

# **DISCLAIMER**

This company presentation (the Presentation) of Transition Minerals Limited (the Company) has been prepared by the Company solely for information purposes and for the sole use of the person to whom it is delivered. The Presentation is prepared for discussion purposes only. The Presentation does not constitute, and should not be construed as, any offer or invitation or recommendation to buy or sell any of the securities mentioned or described herein. The Presentation and the information contained herein is strictly confidential and may not be distributed, reproduced or used, in whole or in part, without the consent of the Company and may not be used for any purpose other than the evaluation of the business of the Company by the person to whom the Presentation is delivered. Applications for shares (if any) will only be considered on the terms of the final application terms, if and when issued. The Presentation has not been and will not be reviewed or registered with any public authority or stock exchange.

The Company does not make any representation or warranty (whether express or implied) as to the correctness or completeness of the information contained herein, and neither the Company nor any of its related companies or any such person's affiliates, directors, employees, representatives or advisors assume any liability connected to the Presentation and/or the statements herein.

The contents of the Presentation are not to be construed as financial, legal, business, investment or tax advice. Each recipient should consult with its own financial, legal, business, investment and tax advisers as to financial, legal, business, investment and tax advice. By attending or receiving the Presentation you acknowledge that you will be solely responsible for your own assessment of the market and the market position of the Company and that you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of the Company's business and any investment in the Company involves significant risks, and several factors could cause the actual or future results, performance or achievements of the Company to be materially different from any results, performance or achievements that may be expressed or implied by information in the Presentation.

Included in the Presentation are various 'forward-looking statements', including but not limited to statements regarding the intent, opinion, belief or current expectations of the Company and/or its management with respect to, among other things, [i] goals and strategies, [ii] plans for new business development, [iii] marketing plans and the Company's target markets, [iv] evaluation of the Company's markets, competition and competitive position, and [v] trends which may be expressed or implied by financial or other information or statements contained herein. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance and outcomes to be materially different from any future results, performance or outcomes expressed or implied by such forward-looking statements.

The distribution of the Presentation and any offering, subscription, purchase or sale of securities issued by the Company may in certain jurisdictions (including but not limited to USA, Canada, Japan, Australia and Hong Kong) be restricted by law. Persons, into whose possession the Presentation may come, are required to inform themselves of and to comply with all applicable laws and regulations in force in any jurisdiction in or from which they invest or receive or possess the Presentation, and they must obtain any consent, approval or permission required under the laws and regulations in force in such jurisdiction, and the Company shall not have any responsibility or liability for these obligations.

The Presentation does not constitute an offer to sell or a solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation to in such jurisdiction. The Company's securities have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act") or the securities laws of any state of the United States.

The Presentation is made and reflects views as of July 2024. As a recipient of the Presentation, you accept that the information contained herein may be subject to changes. The Company does not intend, and does not assume any obligation, to update or correct any information included in the Presentation.

The Presentation is subject to Australian law. Any dispute arising from the Presentation is subject to the jurisdiction of the Australian courts.



# **EXPLORATION TARGET DISCLOSURE**



The references in this presentation to an Exploration Target should be read in conjunction with this disclosure.

Transition Minerals Limited interpreted results from samples collected from 755 metres of aircore drilling over 46 holes at the Vanadis and Benmara prospects of the Barkly Project, Northern Territory (Transition Minerals Limited 100%). Drilling data were previously disclosed in announcements dated 10/11/2022, 4/1/2023 and 11/1/2023 which are available at <a href="https://www.transitionminerals.com/announcements/">www.transitionminerals.com/announcements/</a>. Cross-sections and drillholle spacing are illustrated on page 7 of this presentation.

Based on these Exploration Results, an Exploration Target of 200–1,000 million tonnes at 1,600–1,900 ppm Total Rare Earth Oxide (TREO) in addition to an overlying Exploration Target of 300–1,000 million tonnes at 0.12–0.14% vanadium pentoxide ( $V_2O_5$ ) were determined by a Competent Person and are reported in accordance with the JORC Code (2012).

Exploration Targets are approximations. The potential quantity and grade of the Exploration Targets is conceptual in nature; there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Category	Million Tonnes	V <sub>2</sub> O <sub>5</sub> %	TREO (ppm)
Exploration Target	200-1,000		1,600–1,900 [incl. 500–700 NdPr]
Exploration Target	300-1,000	0.12-0.14	

The Company intends to undertake further drilling to test the validity of the Exploration Targets. Initial testing is likely to include several widely spaced drill lines across the tenements. These are expected to be completed by Q4 2024.

### **Competent Persons Statement**

The information in this presentation that relates to an Exploration Target is based on information evaluated by René Sterk who is a Fellow of the Australasian institute of Mining and Metallurgy (FAusIMM), a Certified Practising Geologist, a Registered Professional Geologist. He holds an ex-officio position on the JORC committee and has sufficient experience relevant to the activity which he is undertaking 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 (JORC Code 2012). Mr Sterk is Chairman of Transition Minerals Limited and he consents to the inclusion in this presentation of the information in the form and context in which it appears. Mr Sterk indirectly holds shares in Transition Minerals Limited and is the main shareholder and managing director of RSC, a geological service company contracted to undertake exploration work for Transition Minerals Limited.

