

As Market Focus on Rare Earths Intensifies, Search Minerals Proceeds on Path to Production

Rare earth's producing miners in the West are very rare as China dominates most of the rare earths production. Two exceptions are both trading with US billion-dollar market caps – They are MP Materials Corp. (NYSE: MP) (US\$6.24 billion) and Lynas Rare Earths Limited (ASX: LYC) (US\$3.92 billion), with Today's company trades on a market cap of just US\$55 million.

[Note from the Publisher: The breaking news yesterday Energy Fuels and Neo Performance Materials Announce Contract Signing and Launch of Commercial Shipments of Rare Earth Product to Europe in Emerging U.S.-Based Rare Earth Supply Chain confirms these 2 companies as players in the rare earths supply chain. And Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) market cap is roughly CAD\$1B and Neo Performance Materials Inc. (TSX: NEO) is CAD\$615M according to Yahoo Finance at 945 AM EST.)

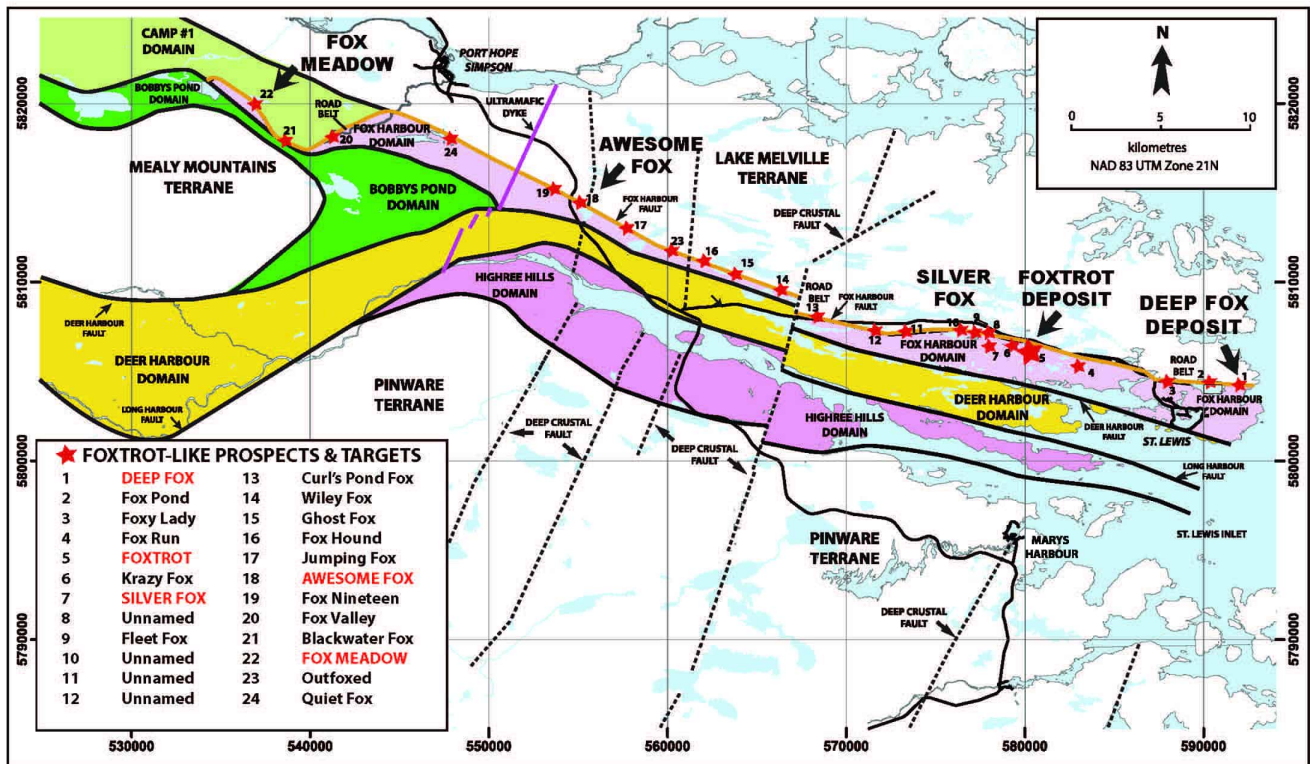
The Company has a plan to be ready to build their full-scale rare earths processing plant by the end of 2023 and once complete become a North American rare earths producer (potentially by about 2025 provided all goes well). Prior to reaching full scale production, the Company plans to operate a demonstration plant in 2022.

