

A Floor Under What Price?

Three rare-earth arrangements quote \$110/kg. Their terms say more than the shared number about risk, while inventory and diversified supply depend on how long a disruption lasts.

Evidence cut-off: 30 September 2026

One hundred and ten dollars a kilogram appears three times in agreements and an announced letter of intent across two governments and two companies.

The United States Department of Defense, since renamed the Department of War, agreed in July 2025 to pay MP Materials a shortfall against \$110/kg for ten years.¹ Lynas holds a US\$110/kg floor with Japan-backed JARE for sales to Japanese industry.² The American department proposed another for Lynas within a US\$96 million four-year purchase allocation; that one remains a letter of intent.³

The shared number does not establish a market price. Nor does it tell a buyer whether a floor, inventory or another supplier would be worth the cost of a disruption.

What the American floor actually measures

The Price Protection Agreement defines what it protects as "the volume average realized sales price for each NdPr Kilogram Equivalent that is included in the Sold NdPr Products ... as determined in accordance with the terms of this Agreement and the NdPr Calculation Principles."⁴

It averages prices imputed differently to each category of eligible material. Stockpiled material, and affiliate sales made without a separate arm's-length third-party price, are "treated as if then sold at the prevailing Market Price"; Market Price is defined as the **Asian Metal Market Price**, a published mid-market index for NdPr oxide quoted **EXW China**.⁵ Only third-party sales run off the price a buyer actually paid, and then only at "the greater of" that price and a redacted floor.⁶ MP elects the eligible categories, while the conversion to kilogram equivalents follows unfiled Schedule A formulas.⁷ An expert can review their application, but cannot change them.⁸

Thus two eligible categories generally reference a Chinese domestic index even as the agreement bars sales to defined Restricted Buyers, a class expressly naming the PRC. The index does not determine every kilogram or the contract-wide average.⁹

MP also elects which material enters the payment calculation. Of the four quarterly designations, three form "Sold NdPr Products" and qualify for payment; Inventory material "shall not be deemed to be sold or require any payment to be made in exchange therefor" and does not.¹⁰ An unsold kilogram may qualify as Stockpile or wait in Inventory; Inventory can qualify when later sold. Reclassification after designation is barred, company magnet facilities receive first allocation, and feedstock bought above \$110/kg is excluded. The two redacted minimum deemed prices would raise the benchmark and reduce the government payment, but their values are unknown.¹¹

No annual dollar cap or maximum qualifying volume appears in the filed price-protection exhibit. Its operative schedules are unfiled, so a limit there cannot be ruled out.¹² The companion offtake's filed text caps one category of uncapitalised costs at \$30 million a year.¹³ The \$110 is nominal and unindexed for ten years.¹⁴ At signing the obligation was unfunded: "appropriated funds are not presently available to fund DOD's obligations under this Agreement."¹⁵

The companion offtake goes further. The EBITDA definition testing a \$140 million annual guarantee sits on an unfiled schedule with GAAP disappplied,¹⁶ as does the definition of the production costs at which the government buys the magnets.¹⁷ And the agreement disappplies four bodies of ordinary procurement law outright, replacing them with private audit.¹⁸

A separate liability ceiling caps the company's exposure, not the price-protection payment. Before commercial operation it uses 28,000 metric tons of magnets at the PRC market price; after it, the lower of 7,000 tons a year of remaining term or 28,000 tons, at the *lower* of the company's production cost and that PRC price. The later ceiling can be smaller, and neither has a disclosed dollar value today.¹⁹

What it has cost so far

MP recognised \$51.016 million of price-protection income in the fourth quarter of 2025, \$42.273 million in the first quarter of 2026 and \$17.580 million in the second: **\$110.869 million across the instrument's first three quarters.**²⁰

The accounting value attached to the right measures something else. The \$218.6 million initially assigned to MP's price-protection right is the residual between the assigned fair values of a preferred issue, warrant and loan (\$768.6 million) and cash received (\$550.0 million).²¹ The \$110.869 million is income recognised, not a recovery of half the ten-year right's economic value. The residual is no disclosed estimate of expected lifetime government payments.²²

Cash followed recognition. No cash flow statement carries a price-protection line, and each closing receivable equals that period's recognised income; MP states the cash in its management discussion: **\$51.0 million received** for the fourth quarter of 2025, **\$93.3 million** cumulatively through the first of 2026.²³ Settlement runs about a quarter behind recognition, leaving only the second quarter's \$17.580 million accrued; that lag is an observed pattern, not a stated term.

