

# Argus Rare Earths Monthly Outlook



## Outlook

### The month ahead

The upwards momentum for magnet and heavy rare earths spot prices halted in mid-May, and prices dropped steadily for the remainder of the month and into June. Prices for other rare earths remained stable. The outlook for the month ahead is for a weakening in monthly price averages for medium to heavy rare earths.

### The next 3-6 months

Prices for the key rare earths are now well below the average breakeven price for the industry, squeezing margins and profitability. Demand remains sluggish but prices are forecast to improve as the year progresses.

### 12 months forward

In the longer term, electric vehicle (EV) sales and offshore wind power capacity additions are likely to strengthen prices for rare earth magnet materials into 2025, with supply of heavy rare earths more constrained than for light rare earths.

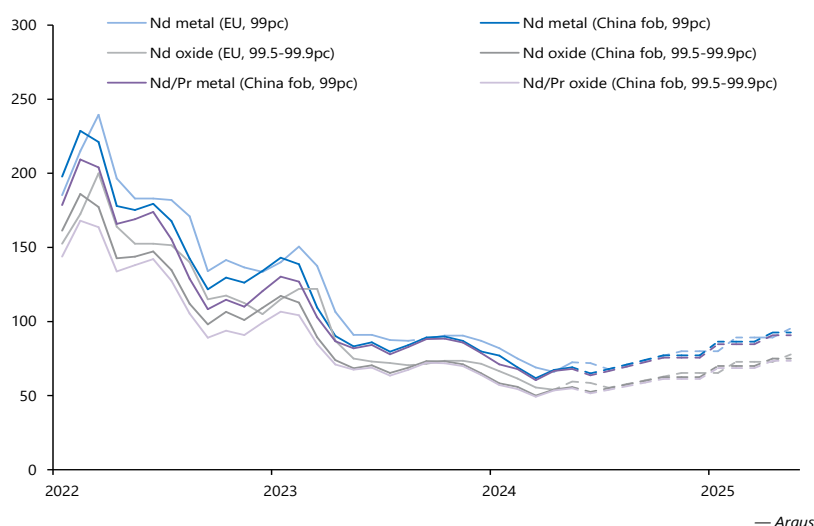
### Neodymium prices

Spot neodymium prices continued their recent rise in early May, but then reversed course and declined steadily towards the end of the month. Neodymium oxide prices (99.5-99.9pc, fob) averaged \$55.27-56.27/kg in May, up by 3pc on the month, with neodymium metal (min 99pc, fob) prices averaging \$68.63-69.63/kg, up by 2.6pc. In Europe, the neodymium oxide price was assessed 5.9pc lower at \$54-58/kg on 3 June, with metal down by 6.2pc at \$66-70/kg.

**OUTLOOK:** Weakening

Neodymium prices, 2022-25

\$/kg

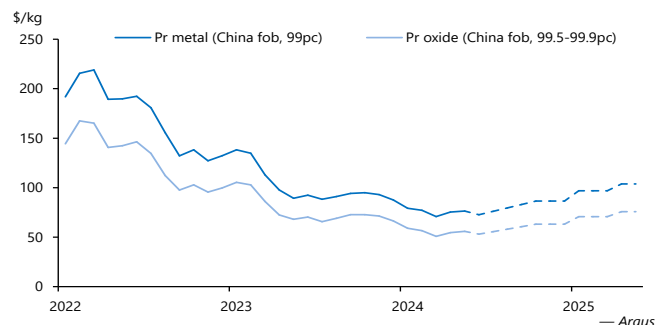


## International pricing series

### Praseodymium

Spot praseodymium prices tend to follow neodymium price trends very closely. The average monthly fob price for 99.5-99.9pc praseodymium oxide increased by 2.3pc to \$55.36-56.36/kg last month, while fob prices for 99pc praseodymium metal were higher by 1.3pc at an average price of \$75.89-76.89/kg.

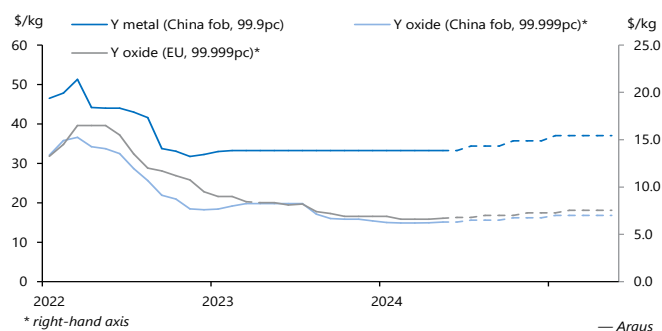
**OUTLOOK:** Weakening



### Yttrium

Spot yttrium oxide prices in China remained stable in May, with oxide and metal prices unchanged. The average monthly fob price for 99.999pc yttrium oxide was only slightly higher at \$6.10-6.50/kg, while fob prices for 99.9pc yttrium metal remained at \$32-34.50/kg. The price for 99.999pc yttrium oxide in Europe was assessed down by 3.7pc at \$6.10-6.80/kg on 3 June.

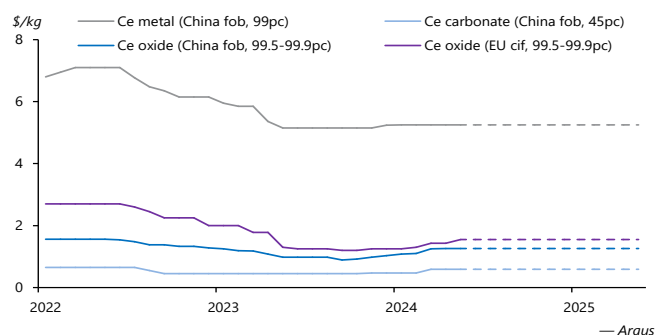
**OUTLOOK:** Stable



### Cerium

Spot cerium oxide prices stabilised after increasing by 20pc in the first quarter. The average monthly fob price for 99.5-99.9pc cerium oxide in May was unchanged at \$1.23-1.28/kg, while average fob prices for 99pc cerium metal remained at \$5.10-5.40/kg. The price in Europe was assessed up by 16pc at \$1.60-2/kg on 3 June.

