# RESOURCES

Discovery focussed exploration company searching for critical minerals essential for the clean energy transition - Niobium, REE, Ni, Cu



Investor Presentation August 2023



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### **Technical Information**

This presentation includes disclosure of scientific and technical information. The information in this document is based on, and fairly represents information and supporting documentation reviewed by Mr Thomas Langley, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Thomas Langley is a Director of the Company. Mr Thomas Langley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Thomas Langley has approved this document as a whole in the form and context in which it appears.

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Certain information contained in this presentation may contain "forward-looking statements". Forward-looking statements may include, but is not limited to, information with respect to the future financial and operating performance of Lycaon, its subsidiaries and affiliates, the estimation of Mineral Reserves and Mineral Resources, realization of Mineral Reserve and Mineral Resource estimates, costs and timing of development of Lycaon's projects, costs and timing of future exploration, timing and receipt of approvals, consents and permits under applicable legislation, results of future exploration and drilling and adequacy of financial resources. Forward-looking statements are often characterized by words such as "plan", "expect", "budget", "target", "project", "intend", "believe", "anticipate", "estimate" and other similar words or statements that certain events or conditions "may" or "will" occur.

Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from those expressed or implied by such forward-looking statements, including: risks associated with investments in publicly listed companies; risks associated with general economic conditions; fluctuations in commodity prices; the inherent risks and dangers of mining exploration and operations in general; the possibility that required permits may not be obtained; environmental risks; uncertainty in the estimation of Mineral Resources and Mineral Reserves; general risks associated with the feasibility, development and production of each of Lycaon's projects; the risk that further funding may be required, but unavailable, for the ongoing exploration, development and production of Lycaon's projects; changes in laws or government regulations, policies or legislation; unforeseen expenses; fluctuation in the exchange rate of the Australian dollar; litigation risk; risks of being unable to sell production resulting from the development of a project; uninsured hazards; disruptions to Lycaon's supplies or service providers; reliance on key personnel; retention of key employees; absence of dividends; and competition. Forward-looking statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of their experience and their perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Lycaon believes that the assumptions and expectations reflected in such forward-looking statements are reasonable.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been considered by Lycaon. Although Lycaon has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, the forward looking information contained in this release is expressly qualified in its entirety by this qualifying statement and readers should not place undue reliance on forward-looking statements. Lycaon does not undertake to update any forward-looking statements, except in accordance with applicable securities laws.

LYCAON RESOURCES

## **CORPORATE OVERVIEW**

### Pat Burke Non-Executive Chairperson

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For

- Extensive legal and corporate advisory experience in ASX companies
- Active Board member of several ASX listed companies, including recently as Executive Chairman of Meteoric Resources and Non-**Executive Chairman of Province Resources Limited**

### **Thomas Langley** Technical Director

- +10 years geologist focussed on economic discoveries
- Lanthanein Resources led the discovery of high grade REE's at the Gascoyne Lyons project
- BSc (UWA) and MSc Econ Geol (CODES)

### Ranko Matic Non-Executive Director

• Chartered Accountant with over 30 years in the areas of financial and executive management, accounting, and corporate advisory

### L Melanie Ross Company Secretary

• 20 years experience in financial accounting and corporate advisory

### ASX 1

Ordir

Unlist

Share

Mark

Cash

Debt

Enter

### **Capital Structure** (24 August 2023)

Ticker	LYN
nary Shares	42,906,251
ted Options (ex. \$0.30)	4.4M
e Price (25/08/2023)	\$0.27
et Capitalisation (\$0.27cps)	\$11.58M
at Bank (post Placement 26/7/23)	~\$3.9M
	Nil
rprise Value	\$7.68M

Shareholders	
Substantial Shareholders	
~6%	
~6%	

## **BOW RIVER**

Currently diamond drilling onsite targeting another 'Savannah North' ± 'Nova' style magmatic nickel-copper discovery

Drillholes designed to investigate **large gravity anomaly defined in geophysical surveys that remain untested** at depth located down plunge from historical high-grade nickel and copper mineralisation

Bow River Project consists of ~10km<sup>2</sup> layered mafic intrusion with a **high grade gossan at surface** over 900m x 300m, historic sampling at surface recorded **up to 28% Cu** 

