

Surging demand for magnetic materials (NdPr) catalyst for stellar Q1 2021 results for MP Materials

December 2020 and March 2021 were the two highest months ever for electric car sales. In March 2021, global electric car sales were up 173% YoY reaching 8.2% market share. Europe sales rose 169% YoY reaching 16% share, China sales rose 244% YoY reaching 11% share.

Given EV sales are forecast to reach 30-50% this decade it looks like the Neodymium (Nd) and Praseodymium (Pr) or “NdPr”, “magnetic materials” demand is only going to increase from here. It is forecast that EVs consume ~5% of annual NdPr production today, but may consume ~100% of current annual production by 2035.

Neodymium (Nd) & Praseodymium (Pr) prices surged higher the past 6 months

Neodymium Oxide (Nd) ask price chart



Praseodymium Oxide (Pr) ask price chart



Source: Kitco

The top two western NdPr producers are MP Materials Corp. (NYSE: MP) and Lynas Rare Earths Limited (ASX: LYC). Today I take a look at MP Materials who state that they are the largest producer of rare earth materials in the Western Hemisphere.

MP Materials was listed in 2020 as a result of the SPAC merger with Fortress Value Acquisition Corp. (FVAC) at US10.00 a share. The merger completed on November 18, 2020. The timing for investors was exquisite with NdPr prices beginning their ~100% price rise from early November 2020.

MP Materials owns and operates the open pit Mountain Pass Mine in California USA, the only integrated rare earth mining and processing site in North America. This gives MP Materials a very high strategic value to the United States. Mountain Pass plans to have an output of 5,000 metric tons pa of NdPr, starting in 2022.

MP Materials state: “Mountain Pass is a world-class asset, consisting of fully integrated and co-located mining and processing capabilities. The self-contained nature of our operations – with mining, milling, separations, and finishing all on one site – affords us significant cost advantages and mitigates operational risks. The Mountain Pass mine contains more than 800k tons of recoverable rare earth oxides with an average 8% ore grade, one of the highest quality known deposits in the world.”

MP Materials Mountain Pass mine and processing plants in California USA



Source: MP Materials website

With Stage 1 of the mine completed MP Materials now produces approximately 15% of the global supply of rare earths,

currently in the form of an intermediate product—rare earth concentrate—that requires further processing in Asia. Following completion of the second stage of recommissioning, expected by 2022, MP Materials will relaunch its onsite processing facilities thereby resulting in the USA having a self-sufficient U.S. rare earth industry.

MP Materials has recently completed design improvements that de-risk Stage II. The design improvements are expected to improve recoveries, provide flexibility and enhance the environmental footprint.

The results of a March 2021 announcement of a private institutional offering of \$600 million principal amount of MP Materials 0.25% Green Convertible Senior Notes due 2026 has not yet been updated to the market. In any case, MP Materials has sufficient cash to complete their Stage II project.

MP Materials achieved a record Q4 2020 on the back of rising NdPr prices

As we saw in Q4, 2020, Q1 2021 should also bring stellar results on the back of high NdPr prices during the Q1 quarter. MP Materials is due to announce Q1, 2021 results tomorrow, May 6, 2021, after the close. The consensus earning per share is US\$0.09. In MP Materials March 18 2021 presentation the Company stated: “Current REO (rare earth oxides) pricing environment implies strong YoY and QoQ profitability growth in Q1.”

MP Materials turnaround is forecast to continue in 2022 and 2023

From a net loss in 2020, MP Materials is forecast to have a net income of \$68 million in 2021, \$101 million in 2022, and \$238 million in 2023. Now that’s an impressive net income ramp! This equates to MP materials forecast PE ratios of 83 in 2021, to 56 in 2022, and 23 in 2023.

Finally, in April 2021 it was announced that Morgan Stanley adjusted their MP Materials' Price Target to \$41 from \$57, keeping their overweight rating.

Closing remarks

Demand for key magnet rare earths (NdPr) looks set to soar the next decade boosted especially from demand from electric motors used in EVs, some wind turbines, drones, consumer electronics, defense systems and many other high-growth, advanced technologies.