Income fell from Q1 to Q2, but the public figures cannot separate a price change from a change in eligible kilograms or mix. Dividing income by MP's reported sales or production volumes yields illustrative benchmark-equivalents of roughly \$64–68/kg in Q1 and \$89–93/kg in Q2. Neither KPI is the contractual base, so these values neither bound nor estimate the actual benchmark.²⁴

MP also stopped publishing a related price KPI. From the fourth quarter of 2025 MP discontinued its "NdPr Realized Price per KG" metric, saying it "is no longer meaningful ... due to the impact of the Price Protection Agreement".²⁵ That KPI could not, in any event, reproduce the agreement's undisclosed designation and conversion.²⁶

What Japan bought instead

Lynas's floor with JARE carries the same \$110 strike and a 30 per cent upside share. JARE's share starts at \$150 and is capped at US\$10 million a year. The American upside leg is not yet live: no payment to the government is due before the Production Milestone Date, and the relevant facility was still under construction at the cut-off.²⁷ JARE's floor attaches to a firm commitment to buy 5,000 tonnes of NdPr a year for Japanese industry, rather than to quarterly producer designations.²⁸ Japan also supplied equity and a secured loan.²⁹

Because the Japanese floor is paid inside the transaction price, **its separate value is undisclosed.**³⁰ MP's government payment has its own income caption. That makes its recognised amount visible, while the quarterly contractual calculation remains unavailable to an outside reader. Neither floor's generosity can be ranked from these disclosures.

The JARE loan facility also qualifies Japanese priority for heavy-rare-earth supply "to the extent possible under any agreement with the U.S."; it does not quantify either party's eventual allocation.³¹

What the firms did

Buyers disclose little about the relevant buffers. Five controlled phrase searches of US 10-K and 10-Q filings from January 2025 to September 2026, plus eight other phrasings, found no numerical rare-earth inventory cover or magnet supplier-qualification period.³² The search leaves those inputs unknown, not zero; other wording or documents might contain them.

The filings show different precautions but not how long they would protect production: Coherent says it historically lacked long-term material-supplier contracts and buys substantially by purchase order,³³ while Allient reports safety stock, supplier contracts and inventory builds and calls qualification "lengthy" without quantifying it.³⁴ Two buyers made prepayments. General Motors prepaid \$150 million for magnetic precursor, with \$45.5 million still undelivered at June 2026; it says it does not normally hold raw materials above production requirements.³⁵ MP disclosed a \$200 million ceiling on Apple's prepayments, with no related revenue yet recognised.³⁶ A controlled search of Apple's 2025–September 2026 10-K/Q filings found neither "rare earth" nor "MP Materials".³⁷

The clearest inventory *build* in this source set belongs to a producer: Lynas raised raw materials and consumables from A\$39.655m to A\$60.623m in FY26, attributing the A\$20.968m increase to protection against disruption. That is a stock movement, not a cost; applying the scenario's 12 per cent annual carrying rate gives roughly A\$2.5m on the increment, my calculation.³⁸ Lynas also reports a 7.4 per cent FY26 year-to-date sales premium against a 5.1 per cent budget, over an unidentified benchmark. It does not attribute that premium to supply security.³⁹

The disruption, as observed

China's April 2025 measure controls seven medium and heavy rare earths, including samarium-cobalt magnets and terbium- or dysprosium-containing NdFeB magnets. NdPr oxide and metal themselves are not listed.⁴⁰ An October rule extended licensing to specified foreign-made goods at a 0.1 per cent China-origin content threshold **by value**.⁴¹ November suspended that escalation and five other measures until November 2026, but not April's.⁴²

EU imports of HS 850511 magnets from China fell in every month from April to August 2025 below any month of that year's first quarter, then September exceeded the pre-control level. But those five months sit inside the series' own recent range: four months of 2024 fall in the same band with no control in force, December 2024 is the lowest month in the whole 31-month window, and volumes have twice since dropped back below the March 2025 level. **The five-month run was below the immediate pre-control quarter, yet remained within the series' recent range.**⁴³ US imports of rare-earth compounds and metals, rather than magnets, **rose 169 per cent** in 2025 while their value fell.⁴⁴ The European Commission, in December 2025, described EU production shutdowns as a risk rather than an observed event.⁴⁵

At firm level: Ford states Chinese restrictions and related supply instability have already caused production disruptions and increased costs.⁴⁶ Regal Rexnord cut FY2025 diluted EPS guidance from \$4.50–5.10 to \$4.26–4.56, citing tariffs and China rare-earth magnet policy together⁴⁷; the same segment's full-year organic sales **rose \$45.8 million**, magnets named only as a partial offset.⁴⁸ A controlled SEC filing search returned no hit for the phrase "rare earth shortage" in the specified window,⁴⁹ and no published source located gives an observed frequency or duration distribution of rare-earth supply interruptions.⁵⁰ Hence a threshold, not a forecast.

