# ASX: MEI

# CALDEIRA PROJECT PRE-FEASIBILITY STUDY

A globally strategic, long-life rare earths project with significant growth potential





1	Introduction
2	Caldeira overview
3	PFS summary
4	Operational summary
5	Permitting and funding
6	Appendices





### Introduction







### DISCLAIMER

These materials prepared by Meteoric Resources NL ("Meteoric" or the "Company") include forward looking statements. Forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

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The information in this announcement that relates to Mineral Resource Estimates at the Cupim Vermelho Norte and the Dona Maria 1 & 2 prospects was prepared by BNA Mining Solutions and released on the ASX platform on 12 March 2025. The information in this release that relates to Mineral Resource Estimates at the Soberbo and Capão del Mel deposits was prepared by BNA Mining Solutions and released on the ASX platform on 14 May and 13 June 2024 respectively. The information in this release that relates to Mineral Resource Estimates at the Figueira deposit was prepared by BNA Mining Solutions and released on the ASX platform on 5 August 2024. The information in this release that relates to Mineral Resource Estimates at the Bara do Pacu deposit was prepared by BNA Mining Solutions and released on the ASX platform on 15 April 2025. The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the BNA Mining Solutions findings are presented have not been materially modified.

This presentation includes exploration results, estimates of Mineral Resources and scoping study results. The Company has previously reported these results and estimates in ASX announcements dated 16 December 2022, 1 May 2023, 27 June 2023, 24 July 2023, 31 August 2023, 27 September 2023, 8 December 2023, 14 December 2023, 30 January 2024, 29 February 2024, 14 May 2024 and 13 June 2024, 8 July 2024, 5 August 2024, 22 October 2024, 12 December 2024 and 5 February 2025. The Company confirms that it is not aware of any new information or data that materially affects the information included in previous announcements (as may be cross referenced in the body of this announcement) and that all material assumptions and technical parameters underpinning the exploration results and Mineral Resource estimates continue to apply and have not materially changed.

All references to the pre-feasibility study and its outcomes in this release relate to the ASX announcement dated 21 July 2025. Please refer to the ASX announcement for full details and supporting information. The Company confirms that all material assumptions underpinning the production target and forecast financial information continue to apply and have not materially changed.

# **COMPANY OVERVIEW**

### **MEI SNAPSHOT**

ASX Code	MEI
Share Price (18/07/25)	A\$0.155
Shares on Issue	2,337M
Market Capitalisation	A\$362M

### **BOARD AND MANAGEMENT**

Executive Chairman	Dr Andrew Tunks
Executive Director	Dr Marcelo de Carvalho
Managing Director	Mr Stuart Gale
Non-Executive Director	Dr Paul Kitto
Non-Executive Director	Mr Peter Gundy
Non-Executive Director	Dr Nomi Prins
Chief Financial Officer	Mr Andy Thomson



# **INVESTMENT HIGHLIGHTS**

Caldeira is set to deliver lower cost MREC than hard rock peers



processing capacity

from the Minas Gerais State Government to deliver first production in 2028

Paulo (270km) and Rio de Janeiro (470km)





# Caldeira overview





# THE CALDEIRA RARE EARTHS PROJECT

The world's premiere undeveloped rare earths project



The most significant and advanced rare earths ionic absorption clay project outside of China



Favourably located in Minas Gerais, the largest mining state in Brazil



Pre-Feasibility Study completed on southern licences only with scope for northern expansion to support a multi-decade operation



Strong state and federal government support with a clearly defined approvals process

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Delivering an alternative and scalable supply of critical magnetic rare earths for use in Western magnet making production facilities



# A WORLD-CLASS DEPOSIT...

Scale, grade, recovery and significant exploration upside

- High-grade ionic clay hosted rare earths mineralisation
- Multi-decade scale resource defined
- High metallurgical recoveries from a simple flowsheet
- Starting from surface
- Soft, free dig material with low strip ratio

**1.5**<sub>Bt</sub> Mineral Resource

**20** year **PFS** initial mine life

# Drilling limited to ~15% of the total licence area

M & I Resource 666<sub>Mt</sub> @ 2,685ppm

### Measured and Indicated Mineral Resources of Rare Earth Ionic Absorption Clay Rare Earth deposits<sup>1</sup>



1. Graph of tonnage v TREO grade for reported M&I MREs of IAC deposits. The size of the sphere relates to contained metal. References in the appendices.