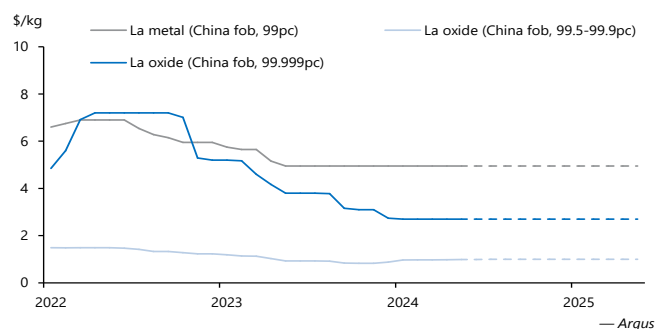
**OUTLOOK:** Stable



### Lanthanum

Spot lanthanum prices were stable in May. The average monthly fob price for 99.5-99.9pc lanthanum oxide was unchanged at \$0.95-1/kg, while fob prices for 99pc lanthanum metal remained at \$4.80-5.10/kg. The monthly average for the higher-grade 99.999pc lanthanum oxide remained at \$2.60-2.80/kg in May.

**OUTLOOK:** Stable



## Price outlook

- China's new energy vehicle (NEV) sales accounted for 32pc in 2023 and 36pc in April. Sales rose by 34pc to 850,300 in April, and 32pc to 2.94mn in January-April
- Energy Fuels is acquiring Australia-based mineral sands developer Base Resources to gain access to the monazite stream from its Toliara project in Africa
- China's total exports of rare earths in January-April rose by 10pc from a year earlier to 18,049t

The price downtrend for most light, medium and heavy rare earths continued from mid-May into early June, as more suppliers destocked material and reduced offers further. More market participants expect the downtrend to continue in the near term, with ample spot supply of rare earths and magnet manufacturing plants waiting for even lower prices.

Argus assessed domestic prices for 99pc NdPr oxide at 369-372 yuan/kg (\$50.94-51.35/kg) ex-works on 4 June, down by Yn4/kg against 30 May in response to profit-taking activity from trading firms and falling metal transaction prices. Oxide separation producers and trading houses lowered offers to generate sales during the period. An oxide separation plant sold 5t of NdPr oxide at Yn370/kg ex-works on 4 June.

Export prices moved down to \$51.20-51.70/kg fob on 4 June from \$51.80-52.30/kg fob on 30 May, in line with the fall in domestic prices.

The price for 99pc NdPr metal was also assessed lower at Yn455-458/kg ex-works on 4 June, down from the 30 May assessment of Yn462-465/kg. A magnet producer purchased 60t of the metal at Yn455/kg paid by cash and Yn458-459/kg paid by acceptance bill.

Most metal producers expect metal prices to extend the downward trend in the near term owing to sporadic purchases from magnet producers. Export prices fell to \$63.20-63.70/kg fob from \$64-64.50/kg fob during the same period.

Weak demand from metal producers continued to weigh on the neodymium oxide market. Prices for 99.5-99.9pc neodymium oxide fell by Yn5/kg from 30 May to Yn375-380/kg

ex-works on 4 June. Export prices slid to \$52-53/kg fob from \$52.70-53.70/kg fob during the same period.

Tepid demand from magnet manufacturing plants and the fall in oxide feedstock prices exerted pressure on the neodymium metal market. Prices for 99pc neodymium metal fell to Yn463-468/kg ex-works on 4 June from Yn470-475/kg on 30 May. Export prices decreased to \$64-65/kg fob from \$65-66/kg fob over the same period.

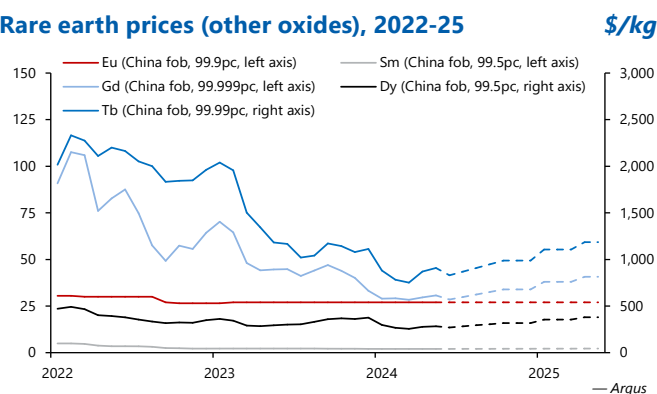
Domestic prices for 99.5-99.9pc praseodymium oxide were assessed at Yn375-385/kg ex-works 4 June, down from Yn383-388/kg on 30 May, in line with the fall in NdPr oxide prices and reduced enquiries from metal producers. Export prices went down to \$52.20-53.20/kg fob from \$53-54/kg fob during the same period.

The price for 99.5pc dysprosium oxide was assessed at Yn1,910-1,930/kg ex-works on 4 June, down from Yn1,940-1,960/kg ex-works on 30 May. More suppliers continued to cut their offers to boost sales, but more buyers remained on the sidelines on expectations of much lower prices considering abundant spot supplies and weaker consumer demand.

Export prices were assessed lower at \$265-270/kg fob China from \$268-273/kg fob China in the same period, in line with falling domestic prices and weaker export purchases.

The lower oxide feedstock costs and slower magnet purchases pushed down the metal market, with prices for 80pc ferro-dysprosium lower at Yn1,880-1,900/kg ex-works on 4 June from Yn1,920-1,940/kg ex-works on 30 May. Some metal plants even offered lower at Yn1,860/kg to attract sales, but

Rare earth prices (other oxides), 2022-25



there were almost no deals reported over the past few days. Export prices were assessed lower at \$259-264/kg fob China from \$265-270/kg fob China in the same period, pressured by weaker domestic prices and demand.

