



An Advanced US Magnet Material Company

Non-Confidential Information Memorandum

Winter 2026

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Forward-looking statements also include projected Rare Earth Element ("REE") metals prices, estimated tonnes of mineral ore, estimated kilograms of REE metals, contingent resources attributable to the Hoidas Lake Rare Earth Elements Project (the "HLREE Project"), the midstream processing facility, and the downstream critical metals and alloys operations of PMT Critical Metals Inc. ("PMCM"), anticipated in situ and enterprise value per tonne of the minerals in the ground, estimated capital costs, estimated all-in-sustainable costs of the mine (AISC), average ore grades, gross estimated mine production rates, gross and net profits, anticipated returns on invested capital, anticipated investment performance, projected return on investment (ROI), projected internal rate of return (IRR), projected net present value (NPV), projected economics, estimated ultimate recoverable kilograms of strategic minerals, including refined and alloyed products manufactured by SRC and PMCM, estimated fair value of the HLREE Project resource upon execution of each planned pre-development phase, projected holding period to a liquidity event, and prior performance by the management team members, including prior value creation, along with other performance results. These forward-looking statements are only predictions and, accordingly, are subject to substantial risks, uncertainties, and assumptions. Certain factors may cause results to differ materially from those anticipated by some of the statements made herein.

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1. Executive Summary

REAlloys Corporate Snapshot

Corporate Execution Overview

- REAlloys Inc. is building a vertically integrated mine-to-magnet platform focused on North American supply chain independence
- Eliminates reliance on China; supported by U.S. policy
- REAlloys' **Euclid Magnet Facility in Ohio will provide metallization** and advanced processing to deliver Tier-1 magnets for defense and clean-energy applications
- REA is developing a **rare earth separation and metallization facility in partnership with a North American midstream processing partner**, first production from Phase 1 expected in early 2027)
- REA plans to develop **multiple magnet manufacturing facilities across the U.S.**, leveraging a capital-efficient, modular design
- **30+** recycled MREO and primary mined concentrate feed suppliers in REA's active outreach pipeline

Key Company Highlights

Policy-Backed Platform

Engaged with U.S. & Canadian policy mandates for protected markets

275tpa Dy+Tb & 3,400tpa+ NdPr

Forecast production: Dy, Tb & Nd-Pr magnet metals

Versatile Feed Strategy

Recycled MREO supply & primary mined sources

Existing Strategic Partnerships

Feedstock, processors, regulators

Phased & Capital-Efficient

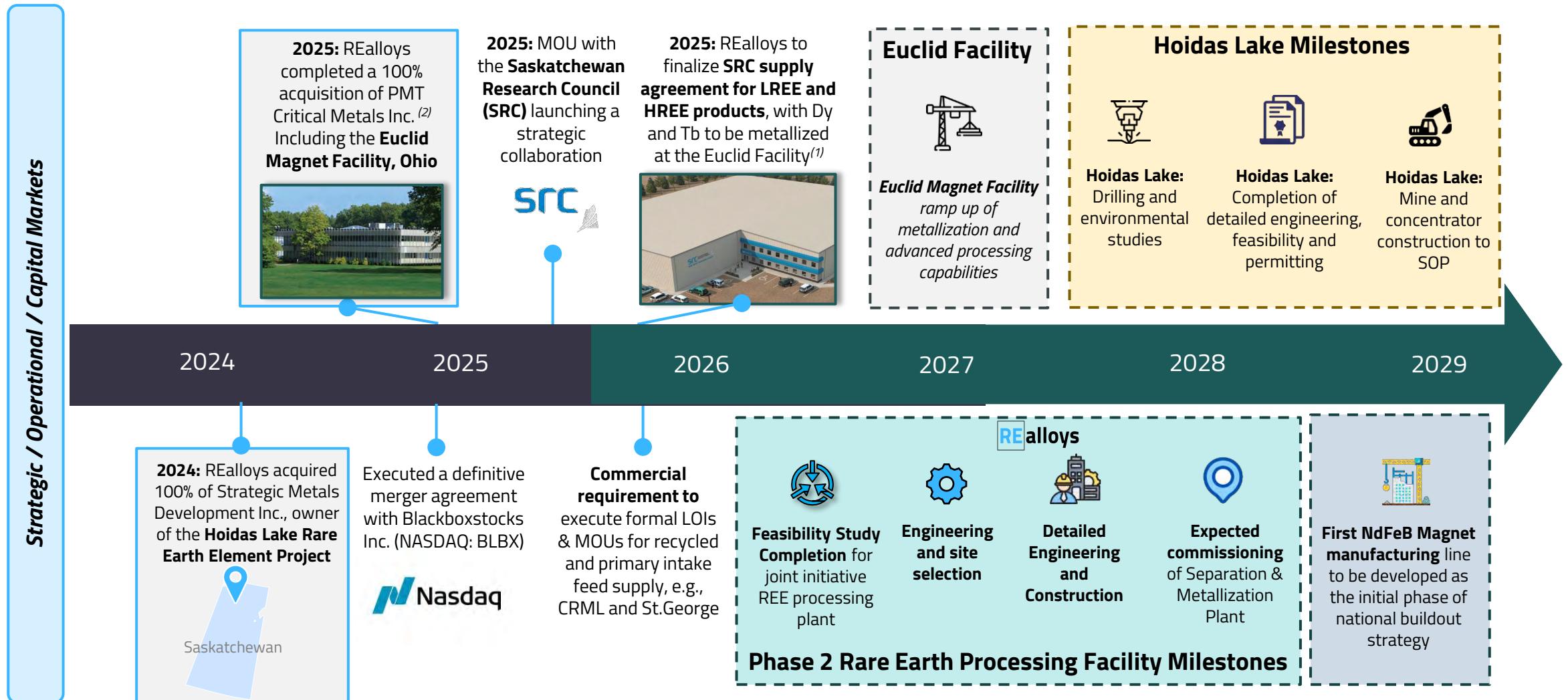
Flexible buildup vs. legacy REE refineries

First-Mover Advantage

Proven technology with domestic operations targeting initial production by 2027

1) Includes 245 tonnes of Dy & Tb metal from REA Phase 2 REPF and 30 tonnes of Dy & Tb metal from North American midstream processing partner Phase 1 REPF + REA metallization
2) Includes 3,000 tonnes of NdPr metal from REA Phase 2 REPF and 420 tonnes of NdPr metal from North American midstream processing partner Phase 1 REPF

Company Historical and Key Forward-Looking Milestones



(1) Under consideration, with North American midstream processing partner REPF first production targeted in H2 2026

(2) Includes the acquisition of rare earth magnet production equipment, know-how, intellectual property, research & development, existing contracts, and clients

RTO & Capital Raising/Fundraising

RTO Transaction overview

- REalloys is merging into a wholly owned subsidiary of Blackboxstocks via a reverse takeover, with close targeted in Q1 2026, subject to effective registration statement, NASDAQ listing approval, and stockholder consent
- Rollover REalloys equity holders are expected to hold majority of pro forma equity
 - Outstanding Series X Preferred converts 1:1 into newly issued Series C Convertible Preferred Stock of the public vehicle
- Series C carries structural protections (seniority or pari passu treatment), anti-dilution features, dividend rights, and a make-whole on redemption/conversion
- As part of the reverse takeover, REalloys will absorb and consolidate all BLBX assets and liabilities; balances are incorporated into the pro forma budget

Strategic Advantages

Access to Capital Markets

Increased Visibility & Credibility

Acquisition Currency for M&A

Market-driven Valuation Transparency

Broader Investor Base

Continued Focus on Governance and Compliance

REalloys Board of Directors

REalloys Board of Directors



Lipi Sternheim

Chief Executive Officer & Chairman



- Founder and CEO of Quartz Lake mining a Nevada integrated gold mining company
- Two decades of experience de-risking mining and oil & gas projects across North America



Brad Wall

Non-Executive Director



- Bradley John Wall served as Saskatchewan's 14th Premier from 2007 to 2018, led the Saskatchewan Party
- Since leaving politics, Mr. Wall been an advisor at Osler, Hoskin & Harcourt LLP and sits on boards across the energy sector



David McNaughton

Non-Executive Director



- Canadian public affairs veteran who led StrategyCorp as chairman and served as Canada's ambassador to the United States
- Former North American president of Hill & Knowlton and Public Affairs Resource Group; now president of Palantir Technologies Canada



Steve DuMont

Non-Executive Chairman of the Board



- President of GM Defense LLC, driving the company's advanced mobility technologies and services for defense, aerospace and security customers worldwide
- Previously at Raytheon, and CEO of Thales Raytheon Systems, with earlier leadership roles at Boeing



2. Key Investment Highlights

Key Investment Highlights



1

Strong Long-Term Macroeconomic Tailwinds and Increasing Focus on Domestic Supply Chain Security

2

Focused Corporate Strategy, First-Mover Advantage with Midstream Process Ownership

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Phased Growth Plan With Capital and Operating Cost Efficiency Supported by A.I. Integration

