reagents	6.79	2.13	1,172	34%
Logistics & Disposal	0.03	0.01	5.00	0%
Electrical Power	6.58	2.07	1,136	33%
Consumables	0.30	0.09	51	1%
Subtotal	**13.70**	**4.30**	**2,364**	**68%**
TOTAL BASE CASE	**20.25**	**6.35**	**3,494**	**100%**

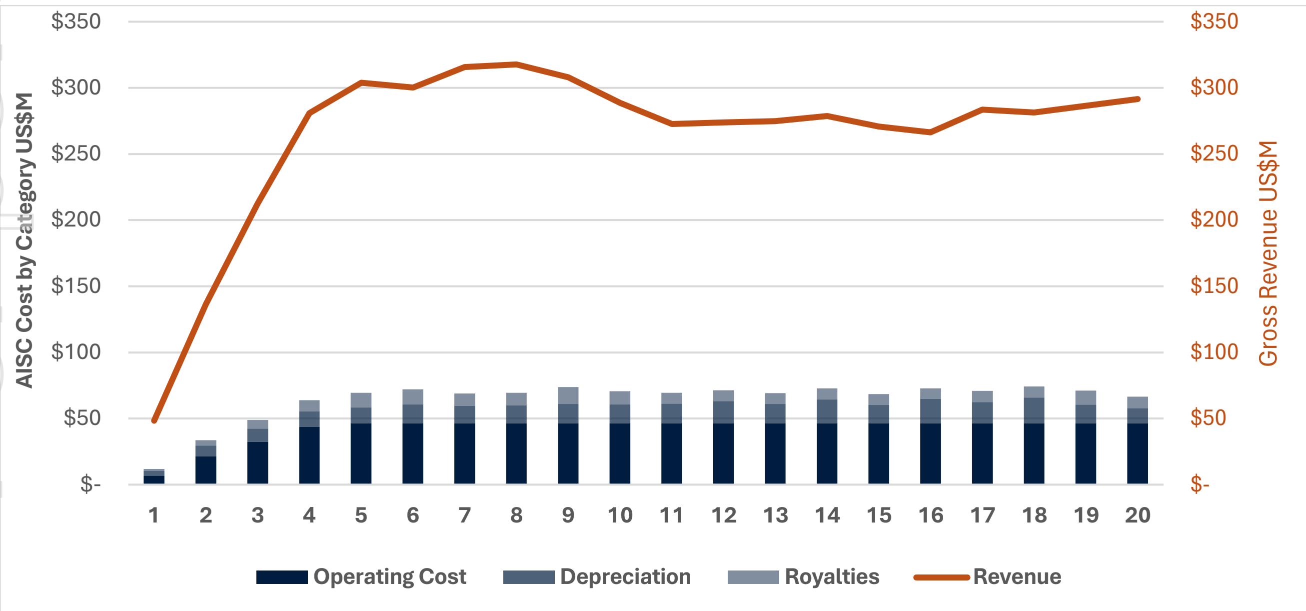


Figure 5: AISC Cost Breakdown by Major Category by Year – Base Case Pricing

Table 12: Reagents Cost (Inclusive of CCS)

Reagent	Cost Per Tonne	Annual Consumption	Annual Cost
	US$/kg	kg/a	US$M/a
Magnesium Sulphate	0.2	20,648,855	4,212,366
Magnesium Oxide	0.63	3,523,113	2,219,561
Carbon Dioxide	-	-	-
Flocculant	4.08	3,337	13,777
Sulphuric Acid	61.81	494,339	227,396
RO Membrane Reagents	8.92	1,384	50,744
CCS Amine Solution	-	-	70,000
Total			**6,793,039**

Reagent costs are based on calculated usages, obtained from the process mass balance and unit costs. A summary of the reagent costs and consumption rates are provided in Table 8.

Magnesium sulphate is supplied as a heptahydrate solid. Carbon dioxide is created on site through the carbon capture storage system as the base case for the BFS.

The labour cost estimates are based on a manning structure provided by the Company, coupled with benchmarked/database data. The total operational staffing is for 380 employees, with drilling/wellfield operating on day shift only, and process plant operating day and night shift based on a rotating 8-hour basis.

Table 13: Staffing and Labour Costs

Item/Position	Total Employees	Total Cost
	#	US$/a
Management	17	204,000
Production	30	335,000
Processing/Technical Services	18	215,000
Mining (ISL Wellfield)	289	2,138,000
Maintenance	7	101,000
Stores/Supply Chain	5	45,000
General Services	14	95,000
Total	**380**	**3,133,000**

The staffing plan has been benchmarked against operating plans for other projects and adjusted for local productivity factors in Brazil.

Hydrology and Wellfield Design

In-situ Recovery ("ISR") is the preferred method for extracting the rare earth elements ("REE") for the Ema Project. ISR offers several advantages over conventional mining of saprolite mineralisation for the following reasons:

- The geology, clay hosting permeability characteristics and topography are similar to other saprolite hosted REE deposits successfully mined via ISR in many countries around the world.
- Viability of using a simple, environmentally, non-toxic, benign reagent to leach REE, magnesium sulphate ('$MgSO_4$"), has been confirmed via laboratory testing and field recovery trials.
- ISR avoids the need of extensive ground disturbance compared to open cut mining, thereby reducing environmental impacts and closure legacy.
- ISR has lower capital and operational costs compared to conventional mining methods.

The ISR method is particularly suited to weathered saprolite zone horizons with topographic relief. The ISR process injects the magnesium sulphate solution that flows through the clay zone and interacts with the mineral surfaces to release REE via ionic exchange, with the REE becoming concentrated in solution. Sub-horizontal recovery holes extract PLS at the base of the hillslope and combine to form the feed solution for processing (Figure 5). The wellfield is then flushed with clean water to dilute remaining reagent, and the mined wellfield is decommissioned.

- The feasibility of using ISR at the EMA project requires several key requirements, primarily related to the specific geological and hydrogeological conditions of the site.

Some of these include:

- Hydraulic conductivity of the ore body: If the saprolite profiles are not sufficiently permeable, the leaching solution may not flow evenly or fast enough, limiting injection volumes and extraction efficiency.
- Low permeability floor. Typically, ISR for REE is implemented in saprolite which resides above low permeability bedrock such as granite or rhyolite. The crystalline nature of the underlying bedrock acts to contain the PLS to the saprolite zone limiting escape deeper in the profile.
- Hydraulic Gradients: Topographic relief supports down gradient flow under gravity. This is important for maintaining hydraulic gradients from the injection to recovery wells.
- Lixiviant/mineral contact and adequate lixiviant retention time to exchange and release REE. Harvesting of PLS should occur at a suitable distance down gradient from injection wells such that lixiviant retention time is sufficient to result in high REE tenor. However, this should be balanced with PLS recovery efficiency.
- Recovery: The wellfield should be designed to recover PLS at the base of hillslopes using horizontal wells or drains. Tunnels are also implemented in Asian REE (e.g. China, Malaysia) to aid in this process. Recovery systems are positioned in downgradient locations and are designed to prevent PLS by-passing the capture system. Recovery systems also play the role of lowering the hydraulic

gradient within the operating wellfield.

- Specific yield. Specific yield is a measure of drainable porosity of a material. A high specific yield within the ore body is preferable to maximise interaction between the host mineralisation and circulating reagents.

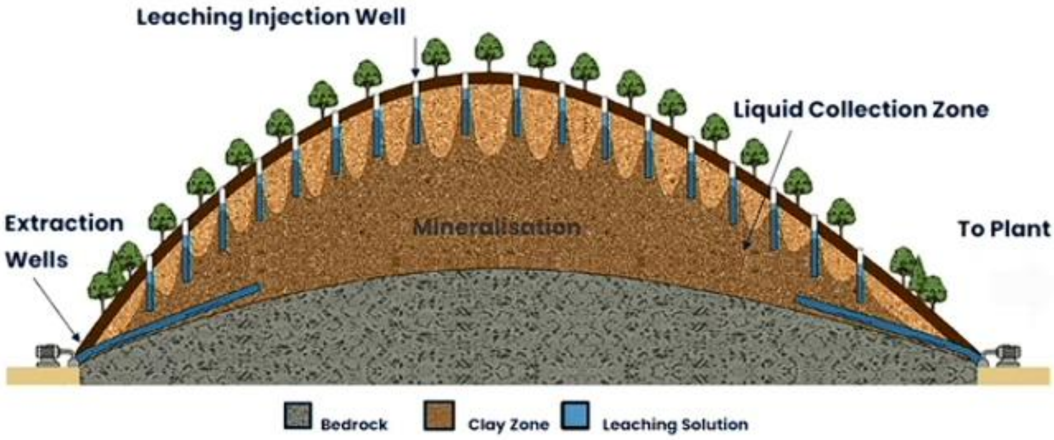


Figure 5: Schematic of the In-Situ Recovery setup

Wellfield – Basis of Design

WSP developed a numerical groundwater model to inform and simulate the wellfield layouts for ISR operations at the Wellfield 1 area. The outcomes from this model have been used to plan and design the wellfield for ISR operations. This includes design of the wellfield injection and extraction system inclusive of injection well design, headworks and other supporting infrastructure.