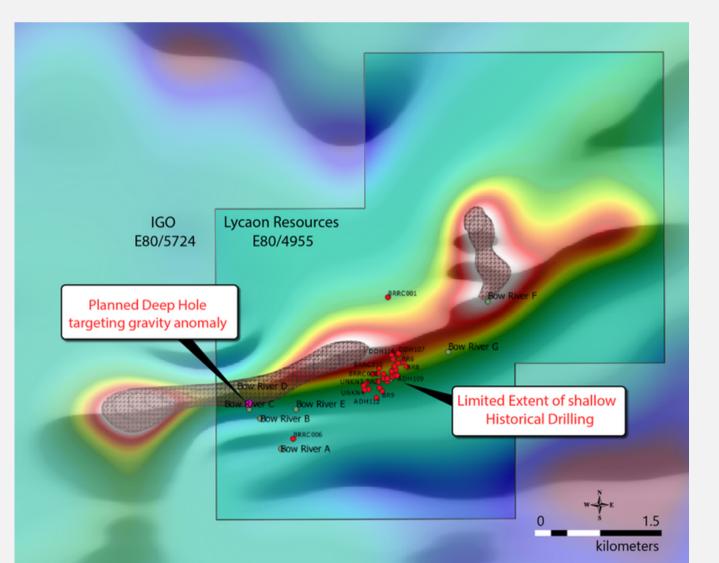
The recent discovery (2014) of the Savannah North resource at depth adjoining the existing mine (effectively **quadrupling the Ni-Cu-Co resource**) has highlighted the **significant discovery potential at depth within these mafic intrusives** 

