

9 July 2021

Dear Shareholders,

The last 12 months has been a busy period for Ionic Rare Earths Limited (ASX: IXR) (“IonicRE” or the “Company”) with a number of important milestones reached, culminating in a very positive scoping study being released to ASX on 29 April 2021.

The next 12 months promises to be as significant, and it is my pleasure to write to you and advise on our planned activities to create growth and shareholder value, including our fast-track approach to developing the Makuutu Rare Earths Project in Uganda. The main areas of focus for the Company over year ahead includes:

- Increasing the Mineral Resource Estimate at Makuutu, including upgrading classification of Indicated and Measured resources;
- Identifying new areas of rare earth mineralisation for future exploration;
- Fast-track the feasibility study at the Makuutu Rare Earths Project in Uganda;
- Move forward strategic partner discussions; and
- Identify value add opportunities for the Company.

Recently the Company announced commencement of the Phase 4 drilling program at Makuutu (ASX announcement 15 June 2021). This drill program supports the Company’s philosophy to not only increase the global Mineral Resource Estimate (MRE) but concurrently move an increased percentage of the MRE into the Measured and Indicated category, greatly enhancing our Feasibility Study. The Company is also considering further opportunities to expedite increasing the resource base, which will add considerable value to the Feasibility Study, and to the Company.

In May we completed the Phase 3 drill program, which included 67 rotary air blast (RAB) drill holes across all five of the Makuutu tenements (ASX Announcement 1 April 2021). The drill assays from this program, pending, are expected to provide a positive indication of areas where additional resource extension potential exists across the Project. Drilling at the highly prospective tenement EL 00147 encountered numerous thick clay intervals, so the pending assay results are eagerly anticipated to confirm the presence of clay hosted rare earth element (REE) mineralisation within the tenements. Subject to positive assay results from this Phase 3 RAB campaign, the Company will evaluate the likely sequencing of additional exploration drilling targets.

Makuutu’s MRE already presents a globally significant ionic adsorption clay (IAC) REE deposit, however there remains potential to further add considerable value to this already robust long life IAC deposit, especially in an environment where demand for a REE basket generated by Makuutu is increasing strongly each year. The increasing demand, year on year, is driven by the push toward carbon neutrality, and technological products derived from heavy and critical rare earths, of which Makuutu’s basket produces one of the best-balanced baskets of all REE projects presently in development. globally. A key differentiator is the composition of magnet REEs, which at 43% of the

Makuutu basket, provides key inputs for the rapidly growing electric vehicle (EV) and offshore wind turbine initiatives that are forecasting growth of up to 8-fold by the end of this decade.

As mentioned, in April, IonicRE released the Makuutu Scoping Study. Based on the existing Indicated resources, the Scoping Study has provided an excellent baseline study that is now driving the current drilling campaigns which are focused on increasing the resource classification for measured and indicated categories. As previously highlighted, there is potential for a project life of 27+ years defined as an upside case based on our ability to convert current Inferred Resources to a higher category of confidence. Our current infill drilling focus will drive towards this outcome.

In March this year IonicRE increased our Mineral Resource Estimate (MRE) to 315 million tonnes at 650ppm Total Rare Earth Oxide (TREO) at a cut-off grade of 200ppm TREO minus cerium oxide (CeO<sub>2</sub>). We hope to further increase the MRE, however our top priority at this time is to complete a Feasibility Study and Environmental and Social Impact Assessment (ESIA) leading to a fully permitted shovel ready Project by the end of 2022.

On a very positive note, the Company has appointed Melbourne based Mincore Pty Ltd (“Mincore”) in the role of Feasibility Study Manager. Mincore is now working with IonicRE in an integrated team to deliver the study against a firm schedule and we are committed to delivering our Project milestones.

The team at IonicRE is focussed on fast tracking the development of Makuutu, evident from the ramp up in activity over the last three months, as this is largely driven by a series of milestones in accordance with Ugandan Mining Regulations and our requirement to submit a Mining Licence application by the end of October 2022.

Work has been steady on the ESIA since activity formally commenced in March post the receipt of the approved Terms of Reference from the National Environmental Management Authority (NEMA) in Uganda earlier this year (ASX announcement 31 March 2021). Specific field work activity including the baseline data collection is nearing completion and the Company is working towards lodging a draft with NEMA in Q4 2021.

Our community engagement activity currently involves working with various stakeholders, having completed numerous meetings over the past quarter via face-to-face community meetings, and recent government stakeholder sessions supported by our Ugandan Rwenzori team and in-country consultants, and internet conferencing tools where possible.

We maintain a very active work program with our partners in Rwenzori Rare Metals, with Ugandan activity ramping up with two rigs now active at Makuutu. A third rig expected within four weeks and our largest drill program to date now underway. Geotechnical testwork programs are in progress and appointment of other in-country specialist consultants is also ramping up.