The focus of the operations is to develop a series of wellfields over a period of 20 years, with progressive expansion of the wellfield to the east and south

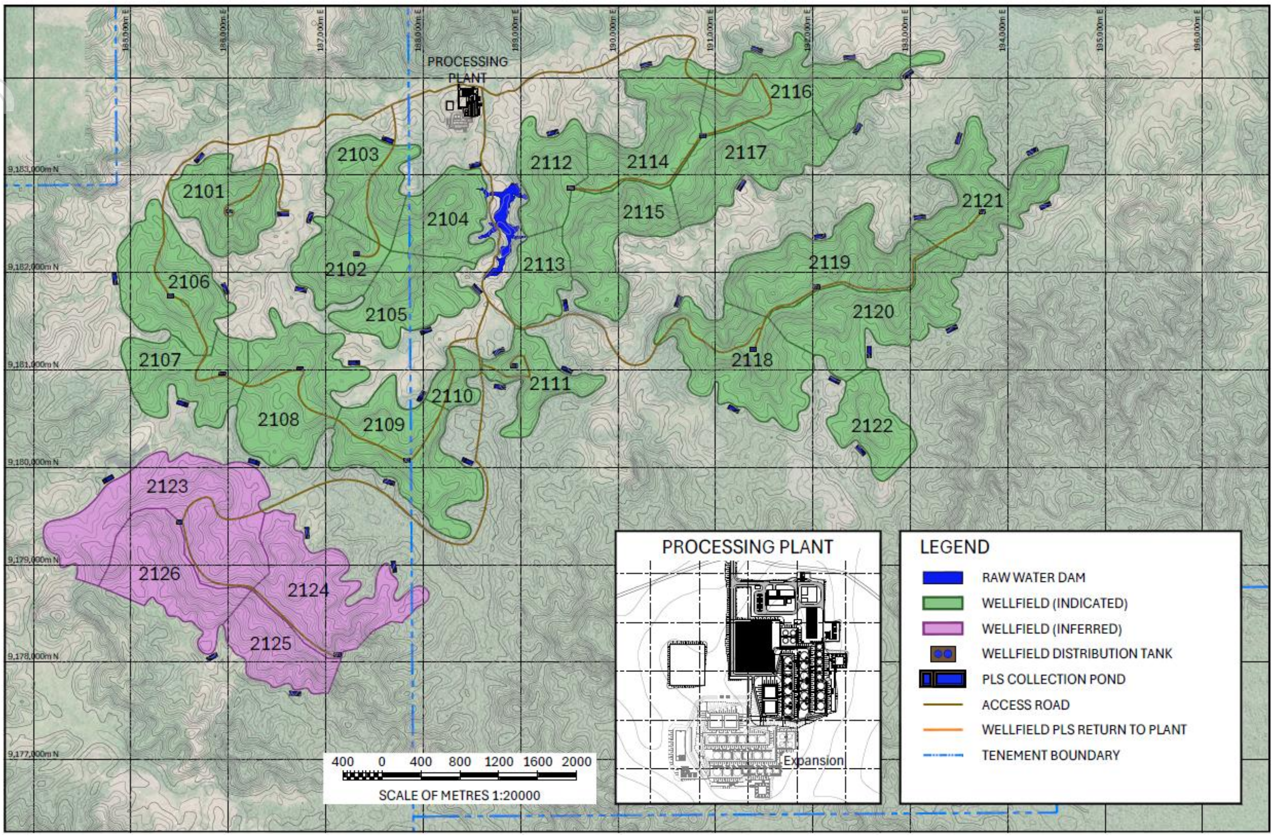


Figure 6: 20-year leaching production schedule.

Wellfield 1 (2101) area has been designed in detail and includes injection over 10 sub-areas which will be developed progressively over the first 2 years of operations (Figure 6). These sub-areas have been used in numerical modelling and have been designed around natural surface water catchments and topographic features.

Numerical modelling included the geometry of the wellfields. This has been used to summarise the wellfield design basis. In general terms the design basis for the ISR wellfield system is as follows:

- Approximately half of the Wellfield 1 area is expected to be in operation in the first year to meet target production requirements of 8000 m^3/day of lixiviant injection.
- Barren liquor ($MgSO_4$) will be injected in the upper hill slopes via a series of closely spaced injection wells constructed into the top of the ore body. Spacing of injection wells has been designed at closely spaced intervals and extends to within 15 m of the PLS collection system. The wells extend to a depth of around 1 m below the top of the mineralisation so an even spread of reagent can be delivered at the top of the ore body.
- Injection well construction methods are simple, comprising of a 1-inch PVC pipe with a 2 m screen interval at the base. Reagent is guided to the injection well via a tap style arrangement where flow rate can be adjusted according to injection well properties and behaviour of the phreatic surface.
- The PLS capture system has been designed as a ‘ring’ around the entire Wellfield area following a contour interval. Once reagents are injected the fluid will migrate down slope along the saprolite-bedrock contact and report to PLS capture systems at the base of slope.

- The PLS capture system comprises a series of closely spaced horizontal wells. The length of the wells is expected to vary but will likely range between 30 and 100 m. Final lengths will be determined by local ground conditions and wellfield geometry at specific location. Where required, the capture system will be supported by further sub-surface extraction systems that are constructed along the saprolite – bedrock contact. The purpose of this is to
  - Reduce the travel time of PLS flowing from upper parts of the hillslope towards the PLS capture system.
  - Depressurise the hillslope in key areas to reduce reagent losses.

Once PLS is harvested it will flow under gravity to the PLS ponds before pump transfer to the process plant for REE extraction. Barren liquor is then re-treated and sent back to the injection wellfield and the cycle is repeated. The cycle stops once the PLS grade drops below a certain ppm threshold or economic cut-off grade at which point the wellfields are flushed with water and the wellfields rehabilitated.

The volume of injection and behaviour of the injectant will be determined by local hydrogeological conditions of the saprolite ore body as dictated by saprolite thickness, hydraulic conductivity and drainable porosity (specific yield), with the target flow rate for the injection and capture system at 8000 m^3/day.

The flow across the wellfield (and associated sub-area) is not expected to be even due to variations in saprolite thickness, hydraulic conductivity and specific yield (drainable porosity). Hence, parts of the wellfield with thicker saprolite and higher hydraulic conductivity are expected to achieve higher quantities of flow and PLS capture compared to those with thinner saprolite sequences or areas where the saprolite is of lower hydraulic conductivity.

Wellfield Operation, Hydraulic Control & Fluid Management

Wellfield operation is based on controlled hydraulic management of lixiviant injection, PLS recovery, and overall solution inventory within the orebody. Maintaining hydraulic control within the wellfield is critical to maximising rare earth recovery while minimising uncontrolled solution dilution, and reagent loss.

The general operating philosophy for the injection and PLS capture system is described as follows:

- A negative pressure extraction system applies suction to production wells and the collection system to draw pregnant leach solution through the mineralised clay profile and into the controlled recovery network. This assists solution movement through the clay material, improves capture of dissolved rare earths and reduces the risk of lixiviant migration outside the designed wellfield area.
- Injection should occur from reagent header tanks to individual injection wells under gravity flow. Flow rates to individual wells are expected to vary but at all times hydraulic heads should remain below ground surface.
- Monitoring of in-wellfield heads (phreatic surface) is undertaken by independent monitoring wells drilled at various locations within each wellfield sub-area. Target phreatic surface inside an operating wellfield will be a minimum of 2 m below the ground surface to avoid coming into contact with plant root zones.
- During commissioning, the injection wellfield flow rates are determined at each well by progressively increasing flow rate until a sustainable flow rate is achieved. Expected injection rates

are likely to be in the range of 50 to 100 L per well/hr, however higher rates may be achievable consistent with results from the field trial.

Process Design

Design Philosophy & Operating Principles

The process plant has been designed to treat PLS generated from ISR operations and produce a saleable Mixed Rare Earth Carbonate ("MREC") product.

The overall process philosophy is based on a simplified hydrometallurgical flowsheet incorporating impurity removal and rare earth precipitation stages, with a focus on operational simplicity, robustness, and suitability for remote operation. The design reflects learnings from analogous ionic adsorption clay rare earth operations and has been adapted to suit the Project's specific feed characteristics, environmental conditions, and logistical constraints.

The process plant is designed to receive PLS from the wellfield at a nominal flowrate of approximately 350 m^3/h. The PLS is expected to contain dissolved rare earth elements along with a range of dissolved impurities, including aluminum, iron, and other gangue species typical of ionic clay deposits.

Process Design Criteria

The selected process design criteria for the Ema Rare Earth Project are summarised in Table 14 below.

Table 14: Process Design Criteria for Ema REE Project – Stage 1

Parameter	Unit	Value
Feed Type	-	Ionic Clay
Mining Method	-	In-Situ Leaching (ISL)
Plant Feed Rate (nominal)	m^3/h	357
Feed Concentration (TREO)	ppm	1,184
Plant Operating Hours	h/a	7,998
Plant Feed Rate (nominal)	m^3/h	357
Overall MREO Recovery (IAC to MREC)	%	55
Process Plant Recovery (PLS to MREC)	%	94.4
Product Production (MREO)	dry t/a	1,900
MREC Purity (TREO)	%	52
ISL & Process Plant Criteria		
Leaching Lixiviant	-	$MgSO_4$
Lixiviant Concentration	mol/L	0.5
Impurity Removal Reagent	-	MgO / $Mg(OH)_2$
MREC Precipitation Reagent	-	$Mg(HCO_3)_2$

Process Description

The schematic process flow sheet (Figure 7) presents the proposed hydrometallurgical treatment route for the PLS. The flowsheet has been developed to support the feasibility study and illustrates the major process steps required to recover rare earth elements from in-situ recovery solution, remove impurities, precipitate a mixed rare earth carbonate product, and recycle barren liquor back to the wellfield.

The process is based on the recovery of rare earths from the wellfield using a magnesium sulphate lixiviant. Pregnant leach solution is collected from the wellfield and directed to PLS storage prior to chemical treatment. The stored PLS is then advanced through an impurity removal stage, where reagents such as flocculant and magnesium hydroxide may be added to remove suspended solids and unwanted dissolved impurities. The impurity removal step is designed to improve downstream product quality and reduce the transfer of deleterious elements into the final rare earth product.

