Will the magnet rare earths prices rise in 2024?

written by Matt Bohlsen | January 12, 2024
Today we take a look at the magnetic rare earths sector and two leading rare earth companies and what we can expect in 2024 and beyond.

The magnet rare earths prices have fallen in 2022 and 2023

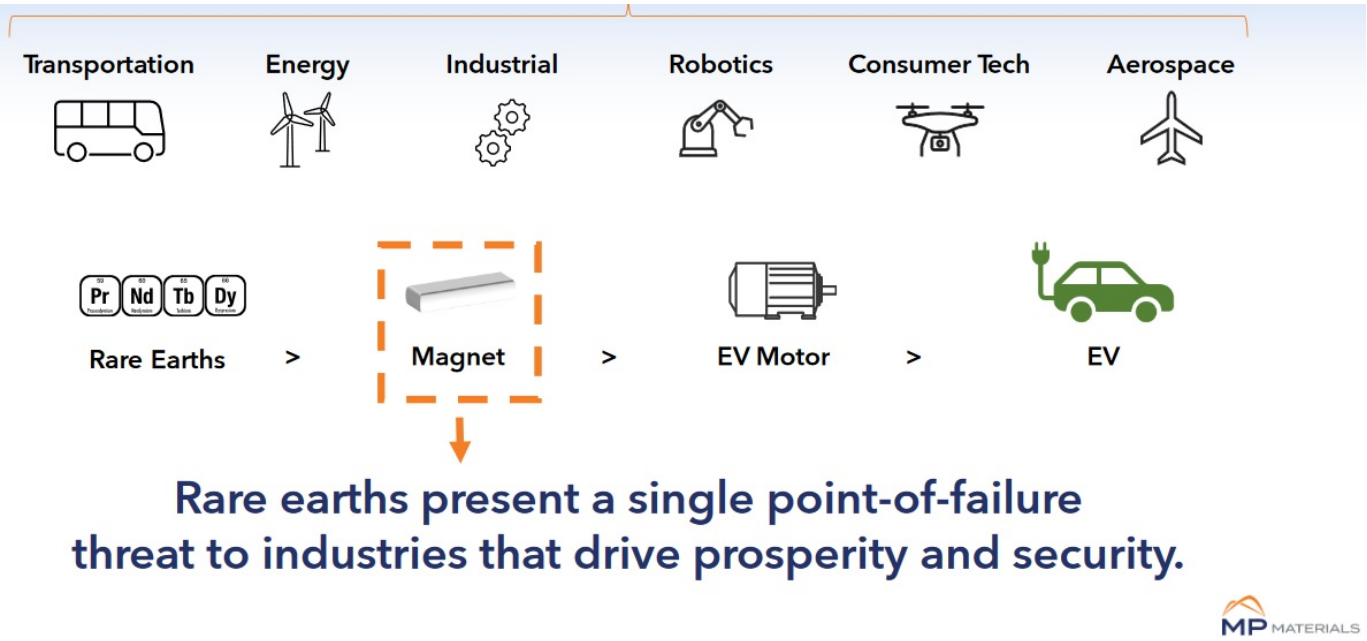
The magnet rare earths sector was hit hard in 2023 with China's Neodymium (Nd), Praseodymium (Pr), and Dysprosium (Dy) prices falling as the global economy and EV demand slowed.

Neodymium prices came crashing down in 2022 and 2023 as demand slowed after the 2021 growth rate boom in EV sales – Now at CNY 530,000/t

Source: [Trading Economics]

Global plugin electric car sales [grew by 108%] in 2021 causing a huge spike in EV metal prices. Then in 2022, the growth rate slowed to 56% at a time when supply of most EV metals surged. Finally in 2023, the growth rate slowed further to an estimated 28%, resulting in further price decline for the magnet metals such as neodymium.

Demand for the magnet rare earths in electric motors is driven by multiple sources with electric vehicle sales being a key driver. (90% of EV motors use rare earth magnets)



Source: [MP Materials company presentation]

Will the magnet rare earths prices rise in 2024?

The answer to this question will largely depend on recovery in China and the global economy driving increased demand for EVs, wind turbines, and other magnets used in various industrial applications. Given the most recent trend globally has been towards future interest rate decreases (notably in the USA and China), it bodes well for a recovering consumer and hence demand. This may take a good part of 2024 to flow through with excess inventories across many sectors still needing to be worked off. If we get a strong pickup in EV demand (>40% YoY increase) in 2024, then the magnet rare earths sector woes could soon disappear.