# ...WITH PROVINCIAL-SCALE UPSIDE

Scope for a Northern operating hub to materially increase both mine life and production potential



### Stage 2: Northern processing facility

- Dona Maria 1 and 2, Cupim Vermelho Norte
- Total Resources of 567Mt at 2,203ppm TREO
- Measured + Indicated of 281Mt at 2,426ppm TREO
- Expansion opportunities readily available, utilising operational cash flows

### Stage 1: 6Mtpa processing facility (PFS)

- Capao do Mel, Barra do Pacu, Soberbo, and Figueira
- Measured + Indicated of 385Mt at 2,875ppm TREO
- Probable Reserves of 103Mt at 4,091ppm TREO (corresponds to only 27% of M+I)
- High-grade ore with strong metallurgical performance
- LOM production of ~13,500tpa TREO

# **ESTABLISHED REGIONAL INFRASTRUCTURE**

Project located near low-cost renewable energy infrastructure and transport and utilities corridors



**Water:** supplied to the plant facilities by an existing dam, ~400m from the plant site



**Power:** 100% sourced from renewable energy (hydro, solar and wind) and connected to site via 2.5km overhead power line.



**Road Access:** connected to established main road infrastructure via construction of a ~3km unsealed road



**Port:** product from Caldeira to be shipped to customers via the port of Santos near the city of Sao Paulo, 254km from the project site.



**Telecommunications:** fibre optic connection via grid connected power supply OHL for operations





PFS summary





# **CALDEIRA PFS | KEY HIGHLIGHTS**

Study parameters substantially refined following extensive testwork and vendor-based cost estimates

Plant throughput	6Mtpa	<b>1 20%</b> <sup>1</sup>	Optimised to deliver greater return on capital
Average annual Total Rare Earth Oxide (TREO) production	13,584t	<b>1 40%</b> <sup>1</sup>	Representing ~8% of the global REO market <sup>2</sup>
Average annual NdPr Oxide production	<b>4,228t</b>	<b>1</b> 32% <sup>1</sup>	Representing ~7% of the global NdPr market <sup>2</sup>
Maiden Probable Ore Reserve	103Mt	@ 4,091ppm TREO	Based on a minimum 100m x 100m drilling



# **CALDEIRA | SUMMARY FINANCIALS**

Industry leading project of scale and simplicity with expansion potential

- Optimised plant design with 6.0Mtpa of capacity; 10% increase in capital costs, resulting in a 20% increase in capacity
- Development capex of US\$443M (inclusive of contingency) with substantial expansion upside
- Post-tax NPV<sub>8</sub> of US\$1.3bn<sup>2</sup> and highly attractive IRR of 39% represents highly compelling return profile over LOM
- Robust financials delivered under forward pricing scenarios
- Consensus pricing derived from research analyst forecasts
- Forecast pricing utilises an average of Project Blue and Adamas price assumptions,
- MP and DoD US\$110/kg NdPr supporting higher pricing environment near term