The range for 99.99pc terbium oxide was assessed lower at Yn5,850-5,950/kg ex-works on 4 June, down from the 30 May price of Yn6,150-6,250/kg ex-works. Buyers told *Argus* that they could secure material at Yn5,800/kg as some suppliers were eager to sell material at much lower prices. The price downtrend has shown no signs of easing in the near term. Export prices were assessed lower at \$815-835/kg fob China from \$850-870/kg fob China in the same period, in response to lower domestic prices and weaker export demand.

The lower oxide prices and magnet demand weighed on the metal market. Prices for 99.9pc terbium metal were assessed lower at Yn7,500-7,600/kg ex-works on 4 June from the 30 May price of Yn7,900-8,000/kg ex-works. Some even offered Yn7,400/kg in a bid to destock material, but more magnet plants had little interest in making spot purchases as they were inclined to operate from inventories to await even lower prices. Export prices fell to \$1,040-1,060/kg fob China from \$1,090-1,110/kg fob China in the same period, in line with weaker domestic prices and export purchases.

The erbium and holmium markets moved down under pressure from sufficient spot supplies and weaker consumer demand. Prices for 99.5pc erbium oxide fell to Yn305-310/kg ex-works on 4 June from Yn310-315/kg ex-works on 30 May. The price for 99.5pc holmium oxide fell to Yn490-500/kg ex-works from Yn500-510/kg ex-works in the same period.

Prices for monazite fell to Yn34,000-36,000/t ex-works on 4 June, corresponding to Yn4,131-4,374/t for the PrO + NdO value contained in the material, from Yn35,500-37,500/t ex-works on 28 May, because some suppliers were eager to sell material with expectations of a further fall in spot prices in the coming days. This sentiment came after China's major light rare earths producer Northern Rare Earth on 3 June cut its June listed prices for NdPr owing to subdued demand from the downstream magnetic material industry.

In Europe, prices for the key magnet rare earths – neodymium, praseodymium, dysprosium and terbium – fell in May on weak global demand and the resumption of price cuts in China. However, cerium oxide and erbium oxide have pushed

higher, bolstered by tight prompt availability in Europe and elevated container freight rates.

The monthly price for neodymium oxide was assessed on 4 June at \$54-58/kg cif Europe, down by \$3.50/kg from the start of May, while neodymium metal fell by \$4.50/kg over the period to \$66-70/kg cif. Underlying demand in Europe remains muted and activity is unlikely to pick up in the near term as the summer holiday draws near.

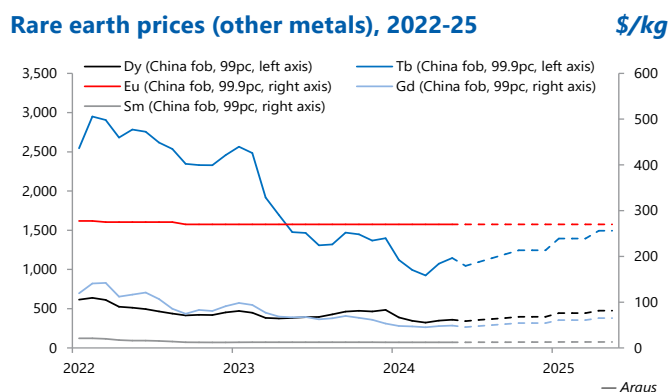
Europe's praseodymium market is also under pressure from falling Chinese prices and slower global demand. Spot price levels floated recently, ranging from the low \$50s/kg cif to about \$60/kg cif, depending on the origin of the material and parties involved, according to market participants.

By contrast, cerium oxide suppliers have been targeting higher price levels in May, with the monthly European assessment rising by \$1.60-2/kg cif. The cerium oxide cif Europe market's premium to fob China has widened in the past two months, largely because of limited availability from Chinese producers and increased container freight rates.

As with cerium, erbium oxide has also risen in the past month – similarly bolstered by tight supply and elevated shipping costs. European inventories are being carefully managed to avoid getting caught short, lifting the monthly European assessment to \$46-50/kg cif on 4 June, up from \$43-47/kg cif at the start of May.

European prices for dysprosium oxide and terbium oxide fell in May, responding to the Chinese market downtrend. The monthly assessment for dysprosium oxide settled at \$270-290/kg cif Europe on 4 June, while terbium oxide was assessed at \$840-890/kg cif.

Rare earth prices (other metals), 2022-25



## Price table

Argus rare earths indexes (cumulative averages)					
Element	Units	Month index May 24	Moving quarterly average	Moving yearly average	Forecast May 25
Cerium					
carbonate min 45% REO fob China	\$/kg	0.59	0.59	0.49	0.59
metal min 99% fob China	\$/kg	5.25	5.25	5.25	5.25
oxide min 99.5-99.9% fob China	\$/kg	1.26	1.26	1.06	1.26
oxide 99.5-99.9% cif Europe	\$/kg	1.55	1.47	1.30	1.55
Dysprosium					
metal min 99% fob China	\$/kg	359.53	343.44	405.40	475.00
oxide min 99.5% fob China	\$/kg	282.90	271.84	315.03	380.00
Europium					
oxide min 99.99% fob China	\$/kg	27.00	27.00	27.00	27.00
Ferro-dysprosium					
min 80% Dy fob China	\$/kg	278.75	267.19	307.24	367.50
Gadolinium					
metal min 99% fob China	\$/kg	48.85	47.22	56.82	65.00
oxide min 99.99% fob China	\$/kg	30.71	29.58	37.94	40.00
Lanthanum					
metal min 99% fob China	\$/kg	4.95	4.95	4.95	4.95
oxide min 99.5-99.9% fob China	\$/kg	0.98	0.98	0.92	1.00
oxide min 99.999% fob China	\$/kg	2.70	2.70	3.08	2.70
Mischmetal					
35% La 65% Ce fob China	\$/kg	5.45	5.45	5.45	5.45
low Zn and Mg fob China	\$/kg	25.50	25.50	25.50	25.50
Neodymium					
metal min 99% fob China	\$/kg	69.13	66.08	66.95	92.50
oxide min 99.5-99.9% fob China	\$/kg	55.77	53.30	63.45	75.00
metal 99% cif Europe	\$/kg	72.50	69.17	82.21	95.50
oxide 99.5-99.9% cif Europe	\$/kg	59.50	56.33	66.88	77.50
Praseodymium					
metal min 99% fob China	\$/kg	76.39	74.18	85.02	105.00
oxide min 99.5-99.9% fob China	\$/kg	54.58	53.99	64.77	83.50
Neodymium-praseodymium					
metal min 99% fob China	\$/kg	68.03	65.04	76.68	90.75
oxide min 99% fob China	\$/kg	55.86	53.75	63.75	75.00
Samarium					
metal min 99% fob China	\$/kg	12.25	12.25	12.35	13.00
oxide min 99.5% fob China	\$/kg	2.01	2.01	2.09	2.20
Terbium					
metal min 99.9% fob China	\$/kg	1,146.25	1,048.02	1,253.18	1,495.00
oxide min 99.99% fob China	\$/kg	908.75	843.48	994.15	1,185.00
Yttrium					
metal min 99.9% fob China	\$/kg	33.25	33.25	33.25	37.00
oxide min 99.999% fob China	\$/kg	6.30	6.24	6.76	7.00
oxide 99.999% cif Europe	\$/kg	6.70	6.63	7.08	7.50

