INVESTOR PRESENTATION

OBY Critical Minerals

A massive new ionic-clay rare earth platform poised to become a leading entrant in 2026

Man of War | Brazil | district-scale ionic clay REE exposure, process upside and a simpler Phase 1 / Phase 2 development story | Pending TSXV Listing under ticker “OBY”

1.35 Bt @ 3,437 ppm **372 Mt @ 5,124 ppm** **23% MREO** **2026 catalysts**

June 10, 2026

Disclaimer

Forward Looking Information

This presentation has been prepared by OBY Critical Minerals Ltd. (“OBY” or the “Company”) for information purposes only and does not constitute an offer to sell, or a solicitation of an offer to buy, any securities of the Company.

This presentation contains forward-looking information and forward-looking statements within the meaning of applicable Canadian securities laws, including the policies of the TSX Venture Exchange (“TSXV”). Forward-looking information includes, but is not limited to, statements regarding exploration and development plans, metallurgical test results and implications, potential processing routes, project scale and selectivity, capital intensity, timelines, future work programs, potential resource expansion, expected market conditions, and the anticipated quality or marketability of any future rare earth products.

Forward-looking information is based on management’s reasonable assumptions, estimates, expectations, and opinions as of the date of this presentation. Such assumptions include, without limitation, assumptions regarding geological continuity, metallurgical behavior, recoveries, impurity removal, permitting timelines, availability of capital, commodity prices, access to infrastructure, regulatory regimes, and political and economic conditions in Brazil. Forward-looking information is subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those expressed or implied. These risks include, but are not limited to: the inherent uncertainty of mineral exploration and resource estimation; the preliminary nature of metallurgical test work; risks related to scaling laboratory results to commercial operations; variability in geological, metallurgical, and processing characteristics; delays in permitting or regulatory approvals; changes in project parameters as plans are refined; availability and cost of financing; fluctuations in rare earth prices; environmental, social, political, and sovereign risks in Brazil; supply chain and logistics risks; and other risks disclosed in the Company’s public filings available on SEDAR+. Any references to mineral resources are conceptual in nature and are reported in accordance with NI 43-101 and JORC (2012) standards, where applicable.

Mineral resources are not mineral reserves and do not have demonstrated economic viability. No economic analysis has been completed to support production decisions, and there is no certainty that any portion of the mineral resources will be converted to mineral reserves.

The Company undertakes no obligation to update or revise any forward-looking information, except as required by applicable securities laws. Readers are cautioned not to place undue reliance on forward-looking information.

Management Team

Deep technical, financial, and in-country execution experience

Michael Robart
Chief Executive Officer

- 15+ years in Rare Earth/Critical Metals Development, Operations, and Commercial Leadership
- Former Tesla Lithium & Recycling Technical Program Manager and SGS Canada Project Manager/Metallurgist
- Former Business Director, Neo Performance Materials (TSX:NEO), a leading mid-stream and downstream rare earth and rare metals company, responsible for rare metals (gallium) business serving global rare earth magnetics industry customers
- Licensed P. Eng (Chemical Engineer) in Ontario, Canada

Jing Peng
Chief Financial Officer

- CPA (Ontario) with 15+ years supporting TSXV and Canadian public companies across mining, technology, and resource sectors
- Experienced public-company CFO and Director, with deep expertise in financial reporting, audits, and capital markets compliance
- Strong international perspective, holding advanced degrees from the University of Toronto and UIBE (Beijing)

Vitor Carmo
Director of Operations & Administration– Oby Brazil

- Production Engineer with planning, project management, and process optimization expertise across multiple complex Brazilian projects
- Corporate and investor communications coordination for OBY
- MBA in Business Management (USP)

Rodrigo Fernandes do Espírito Santo
Project Development Consultant – Oby Brazil

- Former Project Manager at Aclara Brasil, supporting the Carina rare earth project
- 30+ years in capital projects across major Brazilian mining and infrastructure projects, including Carina (Aclar), Araguaia Nickel (Horizonte Minerals), and Tocantinzinho Gold (Eldorado)
- Led EPCM workstreams at Hatch, SNC-Lavalin (now AtkinsRéalis), and AFRY

Carlos Leite
Senior Geologist – Oby Brazil

- 29+ years geology experience total with 15+ years leading exploration programs in Brazil including Rare Earths and strategic metals
- Experience across all mining phases; Predictive methods for mineral exploration; Geology-based modelling for greenfield; brownfield and near-mine projects; Mineral resource estimate
- MAUsIMM; Registered Qualified Professional (QP) – PQR.CBRR; MBA in Data Science & Analytics (USP)

Guido Pessoa
Environmental Manager – Oby Brazil

- Environmental Engineer leading permitting, impact assessment, and sustainability
- Bachelors in Environmental & Sanitary Engineering (UFJF) with international experience at Queen's University Belfast
- Project Management Certification (PUC-MG) and ESG & Corporate Sustainability (FGV)

Board of Directors & Advisors

Proven experience building and financing mining projects in Brazil and beyond

Frederico Marques
Chairman
- Well-known and highly experienced mining executive and lawyer
- > 25 years experience with mineral exploration and mining projects, going public transactions, M&A, joint ventures and corporate matters
- Independent Director of PTX-Metals Inc. (TSX-V) and Former Independent Director of Sigma Lithium Corp. (TSX-V, NASDAQ, BVMF)
- Former in-house lawyer Vale S.A.
- Honorary member of the Board of Directors of the Brazil-Canada Chamber of Commerce and past Chairman. PhD and LLM in International Law

Andrew Whitten
Non-Executive Director
- Investor, advisor, and corporate lawyer with 25+ years in capital markets, M&A, and business strategy.
- Managing Director of Prandium Capital, advising Australian companies on growth
- Master of Laws (UTS) in Corporate Finance & Securities Law

Jed Richardson
Non-Executive Director
- >20 years experience spanning project finance and resource development in emerging markets including Brazil and Africa
- CEO and Executive Chairman of TSX-listed Trigon Metals
- Former Analyst, Sprott Capital Markets, Cormark Securities.

Renato Gomez
Non-Executive Director
- Qualified lawyer in Brazil, Portugal, and New York, with experience in business structuring, M&A, financing, and corporate governance.
- Co-Founder, former-CEO and current board member of Graphcoa
- Director of Verde Agritech (TSX-listed former owner of Man of War Project tenements)

Cristiano Veloso
Executive Advisor
- Founder, Chairman & CEO of TSX-listed Verde AgriTech, Oby Rare Earths, and Toucan Metals
- >20 years leading Brazil-based mining/agri companies through fundraising, development, permitting, commercialization and production, and the creation of three mines, two industrial plants, and a microbial tech facility
- Degrees from UEA (UK), UFMG(Brazil) and certification from Harvard Business School

Why OBY is likely to attract market attention

2026 de-risking sprint to support an already exciting new entrant story

1 **Scale + Basket**
One of the largest, most magnet-weighted ionic clay rare earth stories.
1.35Bt @ 3,437 ppm TREO, w/ 23% MREO (Inferred, 43-101/JORC)

2 **Process simplicity**
Early desorption work opens the door to a cleaner, lower-complexity and more unit-cost efficient development narrative

3 **Two-phase economics**
A financeable bridge plant first, then a much larger scale-up case: easier for investors to underwrite

4 **Execution credibility**
Funded near-term work, SGS-led study spring and year-round auger / PFS-support infill drilling.

