# Lynas Surges Ahead with Expansion Plans, Record Production & Solid Quarterly Results Despite Tesla's Rare Earths Comments

written by InvestorNews | May 22, 2023

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.“*

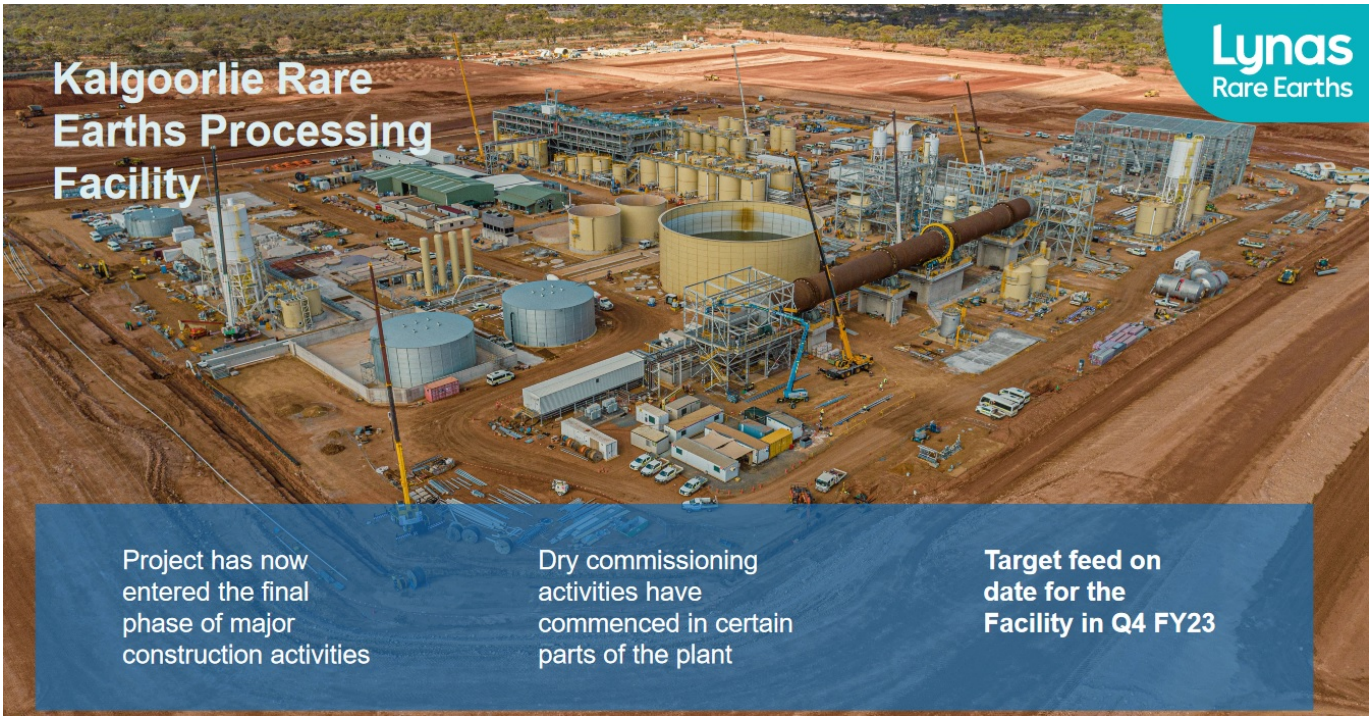
We will have to wait until January 1, 2024, to see what happens next regarding Lynas operating its cracking and leaching plant in Malaysia.

