

Japan's Rare Earth Strategy Is a Portfolio, Not a Project

written by Jack Lifton | July 31, 2026

"The genius of Japan's policy is that it does not require one project to solve everything. It is not merely accumulating mines. It is creating several competing routes for qualified rare earth materials to reach Japanese manufacturers." – Jack Lifton, Co-Chair, [Critical Minerals Institute](#) (CMI)

Japan's national rare earth strategy is considerably more sophisticated than simply financing additional mines. Japan is trying to assemble a **portfolio of supply chains**, each intended to solve a different part of the problem:

- [Lynas Rare Earths Ltd.](#) (ASX: LYC) and Australia provide dependable large-volume light rare earths.
- Lynas's new separation capability is intended to provide an initial non-Chinese stream of dysprosium and terbium.
- Lofdal in Namibia is a prospective primary heavy rare earth source.
- Malaysia may provide ionic-clay feedstocks containing a broader distribution of middle and heavy rare earths.
- Japanese trading companies, manufacturers and JOGMEC provide financing, technical support, offtake commitments and, where necessary, price protection.

This is therefore not merely a mineral-procurement policy. It is an industrial security policy designed backward from the needs of Japan's magnet, motor, electronics, automotive, and defense industries.

The Foundation: Lynas and Australia

Japan's most successful rare earth intervention remains its support for Lynas after China's restriction of rare earth shipments to Japan in 2010. In 2011, JOGMEC and Sojitz, acting through Japan Australia Rare Earths, provided financing and entered into arrangements to secure Lynas's material for Japanese customers. The arrangement helped finance the development of Mount Weld in Western Australia and the Malaysian separation facility.

That intervention effectively solved Japan's immediate light rare earth problem. Mount Weld supplies large quantities of material dominated by cerium, lanthanum, neodymium and praseodymium. Lynas has since become the principal non-Chinese supplier of separated rare earth products, and Japan has secured a substantial portion of the material it requires through long-term arrangements.

Japan therefore appears to have **more than adequate access to non-Chinese light rare earths**, particularly NdPr, assuming Lynas continues to operate normally and expand as planned. Indeed, Japan's concern is no longer primarily the physical availability of light rare earth minerals. It is ensuring that Lynas remains commercially viable despite Chinese price manipulation and periodic oversupply.

This explains Japan's willingness to provide long-term purchasing commitments and price support rather than merely lending money for another mine. Japan understands that a theoretically diversified supply chain is of little use if its only non-Chinese supplier is forced out of business by prices set within the Chinese market.

In 2026, the Japan-Lynas relationship was further extended

through arrangements reportedly covering at least 5,000 tonnes per year of NdPr and a substantial share of Lynas's heavy rare earth output through 2038.

Will Lynas supply Japan with Heavy Rare Earths?

Yes—but initially in limited quantities, and not enough by itself to eliminate Japan's heavy rare earth vulnerability. Japan, through JOGMEC and Sojitz, reached an agreement in 2023 under which up to 65% of the dysprosium and terbium produced by Lynas from Mount Weld feedstock would be made available to the Japanese market. Lynas subsequently installed heavy rare earth separation capability at its Gebeng plant in Malaysia. By 2025–26, it had begun moving beyond NdPr into separated products, including dysprosium, terbium, and samarium. Australia and Japan formally described the commencement of heavy rare earth production as a major milestone in their bilateral critical minerals relationship.

However, the distinction between technical production and sufficient industrial supply is crucial. Mount Weld contains dysprosium and terbium, but it is fundamentally a light rare earth deposit. The amounts of heavy rare earths contained in the ore are small compared with its NdPr content. Lynas can recover and separate those heavy rare earths—and that is strategically important—but Mount Weld is unlikely to become a complete replacement for the heavy rare earth output historically derived from Chinese and Myanmar ionic-adsorption clays.

Lynas can therefore provide Japan with: a strategically valuable minimum supply of separated Dy and Tb; a non-Chinese qualification source for Japanese magnet producers; insurance against a complete interruption of Chinese shipments; and the

operating platform on which additional heavy-rich feedstocks could eventually be processed. What Lynas cannot yet provide is a large, abundant, and inexpensive stream of dysprosium, terbium, yttrium, and other heavy rare earths comparable to the Chinese supply chain. This is precisely why Japan continues to support Lofdal and to examine projects in Malaysia and elsewhere.