2026 Sprint to PEA

Move the story from large inferred scale + preliminary metallurgy toward updated resource framing, SGS-backed process proof and a clear two-phase development case.

C$ 3.6M working capital as of April 2026

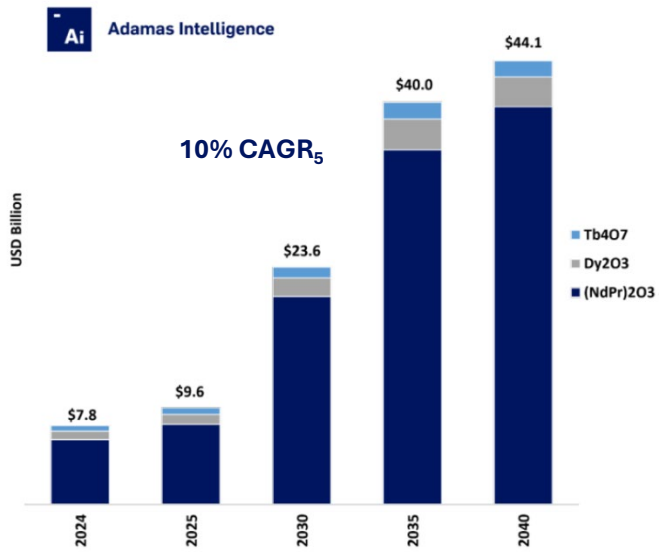
This is a fresh critical-minerals story with enough macro to get attention and enough catalysts to drive valuation growth through 2026

Macro tailwinds are already in place

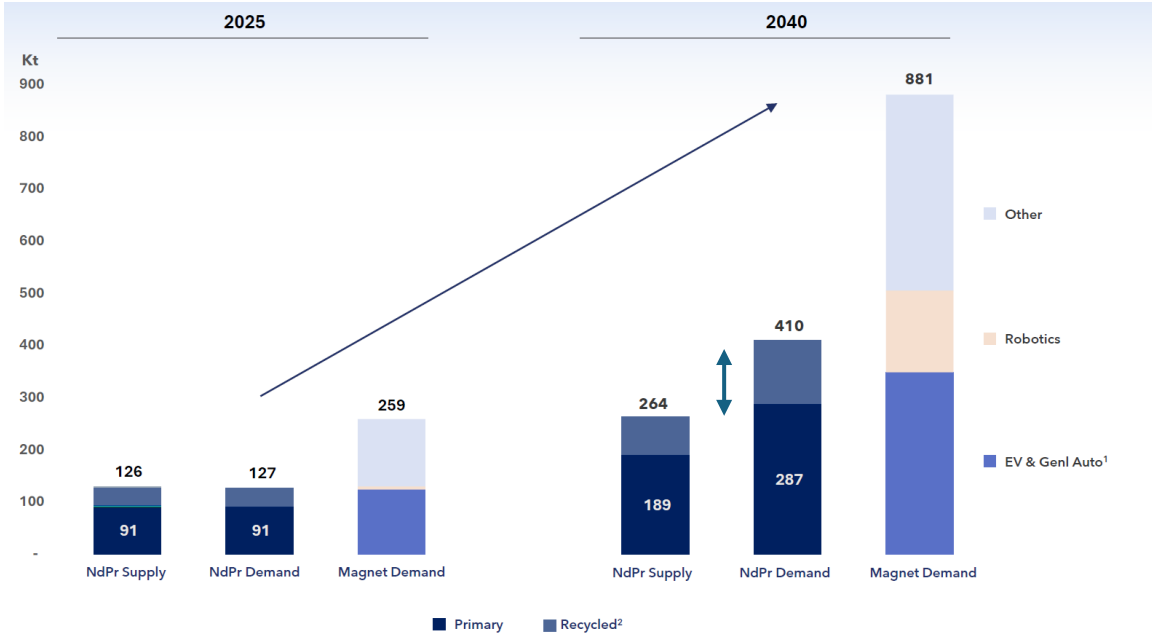
Demand growth, ex-China scarcity and supply chain optionality are doing a lot of the setup work

Demand is moving

EV's, wind, robotics, and AI/datacenters are pulling magnet REE demand higher.



Structural supply gap for ex-China magnetic rare earths



~98 kt NdPr deficit by 2040

~20-30 new ex-China mines are needed to close the gap.

A credible ionic-clay story can pull in both thematic and specialist capital.

Policy support is improving the audience for a fresh rare-earth story

April 20, 2026

USA Rare Earth boosts Western supply with $2.8B Brazil deal

The deal also includes a 15-year offtake agreement to supply a special purpose entity financed by US government agencies and private sources.

November 7, 2025

US backs Serra Verde's Brazilian rare earth project with $465M funding

The financing is to help cover upgrades to the company's Pela Ema mine in Brazil's Goiás state.