China’s December 2023 EV sales give some hope as they jumped to a record [945,000 units], achieving a superb 47% YoY growth rate.

Lynas Rare Earths Ltd. (ASX: LYC) ("Lynas") update

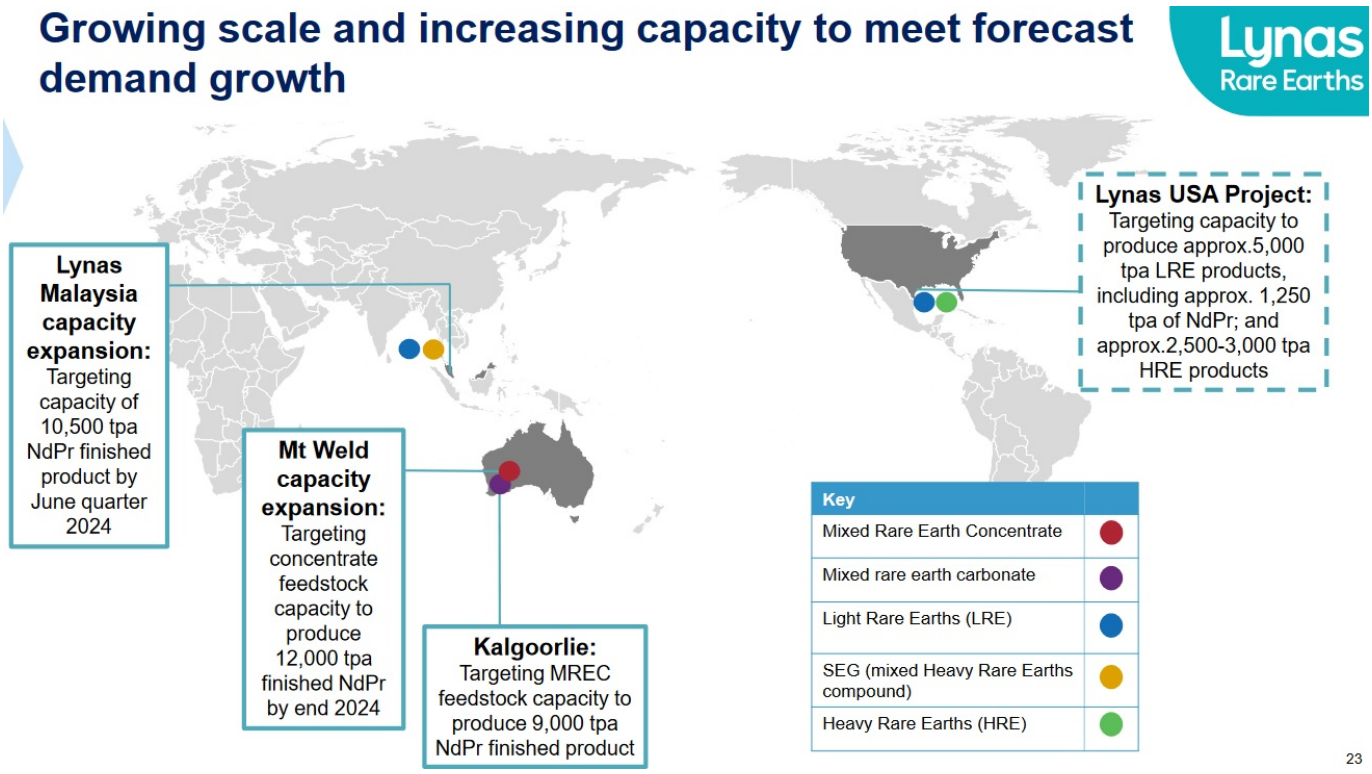
The big recent Lynas news (announced December 7, 2023) is that the first feed of material from the Mt Weld Mine has been introduced into the new Kalgoorlie Rare Earths Processing Facility in Western Australia, leading to first production and ramp-up of the Facility. A great achievement for Lynas, especially given that the Kalgoorlie Rare Earths Processing Facility is Australia's first value-added rare earths processing facility. Lynas stated:

The Lynas Malaysia plant is currently shutdown as works to increase downstream processing capacity are completed. Production will recommence in January 2024. Mixed Rare Earth Carbonate (MREC) from the Kalgoorlie Rare Earth Processing Facility will be progressively introduced to the Lynas Malaysia plant commencing late in the March quarter and increasing as the controlled ramp up of the Kalgoorlie facility is progressed.…"

Once their expansions are completed, Lynas intend to increase their production capacity to 10,500tpa NdPr (Neodymium-Praseodymium). Lynas produced 6,142t of NdPr in FY 2023.