What you would have to believe

The exhibit assumes a disruption price three times its \$93/kg input and values price protection, excluding avoided shutdown loss. Inventory's payoff stops at its cover. A prepared second source keeps protecting supply as a disruption lengthens, eventually exceeding a fixed inventory buffer. An unqualified second source provides no protection until qualification. At twelve months of qualification and a twelve-month disruption, its payoff is zero; a prepared source protects \$46.50 per kilogram of annual requirement.⁵¹

Using \$93/kg as an illustrative price input, not a market observation, 9 per cent cost of carry and 3 per cent for storage and obsolescence, three months of cover costs **\$2.79 a kilogram of annual requirement each year**; six months, \$5.58; twelve, \$11.16. Diversifying a quarter of the requirement costs the premium on that quarter: **\$1.25 at a \$5 premium**, \$3.75 at \$15, \$7.50 at \$30.⁵²

Divide cost by payoff and you get the belief each requires. Three months of cover pays for itself above an annual disruption probability of **6 per cent**; twelve months against a three-month disruption needs **24 per cent**, because extra stock then buys nothing. A quarter diversified at a \$5 premium needs **2.7 per cent** against a twelve-month disruption but **10.8 per cent** against a three-month one; at a \$30 premium, 16.1 and **64.5 per cent**.⁵³ Redundant production capacity has no comparable cost or avoided-loss estimate here, so it cannot be ranked.

A producer floor may sustain capacity before a shock, when a buyer cannot quickly qualify an alternative. Whether that benefit exceeds the transfer requires a counterfactual exit risk and avoided loss that this record does not measure.

Public terms still leave the transfers hard to compare. MP elects the eligible mix; the conversion formulas and two minimum deemed prices are not public; the nominal strike is unindexed. Yet published indices and contractual allocation guards constrain some choices, and DoW can inspect quarterly support and contest application or arithmetic. Japan's upside share has a disclosed annual cap. The American upside share has no stated cap in the filed agreement, but it is not yet active and is distinct from DoW's payments to MP.

India, and what it bought

India approved ₹7,280 crore on 26 November 2025 for 6,000 tonnes a year of integrated sintered magnet capacity, against a stated national requirement of about 4,000 tonnes.⁵⁴ Official figures put its dependence on China for permanent magnet imports at 59.6–81.3 per cent by value and 84.8–90.4 per cent by quantity across 2022–23 to 2024–25; this measures concentration, not realised loss.⁵⁵