December 4, 2025

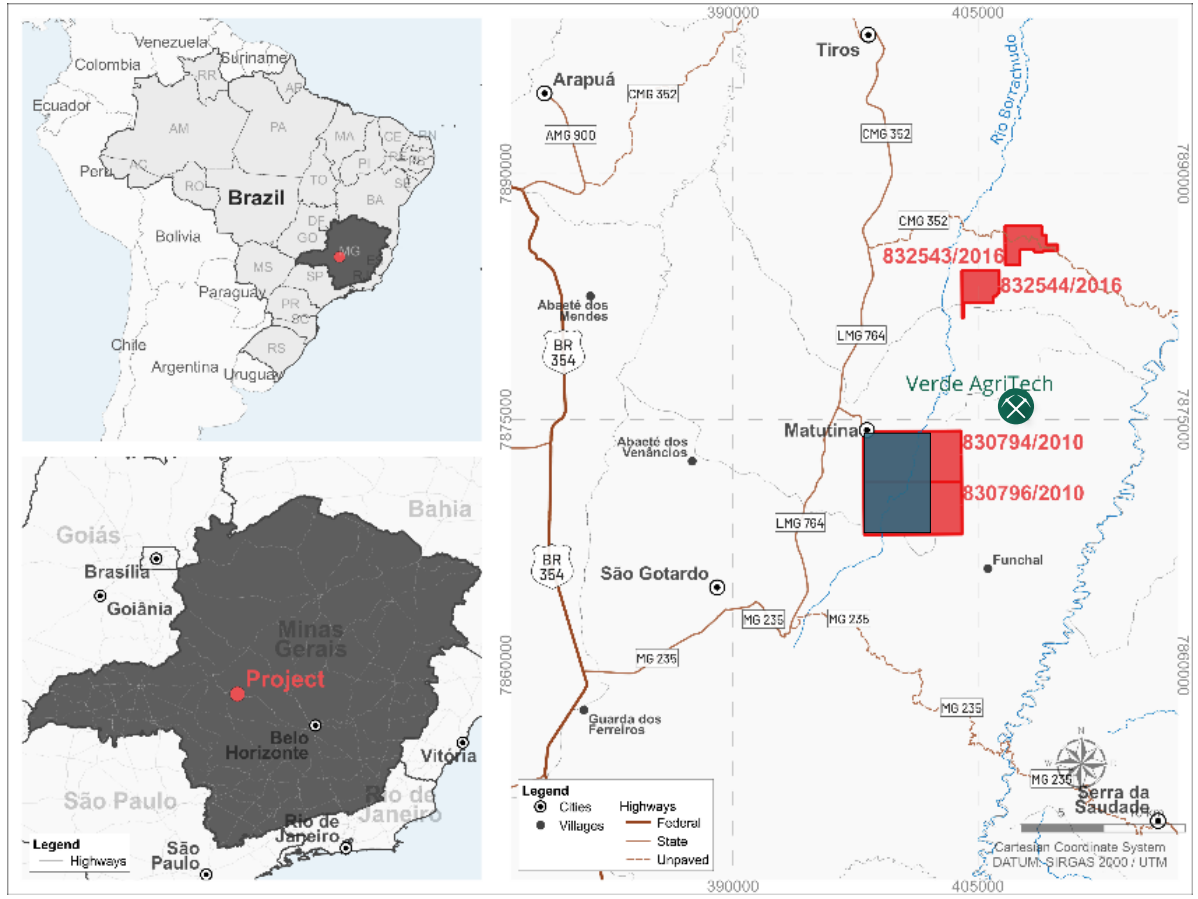
US plans more stakes in minerals companies, Trump official says

Executive director of the National Energy Dominance Council says the move is necessary to counter China's dominance in raw materials.

Source: Adamas Intelligence, MP Materials Nov 2025, Select headlines, tag "Rare Earth", mining.com Nov 2025-Apr 2026

Origin story

From Legacy Exploration to Globally Significant Rare Earth Discovery



Legacy drilling (2011-2012) | **REE Discovery and re-assay (2024)** | **Current resource** | **Undrilled targets**

Project Evolution

2008 Tenements applied by Verde Agritech (TSX: NPK phosphate/potash focused)

2011 3,640 m diamond drilling completed

Q2-Q3 2024 Re-assay of historical drilling → significant REE and MREO identified. Preliminary desorption (metallurgy), SGS Geosol

Q4 2024 Maiden JORC/ NI 43-101 Inferred Resource

Corporate Formation

Jan 2021
Nautica Holdings incorporated

Oct 2024
Oby Rare Earths established by NPK (project vehicle)

Apr 2025
Acquisition of Oby Rare Earths by Nautica (Man of War)