The Company is Search Minerals Inc. (TSXV: SMY | OTCQB: SHCMF) ("Search"). Search controls properties with rare earths in three areas of Labrador, Canada. These are:

- The Port Hope Simpson (PHS) property (flagship)
- The Henley Harbour Area in Southern Labrador

- The Red Wine Complex located in Central Labrador, plus some recently agreed acquisitions

Search Minerals flagship Port Hope Simpson (PHS) property includes Foxtrot, Deep Fox, Silver Fox, Awesome Fox, and Fox Meadow



Next steps (2021) at Port Hope Simpson – Foxtrot/Deep Fox updated PEA by Dec. 2021

The Preliminary Economic Assessment (PEA) of the Foxtrot Resource showed an estimated after-tax NPV10% of C\$48 million and an after-tax IRR of 16.7% over a 14-year mine life. Start-up CapEx was estimated at C\$152 million representing an after-tax payback of 4.4 years.

Search plans to do an updated PEA by December 2021 to include both Foxtrot and Deep Fox. Deep Fox will add to the existing

PEA due to increasing the resource size and it has up to 15% higher grades than Foxtrot. The updated Foxtrot/Deep Fox PEA will double the past PEA production rate (increase production rate to 2,000 tonnes per day), increase recoveries from the optimized pilot plant process, increase revenue from higher grades at Deep Fox, extend mine life with material from Deep Fox and Foxtrot to a central processing facility, and decrease costs with reduced reagents. The impact of all of this is expected to potentially improve the PHS (Foxtrot/Deep Fox) Project economics significantly.

Beyond this, there is plenty of potential to further grow the Resource estimate and economics in the Feasibility Study, as Search also has 3 more advanced prospects (Silver Fox, Awesome Fox, and Fox Meadow) and 20+ potential prospects at PHS. Silver Fox has had some exciting “very high occurrence of zirconium and hafnium”. Project CapEx and OpEx should also be attractive as there is existing infrastructure, a scalable processing plan, technical simplicity, and open pit mining. A local workforce and Search’s patented mining process (lowers environmental and reagents costs) should also help reduce costs.

Search has already achieved a dedicated pilot plant, proving an ability to generate high purity, refinement-ready product at a low scale. Added to this there are MOUs signed with Saskatchewan Research Council and USA Rare Earth for further refining collaboration.

Next steps (2022, 2023) – Demonstration plant in 2022 and full-scale production plant construction ready to begin in late 2023

Search’s master plan includes building a demonstration plant in St Lewis in 2022 as well as an Environmental Impact Statement (EIS) for Foxtrot/Deep Fox.

In 2023 Search intends to complete their permitting, a BFS,

and commence raising capital to build a full-scale processing plant commencing by the end of 2023. All going very well that can potentially lead to Search commencing rare earth production in 2025 or shortly thereafter.

It should be noted that in the mining industry, unless governments act to support and speed up the process, permitting and funding can drag on for some years. The good news here is the Canadian and US governments finally appear motivated to support (perhaps via faster permitting and low rate loans) a local rare earths supply chain.

In news announced on June 24, 2021, Search was selected to participate in the Government of Canada Accelerated Growth Service Initiative. This provides Search with “coordinated access to Government of Canada resources” as Search continues to move quickly to production.

Search Minerals Strategic Plan – 2021 to 2023



Source: Company presentation

Closing remarks

Search Minerals has big plans in the rare earths sector. The road to production for junior miners carries plenty of risks and usually involves stock dilution increasing the market cap, especially when raising initial project CapEx. One plus for Search Minerals is their Canadian location, as US and Canadian governments are showing increasing interest to help support rare earth projects.

If successful Search Minerals (US\$55 million market cap) can begin to follow in the giant footsteps of Western rare earth majors MP Materials (US\$6.24 billion) and Lynas Rare Earths (US\$3.92 billion). As you can see successful Western rare earths miners command very significant size market caps.

Investors will need to 'search' for their patience cap and be prepared for a long ride, but the potential rewards for success can be excellent. Stay tuned.

With the largest single rare earths processing plant in the world, Lynas stock price has risen 224% in the past year

With the recent doubling of NdPr prices, global leading rare earths miner Lynas Rare Earths Limited (ASX: LYC ("Lynas")) stock price has risen 224% (3.4x) over the past year. The question for investors right now is, can Lynas keep moving higher from here.

And the answer?