# **COMPANY MAKER**

### **BARKLY RARE EARTH AND VANADIUM DEPOSIT**



## **COMBINATION REE + V PROJECT**



Regolith-hosted rare-earth-element deposit



Breathtaking 33% NdPr paydirt: decarbonisation Holy Grail



Grade and Scale: 40 Mt @ 2,100 ppm TREO Vanadium in overburden: 200 Mt @ 0.12%  $V_2O_5$  Gallium credits

Inferred Mineral Resources (JORC, 2012)



Further drilling to evaluate massive upside: 200–1,000 Mt @ 1,300–1,900 ppm TREO 300–1,000 Mt @ 0.12–0.14 %  $V_2O_5$ 

Exploration Targets (JORC, 2012)\*



Mineralisation from surface, open all directions



94% vanadium extraction in leach tests 74% NdPr extraction in leach tests Flotation concentrate ~10x TREO upgrade

### **PROGRESSING AIMS:**



Tier 1 rare earth project with vanadium credit



Bulk mining, low strip



Low-cost, modern, hydrometallurgical recovery







**Rare Earths** 

<sup>\*</sup>See disclosure on page 3. The potential quantities and grades of the Exploration Targets are conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. For original announcements, refer to company announcements at <a href="https://www.transitionminerals.com/announcements">www.transitionminerals.com/announcements</a>

# HIGH-ENERGY TOP-QUALITY TEAM



### INDUSTRY-LEADING TECHNICAL TEAM WITH RECORD OF VALUE CREATION AND DISCOVERY



René Sterk
Chairman & Director
MSc FAusIMM CP(Geo) MAIG (RPGeo)
MSEG MInstD

René is a Chartered Professional and a Fellow with the AuslMM, and a Member and Registered Professional Geologist with the AlG. He is a director of RSC (international geological consultancy), a director with the AuslMM (peak body for mining professionals with 13,000 members), a director of Straterra (New Zealand's industry lobby group and national voice for the natural resources industries), and a director of Opaxe (an information technology company providing mineral resource intelligence data). He holds an ex-officio role on the JORC committee.



Tobias Foster

Managing Director

BSc MBA PgCert(PetEng)

Toby has over 20 years' experience in the resources industry, including as Director of Advent Energy, Operations Manager of a geochemical consultancy successfully acquired by global laboratory group SGS, and Corporate Development Manager for an ASX-listed venture capital group focussed on investment into companies targeting potentially large energy and mineral resources. Toby has led successful exploration and appraisal programmes around Australia and secured multi-million dollar corporate and asset-level transactions.



Craig Wright
Director & Company Secretary
MSc MAusIMM MAICD

Craig is the Corporate Development & Strategy Manager and the Acting General Manager—Exploration at RSC, globally one of the largest geological service providers in the minerals industry. His management experience bridges mineral exploration, service, manufacturing, technical and business consulting sectors. Craig cofounded a prominent IT-innovation brand that is established on four continents, and is a director of Opaxe, an on-demand SaaS business leveraging its proprietary database of curated mineral resource data from the global mining sector.



Jim Kerr Board Advisory BSc MSc MAusIMM MSEG AWASM

Jim is an economic geologist with 25 years' experience in the global mining industry, having developed natural resource projects across the commodity spectrum in Australia, Asia-Pacific and Sub-Saharan Africa. Jim has held senior executive roles for companies including Iscor, Barrick Gold Corporation, Mincor, Tethyan Copper, Lithic Metals and Energy (as Managing Director), Hillgrove Resources, Kalbar Resources and Geopacific Resources. He has significant experience working on porphyry copper-gold, epithermal precious metal and base metal deposits.



Paul Frederiks
Board Advisory
FCPA FAICD FGIA

Paul is a professional Company Secretary and Chief Financial Officer with over 30 years' experience in the Australian resources sector. He has an extensive knowledge base in listed public company financial and secretarial management, external reporting, financial modelling and forecasting, project financing, treasury management, corporate governance and hedging. Paul is currently Finance Director and CFO of True North Copper and MaxSil.



Chris Baker
Board Advisory
BSC MBA

Chris has a BSc Hons in Mineral Technology and an MBA, both from Otago University. He has worked as a metallurgist, manager and director in Australia and New Zealand in multiple sectors including gold, mineral sands, uranium, base metals, investment and project development. He has been director and Chair of ASX-listed companies.

Chris is currently the Chair of Seduli Gold Ltd, a public unlisted gold exploration and development company based in Perth, and Chair of RSC Consulting Ltd. He also provides advisory, consulting and mentoring services.



