Hastings Technology Metals Poised to Emerge as a Major Player in the Rare Earths Market

written by InvestorNews | February 10, 2023 With all the talk of on-shoring, near-shoring, friend-shoring, or whatever is the popular term this week, it's easy to lose sight of the fact that most commodities are global in nature. I know I've become fixated on North American solutions when it comes to critical materials and rare earths but that's a somewhat myopic view. There are plenty of countries out there, near and far, that we consider our friends and who may or may not have cost advantages that overcome any incremental transportation fees to compete in our domestic market. Thus, we shouldn't fall into the trap of thinking that just because the U.S. Inflation Reduction Act, and other similar legislation, look to limit parts of the world from contributing to "made at home" solutions, as perhaps, North American miners and explorers aren't necessarily the best option.

One such example is <u>Hastings Technology Metals Limited</u> (ASX: HAS | OTCPK: HSRMF), a Company engaged in the exploration, development, and mining of rare earths and specialty metals in Western Australia. This Perth-based company is primed to become the world's next producer of neodymium and praseodymium concentrate (NdPr). Hastings' flagship Yangibana Project (which comprises a mine and beneficiation plant at the Yangibana site, and a hydrometallurgical plant at Onslow), in the Gascoyne and Pilbara regions of Western Australia, contains one of the most highly valued NdPr deposits in the world with NdPr:TREO ratio of

up to 52%. The Project is permitted for long-life production, with offtake contracts signed and debt financing in an advanced stage. The first product to ship is targeted for H1/2025. Hastings also owns and operates the Brockman project, Australia's largest heavy rare earths deposit, near Halls Creek in the Kimberley.

Earlier this month, the Company increased the mineral reserves at the Yangibana Project and it now has JORC-compliant Proved and Probable Ore Reserves of 20.93 million tonnes at 0.90% TREO which includes a 37% component NdPr, making it one of the largest and highest-grade rare earths projects in the world. The company has made significant progress in advancing the project over the past few years, with a Pre-Feasibility Study completed in 2018 and a Definitive Feasibility Study (DFS) completed in 2020. The DFS confirmed that Yangibana is a highly viable project, with low operating costs and strong economic returns.

But where I find this story gets interesting is all the various financial dealings that Hastings is involved in. More than half of ~A\$400 million of total debt financing required for the Yangibana Project has been secured from the Northern Australia Infrastructure Facility (NAIF), which recently increased its financial support to A\$220 million with a 12½-year tenor. Hastings also completed a Two-Tranche Placement to raise A\$110 million in new equity to progress the Yangibana Project in October 2022. Nothing unusual about these two deals but here's the one that intrigues me. On October 14, 2022, the Company announced the completion of the acquisition of an approximate 19.9% shareholding in Neo Performance Materials Inc. (TSX: NEO) for an aggregate price of C\$134.6 million. The acquisition was funded by a A\$150 million cornerstone investment in Hastings by Wyloo Metals.

It would appear that the management team at Hastings does not

doubt that this mine is moving forward. The NEO acquisition provides Hastings with a strategic stake in NEO and exposure to the global downstream processing of rare earth materials into magnets, critical components of environmentally friendly products such as electric vehicles and wind turbines. Additionally in October (seemingly a very busy month for the Company), Hastings signed a non-binding offtake Memorandum of Understanding (MOU) with <u>Solvay</u>, a French-based global leader in Materials, Chemicals, and Solutions. The deal outlines the intent of both parties to enter into a binding commercial offtake agreement for the supply of Mixed Rare Earth Carbonate (MREC). Under the agreement, the supply of an initial 2,500 tonnes per annum of MREC will be sent from Hastings' Yangibana Project to Solvay's plant in La Rochelle, France. Deals like this might explain why NAIF was comfortable increasing its financial support for the project.

Lastly, it's worth mentioning that Hastings has implemented rigorous environmental and social sustainability standards to ensure that its operations are in line with international best practices. This commitment and transparency were recognized with an exceptional ESG risk rating by Morningstar Sustainalytics with Hastings ranked 4th out of 159 companies rated in the Diversified Metals Mining subindustry category and placed 9th out of 193 companies in the Diversified Metals industry category. Hastings also undertook an EcoVadis assessment and achieved 68/100 which placed the company in the top 5% of companies assessed. This has not only helped the company attract investment from socially responsible investors but also win recognition for its efforts.