## Markets

Chinese exports of rare earth permanent magnetic materials rose in April from a month earlier, supported by increased buying because of price falls. Shipments of permanent magnets rose by 14pc from the previous month to 4,784t in April, according to Chinese customs data. But the April exports were lower by 3pc from the 4,972t shipped a year earlier.

Chinese exports were 17,568t over January-April, down by about 2pc from 18,011t a year earlier. Germany, South Korea and the US remained China's major permanent magnet consumers, accounting for 42pc of the country's total exports over January-April.

The US' newly announced tariff hikes are likely to have mixed effects on China's exports of permanent magnets, natural graphite and some critical minerals. Market participants in China expect that the 25pc tariff will weigh on China's export volumes and prices for permanent magnets, as well as the consumption of rare earth feedstock.

Output expansions and project start-ups in China in recent years have caused an oversupply in the magnet manufacturing industry. Falling rare earth prices and a slowdown in global economic growth have dented market sentiment and restrained magnet demand from the international market.

China's exports of permanent magnets to the US rose by 15.3pc from the previous year to 7,341t in 2023, and accounted for 14pc of China's total exports of 52,689t during the same period. Shipments to the US in the first quarter of this year rose by 0.6pc to 1,608t from a year ago, accounting for 12pc of China's total exports. Producing 7,341t of permanent magnets consumes approximately 2,200t of praseodymium-neodymium metal and 2,600t of praseodymium-neodymium oxide, according to *Argus* estimates.

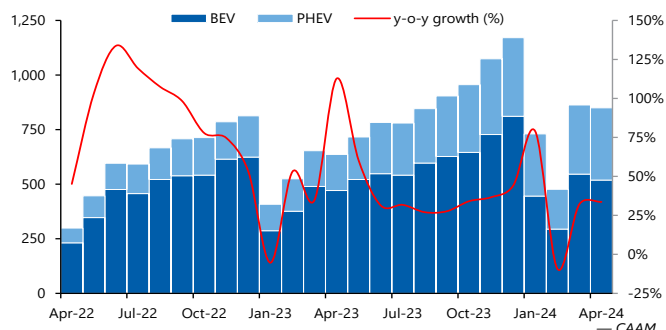
### EV outlook

Global NEV demand far exceeds current supply capacity, China's commerce ministry, Mofcom, said, reiterating that there is no overcapacity in the country's renewable industries.

NEV sales globally are anticipated to reach 45mn units by 2030, triple the figure of 2023, the ministry said, citing the Paris-based IEA's data. The global renewable industry is still in the stage of initial development and rapid growth without

Chinese monthly EV sales, 2022-24

'000 units



any excessive output capacity, but with insufficient supplies, it added.

A number of world leaders, including US president Joe Biden, secretary of state Antony Blinken and German chancellor Olaf Schulz, have expressed their concerns about China's overcapacity in its renewable sectors. Chinese president Xi Jinping last week denied there was an overcapacity problem.

China deems that its new energy industry is contributory and not a threat to the world's new energy industry. "China's EV exports of 1.2mn units in 2023 reduced around 2mn t of carbon emissions," Mofcom spokesperson He Yadong said. "China's new energy industry development is to address the global climate change."

The US and EU have accused China of unfair trade practices by giving excessive subsidies to the NEV industry. Chinese participants have argued that China's NEV development is based on technological innovations and market competition.

Mofcom declined to disclose when and what measures China will use to counter the US' newly announced tariff hikes against \$18bn worth of imports from China, targeting clean energy technologies, steel and aluminium. Beijing said it would take "resolute" measures to safeguard its own rights and interests.

China's NEV production, sales and market penetration continued to rise in April compared with a year earlier, driven by firm consumer demand. NEV sales accounted for 26pc of the country's total automotive sales in 2022, rising to 31.6pc in 2023, 32.8pc in March, 36pc in April and 32.4pc in January-April this year.

China aims to raise the share of NEVs in its total vehicle sales to 45pc by 2027.

China produced 869,300 NEVs in April, up by 36pc on the year and by 0.7pc from a month earlier, with sales increasing by 34pc from a year earlier but decreasing by 3.7pc from the previous month to 850,300, according to data from the China Association of Automobile Manufacturers (CAAM). NEV production totalled 2.985mn units across January-April, up by 30pc from the same period last year, with sales increasing by 32pc to 2.94mn.

A lack of EV charging points is the main factor preventing consumers from switching from internal combustion engine vehicles, consumer survey firm JD Power has found. Among buyers that are somewhat unlikely or very unlikely to consider an EV, 52pc cite a lack of charging points – an increase of 3 percentage points on the year.