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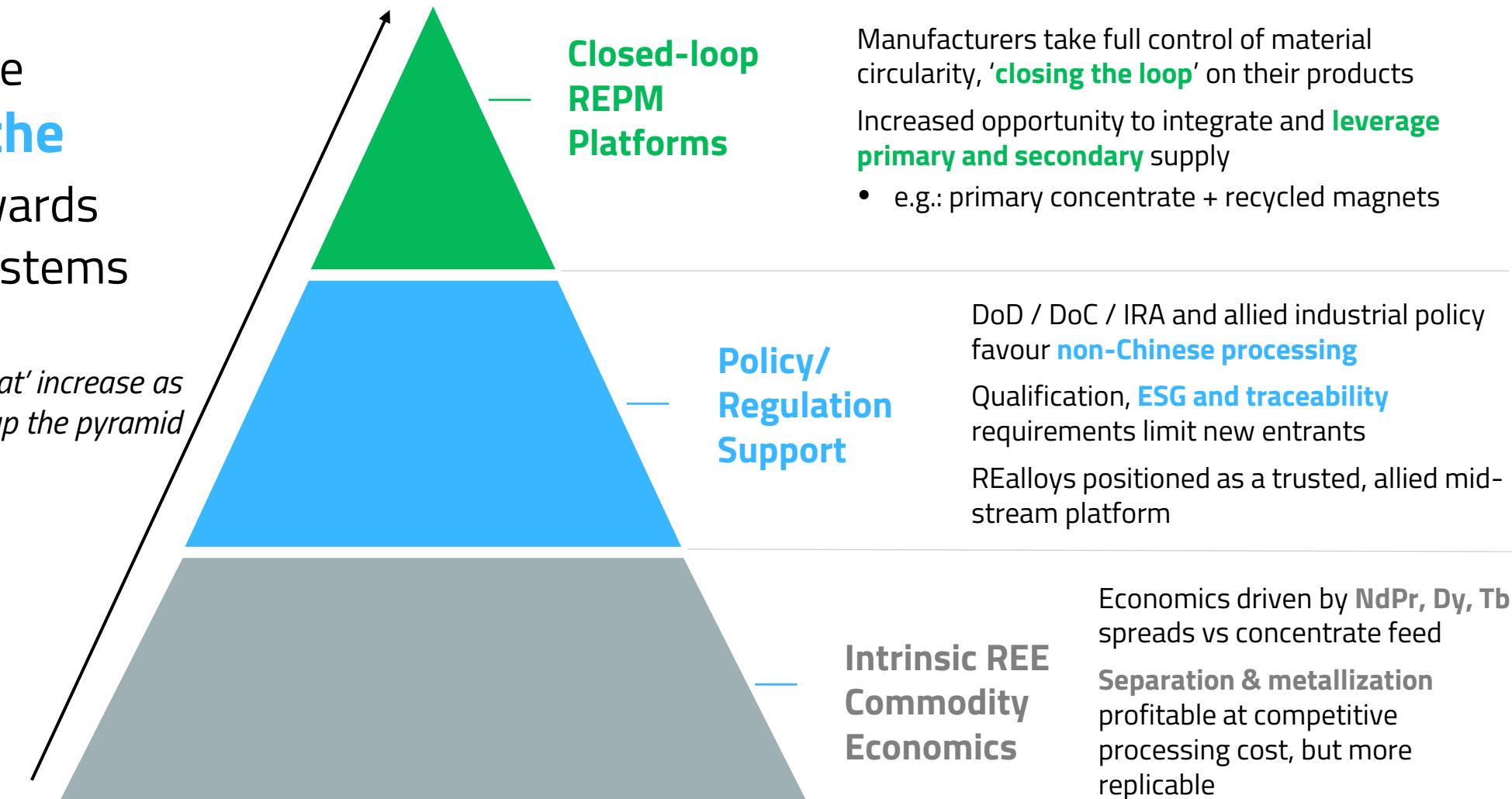
Financial Returns Driven by Vertically-Integrated Model

7

Advanced Key Commercial and Government Contracts/Relationships for Critical Materials Processing

Rare Earth Platforms Are Moving Up The Pyramid Towards Integrated REPM Systems

REE Metals are **moving up the pyramid** towards closed loop systems



Geopolitical and Regulatory Tailwinds Driving REE Supply Chain Localization

Geopolitical supply-chain risks and strong U.S. policy support are accelerating onshoring of critical rare earth processing capabilities

REE Global Situation Overview

- **Currently NA and EU are dependent on concentrated China supply chain for 90%+ of processed RE materials and magnet (REPM) production**
 - This situation underscores the strategic push for a domestic REE supply chain, reinforced by multiple Executive Orders driving this objective
 - Defense Logistics Agency has issued tenders to stockpile sintered NdFeB magnet blocks for military
 - “Friend-shoring” with DOD-backed joint venture with Saudi Arabia to establish a rare earth refinery processing
- **China introduced export controlled-licensing for REE**
 - The controls limit access to high-performance rare earth magnets materials (Dy, Tb, Y, etc.) across defense and commercial sectors, amid rising U.S. and China tensions
 - *Currently Paused*: expanded export controls to cover processing technology, IP, and expertise, barring Chinese entities from supporting foreign rare earth activities



Regulatory Support for Localization of REE Supply Chain⁽¹⁾

10 U.S. Code 4872

Prohibition of acquisition of REE materials from non-allied foreign nations

Title 50, Defense Production Act

Fund domestic facilities, purchase commitments & issue loans

Restoring American Mineral Dominance

Direct government partnerships to de-risk domestic projects (IRA)

DOE LPO & EXIM

Federal loans for domestic critical minerals processing & refining

1. Recent Executive Orders for REE (critical minerals):
 - i. *fast-track domestic mineral permitting/production*
 - ii. *tariffs exemption to stabilize feedstock*
2. Under the National Defense Authorization Acts, Defense Federal Acquisition Regulation was updated to ban Chinese rare earth magnet materials by 2027
3. U.S. led global government, committing **US\$2.5 billion to REE projects**

⁽¹⁾ Source: Benchmark Minerals 2026 REE Report, Argus Media REE Analytics

U.S. Executive Orders Create Strong Tailwinds for the Rare Earth Industry

An emphasis on America-First supply chain and policy momentum is accelerating domestic REE supply chain development



The Trump administration has placed consistent importance on onshoring and domestic sourcing with an 'American-First' policy orientation, which includes Rare Earth Elements. DOE & DoD deploying hundreds of millions in funding for REE processing, alloying, and magnet manufacturing.



Immediate Measures to Increase American Mineral Production directs federal agencies to prioritize permitting for mining and processing projects, including REEs.



Unleashing America's Offshore Critical Minerals America's Offshore Critical Minerals could lead to long-term domestic offtake partners for REE magnet materials with greater payables. EO 14156 declared a National Energy Emergency due to critical mineral shortages prompting federal action to fortify supply chains.



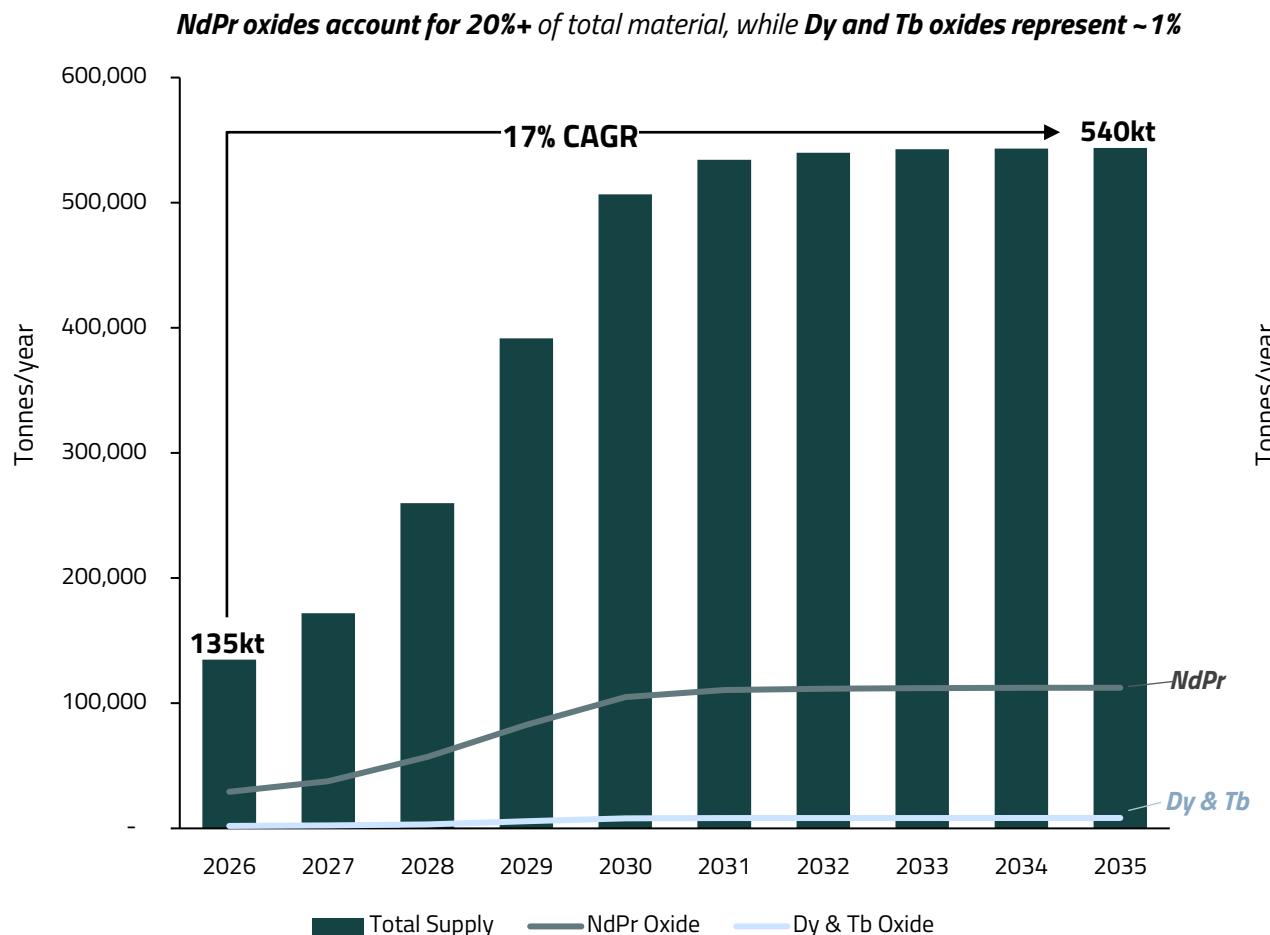
Section 232 Investigation EO considers trade controls for critical minerals (incl. REE) on foreign supply including 25% tariff on Chinese rare-earth magnets effective 2026 to facilitate and accelerate domestic processing and supply chain.