MP Materials' Mountain Pass Mine is already a prized US mine and one of U.S strategic importance. Forecast net income growth assumes they can execute their Stage II plans successfully and become a fully integrated US rare earth end products (especially NdPr) producer in 2022, without any reliance on Asia. Perhaps MP Materials is priced for perfection or perhaps they are priced for their strategic importance. Only time will tell. Feel free to add your comments in the section below.

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

MP Materials: It is Rare Earths Deja Vu All Over Again.

As we know, MP Materials Corp. (NYSE: MP), successfully closed the business combination with Fortress Value Acquisition Corp. in mid November 2020, amid a wild ride for shareholders. The

share price has rocketed to more than a quadruple for initial investors in the \$200 million PIPE. Current market capitalization is approaching US\$7 billion – it looks like the stock is set for yet another record high today (February 16, 2021).

The company will be releasing Q4-2020 results after the markets close on March 18, 2021. The company had a profitable third quarter 2020 (\$14.6 million Net Income and \$11.6 million Adjusted EBITDA) and outside the accounting adjustments for contract changes with Shenghe Resources, should show annual results consistent with the quarter.

The company's Mountain Pass mine and associated processing facilities are in California, just off the Nevada border at Mountain Pass. Production started about 70 years ago in the only rare earths mining and processing site of scale in the Western Hemisphere. By management's estimates, MP Resources currently produces approximately 15% of global rare earths content. Recall that the mine was restarted in 2017, with mining and processing currently exceeding levels achieved prior to the current management team taking over.

The company has an offtake agreement with Shenghe Resources (Singapore) that was modified in mid-2020. MP Materials is now free to sell to whomever they choose, (are there other buyers?) but will still be repaying the Shenghe Offtake Advance (currently \$78 million). Management of MP Materials has estimated that this would be approximately four years from the date of the modification of the offtake agreement, putting it sometime in 2024.

As reported in MP Material's Q3-2020 Form 8-K (page 12) "The completion of our Stage II optimization plan and any development of Stage III is expected to be capital intensive. We expect to invest approximately \$170 million to complete our Stage II optimization plan...". While the company has stated that it has completed process redesign and engineering for

Stage II, we all recall the problems Molycorp had trying to get Project Phoenix to work as designed and arguably being one of the elements that caused Molycorp to go bankrupt. MP Materials has a strong balance sheet, but rare earths processing is not easy – it appears that a North American rare earths supply chain (as far as MP Materials is concerned) may just have to wait.

MP Materials closed the business combination with Fortress Value Acquisition Corp. in November 2020 with the stated objective of the merger to fund MP Materials' Mountain Pass mine Stage II optimization plan. The company "expects to become a fully integrated provider of separated rare earth oxides, with a focus on Neodymium-Praseodymium, one of the most crucial inputs for magnetics, by 2022." There is substantial mining and processing infrastructure in place at Mountain Pass with a comprehensive plan developed to even become a downstream magnet producer (Stage III, 2025-ish)

Is this possible? There are numerous detractors who think that this is an unachievable game plan, but clearly the market disagrees. The company also announced on November 18, 2020, that the company had been awarded a Defense Production Act Title III technology investment agreement to establish domestic processing for separated light rare earth elements. Under the TIA, the US Department of Defense will contribute \$9.6 million towards MP Materials' Stage II optimization efforts.

According to the most recent update in the Q3-2020 results presentation, the Stage II Project remains on track for 2022. The front-end engineering design (FEED) is complete, all circuit designs are complete, long-lead procurements were expected to be complete by December 2020 with initial civil mobilization also expected the first week of December 2020 and full mobilization expected in January 2021. An update on these items in March or sooner will be important.

As I said before – it continues to look promising so far, but hang on, with the history at this site and the fast money in the markets right now, let's hope history does not repeat itself.