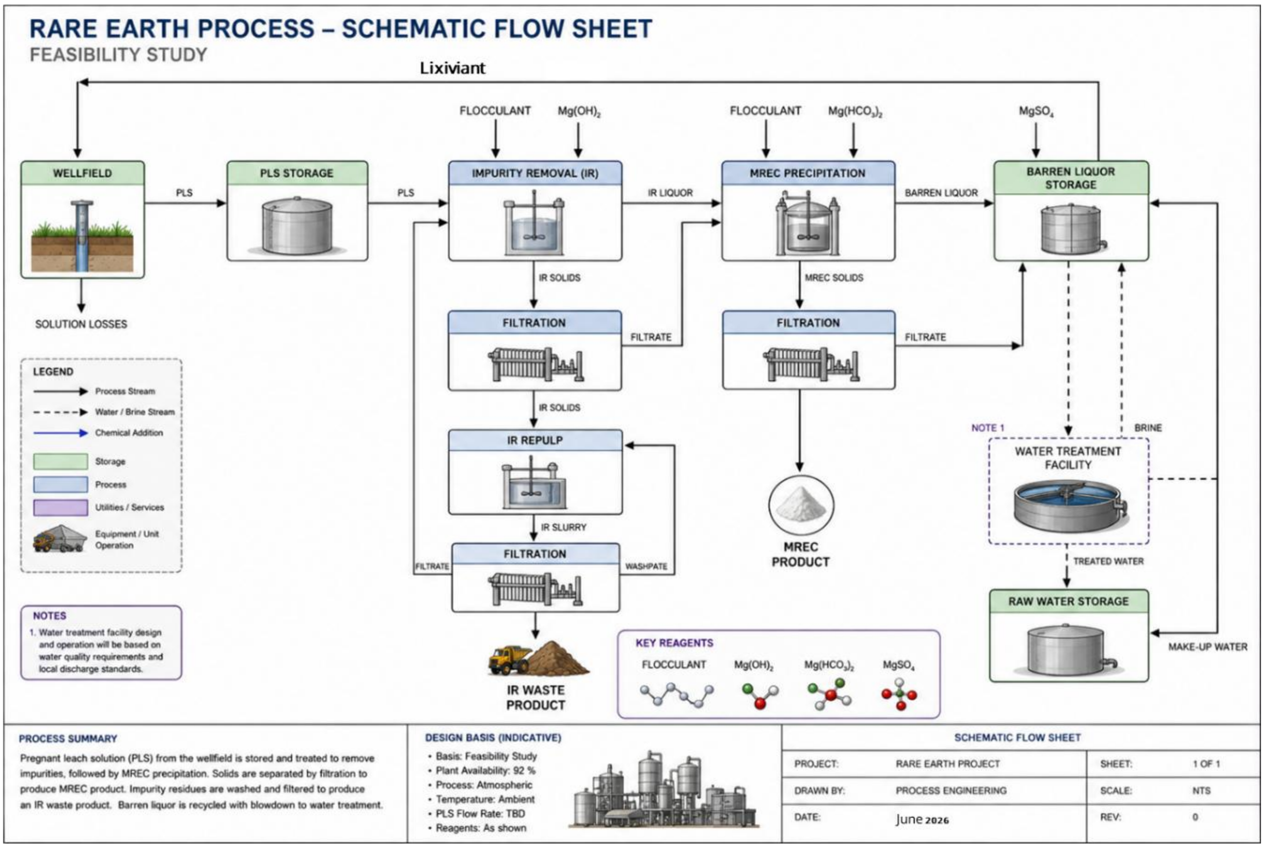


Figure 7. Process Flow Sheet Schematic

Following impurity removal, the clarified rare earth-bearing liquor is directed to the MREC precipitation circuit. In this stage, magnesium bicarbonate and flocculant are added to precipitate the contained rare earth elements as a mixed rare earth carbonate product. The resulting MREC solids are separated by filtration, washed as required, and recovered as the final saleable product. The filtrate from the MREC filtration stage reports to barren liquor storage for recycle.

A key feature of the flowsheet is the recycling of barren liquor. After rare earth precipitation, the barren liquor is returned to storage, reconditioned with magnesium sulphate where required, and reused as lixiviant for reinjection into the wellfield. This closed-loop approach is intended to minimise reagent consumption, reduce water demand and limit solution losses. Raw water make-up is included to replace process losses, with an optional water treatment facility shown for management of brine streams or treated water where required by site water balance, operating conditions or environmental approvals.

Impurity removal solids are separated through filtration and may be repulped and washed to recover entrained soluble rare earths before final filtration. The washed impurity residue is then directed to the IR waste product stream. This approach is intended to maximise rare earth recovery while ensuring that process residues are handled in a controlled and auditable manner.

Overall, the flowsheet is a low-complexity process route and is based on conventional unit operations, including solution storage, reagent addition, precipitation, clarification and filtration. The design emphasis is on operational simplicity, reagent recycling, product quality control and minimisation of environmental footprint through solution recirculation and controlled water management.

Infrastructure & Site Layout

General Arrangement & Layout Development

The site layout for the Ema Rare Earth Project has been developed to integrate the wellfield, process plant, and supporting infrastructure into a coherent and efficient arrangement, while accommodating topographic, hydrological, and operational constraints.

The process plant location was selected following consideration of the initial wellfield development areas, including Wellfields 2101, 2102, and 2103 (Figure 6). The plant has been positioned centrally relative to these areas to minimise solution transfer distances and provide a balanced layout for staged development and long-term operation.

The selected processing site (Figure 4) is located toward the northern boundary of the tenement, providing proximity to the existing access road network and the nearby town of Apuí. This reduces infrastructure requirements for access and logistics and supports efficient construction and operations.

A primary design driver for the process plant layout is the use of gravity flow between major process stages. The plant has been arranged across a series of benches to allow process solutions and slurries to flow sequentially through the circuit with minimal pumping requirements. The general elevation sequence comprises:

- PLS storage ponds located on the upper bench;
- impurity removal facilities on a lower intermediate bench;
- MREC precipitation facilities on a subsequent bench;
- solids handling, including filtration and storage, on a lower bench; and
- pumping and utilities infrastructure located on the lowest bench.

This stepped configuration reduces energy consumption, simplifies operation, and improves overall process robustness.

Raw Water Storage Dam

A raw water storage dam (Figure 6) is provided to the southeast of the process plant to capture and store water for site use, taking advantage of the natural topography to impound a large catchment with a relatively short embankment.

The dam is formed by an engineered earth fill embankment with a crest width sufficient to provide for access and operational requirements. The embankment is constructed from select fill, placed in controlled loose lifts and compacted to a specified minimum percentage of maximum modified dry density (MMDD), consistent with the compaction standards adopted for the process plant platforms.

Power Supply Options

A number of power supply options were assessed for both the wellfield and process plant loads. While grid-connected power presented a lower operating cost option, it was excluded due to concerns regarding supply reliability. An owner-operated solution also provides strategic advantages, including the integration of carbon dioxide generation and the opportunity to offset reagent costs through recovered carbon dioxide.

Onsite diesel reciprocating engine power generation has a higher operating cost compared to grid-connected power when considered in isolation. However, carbon dioxide is a key reagent required for the production of magnesium bicarbonate, creating an opportunity to recover value from onsite diesel power generation.

A centralised, N+2 redundant synchronising diesel reciprocating power station has been adopted for the Ema Process Plant, comprising 5 × 500 kW generator units, and is included in the project CAPEX. Separate standalone generator sets are provided for the wellfield and raw water pumping loads.

Metallurgy

Testwork for the Ema Project has been developed based on detailed mineralogical characterisation and chemical deportment studies, with particular focus on the proportion of REEs present in an ionically adsorbed form versus discrete refractory minerals.

With earlier mineralogical analysis confirming that the REEs in the Ema deposit are predominantly present as ionically adsorbed species, the Rare Earth Extraction Process Definition Testwork was undertaken to evaluate the technical viability of in-situ recovery (ISR) for REE extraction from the Ema deposit.

The In-situ Recovery Testwork program was undertaken at ANSTO using standard column set-up to further examine the potential of applying ISR on the Ema orebody. The testwork was aimed at providing more accurate assessment of the permeability of the undisturbed clay underground compared to the heap leach column tests which were also assessed by BCM.

The column leach test simulating ISR was performed on a master composite sample from 120 holes using a column of 5.08 cm internal diameter and a length of 1 m, at ambient temperature. The column was packed to a density of 1.5 g/cm^3 (as received solids) and fed with 0.5M $MgSO_4$ solution with pH adjusted to 4.5.

The TREY and magnet RE (Pr, Nd, Tb, Dy) extractions with pore volume exchanges are shown in Figure 8. As indicated, the results from this scoping ISR test showed rapid RE desorption, with close to maximum extraction achieved in less than 1.5 pore volume exchanges after breakthrough of REEs from the column. The overall TREY-Ce and magnet RE extractions were 56% and 62%, respectively.

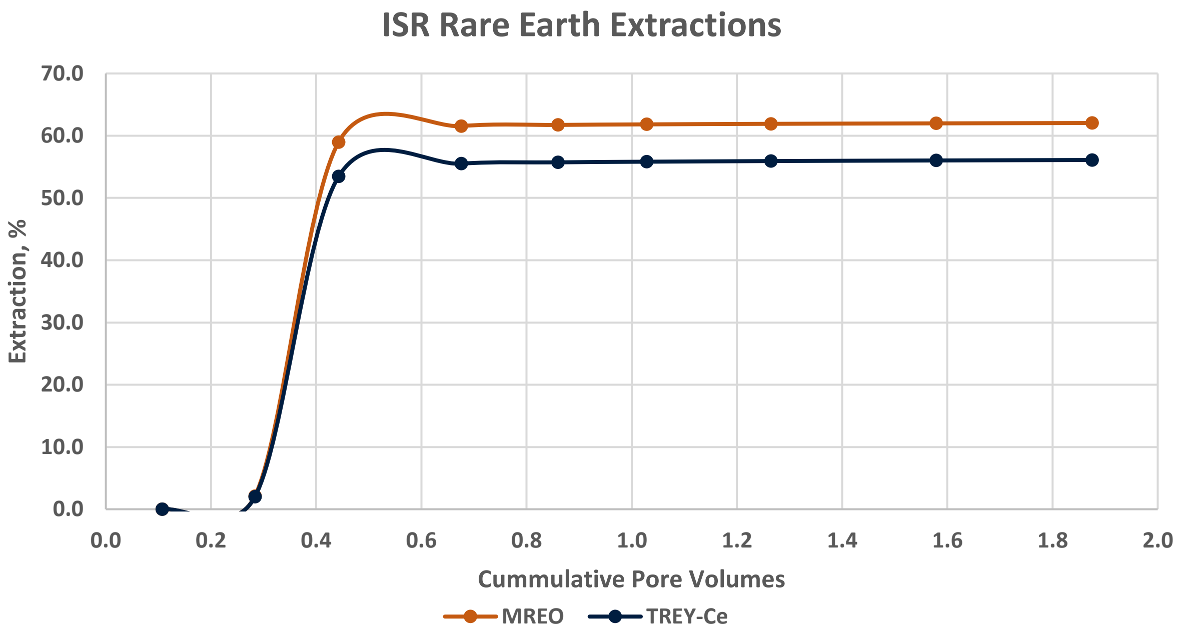


Figure 8. ISR Column test extractions from ANSTO based on master composite sample taken from 120 holes.