Introduction and Critical Applications of Rare Earth Elements

Core Light Rare Earth Elements		Core Heavy Rare Earth Elements		
Element Overview	Nd Neodymium	Pr Praseodymium	Dy Dysprosium	
Use-case (Includes not limited to...)	<ul style="list-style-type: none">High-strength NdFeB magnetsCritical to electrification and clean energy technologies <ol style="list-style-type: none">EV Motors and powertrainsWind TurbinesConsumer ElectronicsIndustrial Robotics 	<ul style="list-style-type: none">High-strength NdFeB magnetsImproves magnetic strength, corrosion resistance, reliability, and stability <ol style="list-style-type: none">EV Motors and powertrainsWind TurbinesAerospace componentsIndustrial RoboticsSpecialty alloys and catalysts 	<ul style="list-style-type: none">Improves high-temperature performance of NdFeB magnetsU.S. defense-designated critical material <ol style="list-style-type: none">Defense: fighter jets, naval propulsion, missile guidanceEV Motors and powertrainsOffshore wind turbinesMilitary and aerospace electronics 	<ul style="list-style-type: none">Used as a magnet performance/coercivity enhancer <ol style="list-style-type: none">EV motors and powertrainsOffshore wind turbinesDefense electronics & lasersHigh-efficiency lighting & display panels 
Rare Earth Metals Power Today's Innovations and Tomorrow's Technologies:  Robotics Humanoid Robotics eVTOL Fusion Power				
REalloys' processing platform positions it as a key North American source of light and heavy REEs, onshoring supply chains and processing capacity currently concentrated in China				

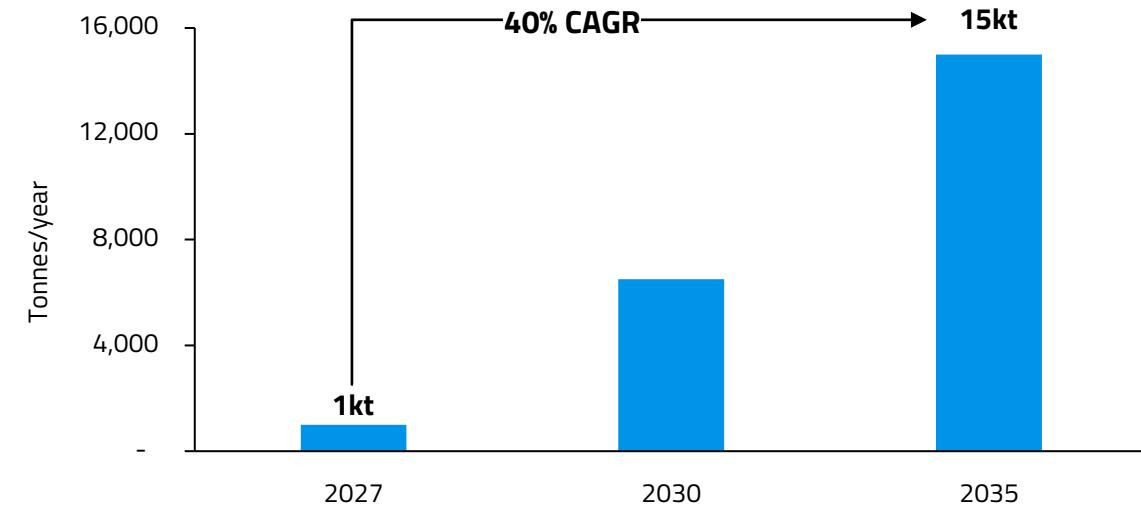
Long-Term Growth for Both Primary and Recycled REE Feedstocks (Global Ex-China)

Increasing Supply for REE-Containing Primary Materials⁽¹⁾



Increasing Supply of Recycled MREO Material⁽²⁾

Mixed Rare Earth Oxide (MREO) recovered from end-of-life products and manufacturing scrap will increasingly complement primary mine supply particularly in supporting a higher proportion of Heavy Rare Earth Elements (HREEs) such as Dy and Tb

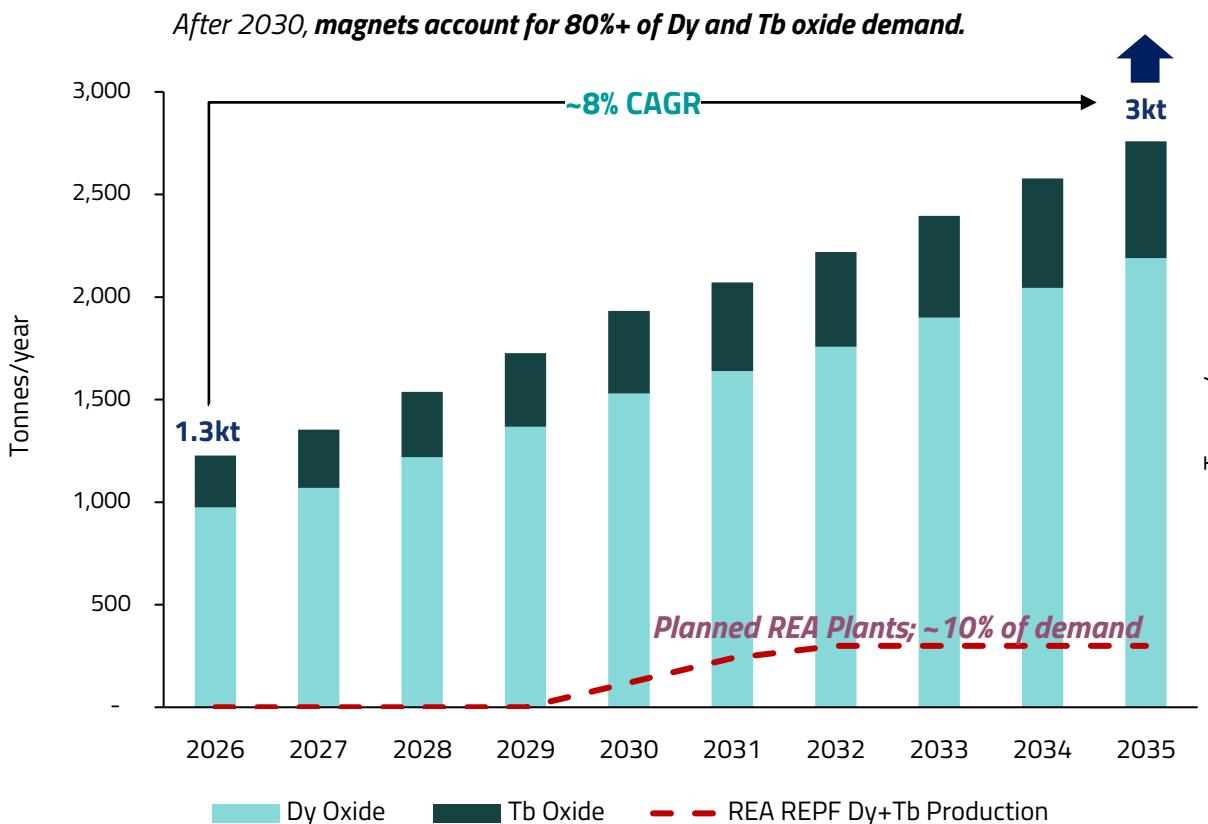


- REalloys has conducted a **bottoms-up analysis of industry recyclers** and their **forecasts to assess future feed availability**
- The next step is to engage with industry leaders to **secure MOUs for feed intake**

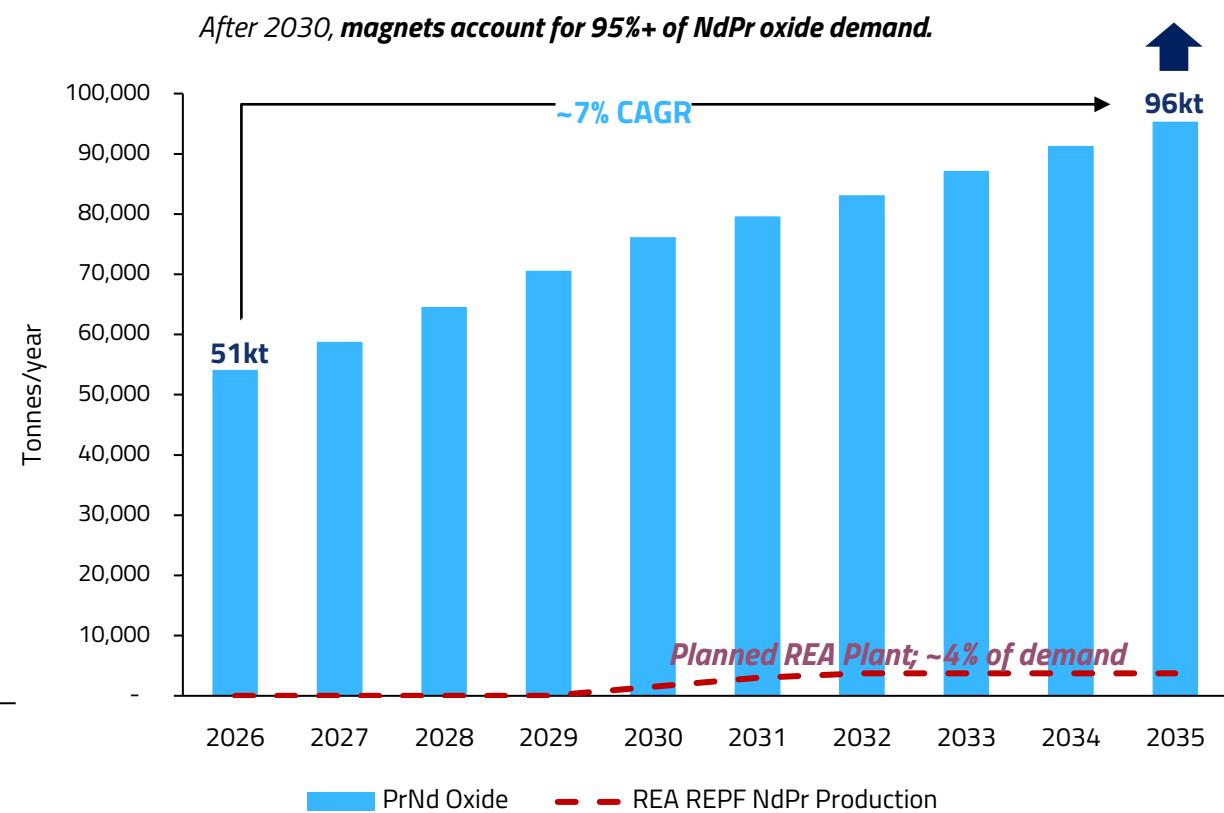
Strategically Aligned with Global (Ex-China) Demand-Driven Global Shifts

Demand analysis shows the upcoming **REalloys Rare Earth Processing Facility**, will supply ~10% of total Dy & Tb and ~4% of NdPr oxide of Global Ex-China demand. Demand is driven by EV growth, broader electrification, renewables, policy-led localization, and OEM preference for high-performance magnets.

