

Rare Earths

Investment theme brief / Research reviewed October 4, 2026 / Horizon through 2030

Our view

Through 2030, we expect the U.S. and its allies to build smaller alternative chains for selected rare earths while China remains the dominant processor. The test is qualified, cost-competitive material across oxides, metals, alloys and finished products - not mine announcements.

Base case: selected alternative material chains grow outside China, but qualified output and cost take longer to prove than announced capacity. This is a market thesis, not a directional forecast for every rare-earth price or equity.

Three facts that define the theme

Where demand goes 47.6% All rare-earth elements / 2024	Beyond magnets 49% Ce 31% + La 18% / all REEs / 2024	Strategic bottleneck 91% Nd / Pr / Dy / Tb / 2024
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Source: [Natural Resources Canada 2024 all-REE mix](#); [IEA 2024 four-element refining share - different denominators](#)

Where the elements come from

Carbonatite / alkaline igneous / heavy-mineral sands / ion-adsorption clays. Deposit type changes the element mix and processing route. A mapped occurrence is not a mine, reserve or qualified supply.

Source: [USGS deposit review](#)

Material paths

Magnetic materials / Nd / Pr / Dy / Tb / Sm

Motors, wind turbines, robotics, aerospace and defense systems. Track: Separated output, metal and magnet qualification, and prices by element.

Catalysts and polishing / La / Ce

Petroleum refining, emissions control and precision polishing. Track: Catalyst and polishing demand, oxide output, and delivered purity.

Optical and specialty uses / Y / Eu / other application-specific REEs

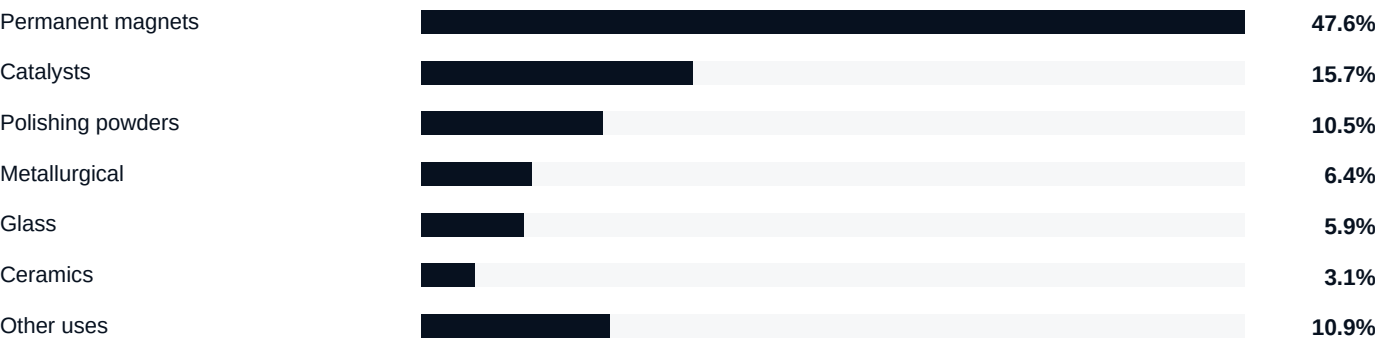
Glass, ceramics, phosphors, lasers and other specialized components. Track: Product-specific demand and qualified material supply.

Rare earths include 17 elements. Magnet inputs are an important subset, while cerium, lanthanum, yttrium and other elements have different end markets and supply constraints.

Demand and elements

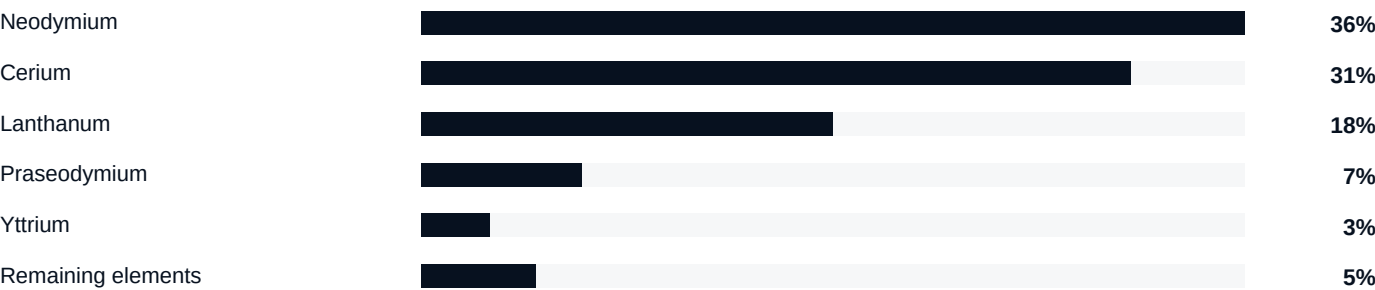
The two views below describe all rare-earth demand in 2024. They are shares, not tonnes.