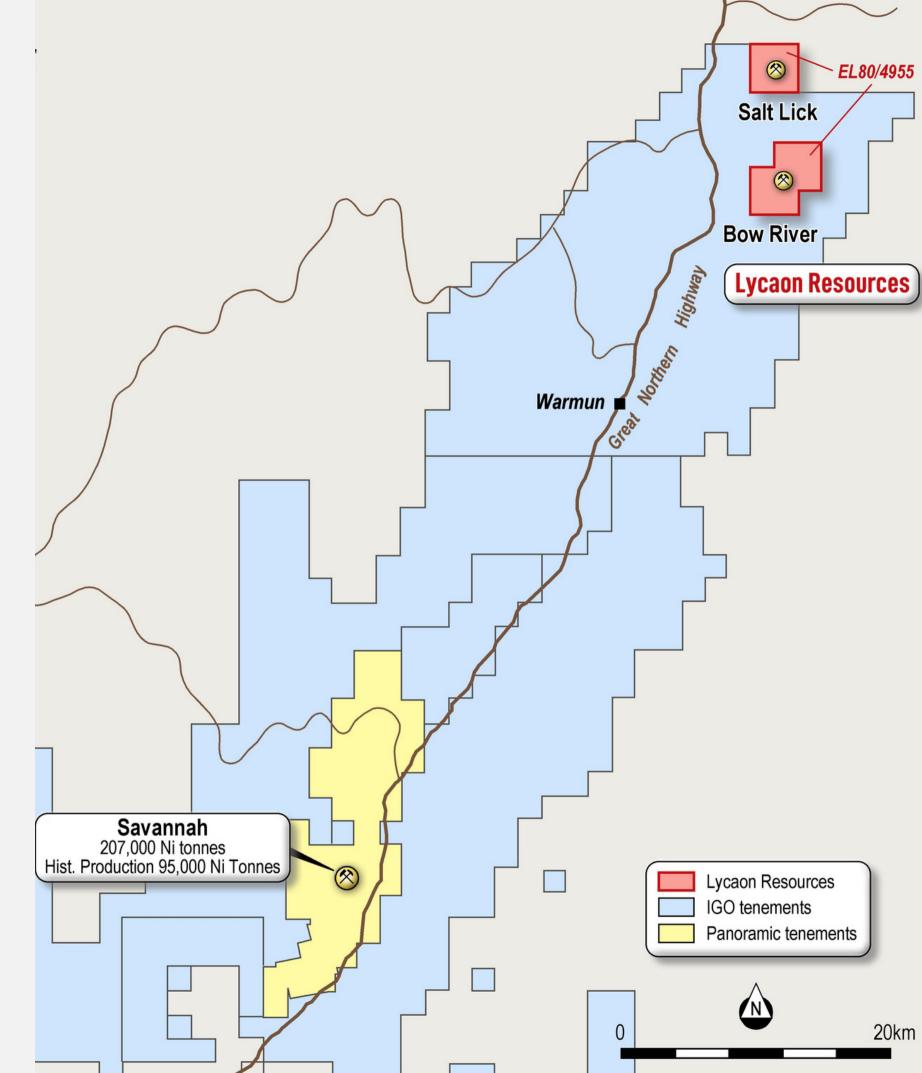


### **BOW RIVER**

Diamond drilling scheduled to take approximately 4 weeks consisting of two diamond drillholes with prospective gravity target zone anticipated to be intersected between 350m to 750m depth

 $\bigcirc O$  Other active explorers in the region include IGO and  $\bigcirc O$  Panoramic Resources





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## WEST ARUNTA

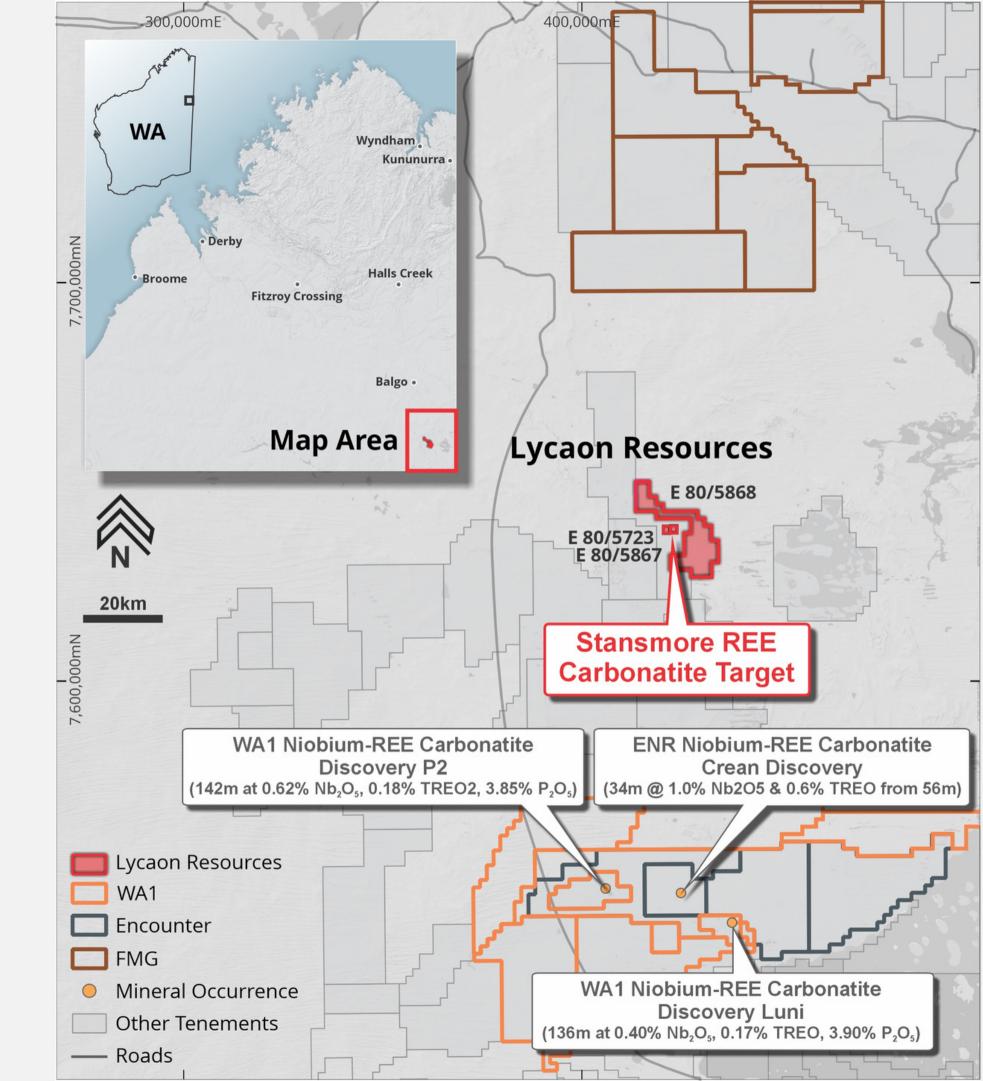
Stansmore West Arunta Niobium-REE Carbonatite Project covers <u>172km<sup>2</sup> granted tenement E80/5723</u>, <u>80/5867 and 80/5868</u>