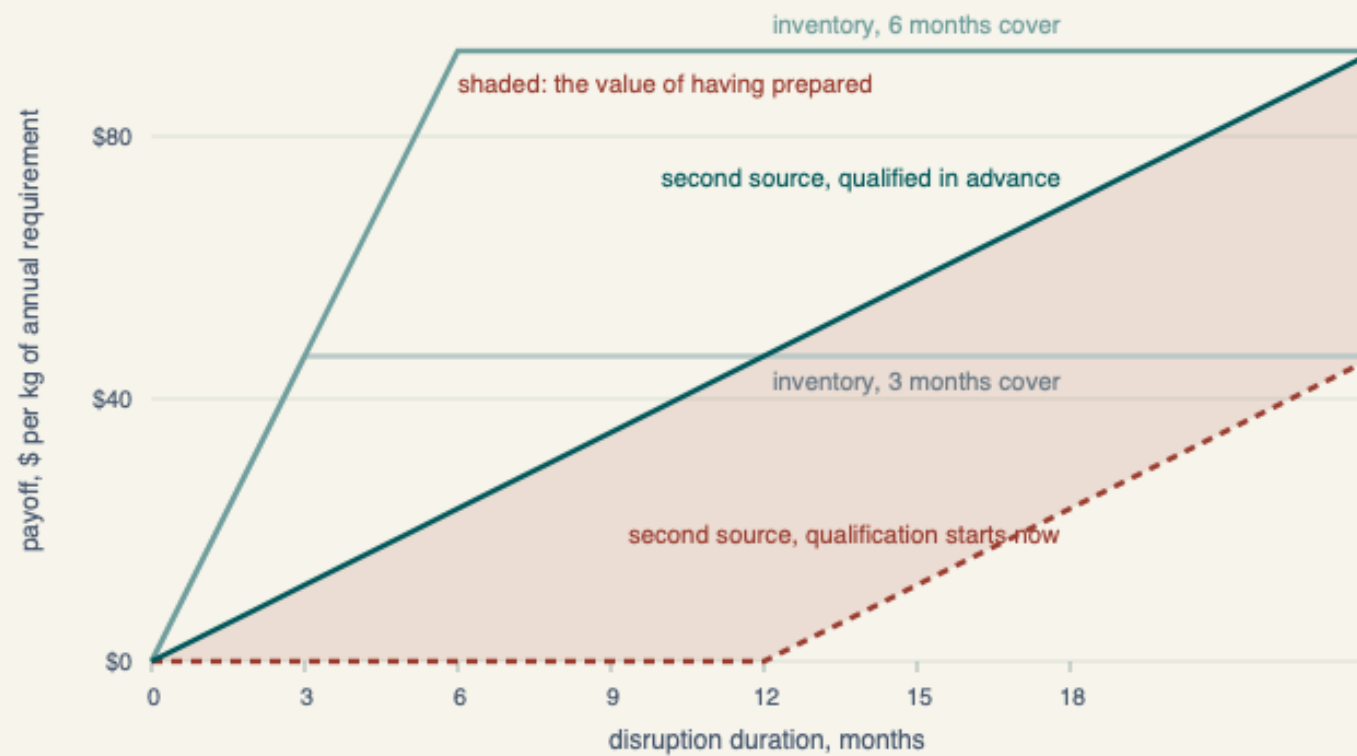
India's scheme specifies a **reverse auction on the subsidy rate**, with capacity offered to the five lowest technically qualified bidders.⁵⁶ Its sales incentive depends on kilograms of magnets sold, while the US floor covers designated NdPr kilograms including stockpiles; Indian capital support follows commissioning and certification, subject to caps.⁵⁷ The semiconductor assembly scheme can release support against eligible spending after approval and the applicant's matching deposit.⁵⁸ The fab guidelines also require continued production and allow recovery after breach.⁵⁹ The magnet scheme directly links its recurrent transfer to output.

The Indian magnet and semiconductor schemes share a further boundary: **none makes upstream origin a condition of support**. The semiconductor schemes fund fabrication and assembly while equipment, materials and process technology stay licensed in from abroad. The magnet scheme's subsidy rate is expressly indifferent to where the oxide comes from, and its request for proposals calls the indicative domestic feedstock route non-binding while leaving each beneficiary responsible for its full oxide requirement, with no milestone relief if that route underdelivers.⁶⁰ A state can condition money on output and still not touch the dependence it is trying to cure.

Resilience payoffs and the price floor

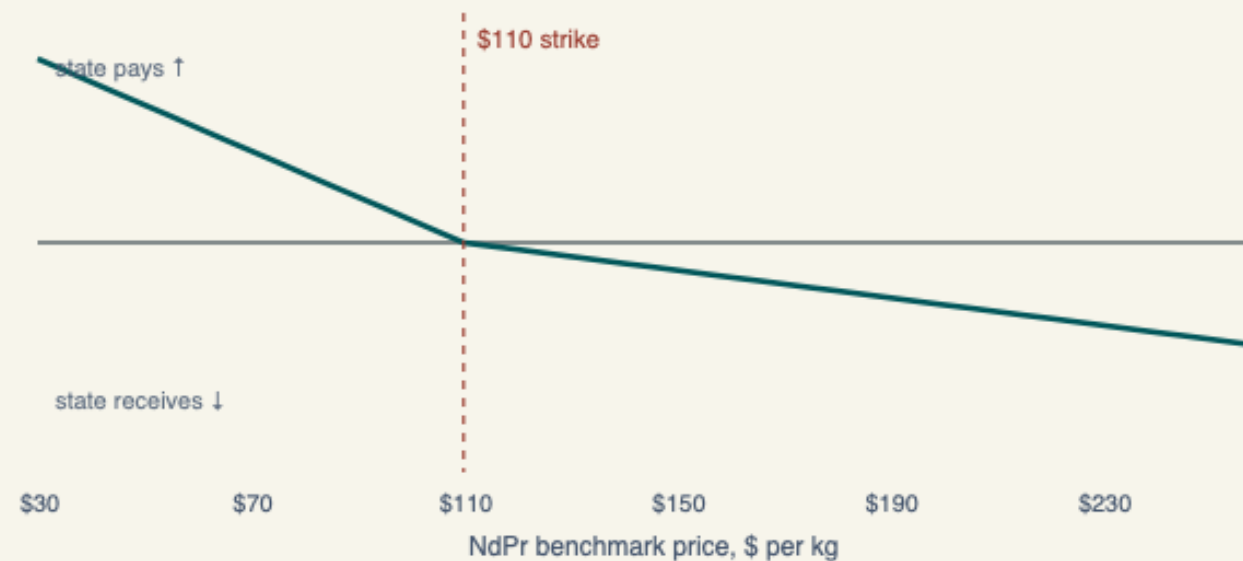
Indiconomics A09 — scenario calculation, not an observation. Dials stated below each panel.