Key financial & cash flow metrics	Unit	Spot pricing	Consensus pricing	US\$110/kg NdPr	Forecast pricing <sup>1</sup>
Annual Revenue	US\$M	245	315	385	485
Annual EBITDA	US\$M	86	150	213	305
Operating Cashflow	US\$M	58	100	143	203
Annual operating costs (ex-royalties)	US\$M		13	33	
Annual operating costs (ex-royalties)	US\$/kg TREO		9.1	78	
Annual AISC (inc. royalties)	US\$/kg TREO	12.62	13.07	13.53	14.18
Basket price TREO	US\$/kg	26	33	41	51
NdPr average pricing	US\$/kg NdPr	67	86	110	135
Cumulative post tax cashflow	US\$M	1,165	1,994	2,842	4,058
Pre-tax NPV <sub>8</sub>	US\$M	251	821	1,347	1,985
Post-tax NPV <sub>8</sub>	US\$M	109	488	835	1,256
Pre-tax IRR	%	15	28	36	39
Post-tax IRR	%	11	21	28	31
Payback Period	Years	6.1	2.9	2.5	2.8

Refer to Caldeira Project Pre-Feasibility Study cover announcement
NPV of forecast cash flows from construction assuming an 8% Real Discount Rate and mid-point of Adamas and Project Blue consulting price forecasts.

All inclusive of royalties

# CALDEIRA PFS | LOM PHYSICALS

Meteoric has high confidence in physical estimates that have undergone further refinement since the Updated Scoping Study was released in October 2024

- Together with industry-leading partners in Ausenco, ANSTO and Fremantle Metallurgy, Meteoric has conducted a bottom-up analysis of the physical inputs that underpin the draft PFS
- There has been limited overall variance, providing confidence in the robustness of key estimates, with key updates including:
- Higher annual production driving increased return on capital and economies of scale
- Strip ratio remains very low
- High-grade (>4,000ppm) feed prioritised in mining schedule
- Process flowsheet and recoveries validated with industry-leading testwork program
- Potential for further optimisation and improvement via DFS

Kay Braduction Outcomes	11-1:4	Updated Sco	oping Study	Pre-Feasibility Study	
Key Production Outcomes	Unit -	Years 1-5	LOM	Years 1-5	LOM
Ore Mined	kt	23,004	98,000	26,523	128,989
Strip Ratio	waste:ore	0.08	0.21	0.52	0.38
Average TREO Feed Grade	ppm	4,591	3,724	4,500	3,750
TREO Recovery	%	53	53	54	55
MREO Recovery	%	73	73	73	71
Average annual production (REO)	t	11,453	9,685	12,382	13,584
Production (REO)	t	57,258	193,584	61,912	271,687
NdPr production	t	18,110	63,899	18,185	84,572
DyTb production	t	510	1,923	532	2,600

# **CALDEIRA PFS | LOM OPERATING MARGINS**

Attractive operating margins above NdPr and DyTb operating costs under all pricing scenarios

- PFS delivers robust financial outcomes at a higher degree of accuracy (+/- 25%) from the Scoping Study (+/- 40%)
- More accurately reflects economic conditions and current estimates for labour and utilities costs
- Costs of reagents and consumables derived from first principles using the consumption rates with prices quoted by suppliers for reagents delivered to site.
- Incorporates refined processes for mining and processing of Caldeira Project material:
  - No drilling or blasting
  - No equipment fleet costs (included in capital and sustaining capital)
  - No re-handling of materials (i.e. wet season stockpiles or spent clay)

Operating Costs (Real LOM)	Annual Cost (US\$M) Year 1-5	Unit Cost (US\$/kg TREO) Year 1-5	Annual Cost (US\$M)	Unit Cost (US\$/kg TREO)
Mining	31	2.54	39	3.04
Processing	79	6.37	88	7.24
Total operating costs	110	8.91	127	9.78



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4

# Operational summary





# SIMPLE, LOW COST MINING METHOD

Mine schedule preferences higher grade ore to drive high returns and rapid payback

- Mine plan ~90% backed by existing Reserves
- No requirements for drill and blast
- Excavators and Trucks utilising conventional load and haul
- Planned owner-mining fleet
- Low LOM strip ratio of 0.38 (waste:ore)
- Spent Ore and Waste material backfilled into in-pit voids
- No requirement for tailings dam storage

### Average mining costs

US\$2.54/kg TREO (first five years)

# US\$2.89/kg



The PFS life of mine ore feed contains approximately 89% Measured & Indicated Resources and 11% Inferred Mineral Resources. An Inferred Mineral Resource has a lower level of geological confidence than an Ore Reserve or a Measured or Indicated Mineral Resource and there is no certainty that further exploration work will result in the conversion of the Inferred mineralisation into an Ore Reserve or that the production target itself will be realised.