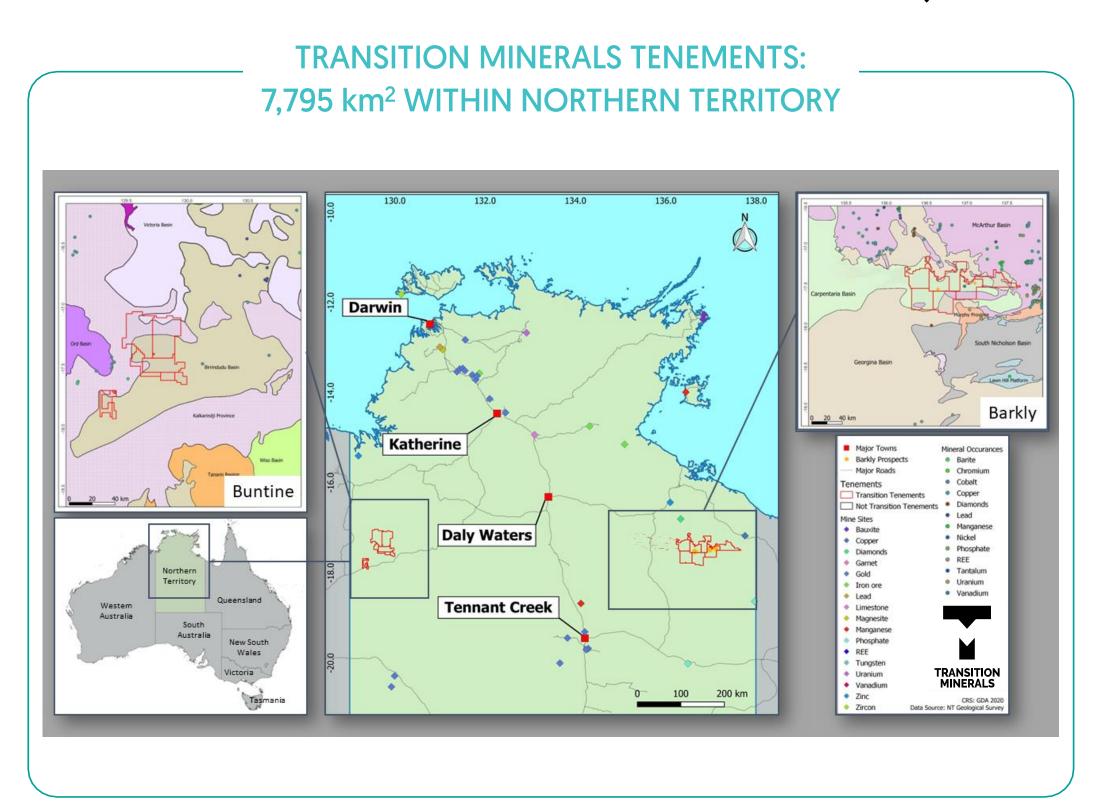
Richard Hall
General Manager
—Exploration
MSc FAUSIMM MGSA

Richard has vast experience across Australia, New Zealand and Africa, including extensive work on sedimentary basin mineralisation. He has diverse commodity exposure including heavy mineral sands and laterite-hosted polymetallic deposits with rare earth elements. He has 38 years' experience in the mining industry, having held senior positions with Goldfields [NYSE: GFI], Anglovaal Gold Division, De Beers Group, Namakwa Diamonds [LSE: NAD] and Newfield Resources [ASX: NWF].

# WHY AND WHERE WE ARE



### IN THE LAND OF GIANTS — SEDIMENT-HOSTED BASE METALS, VANADIUM & RARE EARTHS



# WHY WE ARE HERE "85% of the world's sediment-hosted base metals, including all giant deposits (>10 Mt of metal), occur within 200 km of the edge of thick lithosphere". https://spiral.imperial.ac.uk/bitstream/10044/1/81277/2/134991\_00\_0.pdf Sediment-hosted base metal mineral deposits Lithosphere-Asthenosphere Boundary prospectivity