700m long magnetic feature with striking similarities to OS WA1 Niobium-REE Carbonatite discovery and ENR IOCG-REE discoveries

Sector First mover advantage pegged in November 2021 prior to recent discoveries

Located at **juncture of two major regional faults** and offset from major North Australia Craton Boundary

Long been recognised as a **regionally significant magnetic feature** of interest, with historic exploration targeting diamondiferous kimberlites by BHP in 1982 **never explored for critical minerals Niobium and REE's** 

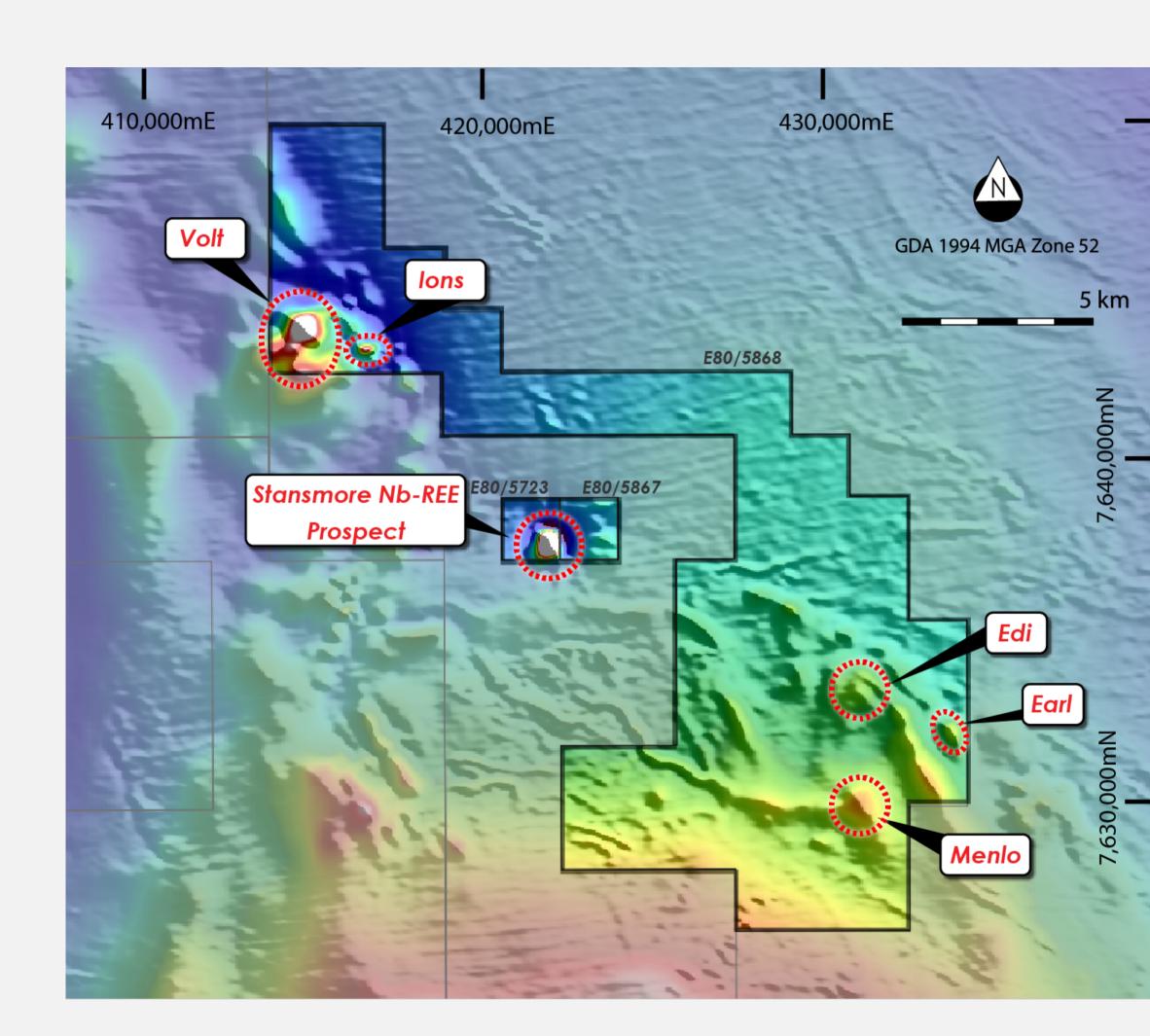


## WEST ARUNTA

### <u>The West Arunta is one of the last</u> <u>frontiers for major discoveries in</u> <u>Australia</u>

The identification of rare earth