2024 will see the Mt Weld Mine expansion and further work on Lynas' US Rare Earths Processing Facility Project targeted to be operational by July 2025 – June 2026.

Lynas is expanding its rare earths mining and processing capabilities through to 2025/26



Source: [Lynas company presentation]

MP Materials Corp. (NYSE: MP) (“MP Materials”) update

MP Materials owns and operates the Mountain Pass Rare Earth Mine and Processing Facility in California, USA. In the past MP Materials had to ship their concentrate to China for processing; however, they have a target to bring this back to the USA.

Their target is to grow their mine output by 50% over the next four years and to build separation capacity in the USA with annual production of 6,000 tpa NdPr oxide. The third stage of their plan is to build a greenfield production facility in Texas targeting ~1,000tpa of finished NdFeB (Neodymium Iron Boron) magnets. They already have General Motors (NYSE: GM) as a foundational customer.

MP Materials is working towards Stage II and Stage III of their plan to bring rare earths processing and magnets production to

the USA

Source: MP Materials company presentation

Closing remarks

2024 should see a year of consolidation for the rare earths sector as some experts are telling me. Some forecasts are for NdPr supply deficit to begin as early as 2024; however, this will largely depend on China demand, the global economy, EV sales, and new NdPr supply hitting the market.

The two Western magnet rare earths leaders Lynas and MP Materials (and some other key players) are progressing their plans to further build a western supply chain and should be largely complete within the next 2-4 years if it goes to plan. This all supports the building of an end-to-end Western rare earths and magnets sector this decade. Stay tuned.

ASM’s Rare Earths Leadership and CEO Rowena Smith’s Global Vision

written by InvestorNews | January 12, 2024

In a recent InvestorNews interview, Tracy Weslosky had a conversation with Australian Strategic Materials Limited’s (“ASM”) (ASX: ASM) Managing Director and CEO Rowena Smith, delving into the company’s new ventures and its unique positioning in the rare earths market.

Eyes on Korea: The Emerging Epicenter of the Rare Earth Supply Chain

written by Jack Lifton | January 12, 2024

To sum up, while the global discourse frequently orbits around China and the US, the Korean rare earth landscape is bustling. Their relentless quest to develop a comprehensive domestic supply chain for rare earth permanent magnets will invariably lead to a demand spike, which may catch many by surprise.

Energy Fuels Q2-2023: On the Pathway to Reshape America's Critical Minerals Landscape

written by InvestorNews | January 12, 2024

In the constantly evolving world of critical minerals, every quarter brings about new promise and potential. But, when a company not only meets its benchmarks but pushes the boundaries of what's conceivable, it warrants a closer look. Energy Fuels Inc.'s (NYSE American: UUUU | TSX: EFR) Q2-2023 results have done just that.

American Rare Earths' Melissa Sanderson on the 'potentially rich deposit' of magnetic materials in Wyoming

written by InvestorNews | January 12, 2024

Jack and Melissa also discussed geopolitical elements in the rare earths' landscape. Despite potential shifts in the White House and its policy approach to mining and natural resources, Melissa expressed optimism. She referenced an unprecedented bipartisan agreement on the Hill. On one side, the left is driven by the demands of climate change and the pursuit of a more sustainable economy. On the other, the right is focused on

national security and the reduction of dependence on foreign entities like China.

Stephen Burega Onsite at the Appia Alces Lake Project in Northern Saskatchewan

written by InvestorNews | January 12, 2024

In an exclusive onsite interview from the Alces Lake Project in Northern Saskatchewan, Stephen Burega, the President of Appia Rare Earths & Uranium Corp. (CSE: API | OTCQX: APAAF), engages with Tracy Weslosky of InvestorIntel to share insights on the progress of the company's drilling program. Burega praises the team's efficiency and the advances made during his inaugural visit to the site, providing Weslosky and her audience with an up-close view of the operations.

He underscores the effective utilization of the budget, revealing that they have successfully completed one-third of the project and are strategically directing their efforts towards uncovering new targets. The interview includes a special appearance by Appia Project Geologist, Kahlen Branning, who offers viewers a glimpse into a core shed and elaborates on the critical minerals present in the samples, namely terbium, neodymium, and dysprosium.