**Transition Minerals** 

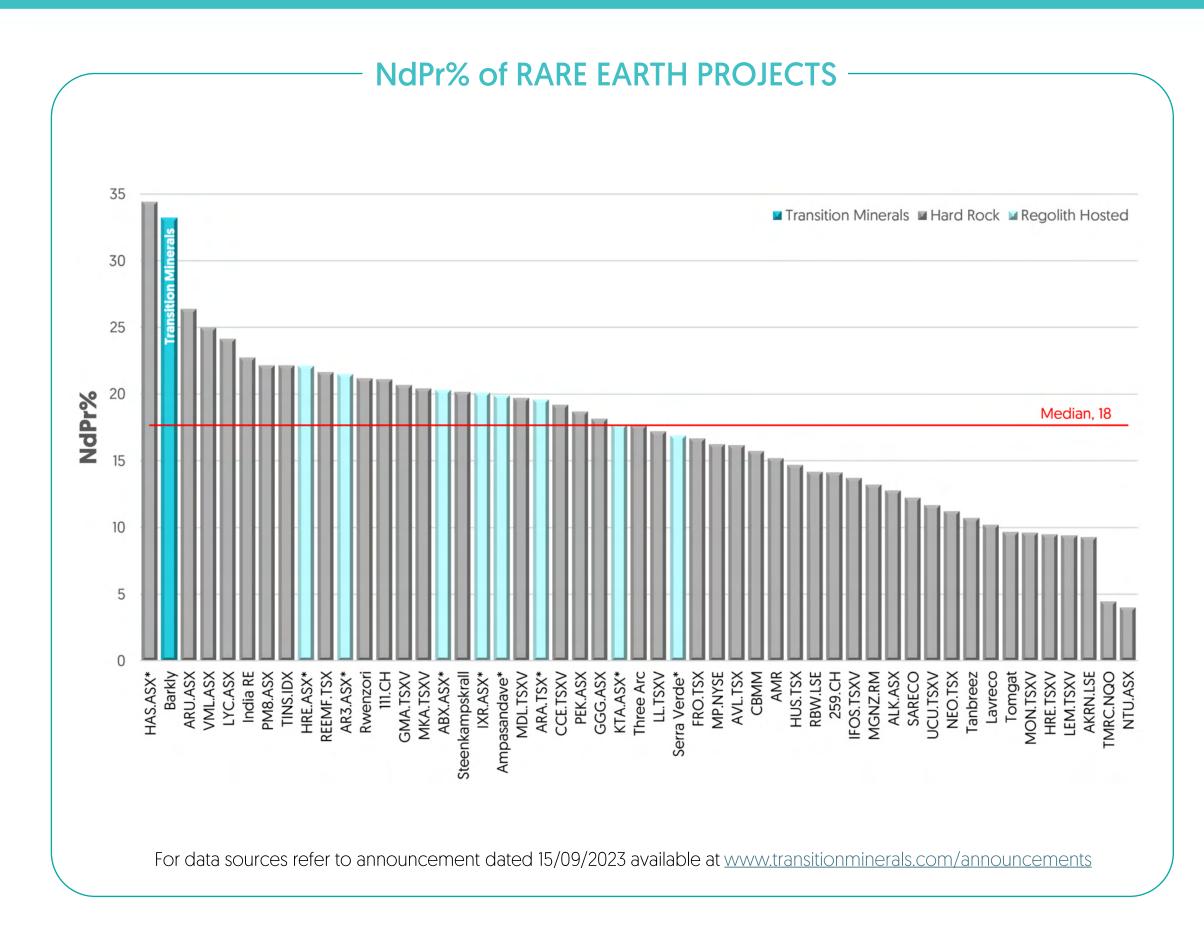
**Tenements** 

Current tenement schedule listed in Appendix A

# TRANSITION: A RARE EARTHS MARKET LEADER

# M

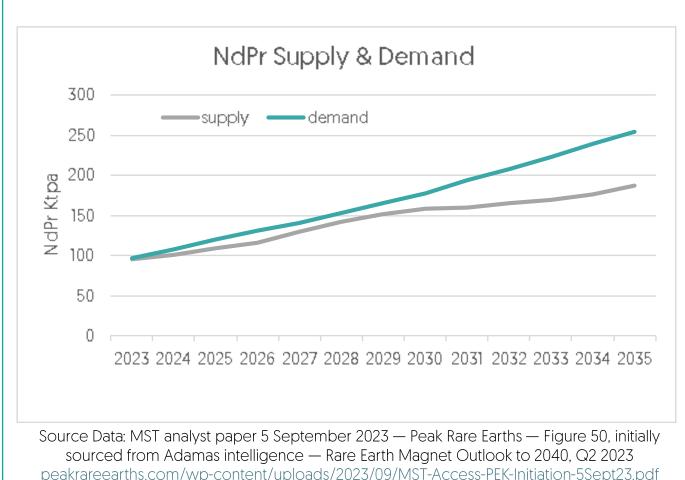
**SUPERIOR NdPr RATIO** 



Transition's Barkly Project contains more of the most sought-after Rare-Earth Elements.