## 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

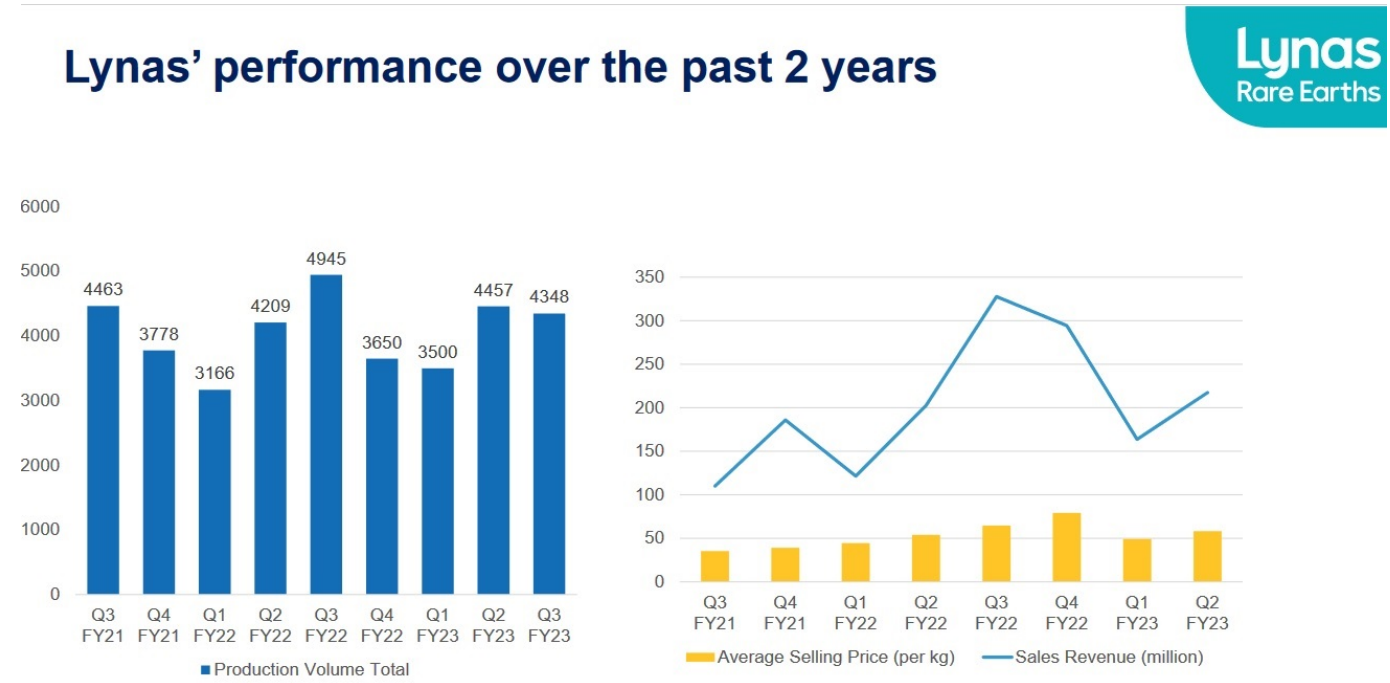



*Source: Lynas company presentation*

# 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.

# Lynas Bets $500 Million on Rare Earths Market Expansion

written by Melissa (Mel) Sanderson | May 22, 2023

Lynas Rare Earths Ltd.'s (ASX: LYC) August 3 announcement that it will invest an additional $500 million to rewrite its own already aggressive growth plan is risky, sure, but then, when it comes to rare earths, what isn't? Managing Director Amanda Lacaze appears to be reading the demand-pull market for Lynas' main products, neodymium (Nd) and praseodymium (Pr), as further accelerating, despite some hits to the "green" economy from the war in Ukraine. There are sound reasons supporting such a view, including the commitments by EU auto manufacturers to cease all gasoline production by 2025 and recent (surprising) political developments in the US, especially passage of the CHIPS Act (supporting redevelopment of a US-based semiconductor industry) and the current Inflation Reduction Act (also known as Build Back Better in disguise) likely to be approved this week by the House of Representatives and signed quickly by President Biden.

Lynas is particularly well-positioned to benefit from this latest legislation as it already has two agreements with the US Department of Defense for construction of two separation plants: a $30 million light rare earths plant (deal signed in January 2022) and also in June a $120 million deal for a heavy RE plant. This in addition to Japan's ongoing demand, a not insignificant factor as Lynas self-identifies as controlling 80% of that market.

So, if all looks positive on the demand, where are the risks? Well, unvarnished success will require the split-second timing of a juggler. Expanding output at Mt. Weld should be a green light: the deposit and its characteristics are well known and

should present few obstacles to an experienced team (with the usual caveats about the weather which these days can be a real Devil).

But, there is a problem with Malaysia. Despite winning an unprecedented two EcoVadis awards, political and public concerns about radioactive materials led the Malaysian government to refuse to extend Lynas' cracking and leaching permits. (ESG Comment: this goes to show how history haunts even companies who had nothing to do with previous problems, and how hard it can be to gain and retain trust.)