Further into the discussion, Burega outlines the instrumental role of helicopters in the movement of drilling equipment, underscoring the operation's logistical ingenuity. The

conversation concludes on an optimistic note as Burega shares the promising future of the Alces Lake project and its potential in rare earth extraction.

To access the full InvestorIntel interview, click here

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About Appia Rare Earths & Uranium Corp.

Appia is a publicly traded Canadian company in the rare earth element and uranium sectors. The Company is currently focusing on delineating high-grade critical rare earth elements and gallium on the Alces Lake property, as well as exploring for high-grade uranium in the prolific Athabasca Basin on its Otherside, Loranger, North Wollaston, and Eastside properties. The Company holds the surface rights to exploration for 113,837.15 hectares (281,297.72 acres) in Saskatchewan. The Company also has a 100% interest in 13,008 hectares (32,143 acres), with rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario. Lastly, the Company holds the right to acquire up to a 70% interest in the PCH Project which is 17,551.07 ha. in size and located within the Goiás State of Brazil. (See June 9th, 2023 Press Release – Click Here)

To learn more about Appia Rare Earths & Uranium Corp., click here

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If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

The Debate for the Most Critical Rare Earths Project in the World Begins

written by InvestorNews | January 12, 2024

American Rare Earths Limited is a leading developer of rare earth elements with a strong focus on developing sustainable and cost-effective extraction and processing methods. ARR's 100% owned three rare earths projects are all located in the USA. ARR has recently decided to re-domicile to the USA in line with their projects' location.

Iluka Resources is building Australia's first fully integrated rare earths refinery

written by InvestorNews | January 12, 2024

Iluka Resources Limited (ASX: ILU) ("Iluka") is an Australian critical metals producer, specializing in mineral sand mining and processing. Iluka is the world's largest producer of zircon, a major producer of high grade titanium feedstocks rutile and synthetic rutile, and is set to become a significant global

supplier of refined rare earths from 2025.

Weathering the rare earth prices storm, all eyes are on Neo Performance

written by InvestorNews | January 12, 2024

“Neo Performance Materials’ organization today is the closest that North America has yet come to a totally vertically integrated rare earth permanent magnet supplier. Now, the company has acquired and is moving to bring a significant rare earth deposit in Greenland into production. When that occurs, it will be the first company outside of China, ever, to be a totally vertically integrated manufacturer of rare earth permanent magnets. We should all be watching Neo Performance as if our (self-sufficient and secure) independent economic lives depend on it.” – Jack Lifton, Co-Chairman, Critical Minerals Institute

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Lynas Surges Ahead with Expansion Plans, Record

Production & Solid Quarterly Results Despite Tesla's Rare Earths Comments

written by InvestorNews | January 12, 2024

Lynas Rare Earths Limited (ASX: LYC) ("Lynas") recently announced some positive news that the Malaysian authorities have advised that their license to import and process lanthanide concentrate is now valid until 1 January 2024, effectively a 6-month extension to get their Malaysian rare earths unit in line with environmental requirements.

Meanwhile, Lynas continues to oppose the Malaysian government's 'new' rules and is working on alternate facilities in Western Australia. Should the Malaysian situation not be resolved then Lynas has a backup plan. The announcement stated:

> *"The licence variation allows the Lynas Malaysia cracking and leaching plant to continue to operate until 1 January 2024 and will remove the requirement for a shutdown at the Lynas Malaysia plant prior to 1 January 2024."*

At the heart of the issue is that the Malaysian authorities say the cracking and leaching plant generates radioactive waste. Lynas argues that they are meeting the conditions as per their original agreement with the Malaysian government. Lynas stated:

> *"Lynas had applied to the MOSTI Minister for the removal of the conditions which limit operations at the Lynas Malaysia facility as they represent a significant variation from the conditions under which Lynas made the initial decision to invest in Malaysia."*