mineralisation associated with carbonatite intrusions by WA1 and ENR nearby in their first ever drill programs, signifies the extremely prospective and underexplored nature of the West Arunta

Southern Geoscience Consultants (SGC) re-processed magnetic data over the Stansmore Carbonatite Project highlights <u>multiple new targets</u> <u>identified prospective for Niobium-</u> <u>REE mineralisation</u>

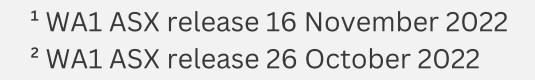


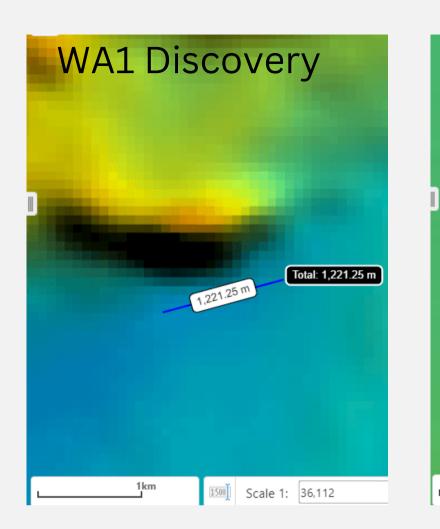
## **WEST ARUNTA**

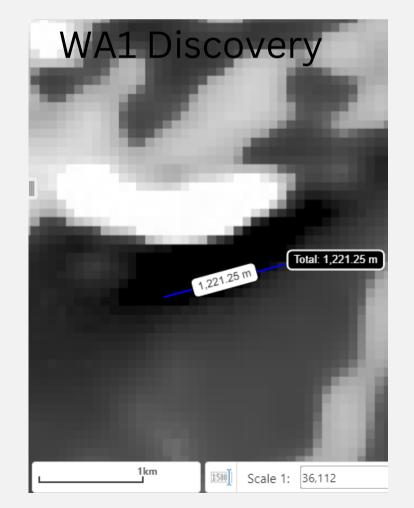
Both WA1 and ENR are **targeting** discrete, coincident gravity-magnetic anomalies with ~1km strike

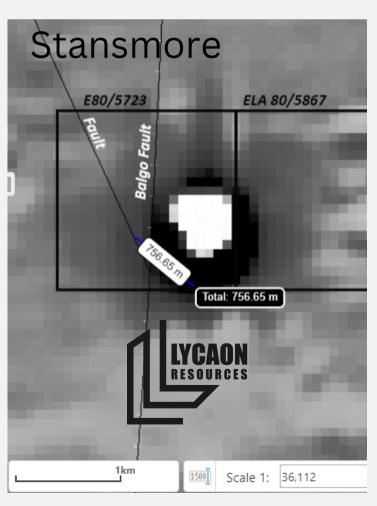
 $\frac{1}{0}$  WA1's discovery drill results include;