Increasing Demand for Dy & Tb Oxide⁽¹⁾



Increasing Demand for NdPr Oxide⁽¹⁾

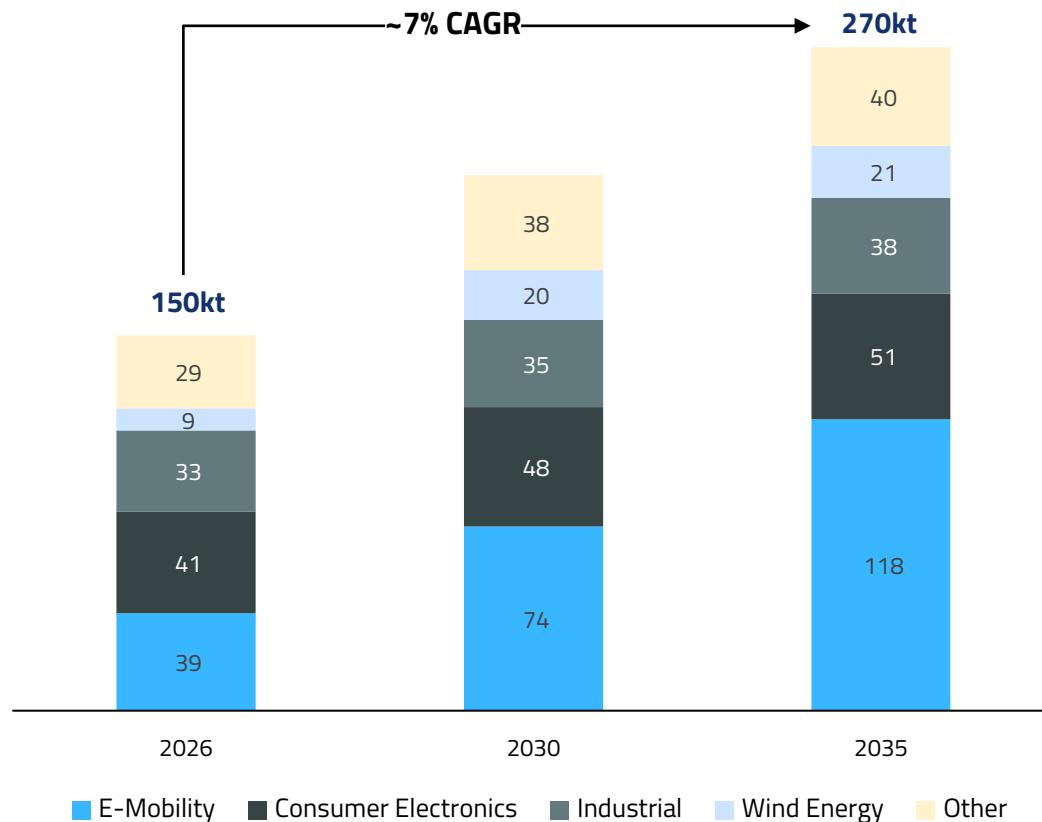


(1) Source: Benchmark Minerals 2026 REE Report forecasts;

Supplying Significantly Growing (Ex-China) Demand for NdFeB Magnets

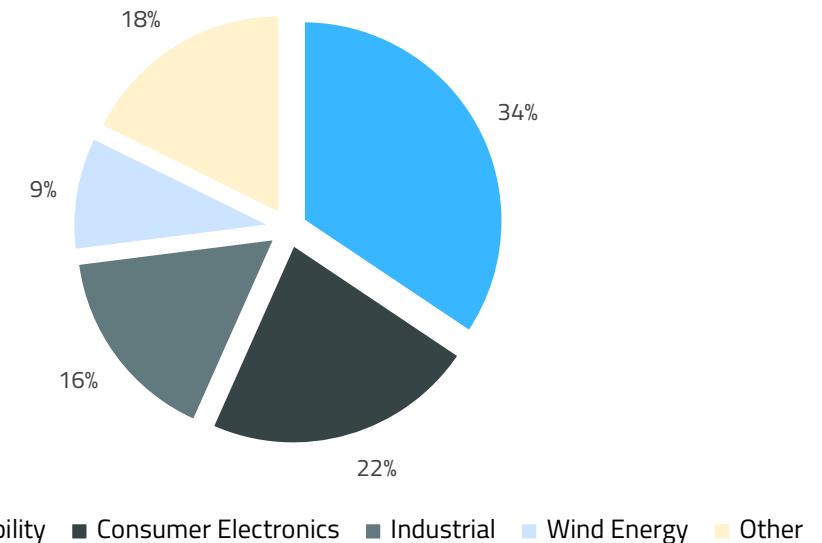
Global NdFeB Magnet Demand (kt)

Strong Demand Outpacing Domestic Processing Capacity



2030 Rare Earth Magnet by Industry

Global demand for NdFeB magnets is being driven by electrification and renewables, but supply is projected to lag, creating structural scarcity in the segment



- China currently controls 85-90 % of global NdFeB magnet production
- **Recent Chinese export controls on medium-to-heavy REEs and magnets have sharply curtailed shipments, intensifying supply constraints and opening windows for non-Chinese producers**

Source: Benchmark Minerals 2026 REE Report forecasts

Moat with a First-Mover Advantage and Scalable Platform

Build and control a secure, vertically integrated North American rare earth supply chain from mine to high-performance NdFeb magnets to serve defense, advanced industrial markets, and vast commercial markets

- ✓ REalloys combines deep mastery of the rare earth elements market with expert government relations, enabling it to anticipate and shape policy-driven demand
- ✓ Public vehicle and strategic positioning enable ongoing access to capital to fund build-out and scale operations
- ✓ Euclid's strong DoD compliance combined with REalloys' positioning builds trust with high-margin end users, including U.S. protected and commercial customers
- ✓ Combines mine-to-magnet execution with flexible sourcing and logistics, using strategic partnerships and contract expertise to accelerate deployment and adapt quickly to market opportunities
- ✓ SRC partnership provides the technical separation capability and early production volumes, supplying REA with consistent magnet-grade feed while reducing exposure to external price volatility

REalloys Strategic Value Drivers

First-Mover in North American stage HREE Production

275t/y Dy+Tb

staking out leadership in a critical materials market

Proprietary, High-Yield Recovery Tech

90%+

Patent-protected process converts REO feedstocks to RE metals

Ex-China RE Demand Surge

~96kt NdPr & 3kt Dy+Tb⁽¹⁾

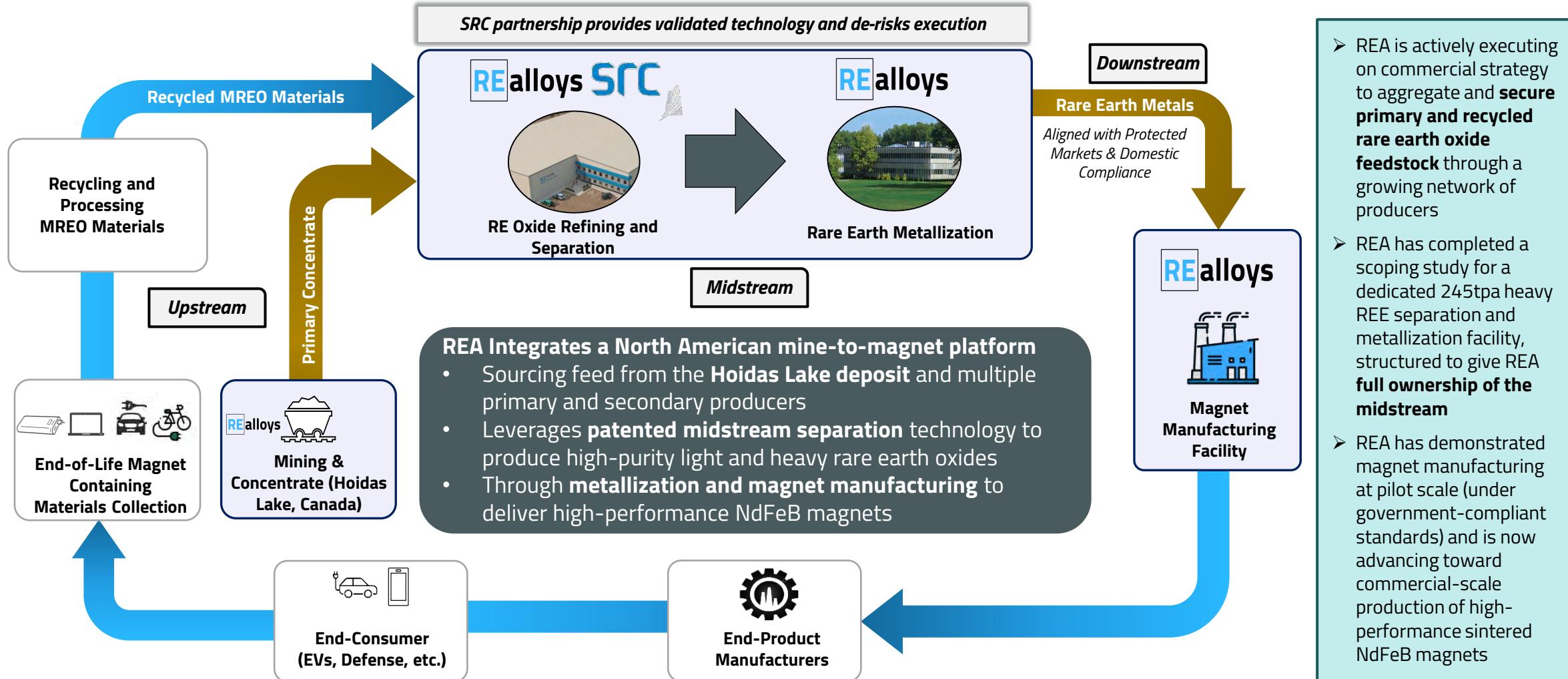
Required by 2035 with the market growing at 7%+ CAGR⁽²⁾