End uses - all rare earths



Other uses combines battery alloys, phosphors, pigments and the source's miscellaneous category. Rounding can prevent shares from adding to exactly 100%.

Demand by element - all rare earths



Source: Natural Resources Canada, 2024 global rare-earth end uses and element demand

Focused forecast - four magnet rare earths

The IEA series covers Nd, Pr, Dy and Tb across all their uses. It is not a forecast for all 17 rare earths, nor is it finished-magnet weight.

YEAR	CLEAN TECH	OTHER USES	TOTAL	STATUS
2021	11 kt	67 kt	78 kt	Historical
2024	19 kt	72 kt	91 kt	Historical
2030	38 kt	85 kt	123 kt	IEA STEPS
2040	47 kt	103 kt	150 kt	IEA STEPS

Source: IEA, Rare Earth Elements 2025: historical observations and STEPS projections

Supply and thesis tests

A deposit, an oxide, a metal and a finished product are different economic goods.

Where concentration is measured



China's 2024 share for Nd, Pr, Dy and Tb. These percentages cannot be generalized to every rare-earth element or downstream application.

Source: IEA, Rare Earth Elements 2026 executive summary

What would move the view

Supports the concentration thesis

Restrictions, shipment delays or failed processing ramps keep buyers dependent on a concentrated chain.

Weakens the thesis

Repeatable non-China output by element, customer qualification and competitive costs reduce that dependence.

Measure by element and form: separated oxide tonnes, metal and alloy yield, product qualification, delivery volumes, licensing decisions and realized prices. Government commitments and nameplate plants are separate leading indicators.

Three possible paths through 2030

Managed diversification - base case

State-backed non-China projects deliver selected products, but China remains a major processor. Confirm with repeated qualified deliveries and customer acceptance.

Renewed disruption

Licensing or physical shipments tighten before alternatives scale. Confirm with official rules plus measured delivery delays, buyer stoppages or cost increases.

Faster resolution

Several chains ramp commercially, reducing concentration and premiums. Confirm with sustained non-China output, competitive cost and qualified buyers.

Selected dated evidence

April 2025: China added export controls on selected heavy rare earths.

February 2026: MP Materials reported 2,599 tons of 2025 NdPr oxide output.

August-September 2026: U.S. offtake and the Serra Verde combination advanced non-China supply plans, but contracts and ownership are not a full measure of delivered oxide.

Source: China MOFCOM announcement; MP full-year results; USA Rare Earth SEC filings

Markets and research record

Transmission to markets

Material form and buyer exposure matter more than a generic rare-earth stock basket. Higher prices may help producers while hurting manufacturers; new supply can reverse that price effect.

MP is an operating U.S. mine and processor with initial magnet production; USAR is an earlier-stage development and integration exposure; UUUU has White Mesa processing and acquired metal/alloy capabilities. Their stock returns also depend on financing, execution, valuation and unrelated businesses.

An export headline alone does not establish a price effect. Record the element, product form, shipment or production change, time window, and observed security price before attributing a market move.

Primary evidence

[Natural Resources Canada - global use and element shares](#)

[IEA 2026 - concentration and diversification outlook](#)

[IEA 2025 - four-element demand series](#)

[USGS 2026 - U.S. rare-earth prices and trade](#)

[MP Materials - 2025 Form 10-K](#)

[USA Rare Earth - 2025 Form 10-K](#)

[Energy Fuels - June 2026 Form 10-Q](#)

Comparative fund research

[VanEck / The Race to Secure Rare Earths \(2025\)](#)

Short investment case and cross-country financing examples. Project announcements are leads, not delivered supply.

[Global X / Rare Earth & Critical Materials ETF \(2026\)](#)

Clear growth, supply and exposure framing. Its fund covers other critical materials too, so it is not an all-REE demand dataset.

[Sprott Capital Partners / Ionic Rare Earths initiation \(2022\)](#)

Research-note structure: investment case, project economics, catalysts and risks. Historical company estimates are not current evidence for this theme.

These fund materials inform presentation and identify questions to test. IntraAlpha figures rely on the primary sources above. The Sprott note is historical company research, not a current price target for this theme.

Method and limits

All-REE shares, four-element magnet-chain measures, oxide prices, announced finance and company output have different denominators and dates. They are not added together. Forecasts and illustrative sensitivities are labeled separately from observations. This brief is general research, not personalized investment advice.