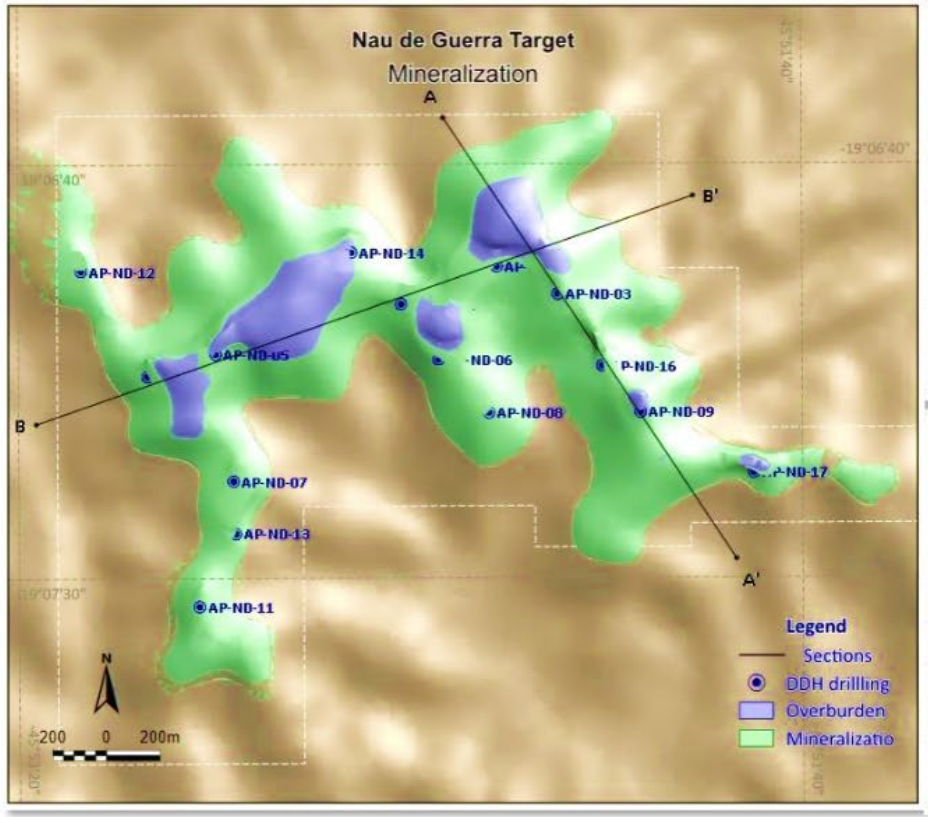
Apr 2025
Oby Brazil incorporated

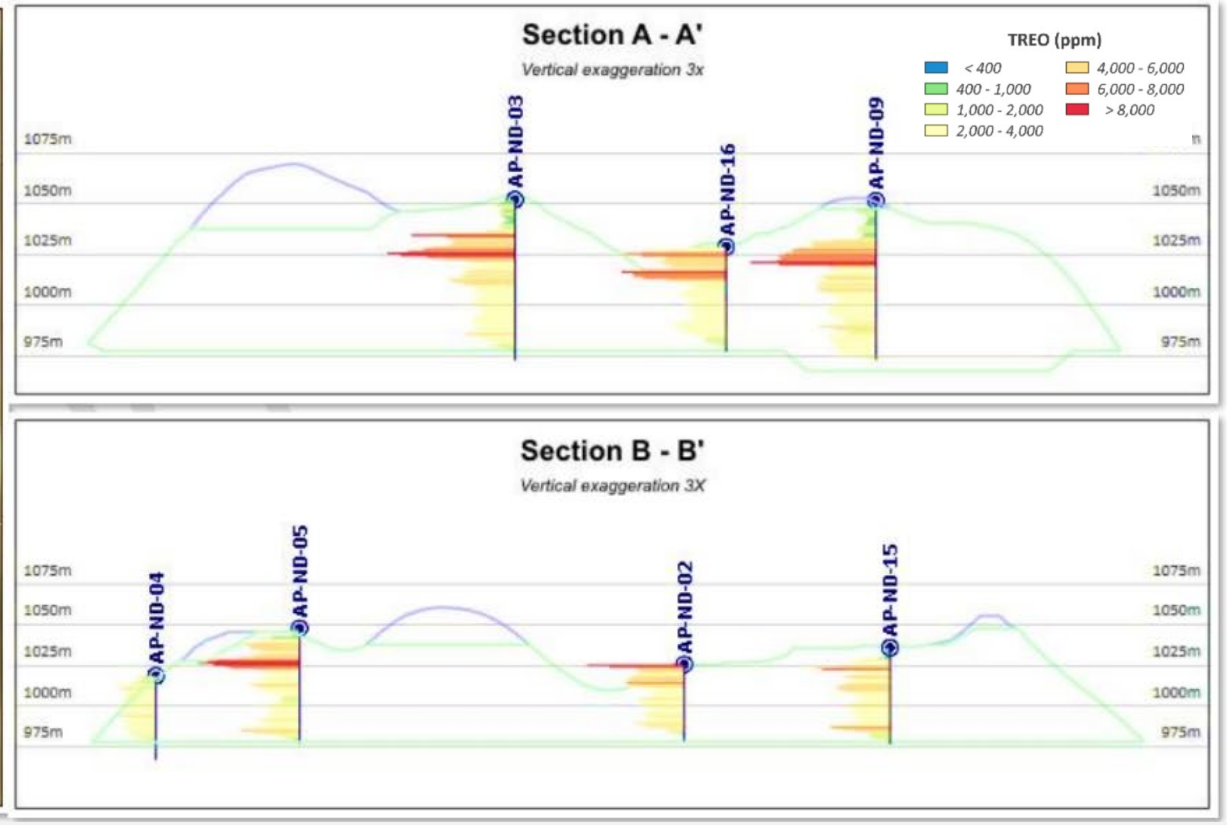
Aug 2025
Nautica Renamed to Oby Critical Minerals

Nov 2025
$C 3.7 M Raised

Geology overview

Clay-Hosted Rare Earth System with Large Undrilled Target Inventory





Man of War

Total tenements
47 km²

In-resource

Nau de Guerra
2.9 km²

Alto da Serra
3.4 km²

Balsamo
11.4 km²

New

Fragata
10.1 km²

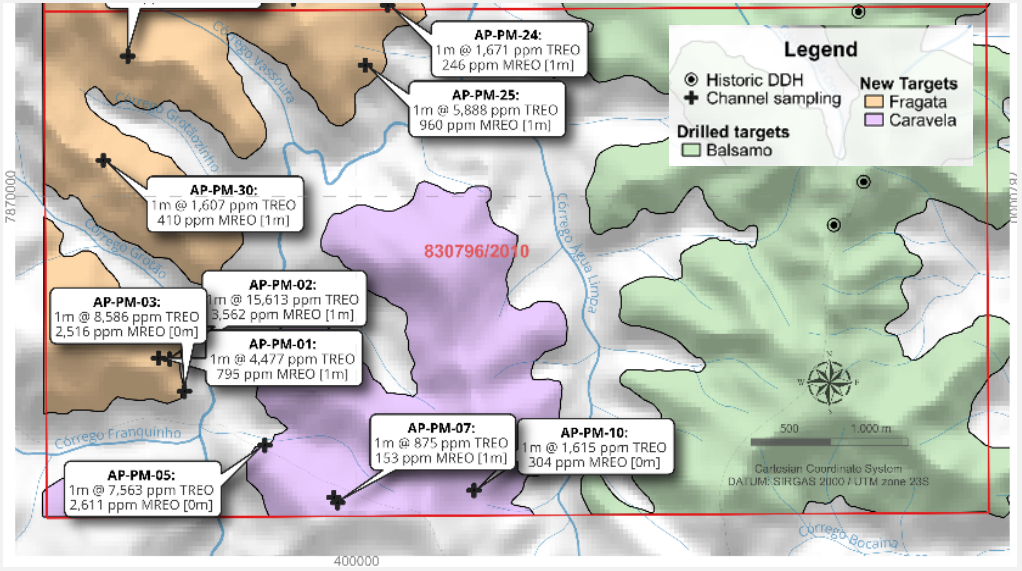
Caravela
3.0 km²

Mineralization associated with clay-rich lithologies within the Capacete Formation. The highest grades and best leaching characteristics typically occur in clay-rich horizons between 5 and 35 m depth.

New Targets: Fragata & Caravela

Some of the highest grades encountered, rich in Dy + Tb

- New targets **Fragata and Caravela**, contain surface sample sites with some of **the highest grades yet encountered**.
- The sample sites are channel samples from road cuttings, natural outcrops and other disturbed locations, and are from above, within and below the high-grade sections of the Capacete Formation.
- **Auger drilling of these targets expected to begin in June, followed by MRE with potential to add significant grade and scale**



Target	Sample ID	TREO *(ppm)*	MREO *(ppm)*	Nd_2O_3 *(ppm)*	Pr_6O_{11} *(ppm)*	Tb_4O_7 *(ppm)*	Dy_2O_3 *(ppm)*
Fragata	AP-PM-02	15,613	3,562	2,726	723	20	90
	AP-PM-03	8,586	2,516	1,904	518	16	79
Caravela	AP-PM-05	7,563	2,611	2,014	511	15	71

Man of War already screens differently

Scale is real today. The 2026 question is how much of that scale can be made cleaner, simpler, and more financeable.