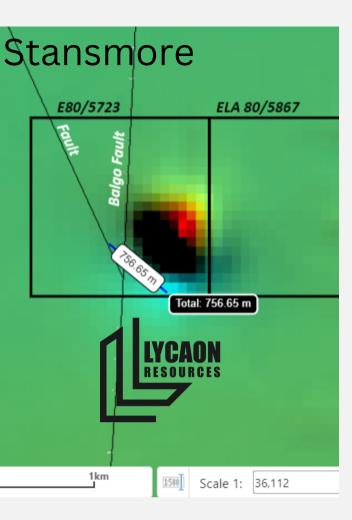
- 136m at 0.40% Nb2O5, 0.17% TREO, For personal use 3.90% P2O5 from 28m (Luni target -LURC002)<sup>1</sup>
  - 142m at 0.31% Nb2O5, 0.17% TREO, 3.94% P2O5 from 74m to 216m (EOH) (**P2 target** - PARCOO3)<sup>2</sup>
  - 24m at 0.82% Nb2O5, 0.21% TREO, 6.44% P2O5 from 157m (Luni target -LURC001)<sup>1</sup>

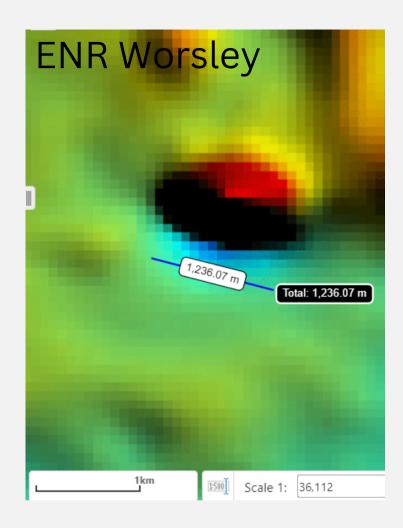


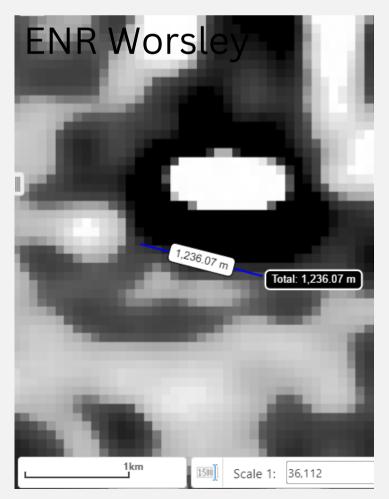












### NEWSFLOW

- Diamond drilling at Bow River estimated to be completed mid September
- Downhole electromagnetic surveys to be completed late September to define if conductors are present that may be related to massive sulphide nickel-copper mineralisation
- West Arunta land access agreement meeting on-country at Balgo mid September
- Bow River assays results from diamond core Q4 2023
- West Arunta heritage surveys Q1 2024
- West Arunta and Bow River drilling Q2 2024

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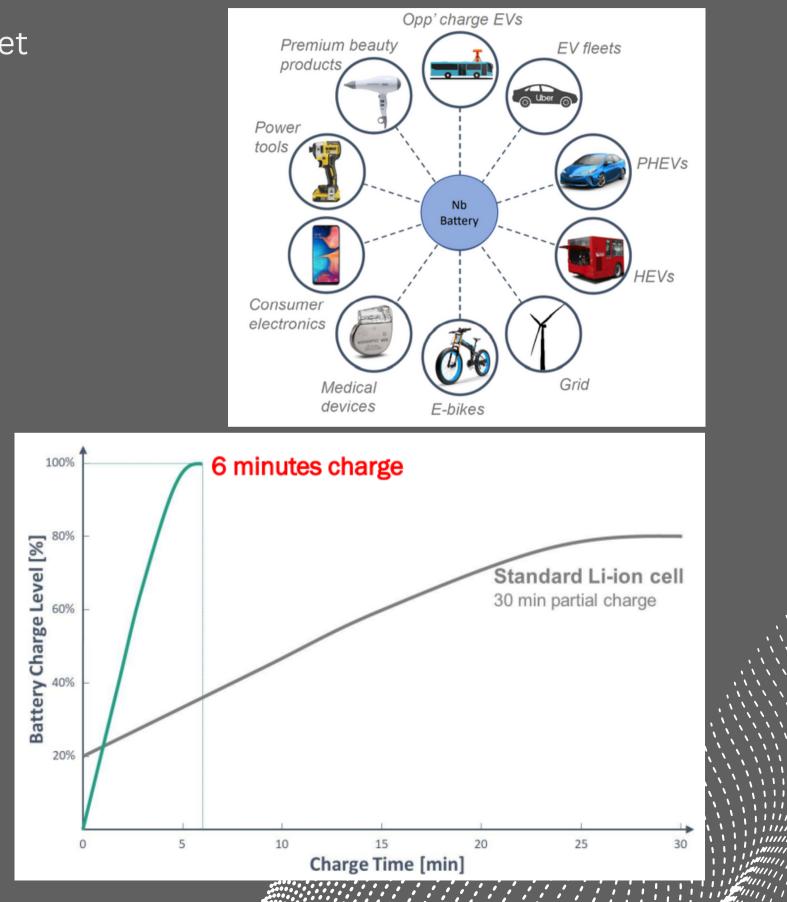
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## Niobium (Nb) - a Battery Mineral