Vertically Integrated Mine-to-Magnet Material

3.8 Mt⁽³⁾

Total primary resources with incremental recycled MREO input

REalloys' Focus as part of the Domestic Rare Earth Supply Chain



REalloys Strategic Positioning: Industry Forces at Play

Robust Business Fundamentals

- Established compliance track record streamlines development of a domestic closed-loop solution and positions REA as a major midstream player
- Agnostic feed intake supported by availability in the market from a variety of sources
- Pilot-tested, scalable capabilities in REE separation and metallization, with potential for advanced downstream processing integration
- Closed-loop, 100% liquid recycling, eliminating wastewater discharge, reducing costs, and strengthening ESG and regulatory alignment
- First-mover status enables strategic offtakes, government-backed funding, and customer qualification pathways ahead of competitors
- Leadership and Advisory team comprised of renowned individuals with extensive experience in critical minerals processing

Supportive Industry Tailwinds

- Strong Macroeconomic outlook, e.g., demand growth for NdPr, Dy, Tb; fast-track permitting and financing opportunities; alongside favorable geopolitical policies
- Access to public markets for capital availability through equity, and debt

REalloys embodies the foundation of a
Closed Loop Solution



Growing Electrified Market



Regulatory Tailwinds



Integrated Customer Network



High Barriers to Entry



Scalable, Proven & Patented Technology



Leadership Experience

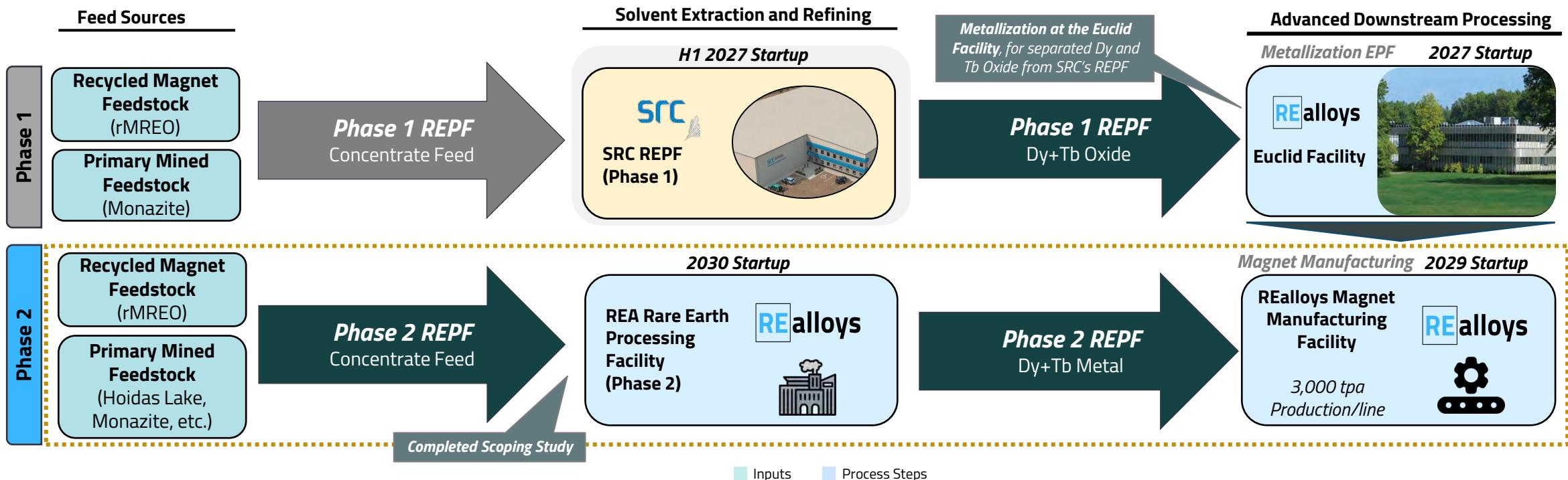


Commercially Contracted



Speed to Market

REalloys Phased Buildout Toward Full Midstream Leadership



- **Phase 1** will advance SRC's first commercial Rare Earth Processing Facility, focused on producing separated oxides from monazite and recycled MREO, which will then be transferred to REalloys and sent to the Euclid Facility for metallization and downstream processing
 - **Enables early revenue generation while supporting customer qualification and offtake validation**
- **In Phase 2**, REA is progressing an upsized 245t HREE Processing Plant (28ktpa intake capacity), designed to consolidate separation, and metallization capabilities under one integrated platform (targeted startup in 2030), complemented by downstream magnet manufacturing capabilities at REA's facilities
 - **Facility to follow a Design–Build–Operate model, ensuring accelerated delivery, and reduced execution risk**

(1) REalloys has evaluated multiple feed types through an ongoing feasibility study for its separation and refining facility to enhance feedstock flexibility and processing optionality

North America's Fully Integrated Rare Earth Value Chain

Leveraging proven compliance, technical and operational expertise to scale into a fully integrated mine-to-magnet platform



Robust Feedstock Sourcing

- Primary supply from *Hoidas Lake Deposit* and agreements in place with *St. George* and *Critical Metals*, and more
- Secondary recycler feed partnerships in progress

Validated Midstream Technology

- Feedstock flexibility to blend multiple resource streams for optimal input quality
- Integrated light and heavy REE separation enables diversified output across NdPr, Dy, and Tb product streams
- End-to-end rare earth refining process converting mixed oxides into high-purity RE metals via metallothermic reduction

High-Value Downstream Integration:

- Sintered NdFeB magnet production
- High-coercivity and performance magnets for EV motors, wind turbines, and advanced electronics

Integrating feedstock sourcing, separation, metallization, and magnet manufacturing, REalloys delivers a complete domestic value chain for high-performance rare earth magnets directly aligned with current administration's critical materials mandates

Benefits of Locating RE Metallization Plant in the U.S. (Euclid Facility Expansion)

Policy and Compliance Continuity:

- Euclid Facility operations can leverage proven compliance track record and frameworks to supply into the U.S. protected markets
- Ability to contract with the DoD, DLA, and other federal agencies which requires domestic processing
- Meets requirements for U.S. Title III, DPA, DOE Title 17/48C/45X, and other federal programs



Market and Strategic Positioning:

- Proximity to U.S. EV, wind, and electronics OEMs improves qualification timelines and supply security
- U.S. processed origin REE can command offtake premium pricing
- Leverages first-mover status and positions REA as one of the first metallizer in the U.S.
- Aligned with government strategic outlook



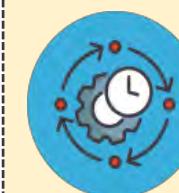
Financing:

- Euclid plant could qualify for government related funding and grants which include, DOE Title 17 loans, DoD grants, EXIM financing, IRA tax credits, etc.
- U.S. location strengthens REA narrative for U.S. focused institutional investors and ESG funds



Operational Efficiency:

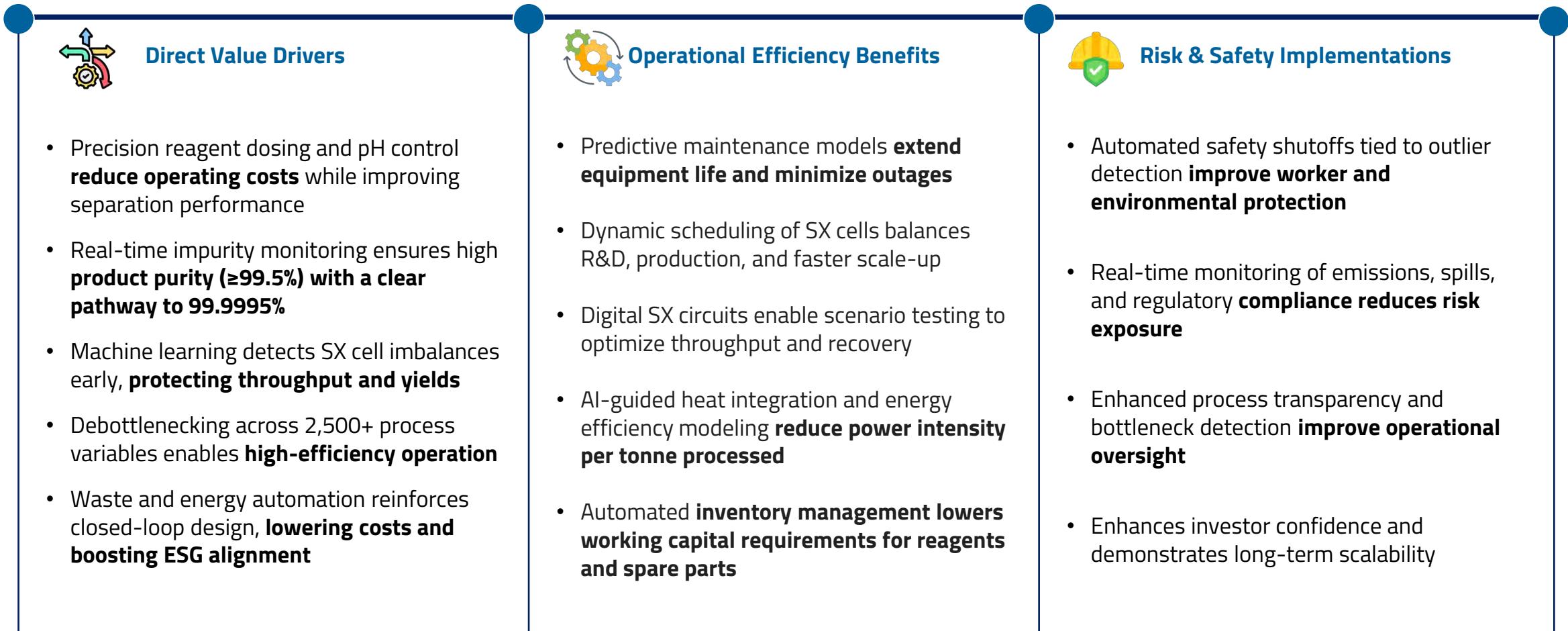
- Shorter supply chains to downstream offtakes into the protected markets
- Avoids tariffs or export barriers on intermediate products by completing metallization in the U.S.
- Considers future policy for "domestic content" requirements for magnets under U.S. defense and EV rules