Well, that depends on your view of NdPr prices going forward and on Lynas' expansion plans.

Lynas Rare Earths Limited 1 year stock price



Source

NdPr demand & supply and pricing forecast

A March 2021 Adamas Intelligence report forecast:

- **“Annual NdPr oxide shortages of 16,000 tonnes expected by 2030:** Constrained by a lack of new primary and secondary supply sources from 2022 onward, Adamas Intelligence forecasts that global shortages of neodymium, praseodymium and didymium oxide (or oxide equivalent) will collectively rise to 16,000 tonnes in 2030, an amount equal to roughly three-times Lynas Corporation’s annual output, or three-times MP Materials’ annual output, of neodymium and praseodymium oxide (or oxide equivalents).
- **“Market for magnet rare earth oxides to increase five-**

fold by 2030: With total magnet rare earth oxide demand forecasted to increase at a CAGR of 9.7% and prices projected to increase at CAGR of 5.6% to 9.9% over the same period, Adamas Intelligence forecasts that the value of global magnet rare earth oxide consumption will rise five-fold by 2030, from US \$2.98 billion this year to US \$15.65 billion at the end of the decade.”

A five-fold demand increase this decade with constrained supply suggests we will most probably see strong long term prices for magnet rare earth oxides (includes NdPr oxide). Given the massive startup CapEx and environmental issues with rare earths mining that should also prove to be a strong barrier for entry for new start-ups.

Lynas’ current operation and an update on their expansion plans

Lynas currently extracts their rare earth ores from their Mt Weld Mine in Western Australia, does initial processing at the Mt Weld concentration plant, then sends the concentrate to Malaysia for final processing into high quality rare earth materials. Lynas’ rare earths deposit in Mt Weld is acknowledged as one of the highest grade rare earths mines in the world. The Malaysia rare earths processing plant is the world’s largest single rare earths processing plant.

Lynas Rare Earths Limited has a strong track record of producing rare earths with a falling cost of production

Lynas is a proven & profitable producer



- Unique Tier 1, high grade, long life (25+ year) resource at Mt Weld¹
- Rich in both LRE & HRE elements
- Provides guaranteed feedstock for separation facilities



- Environmentally-responsible Rare Earths producer
- Mine to magnet traceability
- Life Cycle Assessment with selected partners
- Certified to ISO 14001 (Env Mgmt Systems)



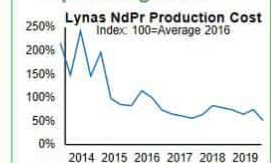
- 8 years' experience as a reliable supplier of quality Rare Earth products
- Hard won inhouse IP, not easily replicated
- Development of processing expertise which is unique to each deposit



- Trusted Customer Relationships
- Quality products and reliable supply has delivered share growth in all key customer markets
- Market leader in Japan



- Strong cost position relative to other suppliers
- Track Record of optimizing costs



Source: Lynas Rare Earths corporate presentation

Lynas' 2025 projects

Lynas has a 2025 plan to grow their processing capabilities. This includes two key parts:

- A planned rare earths processing facility in Kalgoorlie, Western Australia.
- A commercial light rare earths separation plant in the U.S. This may also include processing of heavy rare earths and specialty materials.

The proposed Kalgoorlie facility has commenced site preliminary works and is fully funded and progressing to schedule. It is targeted to begin operations by July 2023. You can read more details [here](#).