- Niobium-based batteries will revolutionize the battery market Super-fast charging and discharging rate ( <6 minutes)</p>
- More power and increased range
- Improves performance at low temperatures
- More charging cycles (+20,000 cycles)
- Demand for niobium to increase 100% by 2030<sup>1</sup>

### **Companies involved with Niobium Battery Technology**





## Niobium (Nb) - a Battery Mineral

Niobum's Role

- Nipbium has been identified by the Australian Government and many other countries as a critical mineral
- Niobium is a metal with a very high melting point
- /#//Ferroniobium (FeNb, 65% Nb) is **used in alloys** in small amounts (<1%) to make steel usage more efficient
- Stronger, lighter, corrosion resistant and heat resistant
- It is an essential metal for advanced technology with additional uses in gas and wind turbines
- Niobium **improves the performance of batteries** by improving chargeability and stability



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Niobium addresses almost all of the major barriers to electric vehicle adoption.

### Barriers to EV adoption

Consumers worry that an EV will not travel as far as an ICE vehicle and that performance will vary

Charging times can vary significantly

depending upon the car and charging

station but can take several hours

Niobium helps increase the energy density of batteries, giving more power and increased range, and improves performance at low temperatures

### CHARGING TIME

RANGE ANXIETY



Niobium materials can increase the rate with which batteries charge and discharge

### PERFORMANCE/LONGEVITY

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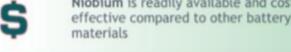
Batteries have a relatively short oper ating life as materials degrade during charge/recharge cycle

> Even with subsidies, BEVs are more expensive than equivalent ICE vehicles



battery so it can withstand more charging cycles Niobium is readily available and cost