Lynas announced in February of this year that it has received Ministerial approval for its Kalgoorlie rare earth processing facility, clearing the way for construction to begin. This new facility will strip and store the radioactive elements (uranium and thorium) and then ship the "clean" material to Malaysia for final processing. Thus the timing issue. If the processing plant can be constructed in record time with no unexpected issues, it could dovetail nicely with the increased output from the mine. Otherwise, lower through-put or possibly storage of mined materials could be necessary, providing a cost hit. And even if the timing is impeccable, there will be some increased product cost due to shipping to and processing at Kalgoorlie and then onwards to Malaysia.

Nonetheless, kudos to Lynas for a bold move, going for market share in a booming market with positive political signals and economic momentum. As Christopher Ecclestone said to InvestorIntel: "Lynas just goes to show that it is a doer when so many others are just talkers in the Rare Earth space."

# Lynas Continues Its Reign Under Amanda The Great

written by Tracy Weslosky | May 22, 2023

Look online, and you will discover that while Lynas Rare Earths Ltd. (ASX: LYC) is covered by 9 research companies, it is impossible to find one PDF Equity Research Report online. For Australian-listed companies, sometimes they publish the reports on their website; unfortunately, not for Lynas.

Dig deeper online and you may see a headline about whether Lynas has too much debt… these conclusions are in my humble opinion quite wrong, and underestimate this rare earths' ruler outside of China, Amanda Lacaze.

I ran my conclusions by a semi-retired analyst, who requested anonymity and wrote me back promptly in agreement: "Saw their balance sheet and they are running just over 1x debt: cash flow and their cash flow is strong based on growing sales and commodity prices."

The media loves to tout Chinese control of rare earths, but it is a woman with an iron fist that rules the rare earths world. Proud of how she likes to watch the pennies, it is unquestionably the reason why she has held the role as a Non-Executive Director for ING Bank Australia Ltd. for over 11 years.

Now let's start with some prenuptial notes on Lynas, before you decide to make a commitment to this industry giant.

Lynas Rare Earths Ltd. is listed on the Australian Securities Exchange (ASX: LYC). The company also has a sponsored Level 1 American Depository Receipt (ADR) program through the Bank of

New York Mellon (Code: LYSDY). On June 6 (Australia), the shares closed at AUD$ 9.35. There 902.4 million shares outstanding, giving the company a market capitalization of approximately AUD$8.4 billion (US$6.1 billion. At December 31, 2021, Lynas reported six month results including AUD$741.7 million positive working capital (including AUD$674 of cash and short term deposits) and AUD$156 million long term debt. Cash and short term deposits increased to AUD$768.4 at March 31, 2022.

Lynas' quarter ended March 31, 2022, had the following highlights:

- All necessary approvals received for the Kalgoorlie Rare Earth Processing Facility (Australia based processing facility)
- Site clearing of the Kalgoorlie facility location is complete
- Delivery of major equipment to Kalgoorlie site with foundation and building work underway
- Kalgoorlie should be on track as part of the company's 2025 Foundation Project program
- Planning is underway for the US Rare Earths Processing Facility including contracts signed with the US Department of Defense
- Record quarter for operations including:
    - Sales revenue of AUD$ 327.2 million (AUD$ 202.7 million previous quarter)
    - Sales receipts of AUD$ 262 million (AUD$151 million previous quarter)
    - Total REO production of 4,945 tonnes (4,209 tonnes previous quarter)
    - NdPr production of 1,687 tonnes (1,359 tonnes previous quarter)
- Lynas noted quarterly price strength for NdPr contributed to record financial results

- Automotive demand for rare earths “remains strong”
- Exploration drilling under the existing Mt. Weld extraction pit revealed continuous rare earth element mineralization along 1,020 metres of drill core. Further targeted exploration is to be conducted “with the goal of meeting accelerating customer demand”.
- The company targets to be operating four sites in three countries with global sales in 2025

Having heard Amanda speak on several occasions in her early role as Managing Director nearly eight years ago, I recall believing that her reign would be short-lived. Her valiant commitment to the bottom line above all else seemed conservative and backward compared to the charismatic marketing styles of other leaders I quite like in the market. Commenting that weekly meetings would necessitate accountability for every dime spent, seemed dismal and droll to me, it seems, however, she was quite right.