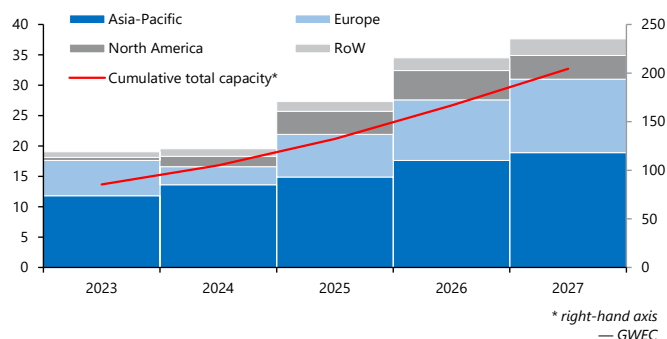
“The main roadblocks to getting consumers behind the wheel of an EV are the continued shortage of affordable vehicles, charging concerns and a lack of knowledge regarding the EV ownership proposition, including incentives,” according to JD Power’s executive director of EV intelligence, Stewart Stropp.

The US in March released a strategy for electrifying road freight. This envisages starting with charging hubs at rail yards and airports, before full coverage by 2035-40.

New EV registrations in the US have been strong compared with other major markets, albeit starting from a lower base, according to the IEA. Sales in the US rose by 40pc to 1.4mn last year, compared with growth of 35pc in China and less than 25pc in Europe. But public charging point (PCP) additions have been weaker, with the US having just 6pc as many PCPs as China at the end of last year, compared with 22pc as many EVs on the road.

In Europe, sales of EVs of all power types increased in April. Hybrid EVs (HEVs) registered the strongest growth on the year at 29.1pc in the EU, European Free Trade Association (EFTA) states and the UK, ahead of growth of 14.8pc for battery EVs (BEVs) and 3.7pc for plug-in hybrid EVs (PHEVs). Year-to-date sales followed a similar pattern to April, with HEV, PHEV and BEV sales in the EU + EFTA + UK rising by 21.8pc, 9.3pc and 6pc, respectively.

## Global offshore wind capacity additions, 2023-27 **GW**



BEV sales in April were particularly strong in France and Belgium, up by 45.2pc and 41.6pc on the year, respectively, while sales in Germany – the largest BEV market in the region – edged down by 0.2pc.

Sales growth across the continent this year is expected to be the weakest out of the three major markets at 10pc, according to the IEA.

### Offshore wind

EU ministers have given final approval for a Net Zero Industry Act, following earlier approval by the European Parliament. The regulation sets an annual target for at least 40pc of strategic net zero technology by 2030 to come from EU-based manufacturing. It also establishes a 50mn t/yr CO<sub>2</sub> injection target.

Priority permitting status can now be given by EU states to a list of net zero technologies including solar, carbon capture and storage, sustainable biogas and biomethane, wind, heat pumps, nuclear, hydrogen, batteries, grid, nuclear fission and sustainable alternative fuels.

Other technologies specifically mentioned are hydropower, energy efficiency, renewable fuels of non-biological origin, CO<sub>2</sub> transport and utilisation, wind and electric propulsion and any other nuclear technologies.

EU states will be required to respect binding time limits for the entire permit granting process, depending on the net zero projects’ status and size, as well as facilitate market access for strategic technology products, particularly in public procurement and renewables auctioning.



## Supply

Interest in monazite as a feedstock for rare earth processing is rising as producers look for sources outside China, bringing mineral sands projects into the supply chain. Deposits of rare earth elements are typically found in rock formations including carbonatites and granites, in calc-silicate sequences and ionic adsorption clay deposits.

But as downstream consumers and governments increasingly look to diversify their supply chains, monazite is becoming attractive as an alternative source. Monazite is a phosphate mineral that contains about 55-60pc rare earth oxides (REOs). It contains 17 rare earth elements.

Reflecting this, US-based uranium and rare earths producer Energy Fuels is acquiring Australia-based mineral sands developer Base Resources to gain access to the monazite stream from its Toliara project in Africa as a feedstock.

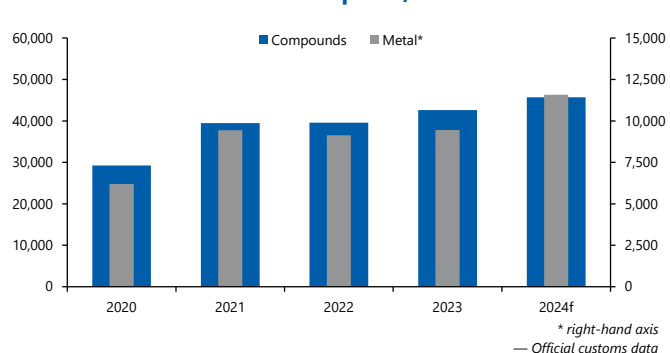
The Toliara heavy mineral sands project in Madagascar plans to produce monazite as a by-product of its primary titanium and zirconium output. The first stage of Base's Toliara project, scheduled for September 2027, aims to produce an average of 17,400 t/yr of monazite. The second stage would see production ramp up to 26,100 t/yr.

Toliara's monazite stream will provide the feedstock Energy Fuels needs for REO production at its White Mesa uranium and vanadium mill in Utah. The facility will also process the uranium content from the feed and, if needed, it can also recover thorium.

White Mesa has been processing monazite supplied by US titanium dioxide producer Chemours. But its output has been limited as there is not enough monazite in the feed, whereas Toliara contains more than 1mn t of monazite and has about 1.5mn t of existing tailings capacity.

Energy Fuels is in the process of commissioning its Phase 1 NdPr separation facility, which is scheduled to start production by the end of the first half of 2024. It expects to produce 35t of NdPr oxalate in 2024. Phase 1 will have the capacity to process 8,000-10,000 t/yr of monazite to produce up to 800-1,000 t/yr of NdPr oxide, while the company plans to increase its NdPr capacity to 3,000 t/yr in 2026-27 and add heavy rare earth processing in 2027-28. It is already starting

Annual Chinese rare earth exports, 2020-24



to pilot heavy rare earth separation and is exploring moving downstream into metal and alloy production.

