

Hastings Technology Metals buys 20 per cent of Neo Performance in strategic rare earths move

Hastings Technology Metals Ltd. (ASX: HAS), an Australian junior mining company, has recently made some interesting moves in the rare earths space. Its major announcement on August 26th was that through an investment from Wyloo Metals in Hastings in the amount of A\$150 million, it was acquiring the majority of Oaktree Capital Management's shares in Neo Performance Materials Inc. (TSX: NEO). Oaktree acquired a controlling position in NEO in 2015 as it emerged from the bankruptcy of Molycorp. This will result in Hastings owning somewhere in the range of 20% of NEO on the same day that NEO announced a bought deal of C\$65 million, which would dilute the original 22.1% position Oaktree was selling. From their press release: "Hastings views the Acquisition as the first step in its Hastings 2.0 strategy, to create a fully-integrated mine-to-magnet supply chain business. Wyloo is supportive of this vision and Hastings is pleased to have the support of Wyloo as a strategic partner."

Wyloo Metals is a company owned by Andrew "Twiggy" Forrest, an Australian billionaire, who made his money selling iron ore from Australia. Earlier this year Wyloo outbid BHP for Noront, whose deposit in the Ring of Fire, Northern Ontario is a high-grade nickel-copper-platinum-palladium deposit with a bid worth C\$616.9 million. This recent choice by Wyloo to invest in Hastings is another move in their aim "to develop and invest in the next generation of mines". Given the funds available from Wyloo is it possible Hastings will increase its position in NEO, given the recent record profits from NEO? They have said there is no plan to increase their holding.

On September 7th Hastings announced a A\$110 million two tranche placement with the goal to accelerate its rare earths deposit in Western Australia. In addition, they announced a non-underwriting share purchase plan (SPP) to raise up to A\$10 million. The aim is to accelerate the rare earth deposit they are developing, which is known as the Yangibana deposit in Western Australia. The deposit had a JORC resource reported in 2019. There are seven areas reported as shown in the chart below:

Deposit	Tonnes	TREO	Nd ₂ O ₃ +Pr ₆ O ₁₁
		%	%
Bald Hill	4,405,000	1.02	0.41
Fraser's	638,000	1.61	0.68
Auer	728,000	1.12	0.41
Auer North	148,000	1.24	0.47
Yangibana	986,000	0.93	0.44
Yangibana West	1,478,000	1.23	0.34
Yangibana North	1,964,000	1.72	0.44
Total	10,345,000	1.22	0.43

The reported percentages of Neodymium(III) oxide (Nd₂O₃) and Praseodymium oxide (Pr₆O₁₁) are high compared to most other global deposits, which is intriguing, as these are the main revenue drivers in all deposits globally except for ionic clay deposits, like the ones in Southern China. What is challenging is the TREO (Total Rare Earth Oxides) grade averaging 1.22%, which will increase operating costs. By comparison, MP Materials' Mountain Pass mine in California is reported around 8%. However, Yangibana average Nd/Pr of 43% is about 3 times higher than Mountain Pass.

On February 21st of this year, Hastings announced an increase in the NPV of the Yangibana project of 84% to \$1,012 million and an IRR of 26%. When looking at Shanghai Metal Markets pricing in mid-February Neodymium oxide (Nd₂O₃) was \$190/kg USD and Praseodymium oxide (Pr₆O₁₁) was \$172/kg. Today those

prices are \$91.11/kg or a 50% reduction.

Looking at Hastings' August and September presentations, their focus is not on separating the rare earths into single elements but view that as NEO's focus. Their stated plan is to produce 15,000 tonnes per year of a mixed rare earth carbonate, which typically is around 45-50% total rare earth oxides (TREO). This would generate 6,750-7,500 tonnes of TREO. This is over double the current capacity of NEO's plant in Estonia. Hastings has already committed 70% of their first 10 years' output to ThyssenKrupp and Skyrock, so this would leave 2,000-2,250 TPY for NEO. ThyssenKrupp will likely sell the material to China as it does for Rainbow Rare Earths. Skyrock is a part of the Baotou rare earth group, so the majority of the Yangibana deposit will end up in China, unless there is an out clause and NEO expands its non-Chinese capacity.

It will be interesting to see how this new relationship in the rare earths space develops. This is certainly not the end of the story.