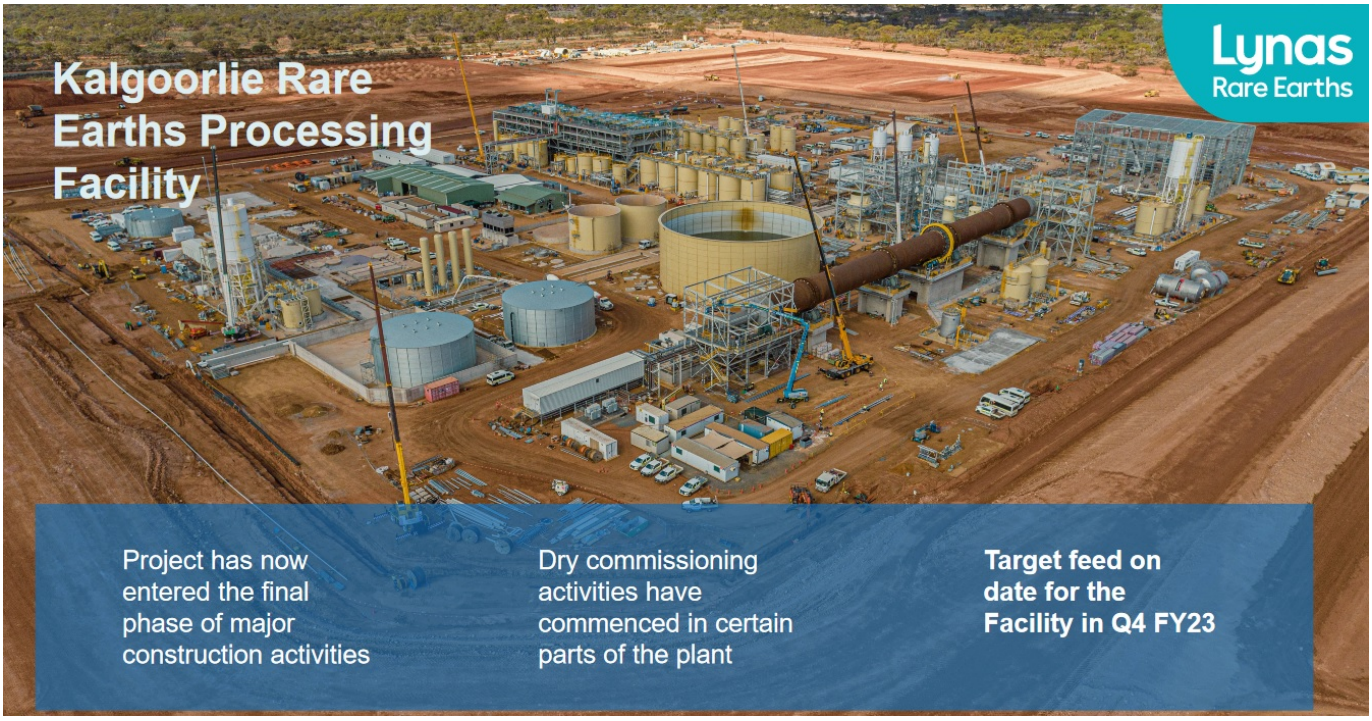
We will have to wait until January 1, 2024, to see what happens next regarding Lynas operating its cracking and leaching plant in Malaysia.

Lynas' Kalgoorlie Rare Earths Processing Facility is in the final stages of construction, feed to start this quarter (Q4/FY23 – Ending June 30)

Lynas has been rapidly building a backup rare earths processing facility in Kalgoorlie, Western Australia. Lynas stated that the facility "has now entered the final phase of major construction activities, dry commissioning activities have commenced in certain parts of the plant, target feed on date for the Facility in Q4 FY23."

Lynas plans to use rare earths carbonate feed from their Mt Weld Mine to feed the new Kalgoorlie rare earths processing facility once complete (noting a ramp-up period applies). The product would then be shipped to Malaysia for final processing.

FIGURE 1: Lynas' under construction rare earths processing facility in Kalgoorlie Western Australia