Key facts:

1.35 Bt
resource at 1,000 ppm cutoff

3,437 ppm
TRE grade at 1,000 ppm

372 Mt
Resource at 4,000 ppm cutoff

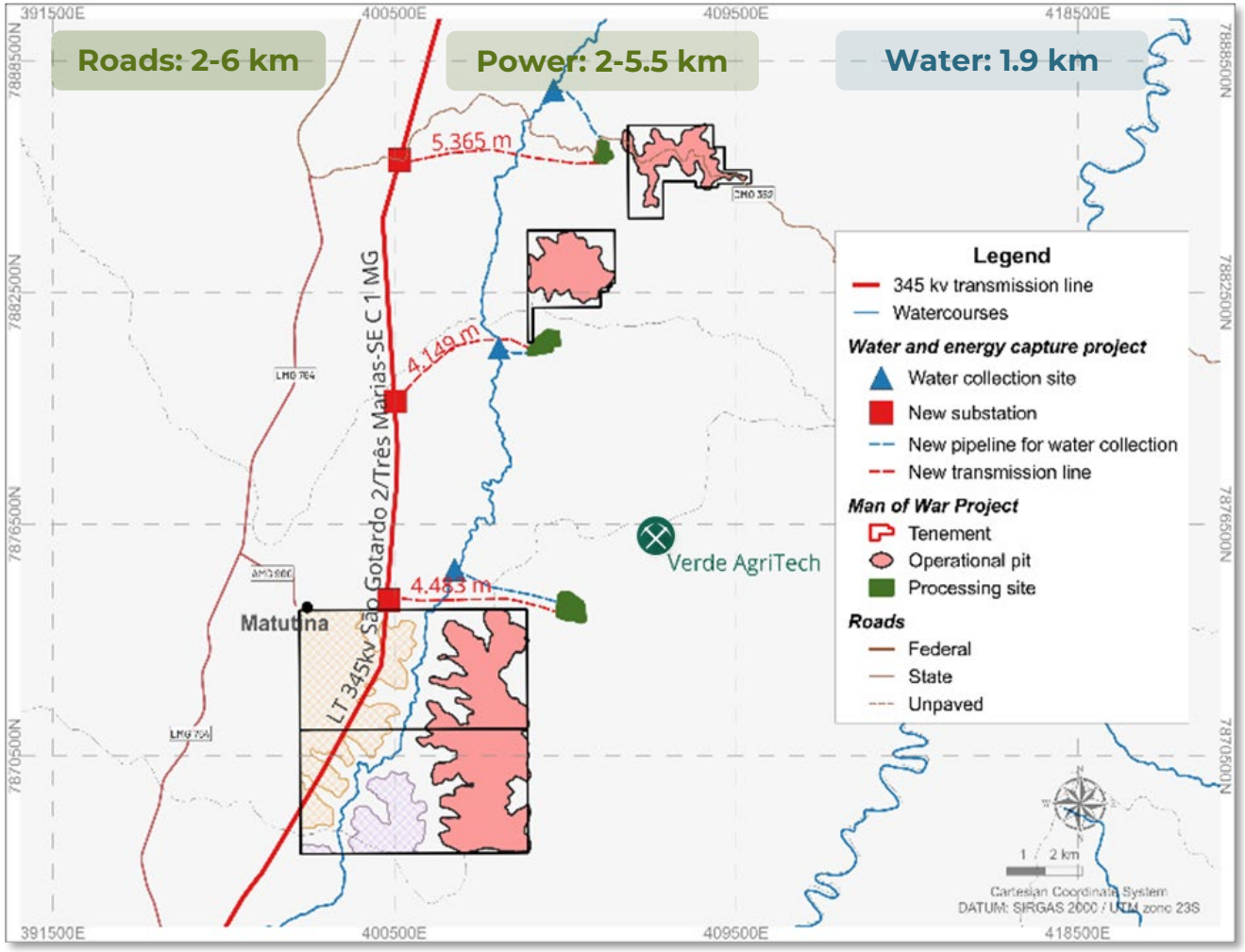
5,124 ppm
TREO grade at 4,000 ppm cutoff

23%
MREO as % TREO

4.6 Mt
Contained TREO (1.1 Mt MREO)

Strategic location, existing infrastructure, clean product angle

- Minas Gerais location with paved roads, power, and water nearby
- Low radionuclide / low impurity narrative
- Five target areas with only three drilled provides room to grow beyond current MRE footprint



Resource comparisons

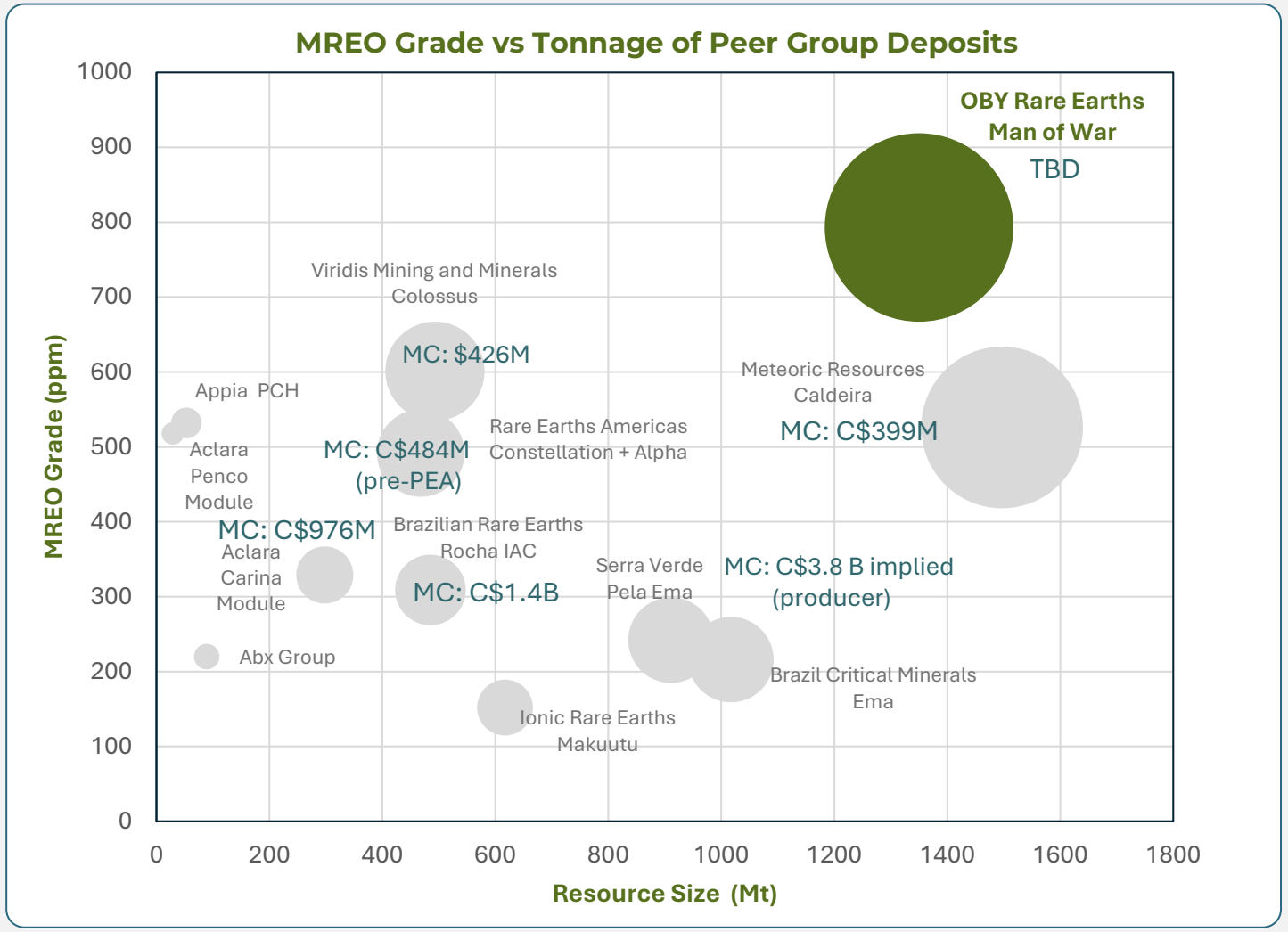
OBY controls a massive resource containing three targets, with substantially higher MREO grades and in-situ value vs. peers