The positive ISR column leach results suggests that the characteristics of the Ema clay are favourable for RE recovery by ISR. The sample possessed sufficient permeability to feed liquor through the ore bed at a pressure equivalent to the depth of the deposit and readily achieved high RE extractions. The test also showed potential of reducing $MgSO_4$ concentration, given most REEs were leached with initial percolation where the $MgSO_4$ solution was diluted by sample moisture.

Impurity Removal

Impurity removal (IR) using MgO slurry is effective for Al removal across both small-scale and bulk test configurations. A target IR pH stoichiometric MgO dosing based on feed Al concentration determined by ICP-OES is the primary control strategy for all configurations. IR recovery is calculated at 95%.

MREC Precipitation

MREC precipitation using $Mg(HCO_3)_2$ at the target pH achieved greater than >99% TREY precipitation at bulk scale in both campaigns. TREO in the bulk MREC products was 50–55 wt% with MREO/TREO ratios of 38–43%, values suitable for downstream rare earth separation processing.

Bulk MREC Test

The mixed rare earth carbonate precipitation was undertaken using magnesium bicarbonate (0.5 M), which was produced by utilising CO_2 into a MgO slurry. The precipitation was undertaken as a batch with the purified liquor and magnesium bicarbonate solution added over 3 hours and stirred for a further 1 hours at the target pH of 7.5.

Almost complete rare earth precipitation was achieved, with only trace concentrations of rare earth elements remaining in solution. The primary filtrate (PF) composition in below table shows that minor concentrations of aluminium (Al), calcium (Ca), manganese (Mn), silicon (Si) and zinc (Zn) precipitated with the REE's, along with most of the uranium.

Overall recovery across the 20-year life-of-mine has been calculated as 55% MREO extraction.

Table 15: Product basket final MREC impurities. Based on master composite sample covering Wellfields 2101 & 2102.

Impurity	Oxide	Weight %
Aluminium	Al_2O_3	0.08
Calcium	CaO	0.04
Cobalt	CoO	<0.001
Copper	CuO	<0.001
Iron	Fe_2O_3	0.003
Potassium	K_2O	0.006
Magnesium	MgO	<0.02
Manganese	MnO	0.01
Sodium	Na_2O	<0.07
Lead	PbO	<0.001
Silica	SiO_2	0.04
Sulphate	SO_4	0.42
Zinc	ZnO	1.06
		ppm
Thorium	Th	<10*
Uranium	U	<10*

Logistics

BCM commissioned C.Steinweg Group to undertake a consumables and MREC Logistics study in December 2025. The study provided an integrated assessment of transportation alternatives, including both inbound logistics, primarily for consumables and suppliers, and outbound logistics, focused on MREC product going to market.

Volumes defined in Table 16 below assume no stocks in reserve as buffering capacity to mitigate against potential supply chain disruptions and this needs to be considered to support operational continuity.

Table 16: *Indicative project logistics requirements for inbound consumables and outbound MREC.*

Product	Yearly volume (tonne)
Magnesium Sulphate	20,700
Magnesium Oxide	3,500
Carbon Dioxide	-
MREC	10,500
Total	**34,700**

Site Access & Road Logistics

The Ema Project relies heavily on a multimodal logistics strategy due to the remote nature of the project area and the limitations of regional road infrastructure. The Project is located approximately 450 kilometers from the Madeira River basin, which serves as the main access corridor for cargo movements in the region. The project site is situated near the Transamazônica Highway, one of the principal road connections in the area, and uses both nearby river terminals in Apuí, Novo Aripuanã, and Humaitá.

Seasonal weather conditions have a substantial impact on road performance, particularly during the wet season (November to June), when accessibility is reduced due to mud, erosion, and flooding.

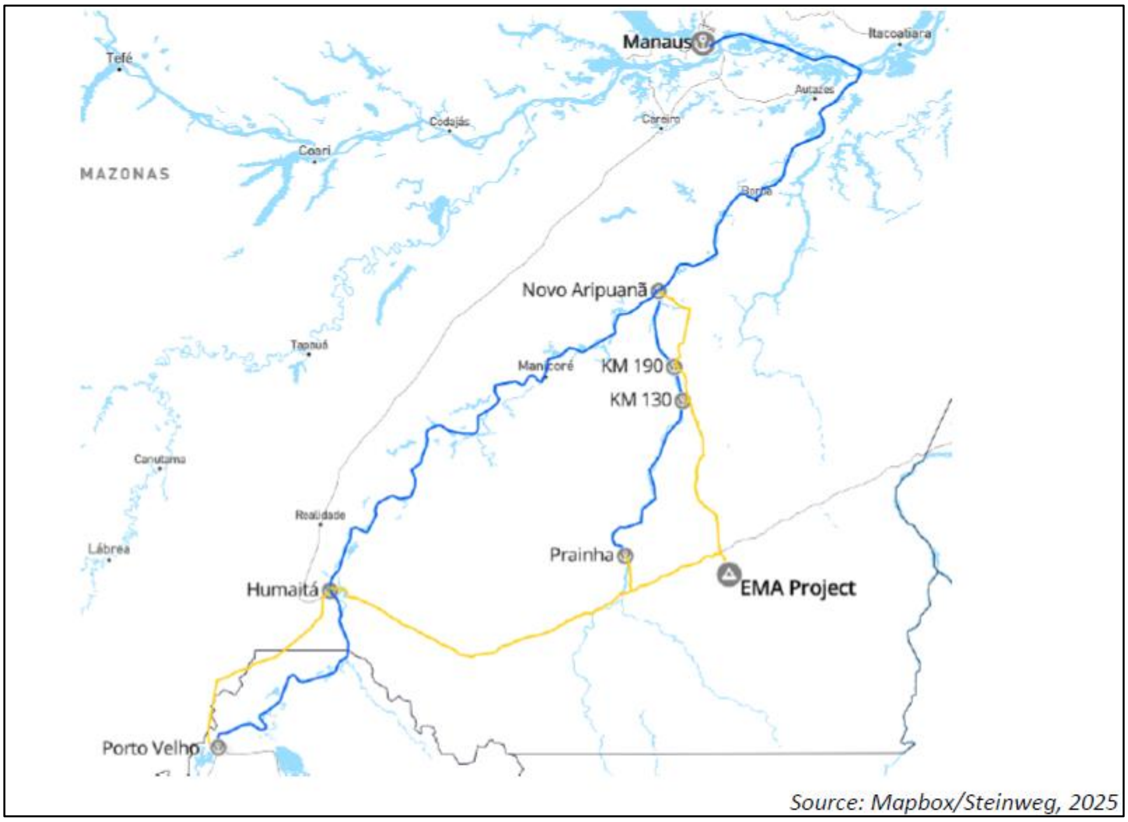


Figure 9. Main locations of container terminals suitable for product transportation to the port of Manaus and Porto Velho.

There are many waterway alternatives close to the project with road transport only playing a critical role in the initial or final transport leg, delivering MREC from the plant to the nearby river terminals and delivering consumables to site by road transportation.

Barge transport will play an essential role in the Project logistics, as the distance via the only highway that connects the Port to the project location is approximately 1100kms. Therefore, the road-fluvial multimodal transport is the best alternative for delivering the consumables to the site and moving the MREC to its export port of Manaus.

The site is located near two important rivers for the barge operations: the Madeira River, which flows between Humaitá and Novo Aripuanã, and the Aripuanã River, which flows between Prainha Nova and the highway AM-174.

The Madeira River is one of the most important waterways in the Amazon region, offering reliable navigability throughout the year. From Manaus, it provides consistent access to key destinations such as Humaitá, approximately 590kilometres from Apui and Novo Aripuanã, about 400kilometres from the site. Due to its deep draft and wide channel, the Madeira River remains operational during the dry season, making it a strategic route for uninterrupted cargo transport.

Many of the barges available in the region have a flat-top design to facilitate the loading and unloading of cargo, with the barges capable of transporting cargo from 700 tonnes to 2000 tonnes.

Source: Gemini/Steinweg, 2025

Figure 10. Barge loaded with big bags.

Manaus is one of the only two container ports in the entire Northern region of Brazil. Manaus has two terminals dedicated to container operations (Super Terminais and Chibatão), both of which are important in supporting connectivity with national and international markets.

Porto Velho is a river port equipped to handle containers, and it serves as an origin or destination for cargo that is transshipped to Manaus and transferred to or from ocean-going vessels (OGVs).

Table 17: Three strategic transport route options for both inbound and outbound cargo.

Source	Destination	Kilometres (kms)	Comments
EMA	Manaus	1,100	Via Porto Velho (road / river)
EMA	Porto Velho	605	Road
EMA	Manaus	1,023	Via Prainha Nova (road / river)
EMA	Manaus	1,090	Via Humaitá (road / river)

Transportation of the final MREC from the mine gate to the final port destination will be handled through contractors and has been calculated on a CIF basis to ports in Asia, Europe and North America. Generally, the spread of costs is small, with total costs falling within the US$0.25 – US$0.35/kg range.

Permitting

In June 2026, Federal Mines Agency (ANM) approved the Final Exploration Reports for both tenements covering the Ema Project.