# **METALLURGY UNLOCKS VALUE**

ANSTO testwork programs provide confidence and optimization of flowsheet and processing costs

- Rare earth minerals extracted using a low acidity (pH 4.5 5) ammonium sulphate solution within a short cycle time (<30 minutes) at ambient temperature
- Continuous pilot program undertaken by ANSTO on a 2.5t sample representative of the CDM starter pit

- Demonstrates process flowsheet with MREO recoveries of 70% achieved with a high quality MREC with <2% impurities</li>
- Further piloting to be undertaken in Brazil in the December quarter 2025 including commissioning of a pilot plant

### Simple process flowsheet with low technical risk and high environmental credentials



# **FORWARD WORK PROGRAM**

Pilot plant being established at the Caldeira Project to support future studies and a development decision



- Pilot plant to produce MREC planned to be established in Poços de Caldas
- Operational in the December quarter 2025
- Objective to further validate and optimise the flowsheet and test different ore types from the Caldeira Project
- MREC produced will be sent to potential offtake partners for testing
- Enables assessment of downstream separation processes including MTM's FJH technology

# **ASSESSING DOWNSTREAM OPTIONS**

Potential to fast-track the production of separated rare earths oxides and/or magnets outside of China

- Several MOUs signed with credible counterparties:
  - MTM Critical Metals (MTM) provides framework to expand downstream processing and separation capabilities
  - Neo Performance Materials offtake MOU supports the production of permanent magnets in Estonia
  - Ucore Rare Metals offtake MOU supports rare earth separation at a new facility in Louisiana, USA
- Successful recent MTM unoptimised proof-of-concept use of its Flash Joule Heating (FJH) separation technology to recover high value magnetic elements from MREC
- MREO content increases from ~30% to 72% by removing of low-value rare earths – 83% La and 88% Ce
- Development of Pilot Plant in Poços de Caldas in September 2025 hosts potential to incorporate FJH demonstration facility



### Initial unoptimised Flash Joule Heating REE recoveries from MREC

Element	Recovered	Interpretation
Praseodymium (Pr)	76 %	Strong volatilisation in single flash
Neodymium (Nd)	65 %	Major portion transferred to vapour
Dysprosium (Dy)	75 %	High heavy REE recovery
Terbium (Tb)	81 %	Near-total recovery in vapour phase
Gadolinium (Gd)	89 %	Confirmed strong heavy REE separation
Samarium (Sm)	51 %	Moderate recovery; to be improved by further flash runs

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5

# Permitting and funding





# **OVERVIEW OF THE PERMITTING PROCESS**

Meteoric continues to successfully progress through Brazil's 3-stage permitting regime

### Submission of the Caldeira EIS



Comprehensive research and community consultation from mid-2023

 Includes favourable feedback from a Social Diagnosis and Stakeholder Survey of the Caldeira Project conducted by EcoDue Ambiental in December 2023



3

### Preliminary License Approval (LP)

- Initial license designed to evaluate social and environmental feasibility
- The principal document supporting the LP was the EIS and Meteoric has strong confidence in receiving approval with the majority of key milestones already being achieved to date
- Installation License Approval (LI)
- Key license to commence detailed construction of the project
- The principal document supporting the LI application is the Environmental Control Plan (PCA) which is being drafted in parallel with the analysis by EPA of the LP application
- ANM approvals to add REEs (PAE and RRR) and CDM approval to convert to ML

— Key requirement for FID and commencement of construction –

### **Operating License Approval (LO)**

 Short, audit style process during which the regulatory authorities (SEMAD) confirm that the project is in compliance with the conditions set out in the Installation License

May 2024



June 2026

2028



# **DETAILED PERMITTING PROCESS ADVANCING**

### Targeting mid-2026 for issuance of Construction Licence



Meteoric is confident of receiving all necessary approvals with strong government support at all levels – BIP, Federal Ministers, the Mayor and councillor officials have all expressed support in favour of the project and the company has executed an MOU with the State Government

1) CODEMA is the Municipal Environmental Council which was responsible to issue the Certificate of Regularity for Land Use and Occupation to Caldeira Project.