Niobium increases the stability of the

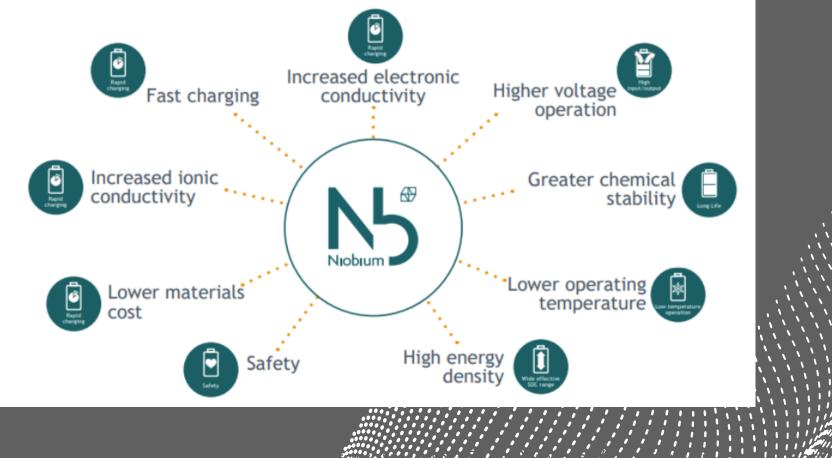


materials

There are few BEVs on the market



This is changing rapidly

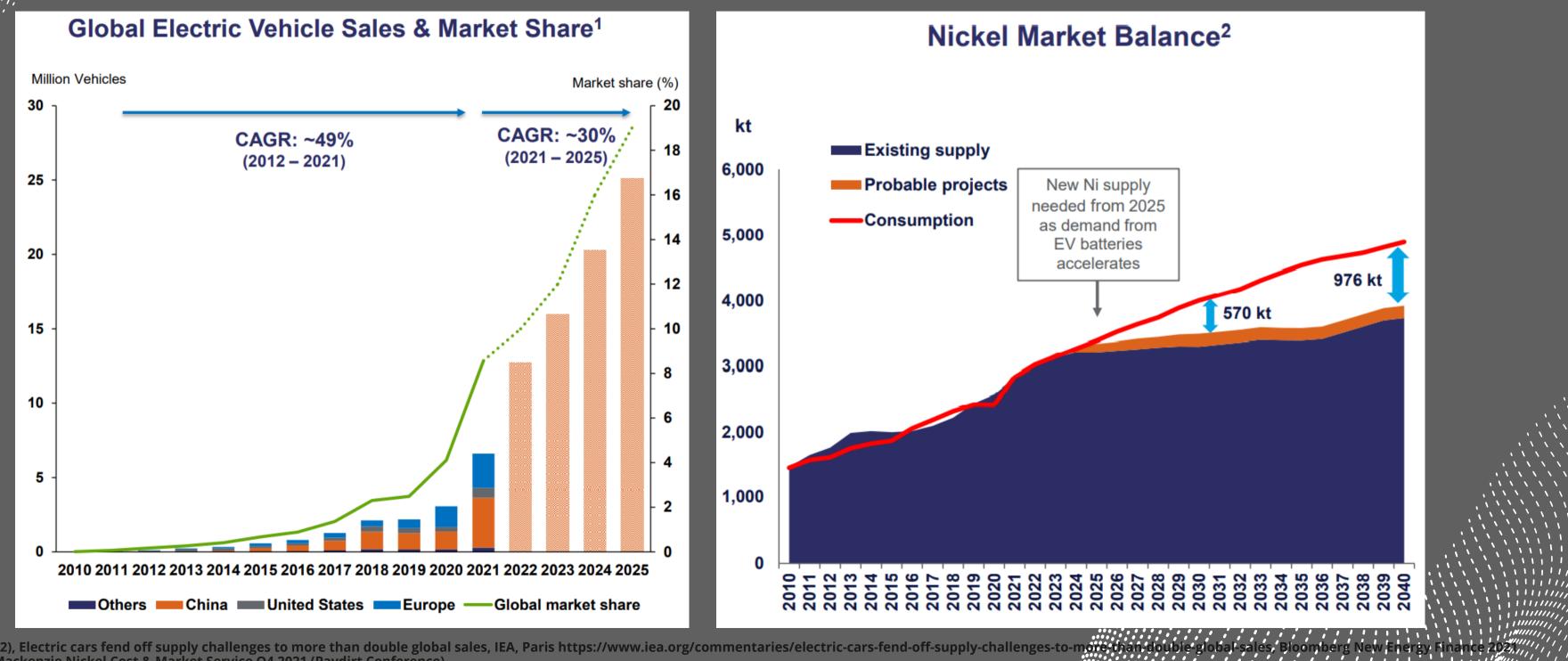




## Nickel Demand Growth

EV makers are said to be desperately short on nickel in particular, with S&P Global predicting the battery

sector to near 35% of total nickel demand by the end of the decade.



1. Source IEA (2022), Electric cars fend off supply challenges to more than double global sales, IEA, Paris https://www.iea.org/commentaries/electric-cars-fend-off-supply-challenges-to-m 2. Source: Wood Mackenzie Nickel Cost & Market Service Q4 2021 (Paydirt Conference)

## **CONTACT US**

### **Thomas Langley Technical Director**



- +61 (08) 6188 8181
- admin@lycaonresources.com
- www.lycaonresources.com
- Level 2, 22 Mounts Bay Road, Perth WA 6000



@Lycaon\_ASX