As down winds from the recession are upon us, or gales of a correction are indeed in full force, I look to the critical materials sector for which many experts harbor no fears. And with the demand for rare earths continuing to exceed supply, it seems that the noble Australian woman whose fearless tactics took me by surprise is now the one championing it all.

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# Welcome to the Future, Critical Metals’ Ventures

# Discover Reality

written by Jack Lifton | May 22, 2023

Way back in 2011 there were nearly 250 rare earth themed junior mining ventures looking at 400 “deposits” mainly in Canada and Australia. Today, just two of them are producing, Lynas Rare Earths Limited (ASX: LYC) and MP Materials Corp. (NYSE: MP) (the successor in interest to the bankrupt Molycorp of yore). These two ventures, even then, stood out from the pack by their common purpose of delivering a value-added product, individual separated (or blended) rare earth chemical forms, in the case of Lynas, and “magnets,” in the case of Molycorp. All of the others, without exception, stated that their saleable product would be a “mixed con.” This was the great “con” of the rare earths’ boom and bust of 2010-2013.

A concentrate of a mixture of all of the rare earths, from which the chemical elements that interfere with the separation of those rare earths into individual, or purposely blended combinations, of individual rare earth salts, is what is targeted to be produced at a mining operation where the ore is “mined,” concentrated, cracked and leached, and then is chemically processed to remove elements that interfere with the next step, selective separation of the individual elements in a form required for the next step in the supply chain that ultimately results in a finished product for sale to consumers.

For the rare earths this concentrate is, for practical purposes of safety and economics, a mix of rare earth carbonate solids. This should have been the initial target of 2011’s 250 rare earth juniors. It wasn’t. They overwhelmingly (other than Lynas and Molycorp) did nothing to advance towards this target. That turned out to be a good thing, because the only non-Chinese customers for this “mixed con” before 2017 were Solvay in France

(9,000 tpa capacity to produce individual rare earth salts), Silmet in Estonia (2,500 tpa), and assorted small operations in Asia, outside of China, with a combined capacity of perhaps 3,000 tpa. All of these bought their feedstock from China or (a tiny amount) from Russia at the time.

**No 2011 junior sold a single gram of mixed con to the marketplace prior to 2017 (Lynas)**

Why was the first 21st century, rare earth boom, such a bust?

Because none of them had the knowledge, education, experience or skill in processing or mineral economics to see that integration into a total rare earths supply chain targeted to a final product is necessary for **profitable operation**. Almost without exception the profitable part of the rare earth supply chain is concentrated in the metals, alloys, and magnet making end, and the only way to make a mine and separation system profitable is to distribute costs along a total supply chain. (America's Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR), which is operating on a total supply chain model through magnet alloys, is an exception, because it is able to make a profit selling a mixed carbonate due to the skill of its administrative and operation management and a unique, for North America, existing processing infrastructure).

If there is to be a domestic American, or European, total rare earth permanent magnet supply chain then there will have to be in place operating commercial rare earth separation systems, rare earth metals and alloys production, and rare earth permanent magnet production capability and capacity to support it.

In fact, if there are to be total domestic supply chains for any critical metals, then, not just a mine, but also all of the

downstream elements of the supply chain have to be in place before that can happen.

I note that for the cobalt chemicals necessary for the production of lithium-ion battery cathodes, the Canadian integrated cobalt processing junior, Electra Battery Materials Corporation (TSXV: ELBM | OTCQX: FTSSF), has entered into a supply agreement for cobalt concentrates from the world's largest non-Chinese producer, Glencore, to process that concentrate into fine cobalt chemicals for the battery manufacturing industry in its existing Canadian facility. When and if Electra can produce cobalt concentrates from its company-owned deposits there will already be in place the downstream operations to support that. In the meantime, it will buy feedstocks from others, and/or also toll them for others. Electra's management looks also to have given considerable thought to pricing, so as to ensure profitability.

This business model, to have in-house as much of the total final product supply chain as is necessary to be profitable, is the only practical business model for the production of critical metals and materials.

As of December 31, 2021, America's Energy Fuels (rare earths) and Canada's Electra (cobalt) are setting the pace for the future development of a North American critical metals' industry by commencing operations.

**Happy New Year!**