A. What the firm-level instruments pay, by length of disruption



Dials: NdPr \$93/kg (illustrative input) · disruption price 3x · diversified share 25% · qualification 12 months. Values price protection only; avoided output loss is not counted; instruments may avert different output losses.

B. Where the state's own package moves money, by NdPr price



Direction of contractual flows per kg under the price floor and the 30% upside share. The upside leg is payable only after the Production Milestone Date and was not live at the cut-off; the negative arm is a term, not an observed flow. Excludes the offtake, loan, equity and warrant.

How payoffs change with duration

Inventory's payoff stops at its cover. Past that, more stock buys nothing.

A prepared second source protects more as disruption lengthens. At these dials it meets six months of inventory protection at month 24.

An unqualified source delivers nothing until qualification ends. A shorter shock ends before it helps.

At short horizons stock and a second source can complement each other: stock buys qualification time.

A price floor supplies no material during a disruption. It may help keep a producer available later. That value depends on unknown exit risk and avoided loss.

The missing measurements

The unfiled conversion formulas and quarterly designations prevent an outside reconstruction of the MP benchmark. A buyer's months of cover and qualification time would turn two scenario inputs into observations; measured disruption likelihood and avoided output loss would still be needed to decide whether a resilience instrument pays.

The next useful test would match a disruption's duration and lost output to buyers' inventory cover and the time needed to qualify another supplier. The disclosed MP income and receipts can be checked now; its contractual benchmark cannot. Until those missing measurements exist, the shared \$110 tells us no more about which buffer is worth buying.