Hastings Technology Metals looks ready to take on the rare earths supply market and become a force to be reckoned with. The Company had A\$172.2 million in cash and equivalents as of December 31, 2022 and seemingly no issues raising additional

capital as needed. Agreements are in place for ~70% of production for the first 10 years and there is still plenty of blue-sky exploration upside to further expand the resource at Yangibana. It appears I need to start looking past my own backyard for resource opportunities that are world-class.

Solvay starts making noise in the rare earths sector with a Hastings MOU

Solvay S.A. (BRU: SOLB | OTCQX: SLVYY) ('Solvay') has started making news in the rare earths space. Solvay, a Belgian chemical company, acquired Rhodia in 2011 and with it the rare earth division with plants in France and China. Since Ilham Kadri was appointed the new CEO of Solvay in March, 2019, their only press releases on its rare earth division have been about three patent infringement cases surrounding materials for catalytic converters and their treatment of exhaust gases from internal combustion engines. Then suddenly over September-October of this year, there were 3 news releases that were focused on developments in Solvay's rare earths division.

On October 11, 2022, Solvay announced the signing of a non-binding offtake memorandum of understanding (MOU) with <u>Hastings</u> <u>Technology Metals Ltd.</u> (ASX: HAS) ('Hastings') where Hastings will initially supply Solvay with 2,500 tonnes per year of mixed rare earth concentrate (MREC) from its Western Australian Yangibana Project. The Solvay plant in La Rochelle, France was

founded in 1948 and originally was built for the separation of rare earths from monazite. The reported capacity for La Rochelle is 10,000-15,000 tonnes per annum of rare earths concentrate, which if accurate, made it a significant producer in the 1980s and 1990s. This would mean however that the agreement with Hastings alone would not bring the plant back to full capacity, unless Hastings expands production over time or Solvay sources concentrate from other producers.

This new MOU follows Hastings' recent move to take a <u>significant</u> <u>position</u> in <u>Neo Performance Materials Inc.</u> (TSX: NEO). NEO and Solvay compete vigorously in all aspects of rare earths but as noted above the main area is in the materials for catalytic converters. This move by Solvay with Hastings comes on the heels of Solvay announcing its plans to expand and upgrade its plant in La Rochelle to process rare earths and recycle rare earth magnets. NEO has also announced its plan to put magnet production capabilities in Estonia where it has a rare earth separation facility in Sillamae.

NEO's plant in Estonia has traditionally received its rare earth concentrate from Russia but given current political circumstances, it begs the question how long can this last? NEO does have an arrangement with Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) to supply concentrate from Energy's uranium operation in White Mesa, Utah. This is the only uranium production facility in the USA. Energy Fuels is going to process monazite to produce RE concentrate. To that end, Energy Fuels announced a deal in May of this year to take a position in a heavy minerals deposit in Bahia, Brazil, which contains monazite.

Another <u>announcement</u> from Solvay this October was that it took 100% control of Solvay Special Chem Japan (SSCJ) through its purchase of the remaining 33% from Santoku Corporation. This

facility, like La Rochelle, is focused on catalyst and semiconductor industries. Decades ago this plant was processing RE concentrate from China. When China stopped exporting concentrate in the late 1990s Anan Kasei, a Japanese joint venture between Santoku Chemical and Rhodia, stopped the separation of rare earths and bought intermediate products from China again to produce more value-added products. Ilham Kadri, Solvay's CEO, commented on the transaction saying: "This transaction marks a logical step forward in our global plan to expand our leadership in Rare Earths specialties."

It will be interesting to watch Solvay and NEO position themselves in the European market which currently only has one metal/alloy producer, <u>Less Common Metals</u>, and one magnet manufacturer, <u>Vacuumschmelze</u>, a German producer. Let the games begin.

Hastings Technology Metals secures Australian Government Funding for Yangibana, World's Richest NdPr Deposit

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Many are now asking will <u>Hastings Technology Metals Ltd.</u> (ASX: HAS) ("Hastings") be Australia's next rare earths producer?

The answer is 'maybe yes' after the Company <u>announced</u> on February 2, 2022: "NAIF approves \$140 million loan for Yangibana

Rare Earths Project.....NAIF loan forms part of A\$300-400 million of total debt financing required for Yangibana."