2) CONGEAPA is the Management Council of the Pedra Branca's Environmental Protection Area (APA). As Caldeira Project is located within the APA's buffer zone, CONGEAPA should be consulted about the project.

# **CALDEIRA MINE PLAN COMPLIES WITH THE APA**

There are two environmental protection areas within the municipality of Caldas

### Law relating to mining in the environmental areas

- The key environmental areas relevant to the Caldeira Project are the Environmental Protection Area ("APA"), and a 3km strip surrounding the APA ("Buffer Zone")
- Article 51 of Law of Caldas/MG nº 1.973/2006 stipulates that mining activity is currently not permitted within the APA (other than for existing activity with operating licenses)
- Mining within the Buffer Zone <u>is permitted</u> and may be undertaken upon completion of an Environmental Impact Assessment (EIA) which Meteoric submitted in May 2024

#### Treatment within the proposed mining plan

 No part of the Caldeira mine plan is within the APA; Production from Capoa Do Mel starter pit (CDM), Barra do Pacu (BDP) and Soberbo (SOB) licenses includes areas within the Buffer Zone. Meteoric has sought approval to mine within these areas.

#### Meteoric has engaged extensively with key decision makers

- The Caldas Council, together with the Mayor of Caldas, are responsible for decisions relating to the management of the APA and buffer zone.
- Meteoric has a strong relationship with the Mayor who has publicly been supportive of the project
- The Governor of Minas Gerais continues to strongly support Caldeira and maintains a longstanding relationship with the Meteoric team
- The Minister of Mines and Energy, has publicly spoken about Caldeira and its importance is for Brazil.



Image (L-R): Marcelo De Carvalho (Executive Director, Meteoric) with Alexandre Silveira (Minister of Mines and Energy) and Ailton Goula (Mayor of Caldas)

#### Map of the Caldeira Project





### METEORIC 26

# **CAPITAL COSTS AND FUNDING**

The development will be funded by a combination of ECA debt, strategic equity and listed equity

### **Project development costs**

- US\$357m of capital for base case 6.0Mtpa development
- Includes all direct and indirect costs, taxes and owner's costs
- Class 4 estimate (nominal accuracy of +/- 25%)
- US\$443m of total capital cost including ~25% contingency

### Approach to funding

- Meteoric continues to assess potential funding options for Caldeira and intends to utilise a combination of Government / ECA debt, strategic equity and listed equity
- To date, there has been strong engagement with EXIM, BNDES, FINEP, DFC and other government funding agencies. Meteoric remains confident in the ability to securing government funding for Caldeira
- Following inbound interest from strategic parties, Meteoric has also engaged Macquarie to assess potential strategic equity funding options

### Indicative funding waterfall (US\$m)



Figures in US\$m	Total cost	Contingency	Total incl. contingency
Mining	24.7	3.3	28.0
Plant Direct	258.8	64.7	323.5
Plant Indirect	73.5	18.4	91.9
Total	357.0	86.4	443.4

# **CONCLUDING REMARKS**

Caldeira stands out as the world's premiere undeveloped rare earths project



![](_page_27_Picture_0.jpeg)

# Appendix

![](_page_27_Picture_2.jpeg)

![](_page_27_Picture_3.jpeg)

# **RARE EARTHS SUPPLY UNCERTAINTY**

Critical minerals with strategic geopolitical importance and a market controlled by China