For the Trial Mining License (GU) permitting path for which the Company has submitted 2 applications, the Environmental Permit now remains the key final approval step. For the Full Mining Permit, this triggers a one-year period to submit a mining license application supported by a Plano de Aproveitamento Econômico (PAE) or feasibility study for analysis which is currently nearing completion and allows the full mining permit process to proceed.

The Ema Project comprises 2 exploration tenements, Ema and Ema East, which are being consolidated to ultimately become a single mining permit (Portaria de Lavra). The permitting process to advance from an exploration licence to a mining licence involves two parallel processes, the environmental licensing process conducted with the state environmental authority (IPAAM) and the mining approval granted by the Federal Mines Agency (ANM).

Environmental Control Plan Summary

The Company developed an Environmental Control Plan (PCA) under consultants CERN coordination, aligning with Brazilian legislation and sustainable development principles, forming a robust basis for environmental approval.

The PCA for the Ema Project, owned by Mineração BBX do Brasil Ltda, is prepared to support environmental licensing associated with mineral exploration under a trial mining licence (Guia de Utilização (GU)). The PCA integrates exploration, pilot trials, and processing activities focused on rare earth elements, including mineral solution production and treatment.

Regulatory Context

The Environmental Control Plan (PCA) is a comprehensive environmental management instrument supporting licensing with IPAAM (Amazon State Environmental regulator). It integrates baseline studies, impact assessment, and mitigation programs. Developed at EIA/RIMA-level detail, it exceeds GU requirements and supports future transition to mine development and public consultation. It aligns with Brazilian legal frameworks including the Federal Constitution, National Environmental Policy, Water Resources Policy, and Environmental Crimes Law.

Environmental Impact Assessment

The initial step was to conduct an environmental impact study (EIA/RIMA) addressing the project's potential physical and social/community impacts and proposed mitigating measures. This study occurred over more than 12 months through both the dry and wet seasons, and the report is made available for public scrutiny for a period of 45 days, during which any member of the public may request a subsequent public hearing.

Prior to obtaining a full mining licence, companies may apply for a trial mining licence (GU) on the basis that they need to test and fine tune operational parameters, in particular aspects of the treatment process, and test product acceptance in the market.

Annual maximum plant throughputs for each major mineral commodity are specified, but no limits have been defined for rare earths. GU's are granted for a period of 3 years and may be renewed for a subsequent 3-year period. The GU licencing process is a simplified version of the full permitting process, involving the submission of a simpler environmental study, termed a PCA, and sign-off from the ANM.

Trial Mining License

BCM has applied for two GU´s, one for each exploration tenement, prior to lodging an application for a full mining licence. Granting GUs enables production to commence at a reduced scale prior to receiving a full mining licence. The GU applications were submitted to ANM in May 2025 and are currently in the final stages of analysis by the ANM.

CERN has completed the environmental impact study and is preparing for the PCA submission. Approval of both the GU applications by the ANM and the PCA by IPAAM are currently under review.

In parallel, the final exploration reports for both exploration tenements, submitted to the ANM in April 2025 and were approved in June 2026.

Full Mining License

On completion of the BFS the PAE a detailed mine plan will be prepared, incorporating the results of the BFS, and lodged with the ANM. This is the first step in the application process for a full mining licence. It is envisaged that the PCA already submitted will satisfy the requirements for the full mining licence environmental approval.

Pricing Strategy

The price forecast adopted for the BFS is based on independent market analysis prepared by Benchmark Mineral Intelligence (Benchmark), with specific focus on magnet rare earth oxides relevant to the Ema product basket, including NdPr, Dy and Tb.

Benchmark provides independent rare earth price assessments, long-term forecasts, and supply-chain analysis for rare earth, magnets and motors. Its rare earth service covers key products including NdPr oxide, dysprosium oxide and terbium oxide, which are the principal value drivers for permanent magnet rare earth projects.

The forecast period used for the BFS is 20 years, consistent with the expected long-life development profile of the Ema ionic clay rare earth project. Pricing provided by Benchmark entailed the period 2026-2040, with additional pricing extending beyond 2040 locked at 2040 levels by the Company.

Pricing Methodology

The price deck for the BFS is based on:

- Benchmark's long-term real price forecast, based on ex-China prices;

- Separate price assumptions for NdPr oxide, Dy oxide, Tb oxide, and any other payable rare earth oxides if required;
- Forecast prices expressed in US$/kg oxide 99-99.99%;
- Conversion into product revenue using the forecast MREC composition;
- Appropriate payability, impurity, refining, transport and offtake adjustment assumptions.
- Surging Ex-China prices over the last 18 months.

Benchmark notes that rare earth contracts are largely negotiated privately, and that its price discovery process uses primary data collection across the supply chain to address the opaque nature of the rare earth market.

Western Supply Premium

The Company has considered whether Ema's product may attract a Western supply-chain premium, particularly where product is sold into North American, European, Japanese or Korean supply chains.

This premium may be supported by:

- Limited availability of Ex-China mine supply;
- Increasing strategic stockpiling and government support;
- Customer preference for traceable and secure feedstock;
- Chinese dominance in rare earth separation and magnet production;
- Defence and industrial supply-chain security concerns.

Based on the above, BCM has selected the Benchmark Ex-China Price Forecast Methodology, with reasoning set out below;

Table 18: Financial Results Summary

Item	Duration	Rationale
Sentiment	Short Term (2026-028)	Developments are guided by primary price assessments, inventory analysis and geo-economic and policy assessments conducted by Benchmark analysts to ascertain the direction of market pricing.
Market Balance	Medium Term (2029-2035)	Analysis of the development of demand over time, and the understanding of the pipeline of new greenfield and brownfield capacity, an assessment of the extent of over and under supply in the market over time, and how this is likely to impact prices. In the medium term Australian and African mining and refining projects capacity are expected to commercially scale sooner than North American projects.
Incentive Pricing	Long Term (2036+)	There will be an ongoing requirement for new greenfield and brownfield capacity over the course of the forecast period. There is no typical 'greenfield' or 'brownfield' rare earths project – instead,

Item	Duration	Rationale
		the long-term incentive price represents the level at which the marginal producer can achieve sustainable profitability.

The forecasted prices LOM prices have been restricted to only the 4 magnet elements as outlined in Table 19 below with financial modelling utilising the base case price assumptions.

Table 19: Ema Rare Earth Basket Prices Utilised in Financial Modelling, averaged over the 20yr LOM

	Base Case	High Case
Basket Price - US$/kg NdPr	**$108**	**$130**
Basket Price - US$/kg Tb	**$3,869**	**$4,643**
Basket Price - US$/kg Dy	**$1,583**	**$1,900**
Payability	**70%**	**70%**

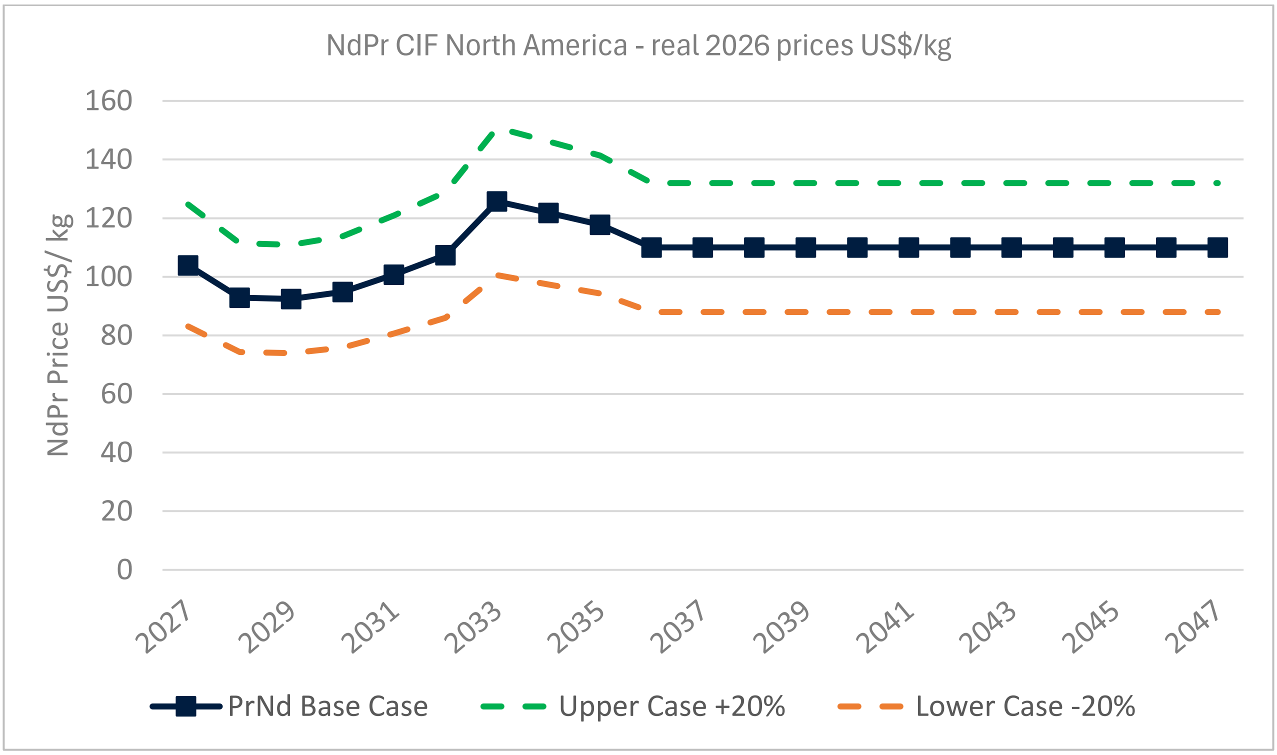


Figure 11: Ema Rare Earth NdPr Oxide Price by year in real pricing as supplied by Benchmark (CIF Ex—China) averaging US$108/kg REAL over the LOM with price adjusted sensitivities by the Company.