Locating metallization at REalloys Euclid Facility in the U.S. enables direct access to protected markets, leverages proven compliance credibility, qualifies for U.S. government incentives, and unlocks operational advantages

Integration of AI & Machine Learning in Rare Earth Processing

Machine learning drives profitability and efficiency while establishing a differentiated industry moat



Potential Relevant Commercial Relationships: Intake & Off-take (Phase 2 Plant)

Potential Feedstock Suppliers (Primary and Recycled MREO)

Outreach pipeline includes **20+ secondary recycled** feed sources and **10+ primary feed suppliers**

REalloys



Terbium Metal



Dysprosium Metal



Nd-Pr Metal



Other LREE (La, Ce, Sm, etc.)

NdFeB Alloy Ingots



Fe, Nd, B, Dy/Pr for elevated coercivity, then homogenized to form the hard-magnet $Nd_2Fe_{14}B$ phase

Light & Heavy Rare Earth Metals



High-purity separated rare-earth metals

Targeted Off-take Customers



U.S. Department of Defense & Defense Industrial Base

U.S. Protected Markets



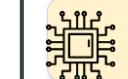
Renewable Energy Producers



EV Battery & Motor Supply Chains



OEM Manufacturers



Consumer-Electronics



Industrial, Robotics & Automation

RoW Commercial Markets



Auction/Spot Market

Feedstock Flexibility and Contract Pipeline Reduce Commercial Risk

Two confirmed feed agreements illustrating diversified sourcing strategy, with ongoing discussions across dozens of non-Chinese mined and recycled feed suppliers

Critical Metals Corp: Tanbreez Project

Critical Metals Corp. has entered an agreement for multi-year offtake granting access to up to ~15% of future mined production

0.38% TREO
44.9M Ore Tonnes

16.8% NdPr
0.4% Tb

2.9% Dy
2.4% Sm



- Location:** Southern Greenland, GRL
- Stage:** PEA (2025)
- Life of Mine:** 25+ years; *Q1 2029 Start of Production*
- Product Basket:** Concentrates (Peralkaline Intrusion Mine)
 - The company has communicated an exploration target of 500 MT rare earth (far above the 45 MT base)

St. George Mining: Araxá Project

St George Mining has entered an agreement for multi-year offtake granting access to up to ~40% of future mined production

4.13% TREO
40.6M Ore Tonnes

18.4% NdPr
0.1% Tb

0.3% Dy
1.5% Sm



- Location:** Minas Gerais, Brazil
 - Nearby region has an established mining history, offering access to infrastructure and a skilled workforce
- Stage:** PEA (2013)
- Life of Mine:** 40 years
- Product Basket:** Oxides (Integrated Carbonatite Mine)

Supplying High-Performance Magnet Materials for "US Protected Markets"

REA is focused on providing high-performance magnet materials & magnets for US Protected Markets with its integrated and verified US North American supply chain

Protected Markets include:

- US National Defense Stockpile
- US Defense Industrial Base & Nuclear Industrial Base
- Robotics
- Electric Aviation
- High-end industrial markets such as designated critical infrastructure & energy industries
- US Partner Countries with Defense Treaties, Alliances & Agreements

Protected Markets Commercial Insight⁽²⁾:

- **Defense Industry** consumes ~8,451t REPM in 2025 globally with the U.S. being the largest regional share (~40%) of demand growing at ~3% CAGR
- **Demand is real, predictable, and sticky in which a compliance premium exists** supported by strict export controls and scarcity
- **Government-backed capital** is surging, with over 90% of new REE projects included government involvement, signaling durable policy support for North American supply chains

- ✓ **Protected markets customers are price-inelastic, requiring material from a verified and compliant U.S. supply chain to secure high-performance NdFeB magnets and other critical rare earth materials**
- ✓ **Disciplined & focused US Protected Markets⁽¹⁾ strategy with low expansion capex, quick to market and fully-verified supply chain**

REE Processing Partner Technologies: Validated via Piloting

Pilot Testing Conducted:

- **Solvent extraction:** Developed and used in-house solvent extraction cells for REE separation
- **Metal smelting outputs:** Production of NdPr metals (10 t/month, purity >99.5%) was independently validated before scaling
- **Independent Verification:** Accredited labs acted as third-party, independent test facilities

Test successfully:

- ✓ Produced Mixed REE concentrate through Monazite processing unit
- ✓ Outputted separated high-purity REOs (Nd, Pr, Dy, Tb) through solvent extraction
- ✓ Confirmed output to be high purity for oxide and metal basis
- ✓ Confirmed high conversion efficiency/recovery for Oxide and Metal production
- ✓ Results have translated predictably to larger-scale operations, validating readiness for commercial deployment

Pilot-Scale Project Details

Separation Pilot Plant

A pilot-scale solvent extraction plant with 150 mixer-settler stages

Commercial-Scale Solvent Extraction Unit

A larger solvent extraction unit with six mixer-settler stages; designed to mimic operations in commercial separation plant

Metal Smelting Pilot Plant

Electrolytic smelting rig used for process refinement, staff training, and R&D toward high purity REE metal recovery

Key Pilot Plant Statistics

High-Purity HREE Oxides

Dy & Tb Oxide >99.5% purity

Operating Conversion Efficiency

98% recovery efficiency

High-Purity LREE Oxides

NdPr Oxide >99.5% purity

Annual Output Target

~400t/y NdPr Metals (~500k EV magnets)

Rare Earth Metals

NdPr Metal (>99.5% purity)

Product Validation

Suitable for REPM, U.S. protected markets, EV and renewable energy

Advancing Strategic Funding Partnerships and Project Financing

These financing partners enhance liquidity, fund critical rare earth processing capex, and provide an interim bridge toward long-term growth plans



Financing/ Investment	Investment in Midstream RE Separation (\$TBD)
Transaction Stage	Memorandum Of Understanding; progressing into Diligence
Key Terms	<ul style="list-style-type: none">Focused on collaboration across the rare earth value chain, including primary and secondary feed qualification, technology transfer, and midstream investmentJoint development and qualification of primary and secondary REE sources for high-performance magnet applicationsFacilitation of licensing, technical assistance, and equipment procurement



Financing/ Investment	\$200M Project Financing
Transaction Stage	Letter Of Interest; progressing into Diligence
Maturity	15-years maximum
Key Terms	<ul style="list-style-type: none">Financing in support of U.S. goods and services procurement for the REA Rare Earth Processing Facility and Hoidas Lake Mine and Concentrator<ul style="list-style-type: none">U.S. equipment, engineering, and construction servicesEligible under EXIM's China and Transformational Exports ProgramQualified under Section 402 for special consideration to counter Chinese export support

These partnerships are strategic growth drivers that extend beyond financing, strengthening REalloys' industry position and de-risking operations



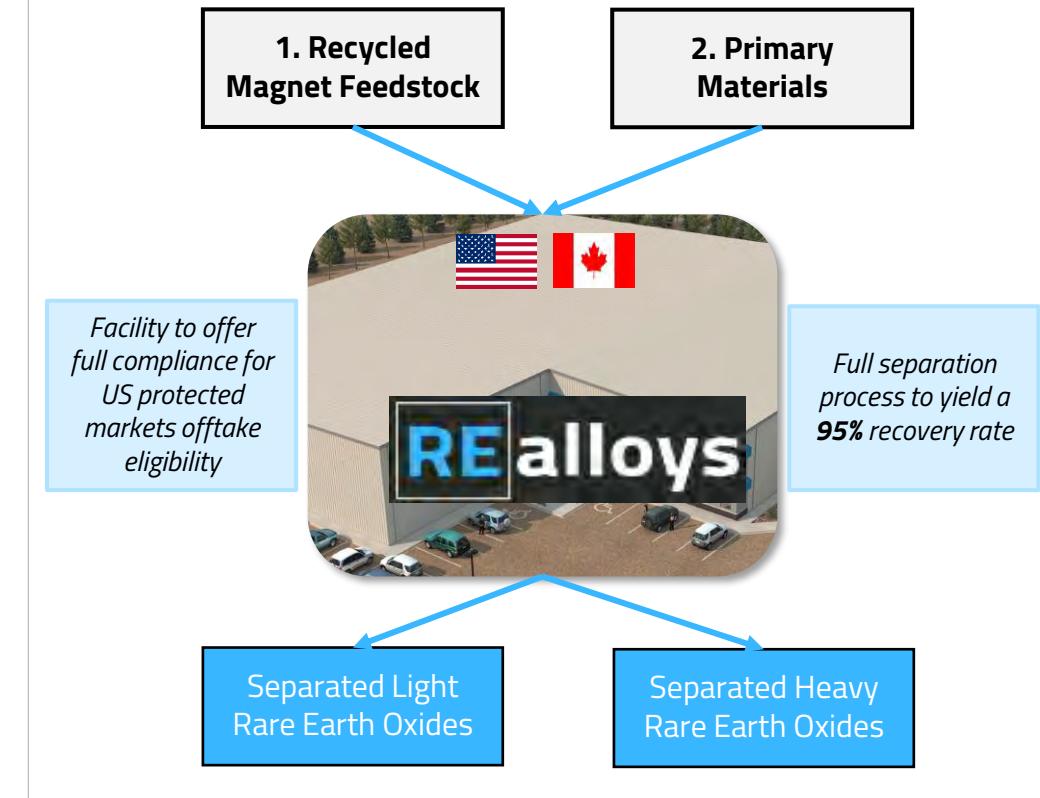
3. Asset Overview, Technology & Long-Term Positioning

Technology Overview & Highlights: Separation

Mid-Stream Process 1: REO Separation Technology

- Fully integrated, commercial-scale rare earth separation facility designed to process both light (LREE) and heavy rare earth element (HREE) feedstocks outside of China
- Can accept primary concentrates (monazite, bastnäsite) and secondary/recycled feedstocks (magnet swarf, end-of-life products), supporting urban mining initiatives
- Production of **high-purity separated oxides** to 99.5–99.9%+ specification for magnet and specialty applications
- Proven Solvent Extraction based on decades of in-house SX expertise with uranium and REEs, scaled up from pilot to commercial capacity
- Positioned to provide DFARS-compliant REOs for **U.S. and Canadian defense, EV, and wind energy sectors**, reducing dependency on Chinese supply
- Embedded AI automation optimize chemical use, recovery, and throughput, reducing costs, etc.