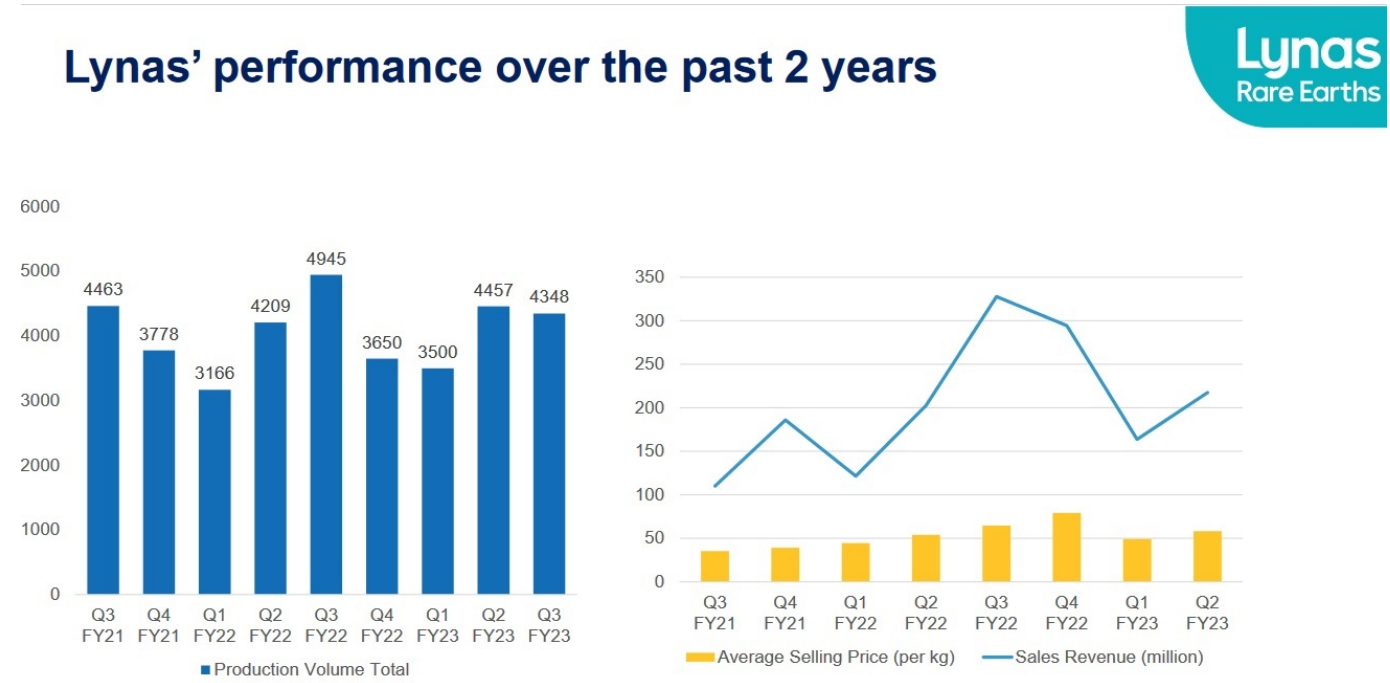


Source: Lynas company presentation

Lynas achieved record NdPr production in Q3/FY23 (Ending March 31)

In Q3/FY23 Lynas produced 4,348 tonnes of total rare earths oxide and a record 1,725 tonnes of Neodymium-Praseodymium ("NdPr"). This resulted in A$237.1 million of revenue for the quarter. The chart below shows Lynas' revenue trending slightly higher over the past 2 years on the back of solid production and prices.

FIGURE 2: Lynas' last 2 years Total Rare Earth Oxides ("TREO") production volumes and sales revenues



Source: [Company presentation]

USA LRE and HRE facilities update

The USA Light Rare Earth ("LRE") and Heavy Rare Earth ("HRE") facilities plan to be able to process both light and heavy rare earths.

Lynas has secured a greenfield site in an existing industrial zone in Texas, further progressed the detailed engineering design, and engaged a preferred U.S. Engineering, Procurement, Construction, and Management ("EPCM') contractor.

Tesla plans to use non-rare earths motors in their next generation vehicle

Lynas CEO, Amanda Lacaze, stated in the [Q3, FY 2023 earnings call]:

"The neodymium iron boron [NbFe] magnet technology is the most

energy efficient, because it is the lightest motor, and over the life time of the vehicle it gives you the best efficiency… …and it has the lowest CO2 emissions… …more are choosing NbFe technology than the alternative… …today we find that demand still is ahead of our ability to service everyone who would like to buy Lynas NdPr… …the current (price) softness is very much about internal China dynamics… …but we at Lynas remain very confident of the long term trend and we know that the Chinese rare earth firms share that confidence. We remain committed to growing to meet the market and that's one of the reasons why our ambitious capital investment plan continues."

Closing remarks

Lynas is very well positioned in 2023 with A$1.12 billion in cash (as of March 31, 2023) and is on target with its expansion plans.

The 6-month Malaysian extension also means that Lynas' rare earths production can continue uninterrupted, at least until January 1, 2024. At that point, the Kalgoorlie facility should hopefully be operating smoothly and ramping up production and offer an alternative should the Malaysia cracking and leaching plant need to be shut down on January 1, 2024.

Lynas Rare Earths trades at a market cap of A$6.82 billion and a PE ratio (TTM) of 12.39.