

Heavy rare earth prices buoyant as world readies for economic recovery phase

Highlights

- Increasing global trade tensions and focus on 'green' COVID-19 recovery investment drive-up heavy rare earth prices in 2020
- Key payable elements of dysprosium and terbium from Browns Range production up 22% and 93% respectively since January
- Governments globally continue to accelerate policies to incentivise change over to electric and hybrid vehicle fleets

Heavy rare earths company, Northern Minerals Limited (ASX: NTU) (**Company**) is pleased to advise shareholders of significant price gains since the beginning of 2020 in the basket of payable heavy rare earth elements produced from its Browns Range Project.

The commercial viability of production from Browns Range is heavily influenced by the ultimate prices achieved for dysprosium and terbium, being the dominant payable elements in the xenotime Mineral Resource at Browns Range.

In 2020, according to data from Asian Metal, the dysprosium price was up 22% from the start of the calendar year.

On 2 January 2020, Asian Metal reported a daily mid-range price for dysprosium of US\$244 per kilogram. The corresponding price on 4 December 2020 had risen to US\$297 per kilogram.



Figure 1: 2020 dysprosium price graph using Asian Metal daily price data.

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The Terbium price is currently at its highest levels since 2012, representing a massive 93% increase across 2020.

Terbium was trading at a daily mid-range price of \$958 per kilogram on 4 December 2020, up from its starting point this year of US\$497 per kilogram on 2 January 2020.



Figure 2: 2020 terbium price graph using Asian Metal daily price data.

Demand for heavy rare earth elements, in particular dysprosium and terbium, continues to be fundamentally underpinned by strong growth in the high performance DyNdFeB permanent magnet sector.

NdFeB permanent magnets are used in new energy applications including renewable generation and the electrification of transport.

However, global trade tensions that have been exacerbated by disruptions resulting from the COVID-19 pandemic are also contributing to upward pressure on most rare earth element prices.

The US imports 80 per cent of its rare earth elements directly from China, with portions of the remainder indirectly sourced from China through other countries.

The US administration recognised the urgency of securing a rare earths supply chain outside of China with a previously announced Presidential Executive Order (ASX, 7 October 2020) in September.

The Executive Order called for future policy options to reduce the vulnerability of the US to the disruption of critical mineral supply chains through cooperation and coordination with partners and international allies.

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Northern Minerals CEO Mark Tory said: "The accelerated price increases in 2020 are likely linked to increasing trade tensions between the United States and China, which remains the dominant producer globally of heavy rare earths.

"In addition to global trade volatility, the disruption caused by COVID-19 will potentially act as a catalyst around the world for countries to focus on investment in more sustainable infrastructure projects, including renewable energy capacity, as part of their economic recovery initiatives."

"We are also seeing an acceleration of government policy settings around the world to further incentivise the purchase of electric and hybrid drivetrain vehicles, while at the same time disincentivise the purchase of new diesel and petrol-engine vehicles."

For example, Northern Minerals welcomed the Government of Western Australia's announcement at the end of November that it was steering towards a cleaner future with the release of State's first ever Electric Vehicle Strategy.

The State's \$21 million Electric Vehicle Fund included a commitment to building one of the world's longest electric vehicle charging infrastructure networks from Perth to Kununurra in the North, Esperance in the South, and Kalgoorlie in the East.

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About Northern Minerals:

Northern Minerals Limited (ASX: NTU) (Northern Minerals or the Company) is one of a few producers of heavy rare earth element Dysprosium outside of China via production from the Browns Range Heavy Rare Earth Project in northern Western Australia.

The Company commenced the production of heavy rare earth carbonate in late 2018 as part of a three-year pilot assessment of economic and technical feasibility of a larger scale development at Browns Range. In March 2020, the operation was placed into care & maintenance as a result of COVID-19 and partially restarted operations in August 2020.

The work program provides the opportunity to gain production experience for supply to our offtake partner, Thyssenkrupp, as well as allowing targeted pilot plant testwork and the assessment of various project enhancement initiatives including ore sorting and the separation of the product into individual rare earth oxides.

Through the development of its flagship project, the Browns Range Project (the Project), Northern Minerals aims to build the Western Australian operation into a significant world producer of dysprosium outside of China.

The Project is 100% owned by Northern Minerals and has several deposits and prospects containing high value dysprosium and other HREs, hosted in xenotime mineralisation.

Dysprosium is an essential ingredient in the production of DyNdFeB (dysprosium neodymium ironboron) magnets used in clean energy, military and high-performance technology solutions.



For more information: northernminerals.com.au.

ASX Code:	NTU	Market Capitalisation:	A\$159.7m	
Issued Shares:	4,437m	Cash (as at 1 December 2020):	A\$14m	

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4