NdPr% =  $[Nd_2O_3 + Pr_6O_{11}]/TREO$ major value influence

### **FORECAST NdPr Market**

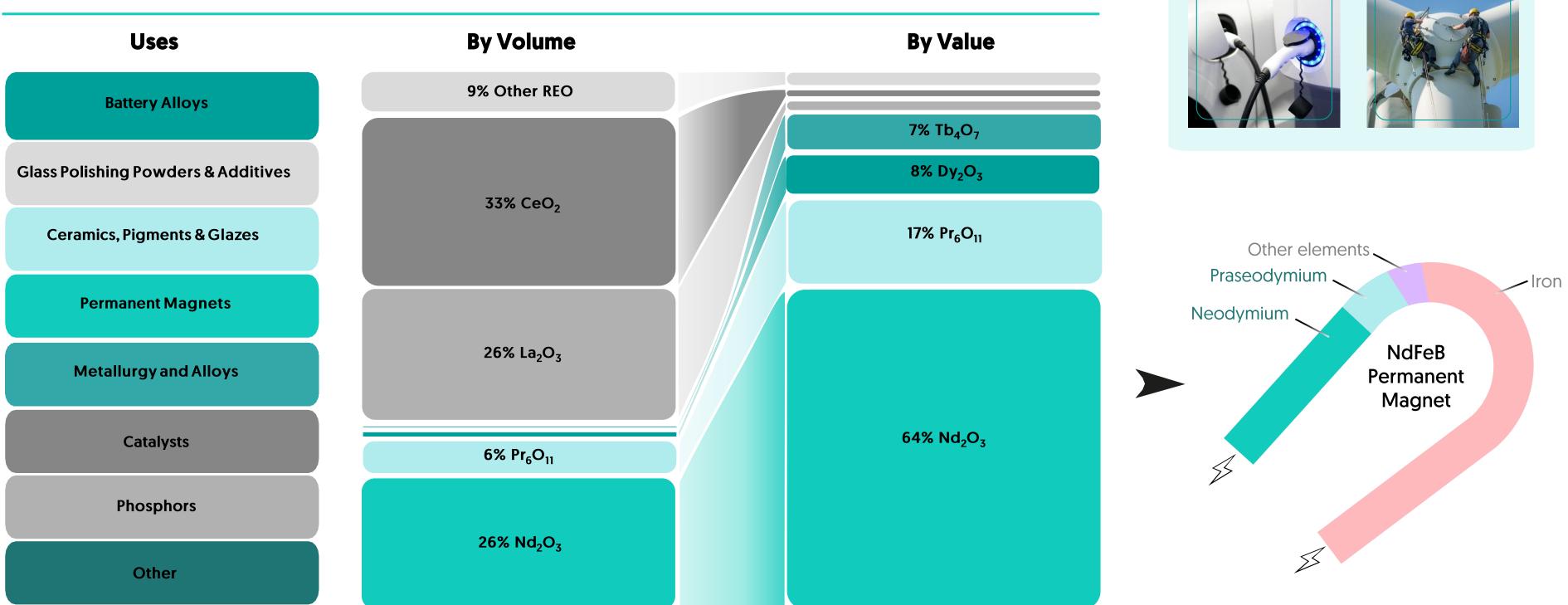


# RARE EARTH MARKET

# M

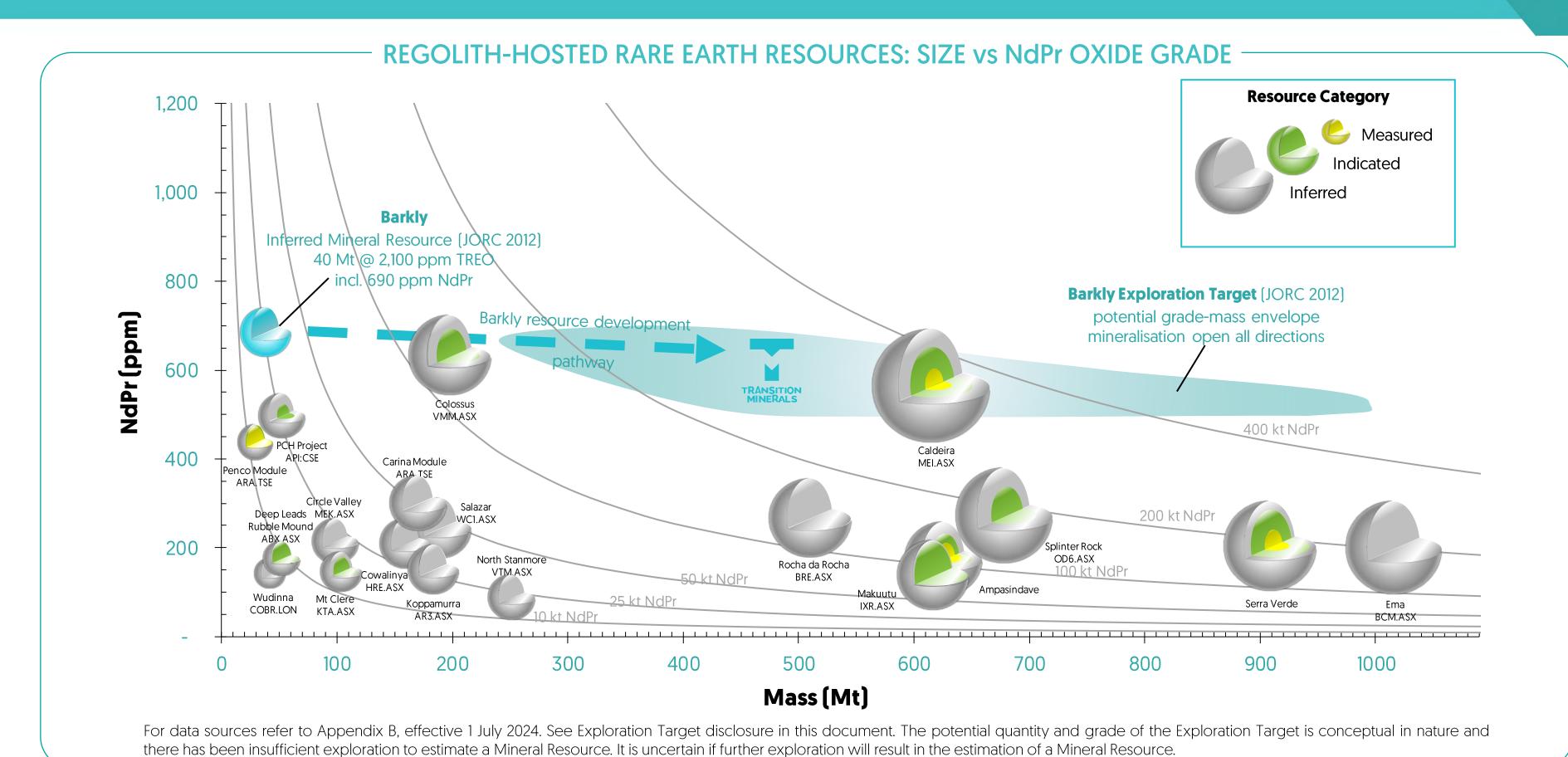
# THE HOTTEST MARKET DRIVING ENERGY INNOVATION

# Why We Care about Neodymium-Praseodymium: 81% of the Rare Earth Market



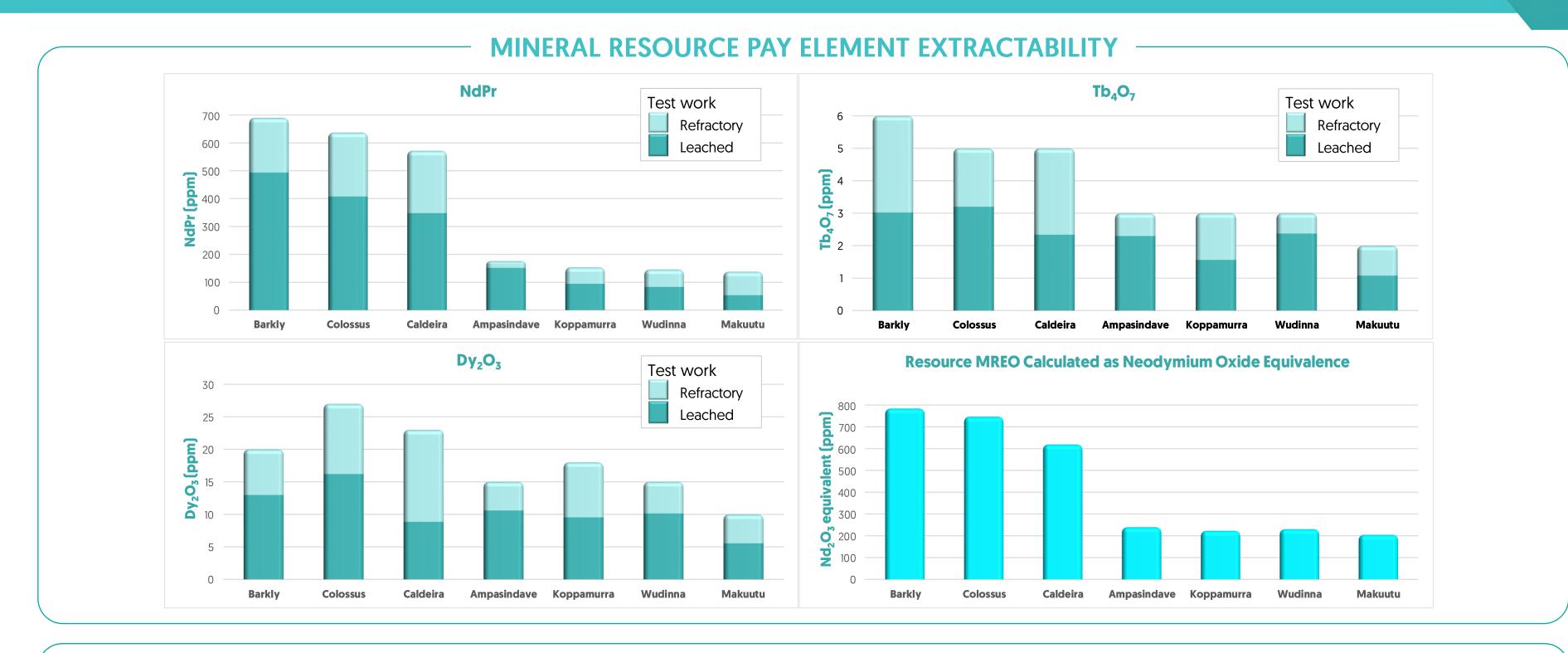
# WHY WE ARE EXCITED

# SUPERIOR EXPLORATION POTENTIAL AND GRADES



# **METALLURGY**

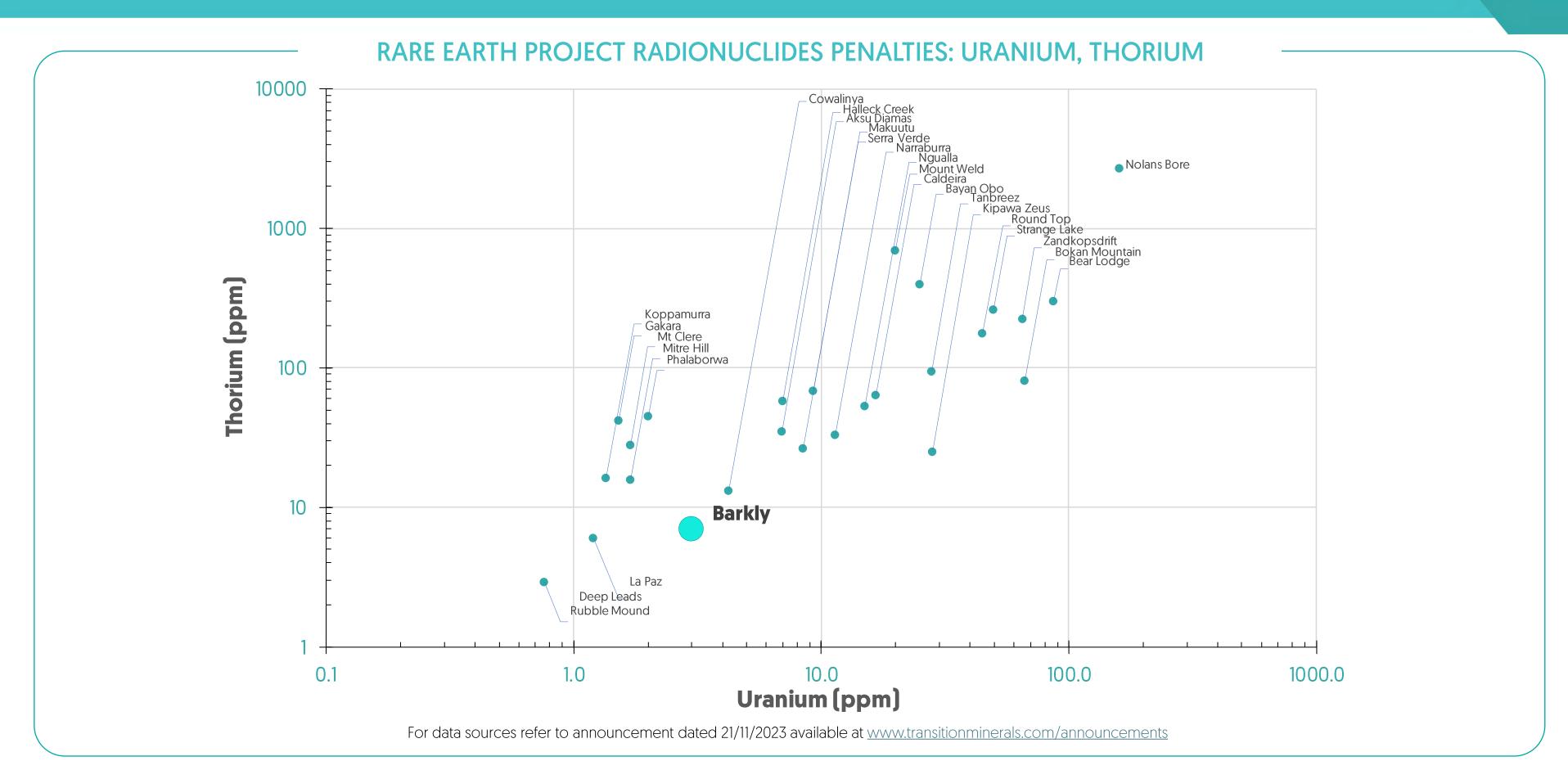
### **SUPERIOR PAY ELEMENT EXTRACTION**



Mineral Resource grades of NdPr,  $Tb_4O_7$ , and  $Dy_2O_3$  were normalised for extractability, based on metallurgical leach results where these data are publicly available for each regolith-hosted rare earth deposit. A neodymium oxide equivalence was calculated based on each project's resource MREO grades  $[Pr_6O_{11}, Nd_2O_3, Tb_4O_7, and Dy_2O_3]$  taking into consideration their published metallurgical extraction rates and forecast rare earth oxide prices. Data sources, forecast oxide prices, and the equivalence calculation formula applied are provided in Appendix C, effective 1 July 2024.

# **RADIONUCLIDES**

### **SUPERIOR PURITY: A CLEAN REE DEPOSIT**



# **GROWTH INSPIRATION**

## **SUPERIOR JURISDICTION**

		METEORIC	TRANSITION MINERALS
Deposit Characteristics		Caldeira	Barkly
Resource M+I+I (JORC 2012)		619 Mt	40 Mt
Grade (TREO)		2,440 ppm	2,100 ppm
Exploration Target (JORC 2012)		2, πο φριτι	200–1,000 Mt <sup>†</sup>
Processing Characteristics			
Extractable MREO pay elements per resource tonne	MREO (ppm)	Metallurgical leach test work: Refractory proportion Extracted proportion  TbDy NdPr	
Crush/grind required		No	No
Penalty elements U+Th		80 ppm	10 ppm
Beneficiation upgrade demonstrated		0x	9.8x
Grade after beneficiation (MREO)		0.06%	0.7% <sup><b>^</b></sup>
Jurisdiction			
Location		Brazil	Northern Territory, Australia
Corruption Perception Rank <sup>§</sup>		104	14
Investment Attractiveness Rank <sup>α</sup>		25	6
Ease of Doing Business Rank <sup>β</sup> <b>Company<sup>‡</sup></b>		124	14
Stock Exchange		ASX-listed	Pre-IPO
Shares on Issue (million)		1,990	141
Market Capitalisation (AUD million)		308	14

### **Notes:**

Metallurgical extraction data effective 1 July 2024 are referenced in Appendix C.

t See Exploration Target disclosure on Page 3. The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

‡ At reporting date 1 July 2024

 $\alpha$  Fraser Institute Annual Survey of Mining Companies 2022

www.fraserinstitute.org/sites/default/files/annualsurvey-of-mining-companies-2022.pdf

