

28 January 2021

IONICRE COMMENCES SCANDIUM MARKETING INITIATIVE

Ionic Rare Earths Limited (“**IonicRE**” or “the Company”) (ASX: IXR) is pleased to advise that the Company has commenced activity in marketing the scandium by-product from the Makuutu Rare Earths Project (“**Makuutu**”). Scandium is a strategic metal with a growing market dependent upon the generation of long-life and stable production sources.

Makuutu potentially has a significant long-term source of scandium production, representing a substantive additional revenue source for the Project. IonicRE is aiming to include by-product potential for initial annual scandium oxide (Sc_2O_3) production tonnages of 10 to 20 tonnes per annum and is considering a range of scenarios. As a by-product, Sc_2O_3 has the capacity to offset a significant portion of operating cost at Makuutu, with current pricing for 99.9% purity Sc_2O_3 trading for approximately US\$1500/kg, or US\$1.5 million per tonne.

IonicRE has initiated discussions with various parties engaged in the adoption of aluminium-scandium (Al-Sc) alloys in the global transportation and space sectors, which represent the largest medium-term market.

The current Makuutu Mineral Resource Estimate announced to the ASX on 23rd June 2020 and set out in Table 1, of 78.6 Million tonnes at 840 ppm total Rare Earth Oxide (TREO), at a cut-off grade of 300 ppm TREO-Ce₂O₃, also includes 30 ppm per tonne of Sc_2O_3 , containing 2300¹ tonnes of Sc_2O_3 .

Scandium has several key functional benefits across all alloy series which make it the most potent alloying element. As little as 0.05-0.1% of scandium in aluminium alloys can significantly improve its performance, as illustrated in Figure 1.

To assist IonicRE advance these opportunities and develop its scandium marketing strategy, IonicRE has engaged the consulting services of Mr. John Carr in the role of Scandium Market Advisor. Mr. Carr has a wealth of expertise in the scandium market, having spent five years as Clean TeQ Limited’s Executive General Manager, Marketing, during which time he was responsible for mapping out and developing the marketing strategy and networks for scandium. Mr. Carr has been engaged on a contractual basis initially to assist IonicRE with the framework for the overall scandium strategy and possesses a deep understanding of the processes required to produce Sc_2O_3 , and how this can be integrated into the overall supply chain.

IonicRE Managing Director Tim Harrison commented: *“Scandium represents another potential key differentiator for Makuutu. The opportunity for long life scandium production from Makuutu*

¹ Rounding applied to reflect resource estimate accuracy.

represents a significant potential feed source for the developing Al-Sc markets that require both diversity in supply and low-cost production capacity to support more wide scale mass adoption. Our belief is that a multi-faceted approach and early collaborative engagement is required to ensure success in the scandium market. As such we believe it is prudent to start engagement now, given the interest for Makuutu to be expedited to production in a climate looking for new alternative supplies of critical and heavy rare earths.”

“We are very pleased to have engaged John to assist IonicRE in planning and developing a scandium marketing strategy, greatly assisting the Company realise the accretive value of scandium to Makuutu. Having worked closely with John in the past, I know John’s experience and network across key markets in Asia, Europe and North America will be crucial, especially the Al-Sc alloy business.”