Sources and calculation notes

1. MP Materials Corp, Form 8-K filed 10 July 2025 (accession 0001193125-25-157310), Exhibit 10.6, Price Protection Agreement, §3(a). All MP filings retrieved from SEC EDGAR on 27 September 2026; receipts, hashes and retrieval times in SOURCES.csv, which is generated from the receipts. [Source 1](#)
2. Lynas Rare Earths, FY26 annual report. JARE floor stated for sales to Japanese industry; it is a floor on the transaction price, not on a separately measured benchmark. [Source 1](#)
3. Lynas FY26 annual report: US Department of War US\$110/kg NdPr oxide floor within a US\$96m four-year purchase allocation, under a binding letter of intent, not a definitive agreement. [Source 1](#) [Source 2](#)
4. Ex 10.6 §1(c), raw/agreements/ex106.txt L45-46. [Source 1](#)
5. Ex 10.6 §1(c) for the benchmark definition, §2 at L97-99 for the Market Price deeming, and §1(a) at L34-37 defining the Asian Metal Market Price as the mid market price per ton of NdPr oxide (Pr6O11 25%, Nd2O3 75%) EXW China published in the Asian Metal Market price index. raw/agreements/ex106.txt. [Source 1](#)
6. Ex 10.6 §2 at L101 and L104: "the greater of (w) [***]" and "the greater of (y) [***]". [Source 1](#)
7. Ex 10.6 §1(i), L66-67, defining the NdPr Calculation Principles as formulas set out in Schedule A. EDGAR full-text search for "NdPr Calculation Principles" returns one hit, the exhibit itself; a nonsense control query returns zero. Receipt in raw/agreements/. [Source 1](#)
8. Ex 10.6 §4(f), L219: "in no circumstances shall the Expert, in making its final determination, be permitted to change the NdPr Calculation Principles." [Source 1](#)
9. Ex 10.6 §1(m), L78-86, defines Restricted Buyer with a clause naming the PRC; §4(g), L222-228, restricts sales to that defined class. The index is EXW China. This does not establish a blanket ban on every buyer in China. [Source 1](#)
10. Ex 10.6 §2, L98-106. [Source 1](#)
11. Ex 10.6 §2, L101-111: redacted minimum deemed prices, later eligibility of Inventory, no reclassification after election, magnet-facility priority and the above-\$110 feedstock exclusion. [Source 1](#)
12. Ex 10.6 §3(a), L118-120. No annual dollar cap or volume maximum appears in the filed 480-line exhibit; Schedules A, B and C are unfiled. This is an absence claim about the filed text only. [Source 1](#)
13. Ex 10.5 Offtake Agreement §6.4.1. [Source 1](#)
14. Ex 10.6 §1(o) and §6. [Source 1](#)
15. Ex 10.6 §8(q)(i), L417-419. [Source 1](#)
16. Ex 10.5 §1.2 and §1.1(a). [Source 1](#)
17. Ex 10.5 §6.1. [Source 1](#)
18. Ex 10.5 §3.5, restated at §12.20: the Federal Acquisition Regulation, the Cost Accounting Standards, the Competition in Contracting Act and the Truthful Cost or Pricing Data Statute, disappplied under 50 U.S.C. § 4533(b). [Source 1](#)
19. Exhibit 10.1, Transaction Agreement, §9.02(a)(v)(4). [Source 1](#)
20. The Q4 2025 figure is the one the FY2025 10-K states for the **full year**, and the two are the same number because the agreement's term began on 1 October 2025, so FY2025 contains exactly one quarter of it; the equality is a derivation, marked as such in data/PPA_ACCOUNTING.md, not a disclosed quarterly figure. Each figure as filed on the face of an income statement: FY2025 10-K L01341 (\$51,016 thousand); Q1 2026 10-Q L00286 (\$42,273); Q2 2026 10-Q L00293 (\$17,580), with H1 at L00295 (\$59,853) reconciling. Sum \$110,869 thousand. [Source 1](#) [Source 2](#) [Source 3](#)
21. MP FY2025 10-K, L03335 and L03350. The \$221.102m balance-sheet carrying amount is that residual plus its share of \$11.3m of capitalisable transaction costs (L03336, L03352). [Source 1](#)