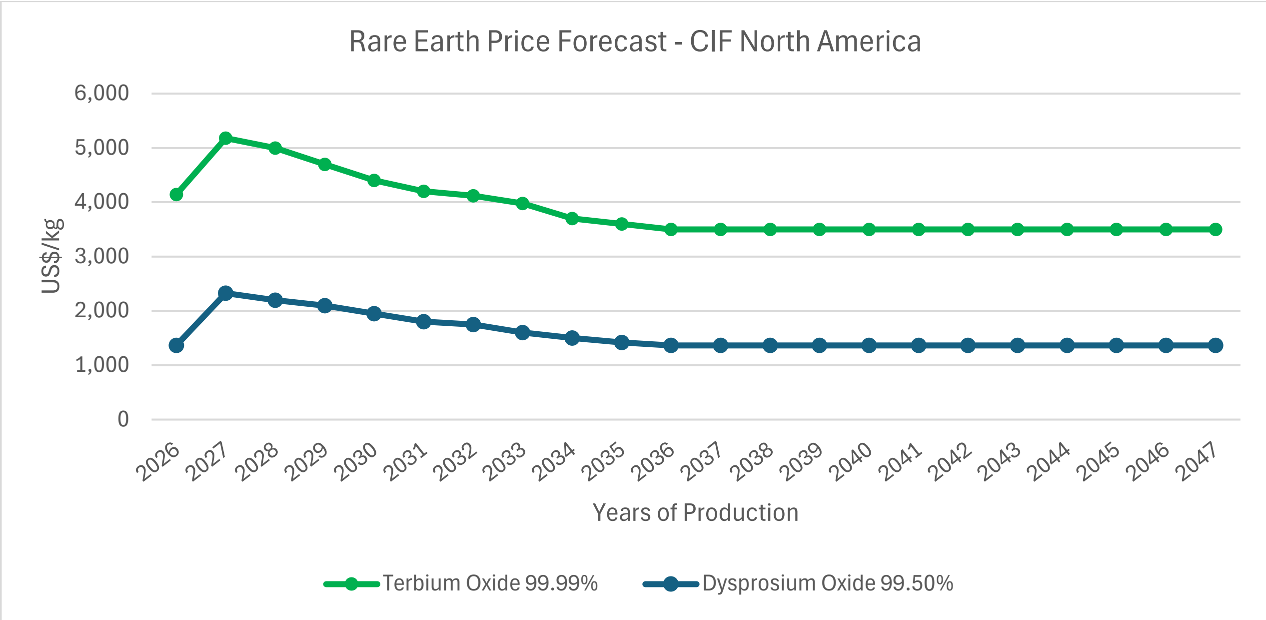


Figure 12: Ema Rare Earth NdPr Oxide Price by year in real pricing as supplied by Benchmark (CIF Ex-China) averaging US$3,856/kg Tb and $1,876/kg Dy REAL over the LOM.

The Company will be selling a mixed rare earth carbonate (MREC) product containing all 15 rare earth elements.

Ongoing discussions with numerous 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 only the prices and oxides outlined in Table 18. Currently only China has the processing capacity to take and separate all rare earth lanthanides (REO Oxides) listed in table 20.

The ex-China price forecast by Benchmark has only been developed in 2026 with forecasts based on the underlying assumption that China's export controls remain in effect and the market will mostly diverge from Chinese supply with minimum dependency. It is also noted that at the time of release of this report there is no single agreed ex-China rare earth reference price.

Table 20: Indicative Ema MREC Basket over selected periods applied to Benchmark (Base Case) forecast pricing and ANSTO recoveries from column leach testing. Basket % values vary over the LOM. Basket pricing is a combination of CIF North American pricing (NdPr, Dy, Tb) with all other oxides ExW China Prices.

REO Oxides	Ema Basket Price - Base Case	2027	2030	2033	2036	2039
Oxide	%	US$/kg	US$/kg	US$/kg	US$/kg	US$/kg
La_2O_3	**29.52**	0.2	0.2	0.1	0.1	0.1
CeO_2	**16.47**	0.3	0.2	0.1	0.1	0.1
NdPr (99.5%)	**32.61**	33.9	30.9	41.0	35.9	35.9
Sm_2O_3	**3.99**	0.1	0.1	0.1	0.1	0.1
Eu_2O_3	**0.45**	0.1	0.1	0.1	0.1	0.1
Gd_2O_3	**2.56**	1.0	1.0	1.0	1.0	1.0
Tb_4O_7 (99.9%)	**0.29**	14.8	12.6	11.4	10.0	10.0
Dy_2O_3 (99.5%)	**1.65**	38.3	32.1	26.4	22.5	22.5
Ho_2O_3	**0.28**	0.2	0.2	0.2	0.2	0.2
Er_2O_3	**0.84**	0.5	0.5	0.5	0.5	0.5
Tm_2O_3	**0.10**	0.1	0.1	0.1	0.1	0.1
Yb_2O_3	**0.63**	0.1	0.1	0.1	0.1	0.1
Lu_2O_3	**0.06**	0.4	0.4	0.4	0.4	0.4
Y_2O_3	**10.55**	0.8	0.8	0.7	0.6	0.6
	TREO US$/kg	90.8	79.3	82.3	71.8	71.8
	MREO US$/kg	**87.0**	**75.6**	**78.7**	**68.4**	**68.4**
	Potential payability (70%) US$/kg	**60.9**	**53.0**	**55.1**	**47.9**	**47.9**

Benchmark only provided CIF North America prices for NdPr, Dy and Tb oxides. The remaining 11 oxides were populated with Benchmark ExW China prices in order to be able to calculate a full TREO basket.

The MREO value of the Ema basket at prices listed above in Table 5. represents approximately 90-95% of the calculated TREO $/kg basket price, depending on the forecast prices for the non-magnetic oxides. The Company has not made any adjustments to the base case pricing numbers provided by Benchmark but has calculated an upside and downside price scenario to determine price sensitivities, as outlined below.

Lower Case

- A conservative discount (20%) to Benchmark's long-term forecast, reflecting lower demand growth, substitution, increased Chinese supply or weaker magnet market conditions.

High Case

- A premium case reflecting stronger EV (20%), wind, defence and robotics demand, together with ongoing supply-chain fragmentation and higher ex-China premiums.

Finance

The financial evaluation demonstrates a highly robust development case underpinned by low initial capital intensity, competitive operating costs, a long-life production profile and strong exposure to high-value magnetic rare earth elements. The Project has been assessed over an initial 20-year life of mine, based on the proposed in-situ recovery mining method, production of a mixed rare earth carbonate product and long-term rare earth pricing assumptions.

The financial model has been prepared on a real, ungeared, post-tax basis and incorporates revenue from the sale of rare earth products, operating costs, royalties, sustaining capital, working capital requirements, corporate taxes and closure allowances. The base case assumes annual production of approximately **1,940** tonnes of magnet rare earth products, with total life-of-mine revenue estimated at approximately US$5.44 billion.

The Project delivers strong financial outcomes, including a post-tax net present value at an 8% discount rate of approximately US$1.47 billion, supported by a high internal rate of return of 105% and rapid capital payback of less than 1 year. These results reflect the strategic advantages of the Ema deposit, including its near-surface ionic clay mineralisation, amenability to low-disturbance in-situ recovery, limited requirement for conventional mining infrastructure and relatively simple process flowsheet.

Table 21: Financial Results Summary

Financial Analysis	Pre-Tax	Post-Tax
Net Present value (US$M)	1,785	1,465
Internal Rate of Return (%)	120	105
Annual average EBITDA (US$M)		219
Total Cash Flow	4,048	3,369

Ema's forecast operating cost profile places the Project at the lower end of the rare earth industry cost curve, at just US$8.84/kg (US$8,800/t) TREO C1 cost reinforcing its potential to become a highly competitive source of magnet rare earth supply.

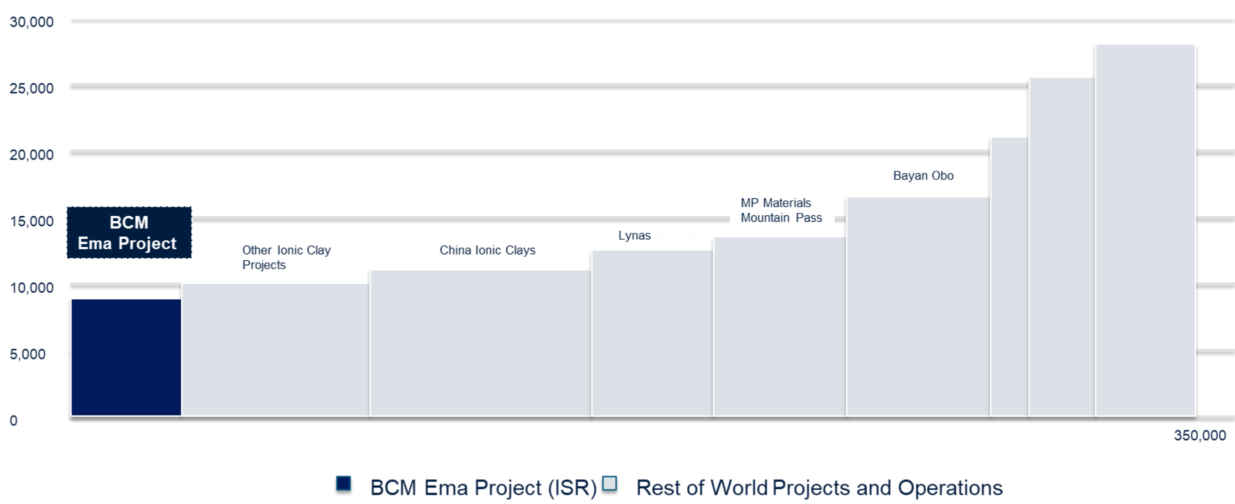


Figure 13: 2024 Rare Earth industry TREO cost curve CIF (source: Public filings, Company Reports)

Cumulative cash flow of $3.37B demonstrates the Project's capacity to deliver significant long-term value. This cash flow profile reflects the combined benefits of a low-cost in-situ recovery operating model, strong rare earth basket value and disciplined capital requirements.