The US rare earths industry comeback has begun as MP Materials announces a NYSE listing via a merger with FVAC

Recent advancements in the US Senate with several critical materials and rare earths Acts currently under consideration has led to a renewed spark in the US rare earths sector, a sector that had been on life support and left for dead. Now investors have a chance to join the US rare earths revival with the announcement today that leading US rare earths miner MP Materials intends to list in a US\$1.5 billion merger deal with Fortress Value Acquisition Corp. (NYSE: FVAC).

MP Materials announced yesterday:

“MP Materials, a leading producer of rare earth materials, to be listed on NYSE through merger with Fortress Value Acquisition Corp. (NYSE: FVAC).”

Details of the release include:

- MP Materials supplies materials essential to electric vehicles, wind turbines, defense systems and many other

advanced technologies, produced at its world-class, “green” mine and processing facility in Mountain Pass, CA.

- MP Materials poised to become the Western champion of rare earth magnetics, onshoring a critical sector that will power a sustainable future.
- Combined company to have an estimated post-transaction equity value of approximately \$1.5 billion with over \$500 million in net cash to fund growth strategy.....
- Current MP Materials shareholders, JHL Capital Group and QVT Financial, will roll 100% of their existing equity holdings into equity of the combined company.
- Board of Directors to include former Chairman of the Joint Chiefs of Staff General Richard Myers, former Omnicom Group CFO Randy Weisenburger, and shareholder representatives.
- Upon completion of the transaction, the combined company will be named MP Materials Corp. and will remain NYSE-listed under the new ticker symbol “MP”.....
- Cash proceeds raised will consist of FVAC’s \$345 million of cash in trust and an additional \$200 million investment, led by institutional investors including Slate Path Capital, Chamath Palihapitiya and Omega Family Office, at \$10.00 per share in the common stock of FVAC immediately prior to closing of the merger.
- The business combination is expected to close in the fourth quarter of 2020, subject to regulatory and stockholder approvals, and other customary closing conditions.

An aerial view of the Mountain Pass rare earths mine and separation facilities in California USA



Source: MP Materials

The implications for the rare earths sector and investors

This is big news for MP Materials, the US rare earths sector, and especially for investors wanting to get involved. MP Materials own the Mountain Pass Mine which is the 'only' rare earth mining and processing site of scale in North America, making it a highly strategic asset. This one mine currently produces 15% of global rare earths supply, noting China produces 70%+ of global rare earths supply. MP Materials has been sending its rare earths to China for processing which is not ideal given the US is now looking to control the supply chain as I discussed here – Control the supply chain – Control the world.

Co-Chairman of MP Materials James Litinsky stated:

“This business combination and becoming a public company is a key milestone in MP Materials’ mission to restore the full rare earth supply chain to the United States of America.”

The raised ~US\$500 million plus of net funds are expected to be used to “retrofit and fully recommission its existing on-

site refining facilities and will further enable the Company to pursue additional downstream growth opportunities in the magnetics industry". Once completed MP Materials will have a total equity value of US\$1.5 billion. MP Materials expects to deliver over \$100 million in estimated revenue and nearly US\$30 million in estimated Adjusted EBITDA in 2020, rising to US\$250 million forecast adjusted EBITDA in 2023.

Investors can essentially buy into MP Materials now via the merging entity Fortress Value Acquisition Corp. (NYSE: FVAC). As mentioned in the news release above certain institutions and early investors will be in FVAC at US\$10.00. Other investors can buy in now directly via the NYSE ticker FVAC, currently trading at US\$11.39. This is a ~14% premium which seems ok for long term investors given the uniqueness and potential of MP Materials.

Closing remarks

This decision from MP Materials is an industry leading move to bring back the rare earths supply chain to the USA. MP Materials' Mountain Pass Mine will now become an even more valuable US strategic asset, especially once the rare earths processing into refined rare earth products is achieved.

The good news for investors is that they can now buy into the Company, compared to before when it was private and not accessible to most investors. The icing on the cake should hopefully be some positive news from the US Senate in regards to several Acts that aim to support a US rare earths supply chain.

Note: The author intends to purchase FVAC.