Yangibana is the first Australian rare earths project to receive NAIF funding. The above mentioned Northern Australia Infrastructure Facility (NAIF) loan has a $12\frac{1}{2}$ -year tenure and is subject to pre-completion conditions.

Hastings <u>stated</u>: "Yangibana early works construction and design for long-lead items underway in anticipation of plant construction commencing in September 2022 Quarter." The NAIF loan first drawdown is expected to occur in early 2023, aligned to the Yangibana funding schedule.

Hastings <u>states</u> about its planned project: "The Yangibana project, which comprises a mine and beneficiation plant at the Yangibana site and a hydrometallurgical plant at the Ashburton North Strategic Industrial Area (ANSIA) near Onslow, will become Australia's second rare earths producer and expands the country's strategic capability in downstream processing of rare earths minerals."

More about Hastings Technology Metals Ltd.

Hastings controls two rare earth projects in Western Australia. They are the <u>Yangibana</u> and <u>Brockman</u> Projects. The more advanced Yangibana Project contains a predominance of neodymium, praseodymium, dysprosium and europium.

The Yangibana Project (mine, beneficiation plant, and hydrometallurgical plant) — Western Australia

Hastings <u>state</u>: "Yangibana has the world's highest composition of neodymium and praseodymium and is located in the Tier 1 mining jurisdiction in Western Australia." The significance here is that neodymium and praseodymium (NdPr) are the highly valued

magnet metals.

The Yangibana Project <u>Proven & Probable Reserve</u> is 16.7Mt at 0.95% TREO (0.35% NdPr oxide) for a total contained 158,419 t TREO. The Total Mineral Resource has a contained TREO of 266,417 t (at 0.97% TREO).

Yangibana Project has great metrics — Has a 37% NdPr content — double the world average

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Source: Company presentation

The Yangibana Project's CapEx is estimated at A\$516 million (A\$67 million contingency) but is currently being revised. The Project's November 2019 NPV was A\$549 million (IRR 21.1%). NdPr prices have increased significantly since then, so updated Project economics are expected soon.

The Yangibana Project is planned to have a <u>1.2Mtpa ore throughput</u>, a 15 year mine life, ~15,000 tpa of MREC production, ~8,500 tpa TREO production and <u>3,400tpa NdPr</u> production. Commissioning is targeted for 2024, subject to final project funding.

Hastings' Yangibana Rare Earths Project and their planned Onslow hydromet plant in Western Australia



Source: <u>Company presentation</u>

Hastings has commenced early site works at Yangibana (Mining Proposal has been approved) and recently received Commonwealth environmental approvals to develop the hydrometallurgical plant site at ANSIA near Onslow. Subject to funding, Hastings intends

to then commence construction of the beneficiation plant and the hydrometallurgical plant.

On February 2, 2022, Hastings Executive Chairman Charles Lew, stated

"The commitment by NAIF will enable Hastings to finalise the funding requirements for Yangibana's development and move into full-scale construction throughout 2022, with the objective of delivering first production by 2024. Yangibana is an amazing, rare earths, opportunity that will supply the world's highest composition neodymium and praseodymium concentrate to Tier 1 customers in Europe and Asia. This is an exciting time not just for Hastings but for Australia's emerging rare earths sector. We look forward to finalizing the funding arrangements that will enable the Hastings' Board to make a final investment decision in the coming months."

Hastings Technology Metals investment highlights (as of November 25, 2021)

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Source: Company presentation

Note: The 52% NdPr to TREO ratio refers to the highest-grade deposit within Yangibana called Simon's Find, which contains 52% of rare earths as NdPr. It potentially provides strong early cash flows to the Project.

Closing remarks

Hastings Technology Metals certainly looks well on the way to becoming Australia's next rare earths producer, and only the second one following on from the very successful Lynas Rare Earths Limited (ASX: LYC) (market cap ~A\$8 billion).

Hastings ticks all the right boxes in terms of a great resource, high NdPr content, location, integrated project, off-take contracts signed, and now is getting closer to achieving project funding (awaiting final credit-approved commitments from lenders' consortium) with only minor regulatory approvals remaining. Executive Chairman Charles Lew owns 7.1% of the Company so that is also a great endorsement.

All going well Hastings could begin Yangibana Project construction in 2022 (<u>September Quarter 2022</u>) and commercial production in 2024. Hastings Technology Metals trades on a market cap of <u>A\$516 million</u> and looks set to have a very big 2022.