Company	Project	Cutoff ppm	Tonnes (Mt)	TREO (ppm)	MREO (ppm)	TREO (Mt)	MREO (Mt)	MREO % of TREO	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	In-Situ[2] Basket $/t
OBY CRITICAL MINERALS	**Man of War[1]**	1000	1350	**3437**	**793**	**4.6**	**1.1**	23.1%	**594**	**173**	22	5	**$137**
		4000	372	**5124**	**1224**	1.9	0.5	23.9%	**917**	**266**	34	**8**	**$211**
RARE EARTHS AMERICAS	Alpha + Constellation[3]	1000	468	2155	492	1.0	0.23	22.8%	357	103	27	5	$103
mineração SERRAVERDE	Pela Ema	NSR	911	1200	242	1.1	0.2	20.2%	161	49	28	4	$69
ionic rare earths	Makuutu	200	617	630	152	0.4	0.1	24.1%	110	30	10	2	$35
METEORIC	Caldeira	1000	1497	2359	526	3.5	0.8	22.3%	370	130	21	4	$99
aclara	Carina	1450	297	1451	391	0.4	0.1	23.9	284	63	38	6	$104
BRAZILIAN CRITICAL MINERALS	Ema	500	1017	793	216	0.8	0.2	**27.2%**	154	45	13	4	$53
Appia RARE EARTHS & URANIUM CORP.	PCH	NSR	53	2841	532	0.2	0.0	18.7%	378	121	28	5	$109
VIRIDIS MINING & MINERALS	Colossus	1000	493	2508	601	1.2	0.3	24.0%	429	142	26	5	$116

[1]Total resource estimated in compliance with JORC 2012 Edition and NI 43-101 standards, under the supervision of Qualified Person (QP) Dr. Volodymyr Myadzel, PhD, MAIG.
[2] Includes Pr_6O_{11}, Nd_2O_3, Tb_4O_7, Dy_2O_3 only at Feb 2026 Argus CIF EU pricing
[3] For REA, two MRE's were summed (Alpha+ Constellation), with other metrics calculated from data within March 25 SK1300 report

Peer Grade x Resource Comparison

OBY has the highest grade AND largest contained MREO tonnage in peer group



Graph of tonnage vs. MREO grade for the total Resources (M+I+I) for global IAC deposits.
Bubble size = overall magnetic rare earth tonnage (grade x resource size)
Data Source: Man of War 43-101 report, Viridis Corporate Presentation, Rare Earths Americas SK1300

Why the peer chart matters

- Current OBY resource framing already combines very large tonnage with standout MREO grade.
- **Man of War is in a zone where valuation can move quickly as the processing route and product story is de-risked.**
- OBY belongs in this peer set and can climb in-side it.

Big enough to matter now, early enough to still re-rate.

Valuation note: Ionic clay/clay-like peers have traded at recent average indicative valuations of ~0.6% EV/in-situ value | ~$C 500/t TREO in-situ | ~$C 2,000/t MREO in situ

MC: Market Capitalization, CAD As of 06/10/2026

Process is the unlock – and the early signals are encouraging

Strong evidence of ionic character and a plausible route to a simple flowsheet and clean product

What technically sophisticated REE investors want

1. **Free-digging clay**
   No crushing or beneficiation-heavy setup to start the story

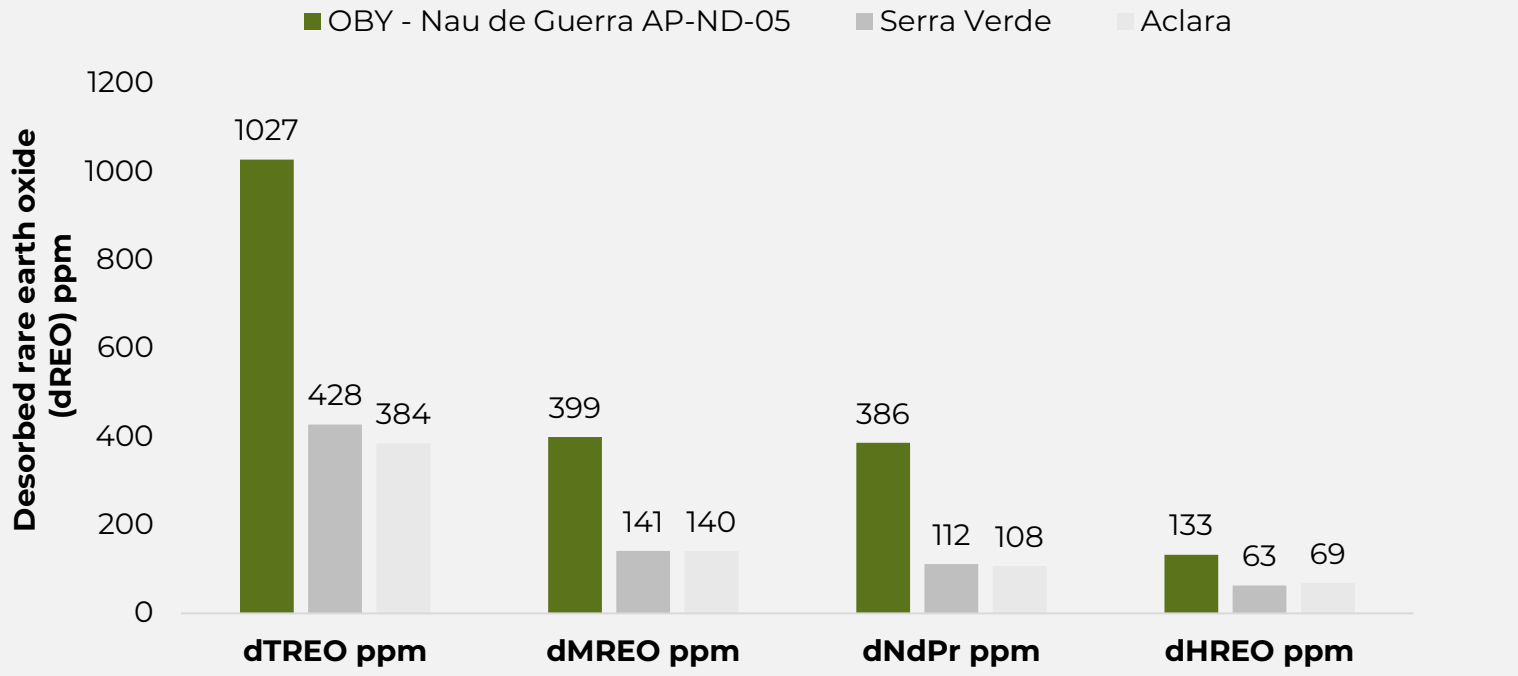
2. **Selective desorption + high dREO**
   Mild ionic leach path rather than a hard-rock style cracking route