Year 2 capital expansion costs of US$27M are required for Stage 2 100% expansion.

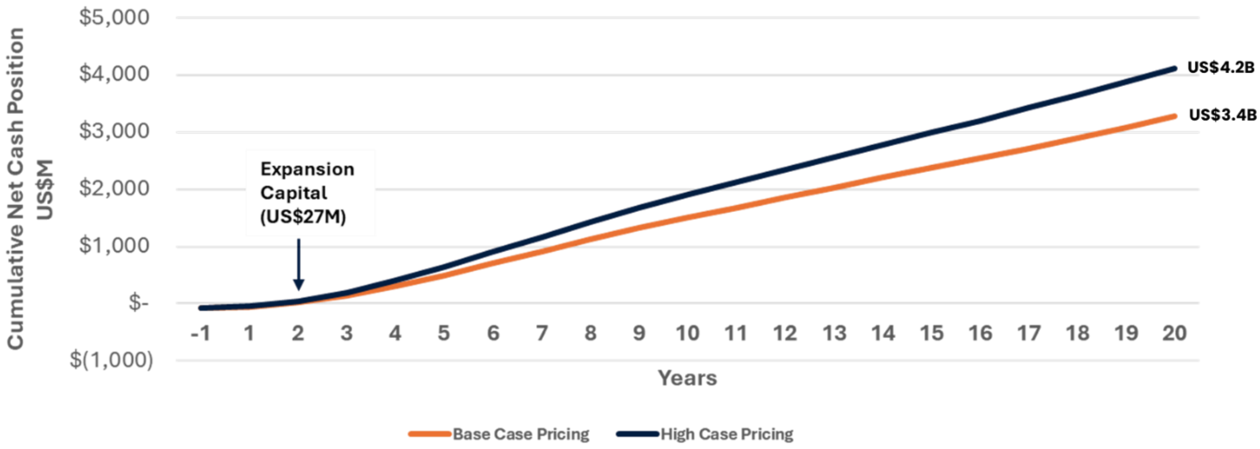


Figure 14: Cumulative Net Cash Flow after Royalties and Taxes

ROYALTIES, AND TAXES

Royalties in the financial model were set to 2.0% for Financial Compensation for the Exploitation of Mineral Resources (Federal Royalty), 1% for local landowners and 3% for Mining Rights holders.

The tax analysis for the Ema Project considered current Brazilian tax legislation applicable to CAPEX, OPEX, MREC sales, and project profits. The relevant federal, state, and municipal taxes—as well as associated tax incentives were identified and evaluated.

Taxes on MREC Sales

Because all MREC production will be exported, no taxes will be levied on sales. Brazilian tax legislation ensures full retention of PIS, COFINS, ICMS, and—once implemented—CBS, IBS-E, and IBS-M credits on the purchase of equipment, consumables, diesel, electricity, and services. CFEM applies to gross MREC sales at a rate of 2%.

Taxes on CAPEX and OPEX

Brazil has enacted comprehensive tax reform. Complementary Law No. 214, published on January 6, 2025, WHICH formalized major changes to the National Tax System, introducing a **dual value-added tax (VAT) structure** with simultaneous federal and state/municipal taxation. Implementation will occur in phases:

Phase 1 (from January 1, 2027): Introduction of the federal CBS (Contribution on Goods and Services) and elimination of PIS and COFINS. CBS will apply broadly to the sale of goods and services.

Phase 2 (from January 1, 2033): Introduction of the IBS (Tax on Goods and Services) at the state (IBS-E) and municipal (IBS-M) levels, replacing IPI, ICMS, ICMS/DIFAL, and ISSQN. IBS will also apply broadly to goods and services.

Although the new tax rates have been defined, they remain subject to revision before entering into force.

Despite generally higher rates, the reform guarantees full offsetting or reimbursement of accumulated credits under the VAT regime.

Taxes on Profits

IRPJ: 15% basic rate + 10% surtax on annual income = **25% total**

CSLL: 9%, calculated on a basis similar to IRPJ

SUDAM Incentive

The Project is considered eligible for the tax incentive granted by the Superintendence for the Development of the Amazon (SUDAM). This incentive results in a 67.5% reduction in the Corporate Income Tax (IRPJ effectively lowering the rate from 25.0% to 8.125% payable by the Project during the first ten years of production (renewable every 10 years), as it constitutes a new investment located in a municipality within the state of Amazonas covered by SUDAM's tax incentive legislation. For the purposes of this study, the incentive period is assumed to begin in Year 1 following the start of the processing plant's operations and to end in Year 19.

PRODUCT MARKETING AND OFFTAKE STRATEGY

The Ema Project is positioned to supply critical rare earth raw materials to downstream customers seeking secure feedstock for the production of permanent magnets. Given the concentration of rare earth separation and magnet production capacity in China, Ema's proposed MREC product may provide an important source of diversified supply for customers in Western markets.

The Project's commercial strategy allows for product sales through long-term offtake agreements, strategic supply arrangements or spot sales. No binding offtake agreements have been entered into at this stage and 100% of the Project's forecast production remains uncommitted. This provides the Company with flexibility to optimise future sales arrangements, customer selection, pricing mechanisms and potential financing-linked offtake structures as the Project advances.

PROJECT FUNDING SOURCES AND STRATEGY

Project Funding Strategy

The development strategy for the Ema Rare Earth Project contemplates a diversified project financing structure incorporating a combination of equity capital, debt financing, strategic offtake participation, through royalty financing and/or product pre-payment facilities. The proposed financing framework is being designed to optimise the project's cost of capital while maintaining balance sheet flexibility and minimising shareholder dilution where practical.

Given the strategic importance of magnet rare earth supply chains and increasing global demand for ex-China rare earth feedstock, the Company believes the Ema Project is well positioned to attract interest from a broad range of financing counterparties including commercial lenders, strategic downstream customers, trading houses, specialist critical mineral funds, royalty and streaming groups, and government-backed financing institutions.

Equity Funding

Equity capital is expected to play an important role during the project development and financing process, particularly during the pre-construction and early execution phases. Equity proceeds are expected to be applied toward completion of permitting activities, detailed engineering studies, pilot plant optimisation, owner's costs, working capital, and early infrastructure development. Potential sources of equity funding may include:

- Institutional equity placements;
- Strategic cornerstone investors;
- Downstream magnet or separation industry participants;
- Sovereign and government-backed critical minerals investment funds;
- Private equity groups focused on critical minerals; and
- Existing shareholder participation through future capital raisings.

Debt Funding Strategy

The Company contemplates incorporation of debt funding following completion of the BFS and establishment of sufficient technical, commercial, environmental, and permitting certainty.

Given the forecast low operating costs, long mine life, and exposure to strategically important magnet rare earth products, the Company believes the project may be capable of supporting meaningful leverage within a conventional project finance framework, which could make up to 70% of the required capital.

Debt funding may include a combination of:

- Senior secured project finance facilities;
- Corporate debt instruments;
- Bond issuances;
- Strategic pre-payment facilities; and
- Structured commodity-linked financing arrangements.

Offtake and Cornerstone Strategic Agreements

The Company expects long-term offtake agreements to form a central component of the overall project financing strategy.

Strategic offtake agreements may provide:

- Revenue certainty;
- Enhanced project bankability;
- Support for debt financing;
- Access to strategic development capital; and
- Long-term downstream market access.

Potential counterparties may include:

- Rare earth separation companies;
- Permanent magnet manufacturers;
- Automotive supply chain participants;
- Trading houses;
- Government-backed critical mineral agencies; and
- Strategic industrial groups seeking long-term rare earth supply security.

The Company may also pursue cornerstone strategic investment arrangements whereby an offtake partner provides direct equity participation, project funding support, pre-payment financing, or construction capital contributions in exchange for secured long-term product supply rights.

Given tightening global magnet rare earth supply conditions and increasing geopolitical focus on supply chain diversification, the Company believes the Ema Project is well positioned to attract strategic participation from downstream industry participants.

DEVELOPMENT TIMELINE

Following completion of the BFS, the Ema Project is expected to move into detailed engineering design, offtake finalisation, project financing and permitting. These workstreams are planned to advance in parallel to maintain project momentum and support a timely transition from feasibility into construction readiness.

Detailed design will focus on the wellfield, processing plant, solution management systems, reagent handling, supporting infrastructure and construction planning. In parallel, the Company expects to continue engagement with potential offtake partners for the proposed MREC product, with discussions focused on product qualification, pricing, payability, delivery terms and long-term supply arrangements.

Project financing will also be advanced following completion of the BFS, with potential funding sources including equity, project debt, strategic investment, offtake-linked prepayments, royalty financing and government-backed critical minerals funding. Permitting activities will continue with the relevant Brazilian authorities to secure the approvals required for construction and operations.

Subject to finalisation of these workstreams, the Company is targeting the commencement of site-based construction and early development activities in the near term, including site preparation, procurement of long-lead items, initial wellfield development and early process plant works.

Appendix A

The information in this announcement that relates to the updated Mineral Resource Estimate at Ema project was prepared by GE21 Consultoria Mineral Ltda and released on ASX platform on 22 April 2026. The Company confirms it is not aware of any new information or data that materially affects the Mineral Resource Estimate 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.

The information in this announcement relates to previously reported exploration results and mineral resource estimates for the Ema Project released by the Company to ASX on 22 May 2023, 17 July 2023, 19 July 2023, 31 July 2023, 13 Sep 2023, 19 Oct 2023, 06 Dec 2023, 06 Feb 2024, 22 Feb 2024, 13 Mar 2024, 02 Apr 2024, 08 Oct 2024 19 Nov 2024, 21 Jan 2025, 17 Feb 2025, 26 Feb 2025, 10 Mar 2025, 13 March 2025, 28 April 2025, 27 May 2025, 28 May, 13 June 2025, 01 Jul 2025, 18 Aug 2025, 01 Sep 2025, 22 Sep 2025, 23 Oct 2025, 1 Dec 2025, 17 Dec 2025, 12 Jan 2026, 03 Mar 2026 and 05 June 2026. The Company confirms it is not aware of any new information or data that materially affects the information included in the above-mentioned releases and continue to apply and have not materially changed in accordance with listing Rule 5.23.2.