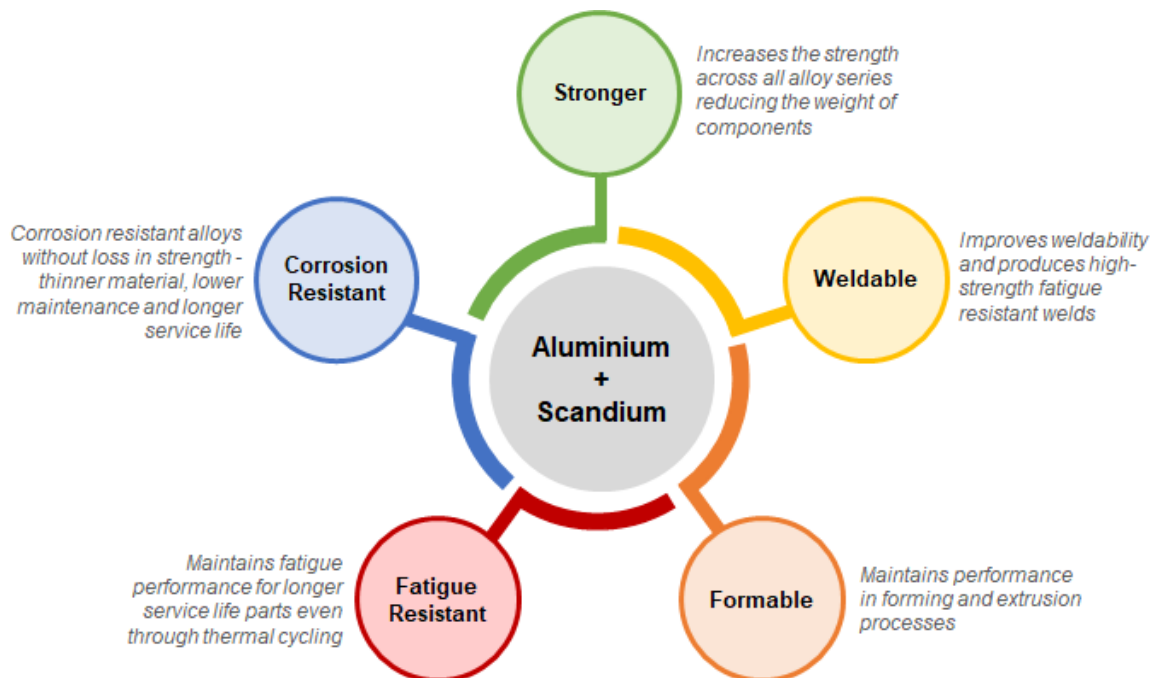


Figure 1: Scandium alloyed with aluminium presents significant improvements to the deployment of aluminium in transportation, enhancing aluminium’s leading position in transport.

Authorised for release by the Board.

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About Makuutu Rare Earths Project

The Makuutu Rare Earths Project is an ionic adsorption clay (IAC) hosted Rare Earth Element (REE) deposit located 120 km east of Kampala in Uganda. The deposit stretches 37 km in length and has demonstrated potential for a long life, low-cost capital intensity source of critical and heavy rare earths. These IAC deposits are prevalent in southern China which have been the source of the world's lowest cost critical and heavy REE production, however these deposits are gradually being exhausted and Makuutu represents one of only a handful of such deposits outside of southern China.

The Makuutu deposit is shallow, with less than 3 m of cover over a 12 m thick clay zone which results in low-cost bulk mining methods with low strip ratio. Processing is via simple acidified salt desorption heap leaching which washes the rare earths (in a chemical form) from the ore. The rare earths are precipitated as a mixed rare earth carbonate product, which attracts both a higher payability and achieves a high basket price due to the dominant high value critical and heavy rare earths which make up over 70% of the product basket. The Project has the potential of generating a high margin product with an operation life exceeding 30 years. The Project is also prospective for a low-cost Scandium co-product.

Table 1: Makuutu Resource above 300ppm TREO-Ce₂O₃ Cut-off Grade (reported ASX on 23rd June 2020).

| Resource Classification | Tonnes (millions) | TREO (ppm) | TREO-Ce ₂ O ₃ (ppm) | LREO (ppm) | HREO (ppm) | CREO (ppm) | Sc ₂ O ₃ (ppm) |
|-------------------------|-------------------|------------|---|------------|------------|------------|--------------------------------------|
| Indicated Resource | 9.5 | 750 | 520 | 550 | 200 | 280 | 30 |
| Inferred Resource | 69.1 | 860 | 620 | 640 | 210 | 320 | 30 |
| Total Resource | 78.6 | 840 | 610 | 630 | 210 | 310 | 30 |

Rounding has been applied to 0.1Mt and 10ppm which may influence grade average calculations.

Competent Person Statements

Information in this report that relates to previously reported Exploration Targets and Exploration Results has been cross-referenced in this report to the date that it was originally reported to ASX. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

The information in this report that relates to Mineral Resources for the Makuutu Rare Earths deposit was first released to the ASX on 23 June 2020 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

Forward Looking Statements

This announcement has been prepared by Ionic Rare Earths Limited and may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and

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