- On 4 April 2025, China's Ministry of Commerce and General Administration announced new restrictions on the export of medium and heavy rare earths and alloys
- These rare earths are critical feedstock components in the EV automobile, IT and military defence industries
- Increasing uncertainties in global trade flows following US tariff proposals
- China maintains a strong foothold on global REE production and processing with virtual control over the rare earths supply chain
- Further highlights the strategic importance of a steady, sustainable supply of rare earths to western markets
- Caldeira represents a highly economic alternative global rare earths source

### Caldeira Mineral Resource by deposit (export restricted rare earths in yellow)

Element	Oxide	CDM	FIG	SOB	DM1	DM2	CVN	BDP	Totals
Yttrium	Y <sub>2</sub> O <sub>3</sub>	16,605	31,415	30,168	28,383	13,217	35,393	40,263	195,443
Lanthanum	La <sub>2</sub> O <sub>3</sub>	128,823	156,135	216,180	138,223	75,465	194,169	328,354	1,237,350
Cerium	CeO <sub>2</sub>	123,735	165,985	172,629	140,064	71,399	185,858	287,836	1,147,508
Praseodymium	Pr <sub>6</sub> O <sub>11</sub>	19,144	23,961	36,600	24,152	12,600	34,737	43,833	195,027
Neodymium	$Nd_2O_3$	52,145	66,764	104,866	72,225	37,499	104,807	116,054	554,360
Samarium	$Sm_2O_3$	5,968	7,854	12,046	8,851	4,371	12,749	13,178	65,018
Europium	$Eu_2O_3$	1,513	2,082	3,045	2,289	1,096	3,195	3,388	16,608
Gadolinium	$Gd_2O_3$	4,042	5,567	8,048	5,997	2,887	8,572	8,983	44,096
Terbium	Tb <sub>4</sub> O <sub>7</sub>	554	847	1,058	840	399	1,124	1,295	6,117
Dysprosium	Dy <sub>2</sub> O <sub>3</sub>	2,803	4,677	5,268	4,494	2,114	5,908	6,793	32,057
Holmium	Ho <sub>2</sub> O <sub>3</sub>	498	892	921	850	391	1,068	1,225	5,844
Erbium	$Er_2O_3$	1,316	2,546	2,426	2,358	1,087	2,977	3,232	15,942
Thulium	$Tm_2O_3$	170	349	313	317	143	388	422	2,101
Ytterbium	Yb <sub>2</sub> O <sub>3</sub>	1,020	2,185	1,836	1,935	874	2,387	2,576	12,814
Lutetium	Lu <sub>2</sub> O <sub>3</sub>	142	307	207	272	124	328	365	1,746
Total Tonnes		358,478	471,564	595,614	431,250	223,666	593,660	857,798	3,532,028

# **MREC PRODUCT SPECIFICATIONS**

High MREO grades with low levels of impurities

- Low U<sub>3</sub>O<sub>8</sub> and ThO<sub>2</sub> levels five batches of MREC produced by ANSTO piloting and tested
- Based on this testwork MREC produced at the Caldeira Project would not be classified as radioactive for transportation under International Atomic Energy Agency guidelines

**12,382t** Average **TREO production** per year (first five years) **13,584t** Average **TREO production** 

4,022t

Average **NdPr production** per year (80,442t LOM)

### **124t**

per year (LOM)

Average **DyTb production** per year (2,473t LOM)