3. **Clean, high MREO mixed product**
   Low impurity / low radionuclide narrative matters for payability and customer relevance

Why ionic clays are strategically interesting

- **Lower CAPEX / energy intensity** vs. hard rock routes
- **Economic at smaller initial scale**, supporting bridge-plant concept
- Potentially **faster path** from metallurgy to PEA and customer conversations

Commercial precedent comparison



4,375 ppm TREO head | **1,027 ppm dTREO** | **386 ppm dNdpr** | **39% MREO product Basket**

OBY's reported AP-ND-05 interval (5 m) compares favorably with cited clay precedents, but **the real 2026 value driver is proving repeatability across domains and optimizing recovery.**

Note:
OBY results per NI 43-101 Technical Report Mineral Resources for the Man of War Project issue date Feb 3, 2026 . Desorption result not indicative of final representative recovery after other losses and is from a single point sample. Does not guarantee potential for economic extraction.. Serra Verde benchmark calculated from Pela Ema Mineral Resources available at https://clientesinterativa.com.br/bccc-events/uploads/files/2017-03/58c6d7b3e9c66.pdf and metallurgical recoveries published at https://appiareu.com/wp-content/uploads/2025/11/Corporate-Presentation_Appia_Nov-13-2025-1.pdf (slide 11). Aclara result calculated from NI 43-101 Technical Report – Carina Project, Goias, Brazil, pg 164 (mine scheduling, desorbable oxide grades, average across LOM) , effective date October 22, 2025

Low Radionuclide Levels

Favorably low uranium and thorium content vs. clay peers, which are already low vs. hard rock

56 ppm Th

Average concentration all samples (43-101)

6.3 ppm U

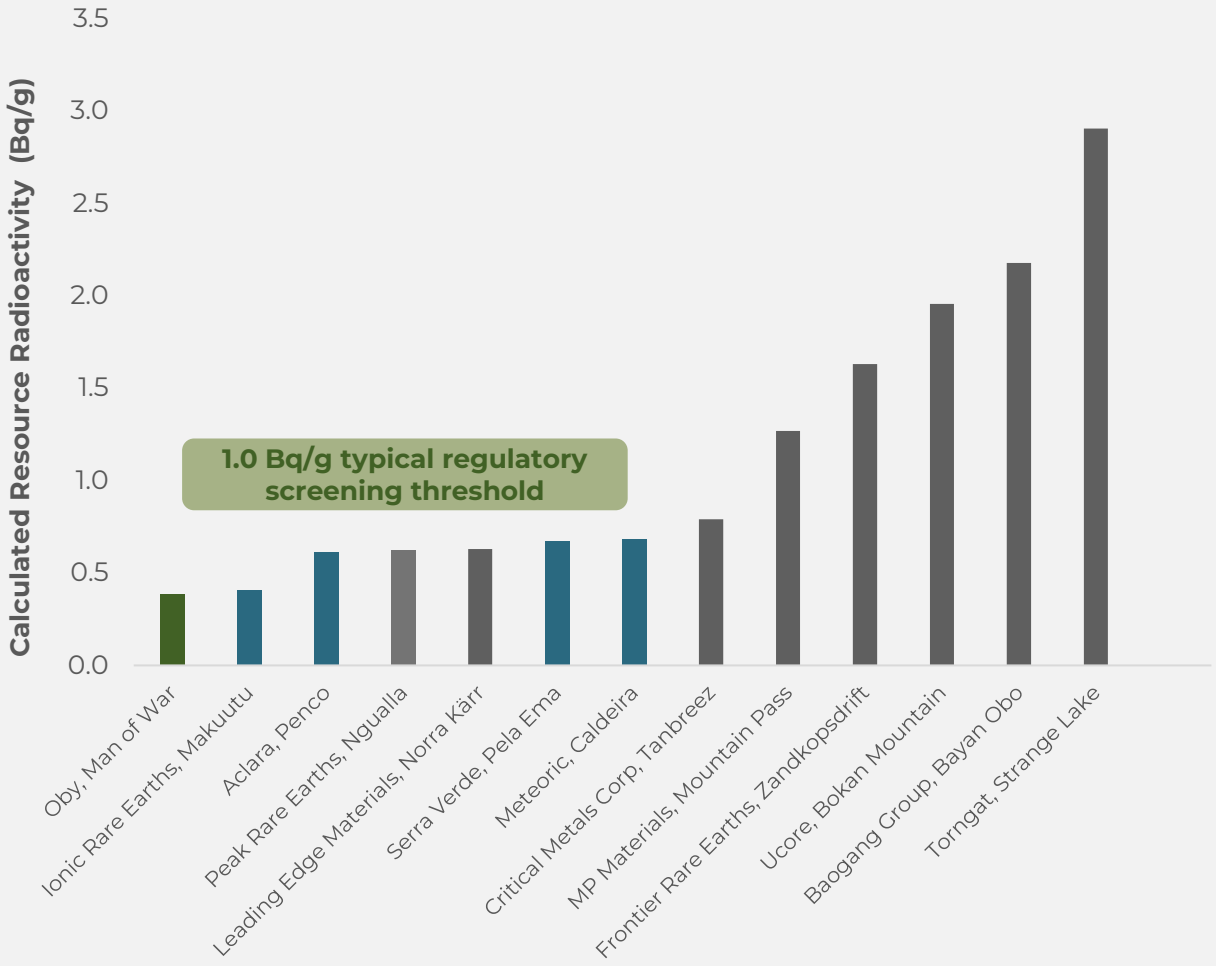
Average concentration all samples (43-101)

0.39 Bq/g

Oby Calculated average radionuclide activity (43-101 resource data set) based on U+Th content

Why radionuclides matter

- Naturally occurring radioactive materials (NORM), primarily uranium (U) and thorium (Th), occur in ALL REE resources
- **Can materially affect**
  - Permitting
  - Residue management
  - Transport requirements
  - Product quality
  - Downstream customer acceptance/payables



Data source: Man of War 43-101 Technical Report (Oby Critical Minerals), average of all samples,
Meteoric Rare Earth Press Release Appendix 1: https://www.listcorp.com/asx/mei/meteoric-resources/news/positive-outcome-on-u-and-amp-th-levels-at-caldeira-project-2863612.html
Bq/g calculated assuming secular equilibrium using reported ,Unat and Th-232 using standard conversions.