Energy Fuels also owns the Bahia project in Brazil, which could supply 4,000-5,000 t/yr of monazite to White Mesa Mill to produce 400-500 t/yr of NdPr oxide and 20-25 t/yr of dysprosium and terbium oxides.

Energy Fuels has the potential to produce 4,000-6,000 t/yr of NdPr oxide, 150-225 t/yr of dysprosium oxide and 50-75 t/yr of terbium oxide, which would supply enough magnetic REOs to supply 3mn-6mn EVs per year.

Chinese rare earths producer Shenghe Resources is investing in mines for heavy mineral sands which contain rare earths titanium and zirconium in Tanzania. Shenghe's wholly-owned subsidiary Ganzhou Chenguang Rare Earths aims to pay A\$43mn (\$28.6mn) to acquire a 100pc stake of Strandline Resources UK from its parent firm Strandline Resources, an Australian heavy minerals developer.

Strandline Resources UK holds an 84pc stake in Nyati Mineral Sands, which operates the Fungoni, Tajiri, Sudi and Bagamoyo heavy mineral sand mines in Tanzania. Nyati has obtained the mining rights for the Fungoni and Tajiri projects, while Sudi and Bagamoyo are still under exploration. The Tanzanian government owns 16pc of Nyati. The Fungoni project has an ore resource of 22mn t with an average heavy mineral sand grade of 2.8pc. The Tajiri project has an ore resource of 268mn t, with an average heavy mineral sand grade of 3.3pc.

Shenghe has been accelerating overseas resource expansions to build up global supply chains and enhance its profitability. It has purchased an 18.2pc stake in Australian



rare earths exploration firm Vital Metal, which owns two rare earth resource projects comprising the Nechalacho bastnaesite mine in Canada and the Wigu Hill deposit in Tanzania.

Holding company Vietnam Rare Earth has reached an initial agreement with Australian mining firm Blackstone Minerals to build a fully-integrated rare earths value chain in Vietnam.

UK-based metal and alloys maker Less Common Metals (LCM) and ASX-listed Ionic Rare Earths are building out their collaboration with a new agreement focused on magnet recycling and the production of other alloys including samarium-cobalt (SmCo) and scandium (Sc).

Under the initial agreement, the companies will look to expand recycling opportunities from magnet manufacturing in the UK and US and will engage with governments to support and expand western magnet recycling capabilities. They will collaborate on the production of other alloys including SmCo and Sc, integrating Ionic Technologies' recycling technology to supply high-purity oxide.

This agreement follows a previous collaboration that was announced in September – also involving US car manufacturer Ford – to develop a UK-based circular rare earth magnet supply chain.

As part of the 2023 agreement, Ionic Technologies plans to deliver the first supply of NdPr oxide, dysprosium oxide and terbium oxide to LCM in July, which will convert it first to metals and then to alloys.

The alloys will go towards magnet manufacturing through a Europe-based subcontractor. Those magnets – originating from recycling REOs – will be delivered to Ford's EV drive-train production facility in Halewood, UK.

LCM is the only commercial rare earth metal and alloy producer outside China – aside from Chinese associated plants in southeast Asia – with the existing capability to accept all products that Ionic Technologies aims to produce through recycling, and is also a provider of feedstock for Ionic Technologies' recycling process.

Rare earth project tracker					
Company	Mine	Country	Stage of development	Resource (mn t)	REO (mn t)
Vital Metals	Nechalacho	Canada	Operating; RE extraction plant construction halted (Apr23)	170.30	2.13
Iluka Resources	Eneabba	Australia	Mine operating; REO refinery due to start up in 2025 (Mar 23)	1.00	na
Mineracao Serra Verde	Serra Verde	Brazil	Operating; ramping up to 5,000 t/yr REO (Jan 24)	911.00	1.09
Northern Minerals	Browns Range	Australia	Targeting final investment decision in 1H 2024 (Aug 23)	9.00	0.06
Hastings Technology Metals	Yangibana	Australia	First production scheduled for 2Q 2025 (Dec 23)	29.93	0.28
Aclara Resources	Penco/Carina	Chile/Brazil	Carina Module clays arrive at pilot plant (Dec 23)	168.00	0.25
Arafura Resources	Nolans	Australia	First production expected by end 2026 (Dec 23)	56.00	1.46
Australian Strategic Materials	Dubbo	Australia	First production scheduled for 2027 (Dec 23)	75.20	0.74
Australian Rare Earths	Koppamurra	Australia	Sampling and metallurgical testwork under way (Sep 23)	186.00	0.13
Brazilian Rare Earths	Rocha de Rocha	Brazil	Advanced exploration; new Jorc estimate 2Q 2024 (Dec 23)	510.00	0.77
Defense Metals	Wicheeda	Canada	Shipping MREC to Ucore (Jan 24)	45.30	0.80
Ionic Rare Earths	Makuutu	Uganda	Mining licence provisionally approved by Ugandan govt (Jan 24)	315.00	0.20
Leading Edge Materials	Norra Karr	Sweden	Natura 2000 permit application process in progress (Sep 23)	110.00	0.55
Lindian Resources	Kangankunde	Malawi	Mining/environmental licences approved; feasibility 2Q 2024 (Dec 23)	261.00	5.74
Meteoric Resources	Caldeira	Brazil	Feasibility started; MOU signed with Neo Performance Materials (May 24)	409.00	1.07
Mkango Resources	Songwe	Malawi	First production of REO carbonate targeted for 2026 (Oct 23)	21.00	0.30
Peak Rare Earths	Ngualla	Tanzania	Targeting 16,200 t/yr REO production by 2026 (Oct 23)	214.40	4.60
Pensana Rare Earths	Longonjo	Angola	Early-stage development activities funded by \$15mn loan (Jan 24)	240.00	3.85
Rainbow Rare Earths	Phalaborwa	South Africa	Definitive feasibility study due by end 2024 (Oct 23)	30.40	0.13
Rarex	Cummins Range	Australia	Regulatory submissions planned for mid-2024 (Dec 23)	519.30	1.65
Torngat Metals	Strange Lake	Canada	Pre-feasibility study due by end 2024 (Dec 23)	563.52	4.91
VHM	Goschen	Australia	Signed binding offtake agreement with Shenghe (Feb 24)	629.00	0.41

## Trade

The administration of US president Joe Biden plans to enact Section 301 tariffs against Chinese permanent magnets from 2026 as part of broader actions targeting \$18bn worth of imports from the country.