Lofdal: Japan's Dedicated African Heavy Rare Earth Option

The Lofdal project in Namibia is quite different from Mount Weld. It is being pursued specifically because its mineralization is unusually enriched in heavy rare earths, particularly dysprosium, terbium and yttrium. The Japan Organization for Metals and Energy Security (JOGMEC) has worked with Namibia Critical Metals Inc. (TSXV: NMI | OTCQB: NMREF) on the project since 2020. In March 2026, Toyota Tsusho Corporation (TSE: 8015) joined JOGMEC as a joint development partner in advancing Lofdal, creating the logical bridge between Japanese government risk capital and the trading and industrial system that would eventually market the products.

Earlier metallurgical work reportedly produced a concentrate grading approximately 8.39% total rare earth oxide, with heavy rare earths accounting for more than 96% of the concentrate's rare earth content. That does not by itself establish commercial viability, but it illustrates why Japan considers Lofdal strategically exceptional. Lofdal is potentially valuable because it is not simply another NdPr project carrying trace dysprosium and terbium credits. It is intended to be a **purpose-built source of heavy rare earths**.

Nevertheless, Lofdal still has to overcome the normal obstacles:

mineralogical variability; beneficiation and concentrate recovery; removal of thorium and other impurities; economic separation of relatively small individual element streams; capital cost; water, power and infrastructure requirements; and qualification of the final oxides by Japanese customers.

Japan's involvement makes the project more credible because it supplies patient capital, technical oversight and a prospective customer. It does not, however, eliminate the metallurgical and economic risks.

Carester–Malaco: Potentially Important, but not yet clearly a JOGMEC Project

The Carester–Malaco initiative in Malaysia may ultimately fit Japan's diversification plan extremely well, but the public record currently calls for a distinction. In July 2026, Carester announced plans for a Malaysian separation plant in partnership with Malaco Mining Group. The proposed operation in Perak would reportedly be capable of processing approximately 13,000 tons of rare earth material annually. Carester and Malaco are also seeking permission to test or develop in situ leaching of Malaysian deposits, with the objective of producing both light and heavy rare earths, including Nd, Pr, Dy, and Tb. Some concentrate could be shipped to Carester's Caremag plant in France.

However, I have not found authoritative public confirmation that the Carester–Malaco venture itself is presently a JOGMEC-funded or JOGMEC-owned project. It may be of strong interest to JOGMEC and Japanese industry, and future financing or offtake participation would be logical, but the currently announced venture is between Carester and Malaco. That distinction matters

because it is easy to conflate several related developments into a single supposed “JOGMEC–Carester–Malaco project” when the contractual relationships may not yet support that description.

Strategically, however, the project could be highly relevant to Japan. Carester would contribute separation technology and access to the European Caremag facility; Malaco would contribute Malaysian mineral rights, local operating relationships and potential ionic-clay feedstock. Japan could subsequently contribute financing, offtake and industrial qualification. The architecture would be compelling:

Malaysian ore → Malaysian concentration or partial separation → Carester separation technology → Caremag and/or Malaysian finishing → Japanese customers. But it remains early-stage. No final capital cost, operating cost, mine plan, permitting schedule or independently demonstrated reserve base has yet been publicly established.

Can Lynas Acquire Malaysian Heavy Rare Earth Properties?

Legally and commercially, it may be possible. Politically and strategically, it would be complicated. Malaysia is attempting to develop its own rare earth industry rather than remain merely a host country processing Australian ore. Malaysian policy has generally favored local participation, domestic value addition and controls on the export of unprocessed rare earth material. A foreign-controlled acquisition of a large Malaysian ionic-clay resource would therefore be politically more sensitive than Lynas’s existing role as a processor of imported Mount Weld material.

Lynas could pursue several structures: a minority investment in

a Malaysian license holder; a joint venture with a Malaysian state or private company; a long-term feedstock purchase agreement; toll separation of material owned by a Malaysian producer; technical assistance in exchange for offtake rights; acquisition of an interest in a downstream separation company rather than direct ownership of the mine.