One small phase to prove it, one big phase to value it

The Phase 1 / Phase 2 concept simplifies the more complex de-risking roadmap and allows a faster pathway to market

Phase 1 | Bridge plant

0.5-1.0 Mtpa

Small enough to be permit-friendly, financeable, and fast-to-market. Large enough to generate production, operating data and cashflow. Customer qualification leverage.

- Base case anchored ~0.5 Mtpa-1 Mtpa (~150 - 300 tpa MREO potential)
- Upside sensitivity to 1.0 Mtpa
- Pathway to firm offtake
- Lower cost of capital for full scale project CAPEX
- Expected to require only fast-track, single-stage permit application process
- **2028 production possible based on permit timeline**

Small enough to be financed.
Big enough to matter.

Phase 2 | Scale-up

10-15 Mtpa

20+ year life-of-mine, full-scale commercial plant anchors the valuation model.

- Base case around 10 Mtpa with scale up sensitivity / modular expansion to ~15 Mtpa
- 4,000 – 6,000 tpa MREO potential
- Requires 3-phase environmental permitting process
- **2030 production possible based on permit timeline**

Path to Production and Scale

Permitting drives the timeline to full scale commercial production

Category	Activity	2026	2027	2028	2029	2030
Technical Development	Exploration drilling + assays (new targets) + updated MRE + bench metallurgy (feeds PEA)					
Technical Development	**PFS/FS Inputs:** Infill drilling + M&I resource upgrade + pilot metallurgy					
Engineering	**PEA** (entire project scope Phase 1 +2)					
Engineering	**PFS** (entire project scope Phase 1 + 2)					
Engineering	**FS** (Phase 1, small plant					
Engineering	**FS Expansion** (Phase 2)					
Permitting (Phase 1)	**Phase 1 simplified licensing** (LAC/LAS) + mining concession support					
Pemitting (Phase 2)	**Full-scale baseline + LAT licensing** (LP→LI) for Phase 2 (10+Mtpa)					
FID/CAPEX Triggers	**Target Investment Decision Dates** (Phase 1, 2)		**FID 1**		**FID 2**	
EPCM (Phase 1)						
Operations (Phase 1)	Semi-industrial operations while full-scale permitting progresses					
EPCM (Phase 2)						
Operations (Phase 2)	**Phase 2** ramp + operations					

Phase 1 aims to rapidly establish a technically and commercially validated foundation

Phase 2 captures the full potential

2026 Sequenced set of value-defining workstreams and milestones

Launch ▶ assays ▶ metallurgy ▶ MRE updates ▶ product proof ▶ PFS support drilling ▶ PEA

May Integrated launch
- SK1300 MRE update was kicked off with SGS
- New Auger drilling program was initiated (met sample Nau de Guerra + new targets)

June-Aug SGS Metallurgy Progress
- SGS PEA & Metallurgy Initiated
- Story moves from concept to repeatable process behavior
- Desorption and leach optimization results

Aug-Sep Flowsheet + product update
- Flowsheet to mixed rare earth concentrate PEA ready
- Small product samples
- Early customer acceptance and product narrative

Dec PEA + resource upgrade
- PEA changes the debate from geology to economics
- Indicated + some Measured MRE targeted
- Phase 1 / Phase 2 timelines validated

July-Sept Auger drilling results
- Includes new targets
- Targeting high-grade, close to surface intercepts with strong ionic character
- Continuous drilling results expected throughout 2026 leading to new MRE

Sept Updated MRE
- Update to SK1300
- Resource expansion potential
- Targeting increased grade and scale potential

Sep-Nov PFS-support density drilling/infill
- Drilling density increases for indicated + measured

Every step in our 2026 roadmap is value accretive

Capital Structure & Ownership Profile

Capital Structure

Basic shares
53.4M

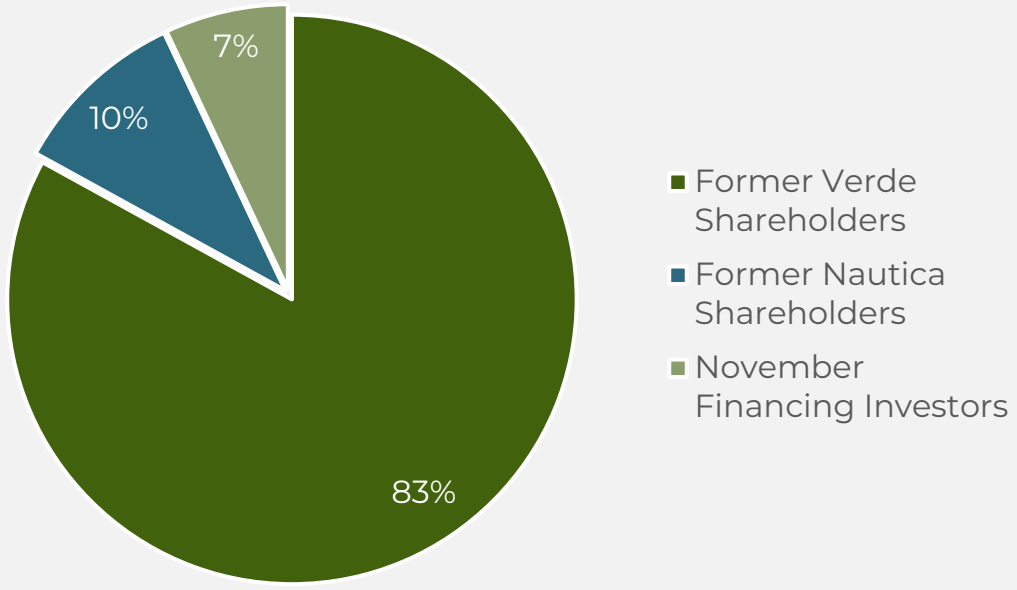
Fully diluted
60.5M

Options
10.5M (@ C$0.63)

Warrants
None

Cash
C$ 3.6M

Ownership Profile



- Clean structure with no warrants
- Cash position to fund near-term catalysts
- No complex legacy instruments
- ~10% insider ownership

WHY LOOK AT OBY NOW

A larger-scale opportunity.
A higher-grade rare earth system.
A clearly defined path to development.

- Scale and basket make Man of War matter
- Process proof and two-phase strategy can change the valuation debate
- The 2026 calendar is catalyst rich and poised to rapidly de-risk the asset

OBY
CRITICAL MINERALS

June 10, 2026