Proven Mid-Stream Processing 1



Technology Overview & Highlights: Metallization

Mid-Stream Process 2: Metallization Technology

- **U.S. Protected Markets-compliant metallization with proven capability to produce high-purity rare earth metals**
- Expertise in calciothermic and metallothermic reduction processes for **HREE and LREE to produce high-purity metals (Nd, Dy, Tb, Gd, Sc)** from oxides
- Proven ability to refine REEs and magnesium from defense and industrial waste streams (munitions, EOL magnets, electronics); closed-loop approach aligned with U.S. Protected markets critical materials strategy
- Advanced Metallization Capabilities, de-risked through 10+ years of proven magnesium foundry operations
- Low technical risk capturing incremental margin uplift from oxide-to-magnet conversion

Proven Mid-Stream Processing 2



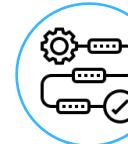
Proprietary
Metallization
Process Know-How



Compliant to US
protected market
downstream



State-of-the-Art Euclid Magnet Facility



Proven Technical track
record of LREE/HREE
advanced processing



Modular and
Scalable technology
integration

The REA facility will produce U.S. protected market-compliant rare earth metals from high-purity oxides, enabling immediate downstream offtake

Technology Overview & Highlights: Magnet Manufacturing

Downstream Processing: NdFeB Magnet Manufacturing

- **Converting separated rare earth metals into high-coercivity sintered NdFeB magnets through pilot-validated process flow:**
 1. **Alloying & Strip Casting:** Combining RE metals with Fe and B to form Alloy and strip-casting optimizes magnetic performance
 2. **Hydrogen Decrepitation & Jet Milling:** Refines particle size for precise magnetic alignment
 3. **Pressing & Sintering:** Compaction essential for magnetic strength
 4. **Machining:** Precision cutting and diffusion to enhance coercivity and temperature stability
 5. **Surface coating:** Protective plating applied to prevent corrosion
- The process emphasizes uniform grain structure, controlled diffusion, and stringent process parameters to ensure stable, repeatable high-performance output

Downstream Integration



Pilot-proven NdFeB magnet manufacturing



Vertically integrated control



Modular process design



Proven alignment with Tier-1 OEM standards



Continuous Improvement Framework

REAlloy's experienced technical team bring proven expertise from alloying through final magnet finishing, ensuring Tier-1 OEM quality for protected market offtake

REA REE Processing Facility (Phase 2): Scaling Domestic Heavy REE Production

REAlloys is leading the project while the partner brings infrastructure, permitting experience, and metallurgical expertise, acting as a strategic technical and operational lead



Planned Structure: Joint initiative between REAlloys Inc. and a North American midstream processing partner



Milestones: Scoping study completed in Q4 2025, final investment decision in 2026, construction starting in 2027, and commissioning to begin in 2030



Feedstock: Mixed Rare Earth Oxide (MREO) feedstock (from Recycled magnet materials), Hoidas Lake + other externally sourced Primary concentrates, and MREC



Technology: Leveraging/licensing midstream partner's Proprietary solvent extraction and High-temperature metallization with their expertise expected to de-risk the process and accelerate timeline



Production: Designed to produce 3,000t NdPr metal, and 245t of Dy + Tb Metals



Funding: Combination of private capital and targeted government support aligned with U.S.-Canada critical mineral initiatives



Strategic Importance: Vertically integrated model which enables onshoring of REE value chain in North America and supporting U.S. & Canada defense and clean tech



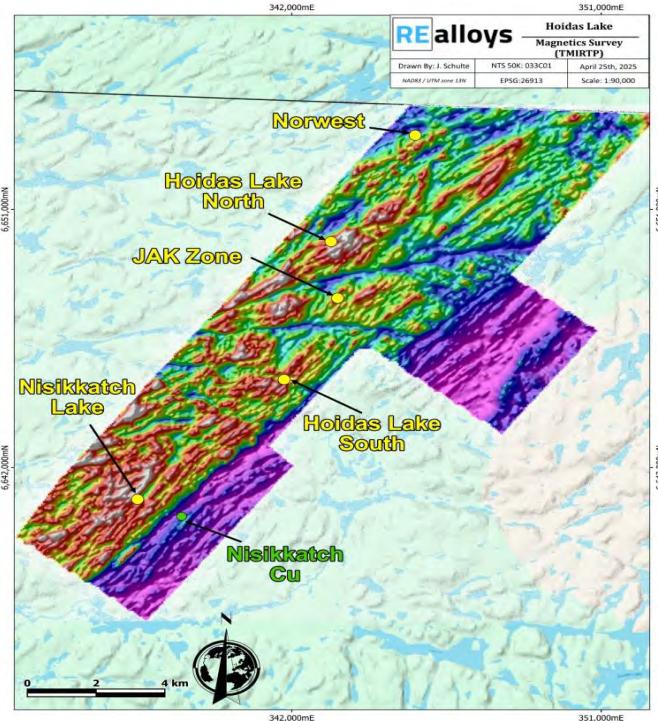
Separation Facility Phase 1



Separation Facility Phase 1

Hoidas Lake: Saskatchewan's Upstream REE Opportunity Supporting a Fully Integrated North American Supply Chain

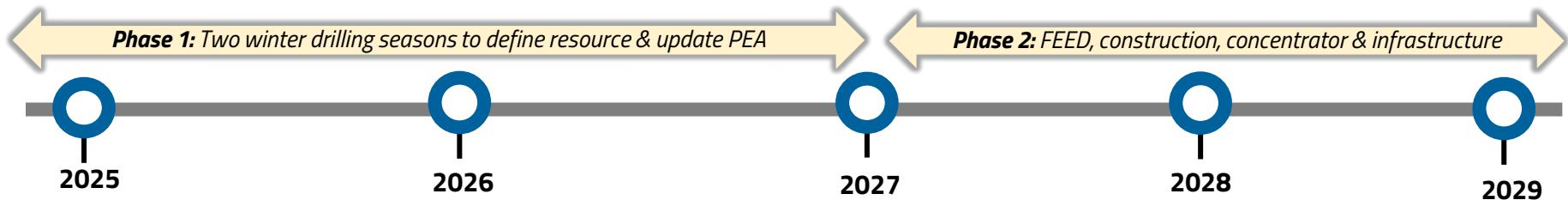
A future primary feedstock source to support REA's Phase 2 midstream facility, enabling long-term independence from foreign-sourced materials



Hoidas Lake REE Project Overview

- S-K 1300 Mineral Resource Estimate (MRE) completed Oct 2024 with US\$40M invested in development to date
 - M&I resource of 2.2Mt at 1.9% TREO, Inferred resource of 1.6Mt at 2.1% TREO and **total resource of 3.8Mt at 2.0% TREO**
 - High-value magnet **light REEs Nd+Pr comprise 26.8% of TREO** along with magnet heavy REs **Dy+Tb comprising 0.52% of TREO**
 - 2024 airborne magnetic survey confirms continuity of REE mineralization across Hoidas Lake trend, including high-potential extensions at Jak Zone
- 14 contiguous mineral claims covering **12,522 ha (31,300 acres) of highly prospective land**
- **Saskatchewan #2 Ranked Mining Jurisdiction Globally** with proximity to processing facilities and the US to ensure logistical advantages
 - Strengthen Canada's ability to offer U.S. defense-aligned REE supply under Title III, reduces reliance on foreign REE and aligns with North American Critical Minerals Strategy

Development Plan Key Milestones Timeline⁽¹⁾



(1) A CAPEX sensitivity study modeling drilling costs at Hoidas Lake for four program sizes (3 km, 6 km, 9 km & 12 km), comparing resource-focused vs. exploration-focused hole mixes; conducted by Axiom

Appendix

Supplemental materials

REE Magnets Key to US Defense Industrial Base and US Partners⁽¹⁾

Magnet Usage for Critical Defense Applications (lbs)			Product / Application	Rare Earth Elements Used	Usage
Image	Value	Type			
	9,200	Nd-based magnets	F-35 fighter jet	Y	Jet engine
	5,200	Nd-based magnets	ATHENA laser weapon system	Er, Yb, Nd	Optical fibres in laser module
	900	SmCo & Nd-based magnets	Tomahawk missile	Nd, Pr, Dy, Tb, Sm	Fin actuators in missile guidance and control systems, GPS, sensors
			JDAM guided bombs	Nd, Pr, Dy, Tb, Sm	Fin actuators in missile guidance and control systems, GPS, sensors
			Zumwalt-class destroyer	Nd, Pr, Dy, Tb, Sm	Electric jamming devices, storage batteries
			HUMVEE military truck	Y, Eu, Tb	Laser
			F-16, F-15, F-22 jets	Er, Sm	Jet engine
			M1A2 Abrams tank	Sm, Eu, Nd, Tb, Y	Navigation system, laser-equipped main gun sight
			Stinger MANPAD	Nd, Pr, Dy, Tb, Sm	Ceramics, nuclear energy, fibre optic communications, glass colouring
			Precision-guided munitions	Nd, Pr, Dy, Tb, Sm	Fin actuators in missile guidance and control systems, GPS, sensors
			PATRIOT missile air defense system	Gd, Sm, Y	Radio frequency circulators
			MQ-9, MQ-1 Predator drones	Y, Tb	Laser weapon system

US Defense Budgets		
Air Force US\$61 billion	Sea Power US\$48 billion	Land Power US\$13 billion
FY 2025 Total Defense Budget US\$850 billion		

3x volume multiplier by adding in NATO and US allies' needs

Source: US DoD, BMO Capital Markets, Industry Reports.