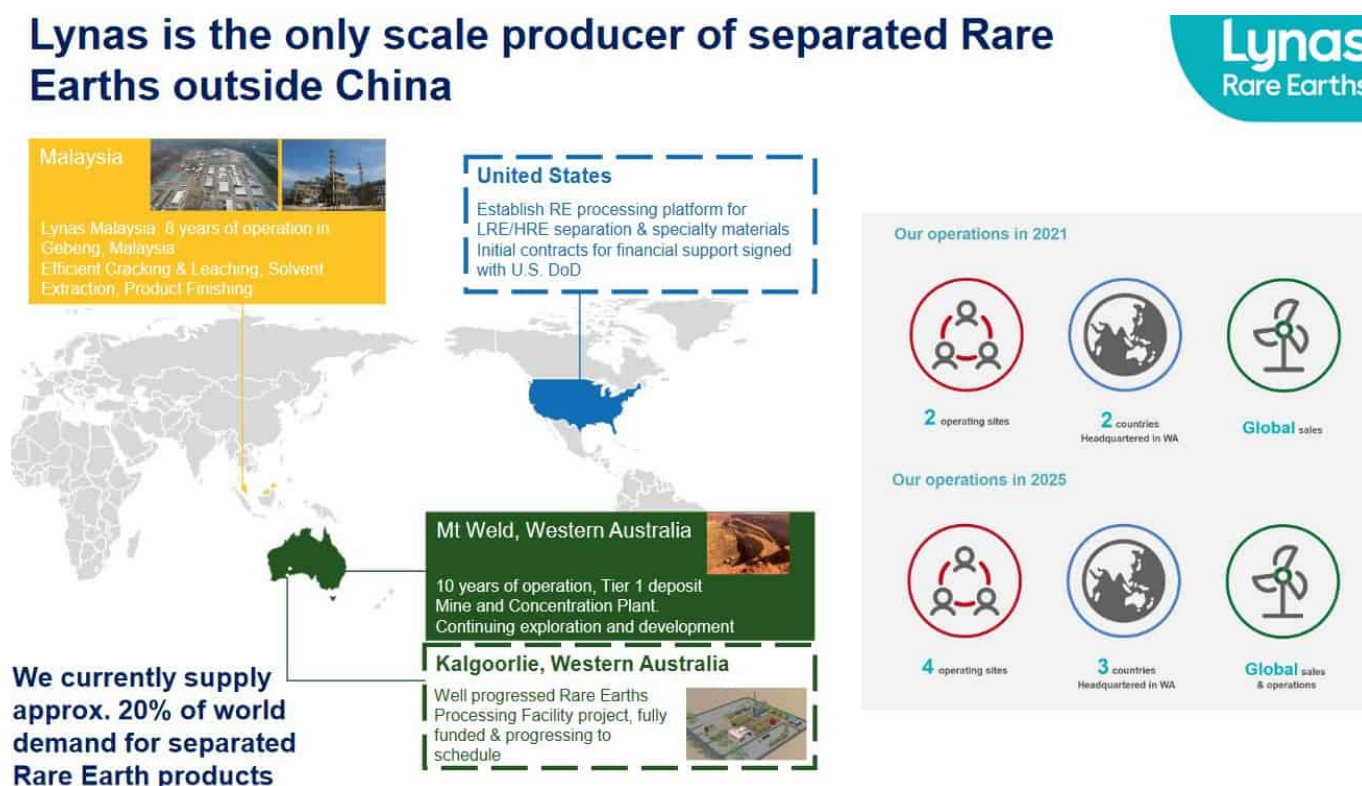
The proposed U.S light rare earths separation plant has recently achieved a signed agreement with the U.S. Government with initial contracts for financial support signed with U.S. DoD. Lynas stated:

“This project is scheduled to be completed in accordance with the Department of Defense timetable and as part of our Lynas

2025 plan. Detailed costings are still being finalized; we expect Department of Defense funding to be capped at approximately US\$30 million. Lynas will also be expected to contribute approximately US\$30 million under the agreement. The plant is expected to be located in Texas. Once operational, the plant is expected to produce approximately 5,000 tonnes per annum of Rare Earths products, including approximately 1,250 tonnes per annum of NdPr. The plant will be able to receive material directly from the cracking & leaching plant that Lynas is developing in Kalgoorlie, Western Australia.”

By 2025 Lynas plans to have a production capacity of at least 10,500 tonnes pa of NdPr (last quarter production was 1,359 tonnes) and their Kalgoorlie facility to be able to feed to downstream operations in the U.S. and Malaysia.

Lynas’ current and planned global rare earths operations



Source: Lynas Rare Earths corporate presentation

After a loss in 2020, Lynas is forecast to have a net income

of A\$137 million in 2021, A\$266 million in 2022, and A\$349 million in 2023. This equates to Lynas having forecast PE ratios of 37 in 2021, to 21 in 2022, and 15 in 2023. This compares favorably with MP Materials as I discussed recently here.

As of March 31, 2021, Lynas had a closing cash balance of A\$568.5 million.

Closing remarks

Lynas Rare Earths Limited has had a great past year helped by strongly rising rare earths prices. Looking ahead Lynas has the 2025 growth plan that has the potential to raise Lynas to the next level. Lynas looks to be in great shape and is well worth consideration for investors that are bullish on the outlook for rare earths, notably NdPr.

Disclosure: The author is long Lynas Rare Earths Limited (ASX: LYC) and MP Materials (NYSE: MP).