- 22.** KPMG designated the PPA accounting a critical audit matter citing the \$218.6m initial value; its procedures addressed identification and classification of contract terms rather than valuation. [Source 1](#)
- 23.** MP Q1 2026 10-Q MD&A L02539 reports \$51.0m cash received; Q2 2026 10-Q MD&A L03484 reports \$93.3m cumulative for Q4 2025 and Q1 2026 income. The cash-flow statement has no separate PPA line. [Source 1](#) [Source 2](#)
- 24.** Indiconomics illustration, code/IMPLIED_BENCHMARK.py, data/IMPLIED_BENCHMARK.json: using sales volume gives about \$68/kg in Q1 and \$93/kg in Q2; production volume gives \$64 and \$89. Neither KPI is the contractual base, so these do not bound or estimate its price. The contractual formula is unfiled. Note separately that MP's NdPr Sales Volume KPI changed its assumed oxide-to-metal conversion ratio from 1.20 to 1.25 in Q1 2026 without recasting prior periods, and from Q4 2025 began including intercompany sales. [Source 1](#) [Source 2](#)
- 25.** MP FY2025 10-K, discontinuation notice for NdPr Realized Price per KG. [Source 1](#)
- 26.** Ex 10.6 §§1(c), 1(i), 2 defines the benchmark, unfiled kilogram-equivalent conversion and elected categories; MP FY2025 10-K explains why the former realised-price KPI was discontinued. The KPI is not a reproduction of the contract calculation. [Source 1](#) [Source 2](#)
- 27.** Lynas FY26 annual report text L703-712: JARE's 30% upside share starts above US\$150/kg and is capped at US\$10m per year. MP's 30% leg starts only after the Production Milestone Date under Ex 10.6 §3(b), L126-130. [Source 1](#) [Source 2](#)
- 28.** Lynas FY26 annual report: JARE firm commitment to purchase 5,000 tonnes NdPr per annum. [Source 1](#)
- 29.** Lynas FY25 and FY26 annual reports: A\$200 million of equity through the JOGMEC-Sojitz vehicle, and a US\$90 million senior loan at 2.5 per cent maturing 30 June 2030, secured over group assets outside Malawi and Malaysia. [Source 1](#) [Source 2](#)
- 30.** Lynas annual reports: no period discloses the value the JARE floor delivered, because a buyer-paid floor lands inside revenue. [Source 1](#)
- 31.** Lynas FY26 annual report, Note C.4 Financing facilities, at LYC_2026-08-26_FY26-annual-report.txt L6904-L6905 (PDF p.115): Japanese priority supply right no. 4. The subordination is a term of the JARE **loan facility**, not of the March 2026 offtake agreement. [Source 1](#)
- 32.** EDGAR full-text search, 1 January 2025 to 27 September 2026. **Five** phrase queries produce the controlled zeros: response bodies at raw/users/q_inv_monthsofsupply.json, q_inv_monthsofinv.json, q_inv_weeks.json, q_qual_qualperiod2.json and q_qual_newsapp.json; four saved positive controls on the same 10-K/10-Q scope: "rare earth" + "safety stock" 19 filings, + "surcharge" 41, + "inventory build" 11, + "long lead times" 92. Eight further phrasings were tested and are recorded in ledger entry U0-HEADLINE. [Source 1](#) [Source 2](#) [Source 3](#) [Source 4](#) [Source 5](#) [Source 6](#) [Source 7](#) [Source 8](#) [Source 9](#)
- 33.** Coherent Corp Form 10-K. [Source 1](#)
- 34.** Allient Inc Form 10-K. [Source 1](#)
- 35.** General Motors Form 10-K FY2025; MP's Q2 2026 10-Q at raw/mp-filings/MP_10Q_2026Q2.txt L03381 for the prepayment balances, all three stated as at 30 June 2026: "we collected all required prepayments ... totaling \$150.0 million", "we had sold \$104.5 million of magnetic precursor products to GM", and "remain obligated to transfer the remaining \$45.5 million". $104.5 + 45.5 = 150.0$. [Source 1](#) [Source 2](#)
- 36.** MP filings: Apple aggregate ceiling \$200.0 million, \$72.0 million cash received by 30 June 2026, \$0 recognised in revenue, classified as non-current deferred revenue. [Source 1](#)
- 37.** EDGAR full-text search restricted to Apple's CIK: "rare earth" and "MP Materials" both return zero, against a control query for "supply chain" returning seven filings. The searches cover 10-K and 10-Q filings dated 1 January 2025 to 27 September 2026. The zero hits do not negate the arrangement disclosed by MP. [Source 1](#) [Source 2](#) [Source 3](#)
- 38.** Lynas FY26 annual report. [Source 1](#)
- 39.** Lynas FY26 annual report, LYC_2026-08-26_FY26-annual-report.txt L3301-3302: a 7.4% FY26 year-to-date premium against an unidentified benchmark, versus a 5.1% budget. No supply-security attribution appears. [Source 1](#)
- 40.** MOFCOM/GACC Announcement 18, official English lines 12-99, especially 25, 49, 61 and note 3 at 99; effective 4 April 2025. The Chinese text controls. The listed magnet materials include samarium-cobalt and terbium/dysprosium-containing NdFeB; NdPr itself is not listed. [Source 1](#)
- 41.** October 2025 extraterritorial rule: the threshold is 0.1 per cent of the foreign-made item's value attributable to China-origin rare-earth content; this is a value share, not a mass share, which makes the same physical quantity qualify or not as prices move. [Source 1](#)
- 42.** MOFCOM/GACC Announcement 70 of 7 November 2025 suspends Announcements 55-58, 61 and 62 until 10 November 2026, including the October extraterritorial escalation. April's Announcement 18 is not listed; whether a later instrument altered it requires continued monitoring. [Source 1](#)