TRE	O composition	Impurity	compositio	on
PEO	Concentration (%)	Oxide	Concentration	Units
REO	Concentration (%)	Al <sub>2</sub> O <sub>3</sub>	0.21	%
La <sub>2</sub> O <sub>3</sub>	31.4	CaO	0.56	%
CeO <sub>2</sub>	0.67	K <sub>2</sub> O	0.017	%
	4.00	MnO	0.013	%
Pr <sub>6</sub> O <sub>11</sub>	4.29	SiO <sub>2</sub>	0.095	%
Nd <sub>2</sub> O <sub>2</sub>	11.06	SO <sub>4</sub>	1.03	%
2 3		SrO	0.11	%
$Sm_2O_3$	1.08	ZnO	0.086	%
Eu <sub>2</sub> O <sub>2</sub>	0.27	CdO	<2	ppm
2-3		CoO	<3	ppm
$Gd_2O_3$	0.81	Cr <sub>2</sub> O <sub>3</sub>	<6	ppm
Tb.O-	0.091	CuO	<5	ppm
4-1		Fe <sub>2</sub> O <sub>3</sub>	31	ppm
Dy <sub>2</sub> O <sub>3</sub>	0.37	HgO	<2	ppm
Ho O	0.050	MgO	<30	ppm
10203	0.009	NiO	<5	ppm
$Er_2O_3$	0.13	P <sub>2</sub> O <sub>5</sub>	92	ppm
Tm O	0.011	ThO <sub>2</sub>	<2	ppm
$III_2O_3$	0.011	TiO <sub>2</sub>	<3	ppm
$Yb_2O_3$	0.062	U <sub>3</sub> O <sub>8</sub>	8	ppm
	0 0073	V <sub>2</sub> O <sub>5</sub>	<4	ppm
	0.0073	ZrO <sub>2</sub>	3	ppm
$Y_2O_3$	2.37	CI	<50	ppm
TREO	52 7	F	710	ppm
INLO	JZ.1	Loss on Ignition	45.2	%

# **MAIDEN ORE RESERVE**

Selectively targeting the highest-grade mineralisation to drive high returns and rapid payback

Classification	Tonnes (Mt)	TREO ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Cont. REO kt				
Capão do Mel (CDM)									
Proved	-	-	-	-	-				
Probable	37.1	3,925	243	667	146				
Total	37.1	3,925	243	667	146				
Figueira									
Proved	-	-	-	-	-				
Probable	16.1	4,951	450	938	75				
Total	16.1	4,951	450	938	75				
Soberbo									
Proved	-	-	-	-	-				
Probable	24.3	3,735	256	736	91				
Total	24.3	3,735	256	736	91				
Barra do Pacu (BDP)									
Proved	-	-	-	-	-				
Probable	25.5	4,130	234	621	105				
Total	25.5	4,130	234	621	105				
Total Caldeira Project									
Proved	-	-	-	-	-				
Probable	103.0	4,091	276	714	416				
Total	103.0	4,091	276	714	416				

- Ore Reserves based solely on higher-grade material from the CDM, Figueira, Soberbo and BDP deposits
- Ore Reserve average grade >70% higher than the average Mineral Resource grade to drive returns
- Drill density for Ore Reserves at a minimum 100m x 100m spacing
- Significant scope for future growth
- 1. All Ore Reserve figures reported in the table above represent estimates as at 21 July 2025. Ore Reserve estimates are not precise calculations, being dependent on the underlying Mineral Resource and based on limited information in respect to modifying factors. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate.
- 2. Only material that is CLAY and has a resource classification of Measured or Indicated have been included.
- 3. Measured and Indicated have been converted to Probable only.
- Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