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.

Cautionary Statement about Forward-Looking Statements

This announcement contains certain “forward-looking statements” including statements regarding our intent, belief or current expectations with respect to Brazilian Critical Minerals business and operations, market conditions, results of operations and financial condition, and risk management practices. The words "likely", "expect", "aim", "should", "could", "may", "anticipate", "predict", "believe", "plan", "forecast" and other similar expressions are intended to identify forward-looking statements. Indications of, and guidance on, future earnings, anticipated production, life of mine and financial position and performance are also forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Brazilian Critical Mineral's actual results, performance and achievements or industry results to differ materially from any future results, performance or achievements, or industry results, expressed or implied by these forward-looking statements. Relevant factors may include (but are not limited to) changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which Resolute operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. The production target in this BFS contains 16% Inferred Mineral Resources. To the extent a production target is based on those Inferred Mineral Resources, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that future exploration work will result in the determination of inferred mineral resources or that the production target itself will be realised

Forward-looking statements are based on Brazilian Critical Mineral's good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. Brazilian Critical Minerals does not give any assurance that the assumptions will prove to be correct. There may be other factors that could cause actual results or events not to be as anticipated, and many events are beyond the reasonable control of the Company. Readers are cautioned not to place undue reliance on forward-looking statements, particularly in the current economic climate with the significant volatility, uncertainty and disruption present in global markets. Forward-looking statements in this document speak only at the date of issue. Except as required by applicable laws or regulations, Brazilian Critical Minerals does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in assumptions on which any such statement is based. Except for statutory liability which cannot be excluded, each of Brazilian Critical Minerals, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in these forward-looking statements and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in forward-looking statements or any error or omission.

ASX LISTING RULE 5.16 AND 5.17 REQUIREMENTS

The material assumptions on which the production target for the Project and the forecast financial information derived therefrom are based are detailed in the BFS Summary Report, which is available on the Company's website.

The production target is based on Mining Inventory from Indicated and Inferred Mineral Resources that have been prepared by Competent Persons in accordance with the requirements of the JORC Code (2012).

ASX LISTING RULE 5.9.1 REQUIREMENTS

Key BFS assumptions and outputs are summarised in Table 22 below. Further details are available in the BFS Summary Report, which is available on the Company's website.

Table 22: Inputs and Assumptions

Processing	Unit	Number
Mine Life	Years	20
Processing Grade	Ppm	1,184
MREO Recovery	%	55
Total TREO Produced	T	109,500
Capital Costs		
Construction Costs – Stage 1	US$M	74.0
Pre-production Costs	US$M	12.59
Contingency	%	14.4
Sustaining Capital Costs	US$M	258
Operating Costs		
Cash Costs	US$/kg TREO	8.84
All-in-Sustaining Costs	US$/kg TREO	13.02

Processing	Unit	Number
Pre-tax NPV8%	US$M	1,785
Pre-Tax IRR	%	120
Pre-Tax Payback Period	Months	3
Post-Tax NPV8%	US$M	1,465
Post-Tax IRR	%	105
Post-Tax Payback Period	Months	6

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.	• Holes were sampled using a handheld-mechanical auger drilling machine (open hole) conducted by BCM´s exploration team for 2023 and 2025 auger drilling campaign. 2024 infill auger drilling campaign was conducted by BCM´s exploration team and supervised by GE21 technical team. • Sampling was executed and supervised by BCM technical team for 2023 and 2025 drilling campaign. Sampling was executed by BCM technical team and supervised by GE21 technical team (one geologist and two mining technicians) for 2024 campaign. • Every 1-metre sample was collected in a raffia bag in the field and transported to the exploration shed to be dried in the sun prior to homogenisation for 2023 campaign. Every 1-metre sample was collected in a plastic bag in the field and transported to the exploration shed to be oven-dried prior to homogenisation for 2024 and 2025 campaign. • 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 handheld-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. • The maximum depth achieved with the powered auger was 25m. Deep auger holes (> 15m) are only achievable if fragments of rocks/boulders etc. sitting within the weathered profile and/or the water table are not in the drillhole path. Auger drilling advances were measured using a measuring tape.
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.	• No recoveries are recorded. • The operator observes the volume of each metre and notes any discrepancy. • When recovery is below 75% in two sequential one metre interval, the field crew stops the drill hole. • No relationship is believed to exist between recovery and grade.

Item	JORC code explanation	Comments
	• 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.	
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. • The total length and percentage of the relevant intersections logged.	• All holes from 2023 and 2025 drilling campaign were logged by BCM geologists. Holes from 2024 infill campaign were logged by GE21 geologist or field technicians. Logging for both campaigns detailed the colour, weathering, hydrothermal alteration, texture and any geological observations. Care was taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that supports a Mineral Resource Estimate. • Qualitative logging with systematic photography of the stored box. • The entire auger hole is logged.
Sub- Sampling Techniques and Sampling Procedures	• 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.	• Auger sampling procedure is completed in the exploration shed in Apui. • The entire one metre sample is bagged on site in a rafia bag (2023 campaign) or big plastic bag (2024 and 2025 infill) and transported to the exploration shed where it was naturally dried at the sun (2023 campaign) or oven dried at 70-90C (2024 and 2025 infill campaign) prior to homogenisation, then quartered to about 1kg to go to SGS Laboratories and another 1kg sample is 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.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></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 BCM 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 with ICP-OES/MS determination (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>Al_2O3</td><td>CaO</td><td>Cr_2O_3</td><td>F_2O_3</td></tr>
<tr><td>K_2O</td><td>MgO</td><td>MnO</td><td>Na_2O</td></tr>
<tr><td>P_2O_5</td><td>SiO_2</td><td>TiO_2</td><td></td></tr>
</table>

The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited.
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.

</td>
</tr>
<tr>
<td>Verification of Sampling and Assaying</td>
<td>

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.

</td>
<td>

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 for 2023 and 2025 drilling campaign. Geological data was logged digitally on a tablet application and directly imported into the drill hole database for 2024 infill drilling campaign. Microsoft Access was used for database storage and management and incorporates numerous data

</td>
</tr>
</table>

Item	JORC code explanation	Comments
	• Discuss any adjustment to assay 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}
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+Lu+Y

HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Lu+Y

CREE: Nd+Eu+Tb+Dy+Y

• LREE: La+Ce+Pr+Nd

Item	JORC code explanation	Comments
Location of Data Points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys). trenches. mine	• Auger collar locations were surveyed initially by handheld GPS receiver, at an estimated accuracy of 10m. • Posterior to the end of the drilling campaign, the collar locations were surveyed by a Trimble total station (+/- 5cm),

Item	JORC code explanation	Comments
	workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	referenced to a government survey point. All drill holes have been checked spatially in 3D. • The grid system used for all data types in a UTM projection is SIRGAS Zone 21 Southern Hemisphere. No local grids were used. • The auger holes collar coordinates for the holes used in the resource estimation were surveyed to sub-decimetre accuracy by a licenced surveyor. •
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 (2025 drilling campaign), 300 metres apart inside the infill area (2024 drilling campaign), and over 200m to 800m apart (2023 drilling campaign) designed for testing ionic clay REE mineralization in the regolith over the mapped Proterozoic volcanic rocks (rhyolites and ignimbrites). • 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. Data spacing and distribution are appropriate for Mineral Resource estimation. • Sample composition was applied within the modelled weathering horizons •
Orientation of Data in relation to Geological Structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the 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.	• The location, orientation, and depth of the sampling is appropriate for the deposit type. • 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:
	  • 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.
		• Drill results and hole locations relating to the last mineral resource estimate have been released by BCM on 22 May 2023, 17 July 2023, 19 July 2023, 31 July 2023, 13 Sep 2023, 19 Oct, 2023, 06 Dec 2023, 06 Feb 2024, 22 Feb 2024, 13 Mar 2024, 02, Apr 2024, 19 Nov 2024, 08 Oct 2024, 19 Nov 2024, 21 Jan 2025,17 Feb 2025, 26 Feb 2025, 10 Mar 2025, 13 March 2025, 28 April, 2025, 27 May 2025, 28 May, 13 June 2025, 01 Jul 2025, 18 Aug 2025, 01 Sep 2025, 22 Sep 2025, 23 Oct 2025, 1 Dec 2025, 17 Dec2025 and 12 Jan 2026.
		  • All drill holes are vertical and did not have a down-hole survey due the total length of less than 50m.
		  • All collar tables are presented in the releases prior to this announcement.

Criteria	JORC code explanation	Commentary
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 flat following the topography gradient. • The downhole depths are reported and equivalent to true widths 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 are inserted.
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.

Criteria	JORC code explanation	Commentary
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.	• Infill drilling to expand the indicated resource • Additional metallurgical test works in the Catalão facility with magnesium sulfate.

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. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• 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 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.

Criteria	JORC code explanation	Commentary
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. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• 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 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.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• All tonnages have been estimated as dry tonnages.

Criteria	JORC code explanation	Commentary
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	• 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.
Mining factors or assumptions	• 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.	• A detail ISR mining study has been completed to support the BFS study for the Ema deposit • Mining assumed the leaching of all ionic rare earths hosted in the clays above the 130RL, by ISR method and only the mineralized blocks above that level were considered for the mining plan. • Details of the ISR methodology and economic parameters to complete the Bankable Feasibility Study is presented in the body of this announcement.
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 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.	• Assumptions related to the metallurgical recoveries for the Mineral Resource grades were based on ANSTO test works and BCM test works conducted in it facility in Catalão City.
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 has already applied to IPAAM for the necessary environmental permits and comply with environmental laws.
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.	• 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

Criteria	JORC code explanation	Commentary
	• 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.	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.
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.