- 43.** Eurostat Comext DS-045409, EU27 imports of HS 850511 from China, monthly; series in `data/eurostat_EU27_imports_HS850511_from_CN_monthly.csv`, 31 months from January 2024 to July 2026. The API quantity unit is 100 kg; figures here are converted to **tonnes**. April–August 2025: 2,649.6, 2,691.4, 2,353.9, 2,268.8 and 2,770.5 tonnes, below each Q1 2025 month (March: 3,148.7), followed by September at 3,518.5. Four 2024 months fall inside the April–August 2025 band: January 2,647.4, April 2,524.3, May 2,724.7 and June 2,484.0. December 2024 is lower still at 2,230.9, the window's minimum. November 2025 (2,944.2) and May 2026 (2,916.9) again fall below March 2025. This is trade volume, not production or causal evidence. [Source 1](#)
- 44.** USGS Mineral Commodity Summaries 2026, rare earths, `usgs_mcs2026_rare_earth.txt` line 8: "U.S. imports of rare-earth compounds and metals increased by 169% in 2025; however, the estimated value of these imports decreased to \$165 million from \$168 million in 2024, reflecting a shift toward lower-value imported products." The 169 per cent is compounds and metals, not magnets, and the value clause is part of the same sentence. Note that USGS revised its own 2024 US net import reliance for rare-earth compounds and metals from 80 to 53 between its 2025 and 2026 vintages, so reliance comparisons across those publications are invalid. [Source 1](#)
- 45.** European Commission, 3 December 2025. [Source 1](#)
- 46.** Ford Motor Company Form 10-K. The modality of Ford's recurring sentence changes between filings and is quoted from the FY2025 10-K. [Source 1](#)
- 47.** Regal Rexnord, guidance as at 6 August 2025 and as at 30 October 2025. [Source 1](#) [Source 2](#)
- 48.** Regal Rexnord FY2025: Automation & Motion Control organic net sales +\$45.8m for the full year, against a \$12.7m organic decrease in H1 2025. [Source 1](#)
- 49.** EDGAR full-text search with controls; receipts in `raw/exposure/`. [Source 1](#)
- 50.** No such source was located. Recorded as unknown, not zero.
- 51.** Indiconomics scenario calculation, `code/thresholds.py`, exhibit `figures/figure01.svg`, data `figures/FIGURE01_DATA.csv`. Dials: illustrative NdPr input \$93/kg, disruption price 3×, diversified share 25 per cent, qualification 12 months. Values price protection only; avoided output loss is not counted.
- 52.** Indiconomics scenario calculation, `code/thresholds.py`, printed by `python3 thresholds.py --table`. Costs are per kilogram of ANNUAL requirement protected: holding C months of cover on a 1 kg annual requirement means carrying C/12 kg of stock at (financing + storage). Dials: NdPr \$93/kg (reconstructed, not disclosed), financing 9 per cent, storage and obsolescence 3 per cent.
- 53.** Same script. Breakeven annual probability = annual cost / payoff if disrupted, at a disruption price multiplier of 3. Avoided output loss is excluded and could differ across instruments.
- 54.** Government of India approval of 26 November 2025, ₹7,280 crore, 6,000 MTPA nameplate integrated sintered magnet capacity. [Source 1](#)
- 55.** Official Indian figures, ranges across FY2022-23 to FY2024-25. [Source 1](#)
- 56.** Scheme documents: reverse auction on subsidy rate, five technically qualified lowest bidders, rate indifferent to oxide origin. [Source 1](#)
- 57.** Ministry of Heavy Industries, Request for Proposals for the Scheme to Promote Manufacturing of Sintered Rare Earth Permanent Magnets, 20 March 2026, physical pp. 14–18, clauses 1.3.2(e), 1.3.4, 1.3.5 and 1.3.6: sales incentive per kilogram sold and capital support after full-capacity commissioning and certification, subject to scheme caps. [Source 1](#)
- 58.** MeitY, Guidelines for the Modified Scheme for Compound Semiconductors and ATMP, 10 October 2022, §§2.12 and 8.5: pari-passu release from a No-Lien Account after approval and matching deposit. Fab guidelines of 29 May 2023, §§12.1–12.2: production, employment and value addition as periodic-review subjects. [Source 1](#) [Source 2](#)
- 59.** Fab guidelines §13.5 at L00401-00404: "Units receiving fiscal support under the Scheme shall have to remain in commercial production for a period of at least 3 (three) years from the date of commencement of commercial production of the entire project and provide an undertaking for the same." §13.9 at L00424-00429 lists recovery triggers including "breach of any of the terms under the Scheme". [Source 1](#)
- 60.** Ministry of Heavy Industries, Request for Proposals for the Scheme to Promote Manufacturing of Sintered Rare Earth Permanent Magnets, 20 March 2026: the indicative IREL route is called non-binding for bid reliance, the government does not guarantee its delivery, and each beneficiary remains responsible for its full oxide requirement with no milestone relief. [Source 1](#)