# **CALDEIRA MINERAL RESOURCE ESTIMATE (APRIL 2025)**

Licence	JORC Category	Material Type	Tonnes Mt	TREO ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Tb₄O <sub>7</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	MREO ppm	MREO/TREO
Capão do Mel	Measured	Clay	11	3,888	222	586	6	28	842	21.7%
Cupim Vermelho Norte	Measured	Clay	26	2,607	156	477	5	25	663	25.4%
Total	Measur	Measured		2,983	176	509	5	26	715	24.0%
Capão do Mel	Indicated	Clay	74	2,908	163	449	5	23	640	22.0%
Barra do Pacu	Indicated	Clay	77	2,917	143	376	4	21	545	18.7%
Soberbo	Indicated	Clay	86	2,730	165	476	5	23	669	24.5%
Figueira	Indicated	Clay	138	2,844	145	403	5	28	582	20.5%
Cupim Vermelho Norte	Indicated	Clay	90	2,658	163	489	5	26	683	25.7%
Dona Maria 1	Indicated	Clay	111	2,253	128	376	4	23	531	23.6%
Dona Maria 2	Indicated	Clay	53	2,303	132	390	4	22	548	23.8%
Total	Indicat	ed	629	2,668	148	422	5	24	599	22.4%
Total	Measured + I	ndicated	666	2,685	150	427	5	25	605	22.5%
Capão do Mel	Inferred	Clay	32	1,791	79	207	2	13	302	16.9%
Barra do Pacu	Inferred	Clay	190	2,153	112	296	3	18	429	19.9%
Soberbo	Inferred	Clay	89	2,713	167	478	5	24	675	24.9%
Figueira	Inferred	Clay	9	3,105	139	379	5	28	551	17.7%
Cupim Vermelho Norte	Inferred	Clay	78	2,237	126	377	4	23	530	23.8%
Dona Maria 1	Inferred	Clay	49	2,225	121	383	5	25	534	24.0%
Dona Maria 2	Inferred	Clay	29	2,324	130	397	4	21	552	23.8%
Capão do Mel	Inferred	Transition	25	1,752	86	239	3	14	341	19.5%
Barra do Pacu	Inferred	Transition	122	1,837	95	253	3	15	355	19.9%
Soberbo	Inferred	Transition	54	2,207	138	395	4	20	558	25.3%
Figueira	Inferred	Transition	24	2,174	115	328	4	21	468	21.5%
Cupim Vermelho Norte	Inferred	Transition	67	1,665	92	281	3	17	393	23.6%
Dona Maria 1	Inferred	Transition	42	1,703	95	275	3	17	390	22.9%
Dona Maria 2	Inferred	Transition	21	1,615	86	251	3	15	355	22.0%
Total	Inferre	ed	832	2,097	115	325	4	19	462	22.0%
Total	Measured + Indicated + Inferred		1,497	2,359	130	370	4	21	526	22.3%

Caldeira Project MRE by licence at 1,000ppm TREO cut-off. Differences may occur due to rounding.

# PEER COMPARISON REFERENCE DATA

Source data for Bubble Plot, showing IAC Deposits with reported Measured + Indicated Resources (Mt) x TREO Grade (ppm).

Company	Project	Classification	Resource(Mt)	Grade (ppm)	Cut-Off (ppm)	MREO (ppm)	Bubble Size	Reference
Serra Verde	Pela Ema	Measured + Indicated	390	1,500	NSR	0	59	Minedocs August 2016
Appia	PCH	Indicated	7	2,513	NSR	562	2	Appia Rare Earths & Uranium Corp 1 March 2023
Viridis	Colossus	Measured + Indicated	330	2,680	1000	659	71	<u>Viridis Mining &amp; Minerals Ltd 22 January</u> 2025
Ionic Rare Earths	Makuutu	Indicated	518	640	200	152	33	Ionic Rare Earths Limited 15 May 2024
Aclara	Penco Module	Measured + Indicated	28	2,292	NSR	523	6	Aclara Resources Inc. 12 December 2023
Meteoric Resources	Caldeira (Global)	Measured + Indicated	666	2,655	1000	605	179	MEI ASX 15 April 2025
Meteoric Resources	CDM	Measured + Indicated	85	3,035	1000	666	26	MEI ASX 13 June 2024
Meteoric Resources	BdP	Indicated	77	2,917	1000	545	22	MEI ASX 15 April 2025
Meteoric Resources	SOB	Indicated	86	2,730	1000	669	23	MEI ASX 14 May 2024
Meteoric Resources	FIG	Indicated	138	2,844	1000	582	39	MEI ASX 5 August 2024
Meteoric Resources	CVN	Measured + Indicated	116	2,647	1000	679	31	MEI ASX 12 March 2025
Meteoric Resources	DM1 + DM2	Indicated	164	2,269	1000	536	37	MEI ASX 12 March 2025