Corporately, the Company has been engaging with several investor groups, and it is evident there is very strong investor interest internationally driven largely by growing awareness of the Makuutu Rare Earths Project, and its well-balanced basket, dominated by individual metals classified as critical or strategic by a growing list of countries. Given that several investment houses have shown interest in IonicRE we have initiated a due diligence process to review and evaluate alternative investment markets, such as a dual stock market listing on alternative exchanges where we see strong interest in the Makuutu Rare Earths Project and its unique offering. The Makuutu REE opportunity has resonated strongly with European, UK and US investors looking to get exposure to the critical and

heavy REE dominant basket that the Project provides, which distinctly differentiates Makuutu compared to many other REE investment opportunities globally.

Other international activity also includes the non-binding MOU with China Rare Earths Jiangsu (announced to ASX on 7 April 2021) which provides IonicRE with a path to expedite Makuutu with the support of one of the largest, if not the largest, global ionic adsorption clay operator and refiner. China Rare Earths Jiangsu has four plants in production, and is currently processing products from IAC mines, and as such the opportunity to work with the Chinalco subsidiary provides a lower risk with respect to having an operational demand already in place for Makuutu product when we commence operations in 2024. Realistically, it must be understood that as it stands today, all heavy REE separation capacity projected to be in operation by 2024 exists in China, with minor capacity in Vietnam. As such, IonicRE's decision to engage directly with China Rare Earths Jiangsu makes strategic sense and forms part of the overall strategy for the development of Makuutu.

IonicRE can also confirm that we continue to progress previously initiated discussions with numerous other global strategic partner groups, with aspirations to acquire the Makuutu product basket and secure long-term stable supply. As part of these discussions, the Company is exploring opportunities to extract greater value from our uniquely balanced critical and heavy REE basket, along with scandium, which the Project will produce at low costs with ability to readily scale production to meet global growth demand.

With respect to the timing of any offtake agreements, there remains many additional steps, including product testwork, before any agreements can be finalised. Primarily, the questions of downstream rare earth separation and refining needs to be resolved, and as part of discussions with some of the strategic partners, IonicRE is working through a number of options. This is the big differentiator for Makuutu and IonicRE – we have a product basket that is very desirable; it's a basket with diverse appeal across numerous industries and unparalleled strategic importance. Makuutu's basket appeal extends across EVs, offshore wind turbines, communications, and defence, and differentiates Makuutu from many hard rock REE projects with revenue primarily from NdPr. This is not the case for Makuutu, which obtains approximately 50% of revenue from the heavy REE. As such, the Company is looking for ways to preserve long-term optionality for offtake, and these discussions continue.

The Company is working hard to progress our unique Makuutu Rare Earths Project in a timely, methodical, and considered manner, and I look forward to keeping you updated as we drive the Makuutu forward.



Tim Harrison  
Managing Director  
Ionic Rare Earths Limited

## Makuutu Mineral Resource Estimate

**Table 1: Makuutu Resource above 200ppm TREO-CeO<sub>2</sub> Cut-off Grade**

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)	Sc <sub>2</sub> O <sub>3</sub> (ppm)
Indicated Resource	66	820	570	590	230	300	30
Inferred Resource	248	610	410	450	160	210	30
<b>Total Resource</b>	<b>315</b>	<b>650</b>	<b>440</b>	<b>480</b>	<b>170</b>	<b>230</b>	<b>30</b>

Rounding has been applied to 1Mt and 10ppm which may influence averaging calculation.

All REO are tabulated in MRE announcement dated 3 March 2021 with formulas defining composition of Light Rare Earth Oxides (LREO), Heavy Rare Earth Oxides (HREO), Critical Rare Earth Oxides (CREO) and Total Rare Earth Oxides (TREO).

**Table 2: Mineral Resources by Area**

Classification	Indicated Resource			Inferred Resource			Total Resource		
Area	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)	Tonnes (millions)	TREO (ppm)	TREO-CeO <sub>2</sub> (ppm)
<b>Central Zone</b>	66	820	570	51	730	500	118	780	540
<b>A</b>				12	570	390	12	570	390
<b>B</b>				25	410	280	25	410	280
<b>C</b>				-	-	-	-	-	-
<b>D</b>				6	560	400	6	560	400
<b>E</b>				-	-	-	-	-	-
<b>Central Zone East</b>				37	740	520	37	740	520
<b>F</b>				11	570	390	11	570	390
<b>G</b>				6	660	450	6	660	450
<b>H</b>				4	780	560	4	780	560
<b>I</b>				96	550	350	96	550	350
<b>Total Resource</b>	<b>66</b>	<b>820</b>	<b>570</b>	<b>248</b>	<b>610</b>	<b>410</b>	<b>315</b>	<b>650</b>	<b>440</b>

Rounding has been applied to 1Mt and 10ppm which may influence averaging calculations.

## Competent Person Statements

Information in this report that relates to previously reported Exploration Targets and Exploration Results has been crossed-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 3 March 2021 and is available to view on [www.asx.com.au](http://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 assumptions which are outside the control of Ionic Rare Earths Limited. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Ionic Rare Earths Limited does not undertake any obligation to update or revise any information or any of the forward-looking statements in this document or any changes in events, conditions or circumstances on which any such forward looking statement is based.