The White House will levy a tariff of 25pc on imports of the magnets in an effort to protect the US from China's "unfair trade practices", up from a current tariff rate of zero.

Permanent magnets have multiple applications – some of which are military – and are gaining growing political attention because of their usage in EV powertrains and offshore wind turbines. The US is heavily reliant on China for permanent magnets and the rare earth materials that give these magnets their unique properties.

In 2023 alone, China accounted for 376mn – or 90pc – of the NdPr and SmCo magnets imported into the US, according to data from the US Department of Commerce (DoC).

The US DoC has in the past cautioned against imposing any restrictions on permanent magnets from China, saying in September 2022 that while America's reliance on China is a risk to national security, the "severe lack of domestic production capability through the magnet supply chain" meant that any trade barriers could "have an adverse impact on consuming sectors and might incentivise businesses to move operations incorporating NdFeB magnets offshore".

The decision to now impose import tariffs marks a change of tack from Washington and suggests a growing commitment to developing full US rare earth magnet supply chains.

The Japanese magnet industry is observing the aftermath of the US hiking tariffs against Chinese critical minerals, despite Chinese exporters predicting Japan could increase exports to the US as a result. It remains unclear if Japanese magnets could be price-competitive for US consumers even after the tariff hike, according to a market participant.

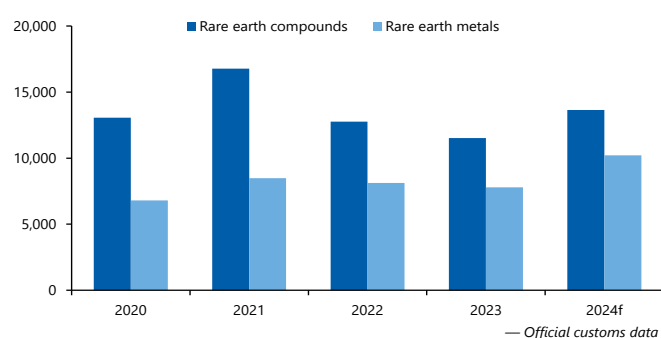
Whether the Japanese magnet producers can expand output capacity within a year or so is another issue to be looked at, the participant said, given that the US government is planning to impose the new tariffs against China from 2026.

The US, whose magnet purchases are heavily dependent on foreign deliveries, imported approximately 6,200t of magnets from China last year under HTS code 8505110070, according to data by the US International Trade Commission, while it purchased only 180t from Japan. "It's difficult to increase several thousand tonnes [of magnet] exports" to replace all the Chinese products in such a short period, another participant added.

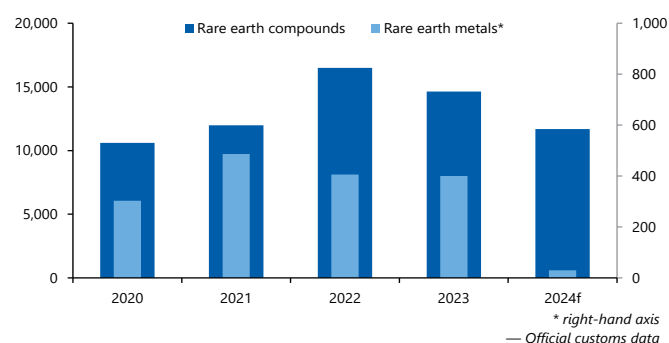
China's rare earth metal ore imports from the US fell on the year and month in April. The US cut exports to China because of a rise in domestic oxide consumption. Imports of US rare earth metal ores fell by 44pc on the year and by 16pc on the month to 4,836t in April, according to Chinese customs data.

This was equivalent to 2,659t of REO, down from 4,772t in April 2023 and 3,185t in March. The average price for US rare earth metal ores fell by 12pc on the month and by 60pc on the year to \$2,468/t in April.

Annual Japanese rare earth imports, 2020-24



Annual US rare earth imports, 2020-24



China imported 18,232t of rare earth metal ores in January-April, down from 25,290t a year earlier. This was equivalent to 10,027t of REO, down from 12,645t over the same period. The average import price for rare earths dropped by 57pc on the year to \$2,903/t for January-April.

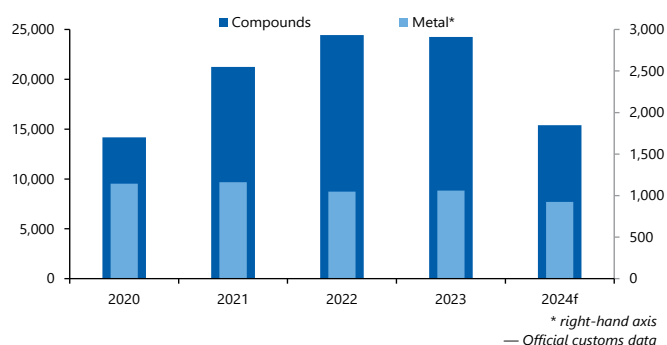
China in April imported 6,159t of rare earths or 4,959t of REO from Myanmar, which was up from 4,224t of REO in April 2023 and 4,438t in March. The average import price for rare earths was \$19,383/t in April, down from \$22,251/t in April 2023 but up from \$16,812/t in March.

Imports from Myanmar in April accounted for 78pc of China's total imports of 7,873t. Laos was the second-largest supplier of ion-absorption ores at 958t of REO, followed by Malaysia with 312t of REO.