Of these, a joint venture or offtake arrangement is more probable than outright acquisition and control of Malaysian mineral properties. There is also a competitive issue. Malaysia may not wish to allow Lynas to dominate both the country's existing separation capacity and its emerging domestic feedstock base. The government is likely to encourage several competing industrial groups—Malaysian, Chinese, French, Japanese, Korean and Australian—to preserve leverage and accelerate technology transfer. Carester and Malaco are already attempting to establish one such alternative platform. Other Malaysian companies have relationships with Chinese technical and commercial partners. Lynas would therefore be entering a politically crowded field.

Would Malaysian Feedstock solve Lynas's Heavy Rare Earth Problem?

Potentially—but only if four conditions are met. First, the Malaysian deposits must contain meaningful recoverable concentrations of dysprosium, terbium and yttrium, not merely geological indications or attractive total rare earth numbers. Second, they must be capable of being leached with acceptable recoveries and reagent consumption. Ionic-clay projects can appear simple because the rare earths are adsorbed onto clay surfaces rather than locked inside resistant minerals. But permeability, clay chemistry, reagent recirculation, slope stability and groundwater control determine whether an operation

is genuinely economic. Third, Malaysian authorities must permit production at industrial scale. In-situ leaching carries considerable environmental and political risk, particularly in plantation and forested regions. Fourth, the resulting mixed rare earth product must be compatible with Lynas's separation circuits. A plant designed around Mount Weld feedstock cannot necessarily accept an entirely different ionic-clay feed without new impurity-removal, precipitation and separation stages.

Thus, acquiring Malaysian feedstock would not simply mean trucking a new concentrate into Gebeng. Lynas would have to characterize, pilot, engineer and qualify an additional processing route.

Japan's broader Australian portfolio

Australia is likely to remain the anchor of Japan's mineral-security relationship because it offers political reliability, sophisticated mining regulation, existing trade infrastructure and numerous rare earth projects.

Lynas is the centerpiece, but Japan is also examining Australia as a source of additional critical minerals and prospective heavy rare earth supplies. In May 2026, Japan and Australia announced an elevated critical-minerals partnership involving a combined prospective support of approximately A\$1.67 billion, with projects to be selected based on their strategic importance and ability to diversify supply chains.

Potential Australian sources outside Lynas Rare Earths Limited (ASX: LYC) include the Browns Range Heavy Rare Earths Project of Northern Minerals Limited (ASX: NTU), which is enriched in dysprosium and terbium; the Eneabba refinery and monazite stockpiles of Iluka Resources Limited (ASX: ILU); the Nolans Project of Arafura Rare Earths Limited (ASX: ARU), principally a

light rare earth source; various emerging clay-hosted deposits; and recycling and recovery from mineral sands residues.

These projects are not interchangeable. Nolans and much of the Australian monazite inventory principally reinforce light rare earth and NdPr supply. Browns Range is more relevant to the dedicated heavy rare earth problem. Iluka's refinery could become strategically important because it provides a processing platform capable of accepting multiple feedstocks rather than relying on a single mine.

My view is that Japan has probably already secured sufficient non-Chinese light rare earth capacity to meet its foreseeable industrial requirements, provided Lynas remains operational. Its remaining vulnerability is concentrated in the smaller-volume but much more strategically consequential heavy rare earths.

Lynas will help substantially. It is now capable of producing separated heavy rare earth products from Mount Weld material, and Japan has secured preferential access to much of that output. But Mount Weld alone is not a complete heavy rare earth solution. Lofdal is Japan's most clearly defined attempt to develop a geologically heavy-rich primary source. The Carester-Malaco venture could become a second pathway based upon Malaysian ionic clays and French separation technology, although it should not yet be described categorically as a JOGMEC project without evidence of a formal Japanese participation agreement.

Lynas may eventually obtain Malaysian heavy-rich feedstock, but it is more likely to do so through a partnership, tolling contract or offtake agreement than through outright ownership of Malaysian deposits. The genius of Japan's policy is that it does not require one project to solve everything. It combines:

Mount Weld for volume; Lynas Malaysia for separation; Lofdal for dedicated heavy rare earth geology; Malaysian clays for

optionality; Carester for additional processing technology; and Japanese capital and offtake to connect all of these projects to actual industrial demand.

Japan is, in other words, following where value is added. It is not merely accumulating mines. It is creating several competing routes for qualified rare earth materials to reach Japanese manufacturers.