(1) Includes the US National Defense Stockpile (NDS), US Defense Industrial Base (DIB), US Nuclear Industrial Base (NIB), Robotics, Electric Aviation and Critical Infrastructure Industries and for US Partner Countries with Defense Treaties, Alliances & Agreements.

Hoidas Lake REE Project

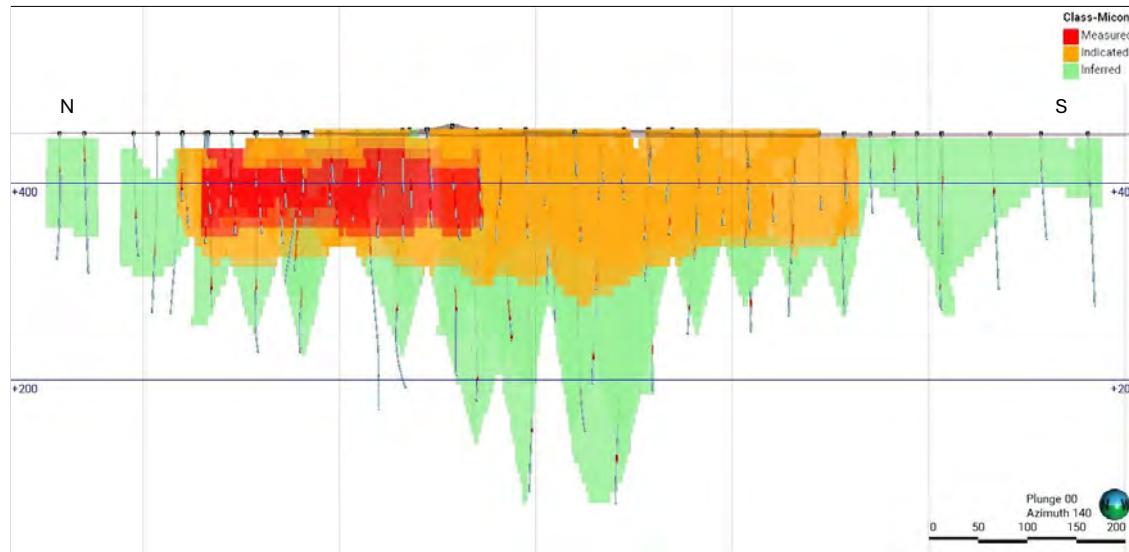
S-K 1300 Mineral Resource Estimate completed Oct 2024

- New S-K 1300 Mineral Resource Estimate (MRE) completed by Micon in Oct 2024 increased total resource by 32%
- M&I resource of 2.2Mt at 1.9%, Inferred resource of 1.6Mt at 2.1% TREO and total resource of 3.8Mt at 2.0% TREO
 - Light magnet REEs Nd+Pr comprise 26.8% of TREO
 - Heavy magnet REEs Dy+Tb comprise 0.52% of TREO
- 188 drill holes contained in geological database, 110 were in the area of HLREE deposit & used in resource estimate

HLREE Project Mineral Resource Estimate

Category Oct 30, 2024	Tonnage (tonnes)	TREO (%)	Cont. TREO (tonnes)
Mineral Resource			
Measured	711,000	1.858	13,210
Indicated	1,442,000	1.929	27,816
M&I	2,153,000	1.906	41,027
Inferred	1,602,000	2.089	33,466
Total Resource	3,755,000	1.984	74,492

Long Section Micon Mineral Resource Categorization (Looking Southeast)



- Resources reported relate to JAK zone on the Hoidas Nisikkatch Fault
- REE primarily found in the bastnasite & allanite minerals, and secondly in the monazite, parasite, thorite & apatite minerals
- Significant additional structures identified outside of the JAK Zone
- Drilling will immediately increase HLREE resource

Notes: The effective date of the Mineral Resource Estimate is October 30, 2024. The mineral resource estimate was determined using an NSR cut-off value of US\$328.33/t.

Hoidas Lake REE Project

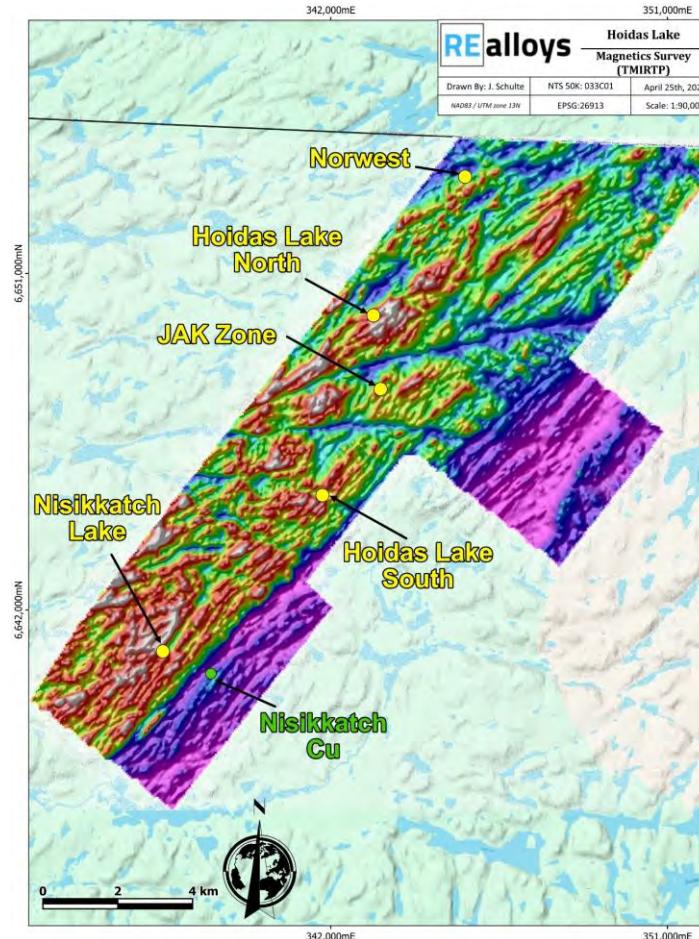
Magnetic & Radiometric Survey Results (Fall 2024) – Significant Additional Structures Identified Outside of the JAK Zone

Airborne Magnetic & Radiometric Surveys

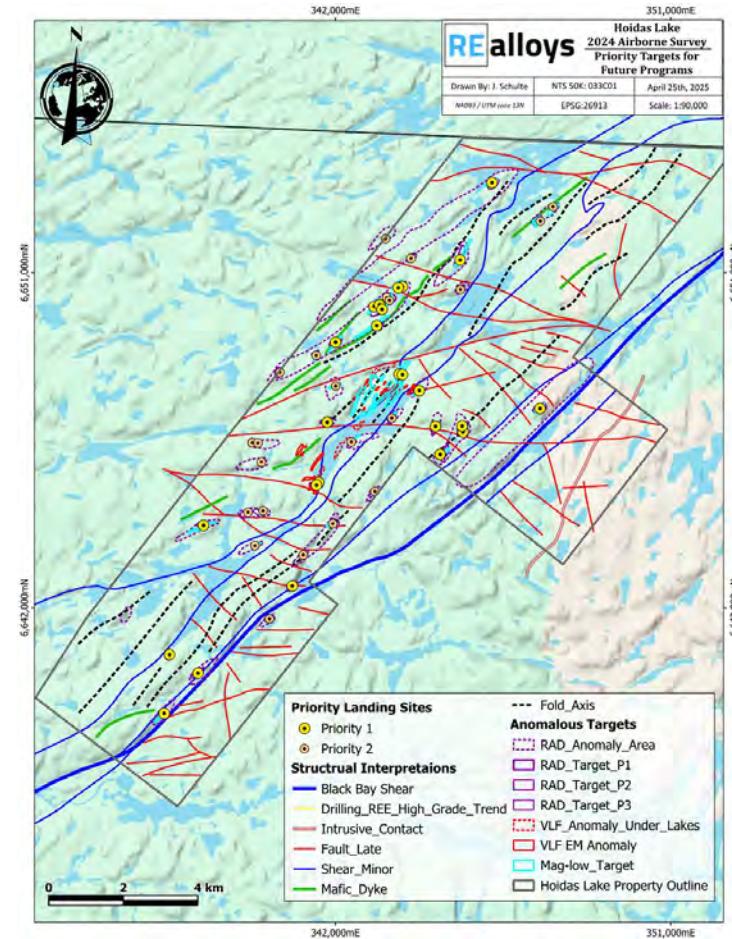
- Will assist future exploration & drilling programs for highly prospective target areas outside of known Jak Zone Deposit
- Successful in identifying multiple prospective trends on the property that greatly enhance the potential for future economic REE discoveries
- Axiom Exploration Group (Axiom) completed a helicopter-borne Triaxial gradient magnetic and radiometric survey over the HLREE Project
- Resource Potentials (ResPot) compiled & integrated the newly acquired & available historical exploration datasets of the HLREE Project

"ResPot considers the [HLREE] project area to be highly prospective for hosting additional REE deposits, and for hosting additional mineralized veins in and around the JAK deposit area, that remain undiscovered and would significantly increase the REE resource at the project."

– Dr. Jayson Meyers, Principal Consultant & Director, ResPot



Coloured Magnetic Anomaly Image (TMIRTP) of HLREE Project



Priority 1 & 2 landing sites with radiometric anomaly trends, prioritized radiometric target outlines (purple) and high-level interpreted structures.



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