China imported 20,357t of rare earth ores from Myanmar in January-April. This was equivalent to 15,360t of REO in January-April, up slightly from 15,287t a year earlier. The average import price for January-April dropped by 27pc on the year to \$17,597/t.

Myanmar remained the largest supplier of ion-absorption ores to China, accounting for 74pc of the country's total imports. This was followed by Laos with 2,621t of REO and Malaysia with 1,285t.

Annual EU27 + UK rare earth imports, 2020-24



China's January-April rare earth exports rose from a year earlier on the back of firm restocking demand from overseas buyers and comparatively lower export prices.

Total shipments from January-April rose by 10pc from a year earlier to 18,049t, customs data show. The average export price in January-April fell to \$9,767/t from \$19,375/t a year earlier. But the 10pc year-on-year rise for January-April slowed from a 14pc increase in the first quarter of this year and an 18pc rise in January-February.

April exports fell by 3pc from a month earlier to 4,566t. But the April exports were almost unchanged from 4,574t in April 2023. The average export price in April was \$7,227/t, down by 44pc from March and by 60pc from \$18,030/t a year earlier.

Argus provides a trusted and independent view into the changing energy landscape.

How is the global energy system transforming?

Visit the [Argus Energy Transition Hub](https://www.argusmedia.com/energy-transition) for the latest news and insights  
[www.argusmedia.com/energy-transition](https://www.argusmedia.com/energy-transition)



The global energy transition

As commodity markets evolve, so does our coverage.



Visit the [Argus Energy Transition Hub](https://www.argusmedia.com/energy-transition) for the latest news and insights  
[www.argusmedia.com/energy-transition](https://www.argusmedia.com/energy-transition)

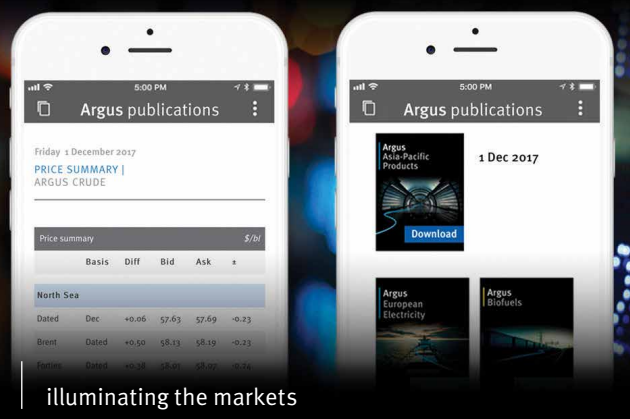
**Access on-the-go: Argus Publications app.**

Closer to our clients. Closer to the market.

A new option is now available for you to access Argus publications, no matter where your work takes you.

- Optimized for reading on Android or iPhone
- Charts and tables optimized for mobile access
- Jump quickly to sections of interest

**Download** the app now



illuminating the markets

**Argus Rare Earths Monthly Outlook:  
Data & Downloads Available**

The Argus Rare Earths Monthly Outlook also features downloadable market data published in spreadsheet format, available only in Argus Direct.

**Downloads include:**

- All monthly outlook raw price forecast data
- Global new projects tracker (updated monthly)
- Global trade balance data (updated monthly)

For more information, visit:

**[argusmedia.com/rare-earths-outlook](http://argusmedia.com/rare-earths-outlook)**

Metals

illuminating the markets

Market Reporting  
Consulting  
Events



**Argus Rare Earths Monthly Outlook** is published by Argus Media group

**Registered office**

Lacon House, 84 Theobald's Road,  
London, WC1X 8NL  
Tel: +44 20 7780 4200

ISSN: 2057-0279

**Copyright notice**

Copyright © 2024 Argus Media group  
All rights reserved  
All intellectual property rights in this publication and the information published herein are the exclusive property of Argus and/or its licensors (including exchanges) and may only be used under licence from Argus. Without limiting the foregoing, by accessing this publication you agree that you will not copy or reproduce or use any part of its contents (including, but not limited to, single prices or any other individual items of data) in any form or for any purpose whatsoever except under valid licence from Argus. Further, your access to and use of data from exchanges may be subject to additional fees and/or execution of a separate agreement, whether directly with the exchanges or through Argus.

**Trademark notice**

ARGUS, the ARGUS logo, ARGUS MEDIA, INTEGER, ARGUS RARE EARTHS MONTHLY OUTLOOK, other ARGUS publication titles and ARGUS index names are trademarks of Argus Media Limited. Visit [www.argusmedia.com/Ft/trademarks](http://www.argusmedia.com/Ft/trademarks) for more information.

**Disclaimer**

The data and other information published herein (the "Data") are provided on an "as is" basis. Argus and its licensors (including exchanges) make no warranties, express or implied, as to the accuracy, adequacy, timeliness, or completeness of the Data or fitness for any particular purpose. Argus and its licensors (including exchanges) shall not be liable for any loss, claims or damage arising from any party's reliance on the Data and disclaim any and all liability related to or arising out of use of the Data to the full extent permissible by law.

All personal contact information is held and used in accordance with Argus Media's Privacy Policy <https://www.argusmedia.com/en/privacy-policy>

**Publisher**

Adrian Binks

**Chief operating officer**

Matthew Burkley

**Global compliance officer**

Vladas Stankevicius

**Chief commercial officer**

Jo Loudiadis

**President, Expansion Sectors**

Christopher Flook

**SVP Consulting services**

Lloyd Thomas

**Senior Analyst**

Mark Seddon  
Tel: +44 20 7199 7247  
[mark.seddon@argusmedia.com](mailto:mark.seddon@argusmedia.com)

**Customer support and sales:**

[support@argusmedia.com](mailto:support@argusmedia.com)  
[sales@argusmedia.com](mailto:sales@argusmedia.com)

London, Tel: +44 20 7780 4200

Houston, Tel: +1 713 968 0000

Singapore, Tel: +65 6496 9966