β World Bank (2019)
data.worldbank.org/indicator/IC.BUS.EASE.XQ

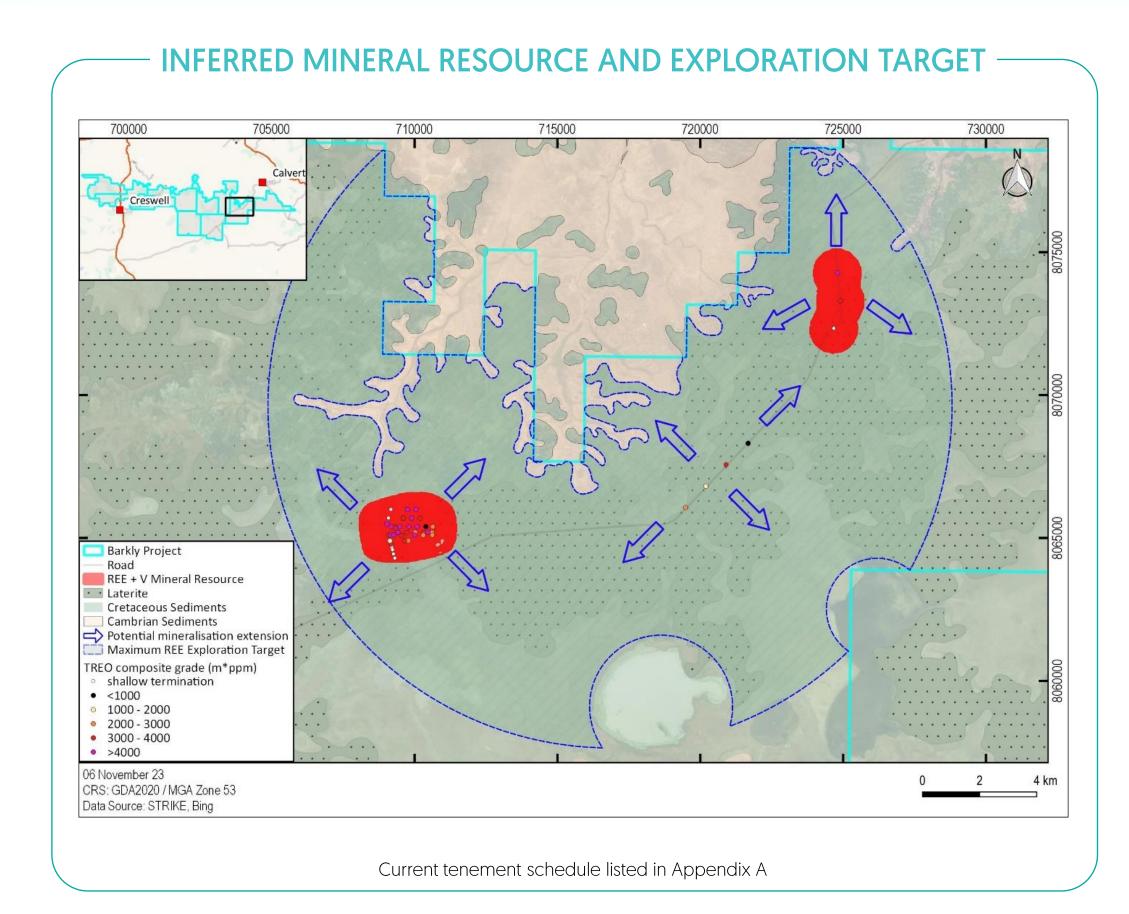
§ Transparency International 2023 www.transparency.org

A The grade after beneficiation is derived by multiplying the Mineral Resource MREO grade by the upgrade rate achieved in the beneficiation test work. The actual mineral concentrate grade will be established through more detailed future studies.

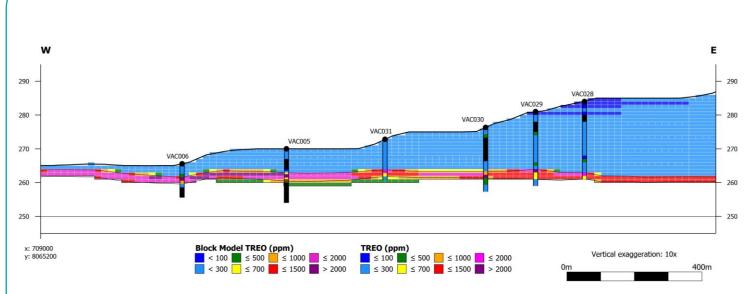
WWW.TRANSITIONMINERALS.COM \_\_\_\_\_\_\_ 1

# REE INFERRED MINERAL RESOURCE





### GEOLOGICAL CONTINUITY AND CONFIDENCE



Category	Tonnage (Mt)	TREO (ppm)	NdPr (ppm)		
Inferred Resource	40	2,100	690		
Exploration Target	200-1,000	1,600–1,900	500–700		

The Mineral Resource is extracted from the report entitled "Barkly Initial Inferred Mineral Resource" by Competent Person Rene Sterk, created on 21/11/2023 which is available to view at <a href="https://www.transitionminerals.com">www.transitionminerals.com</a>. The company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed from the original announcement.

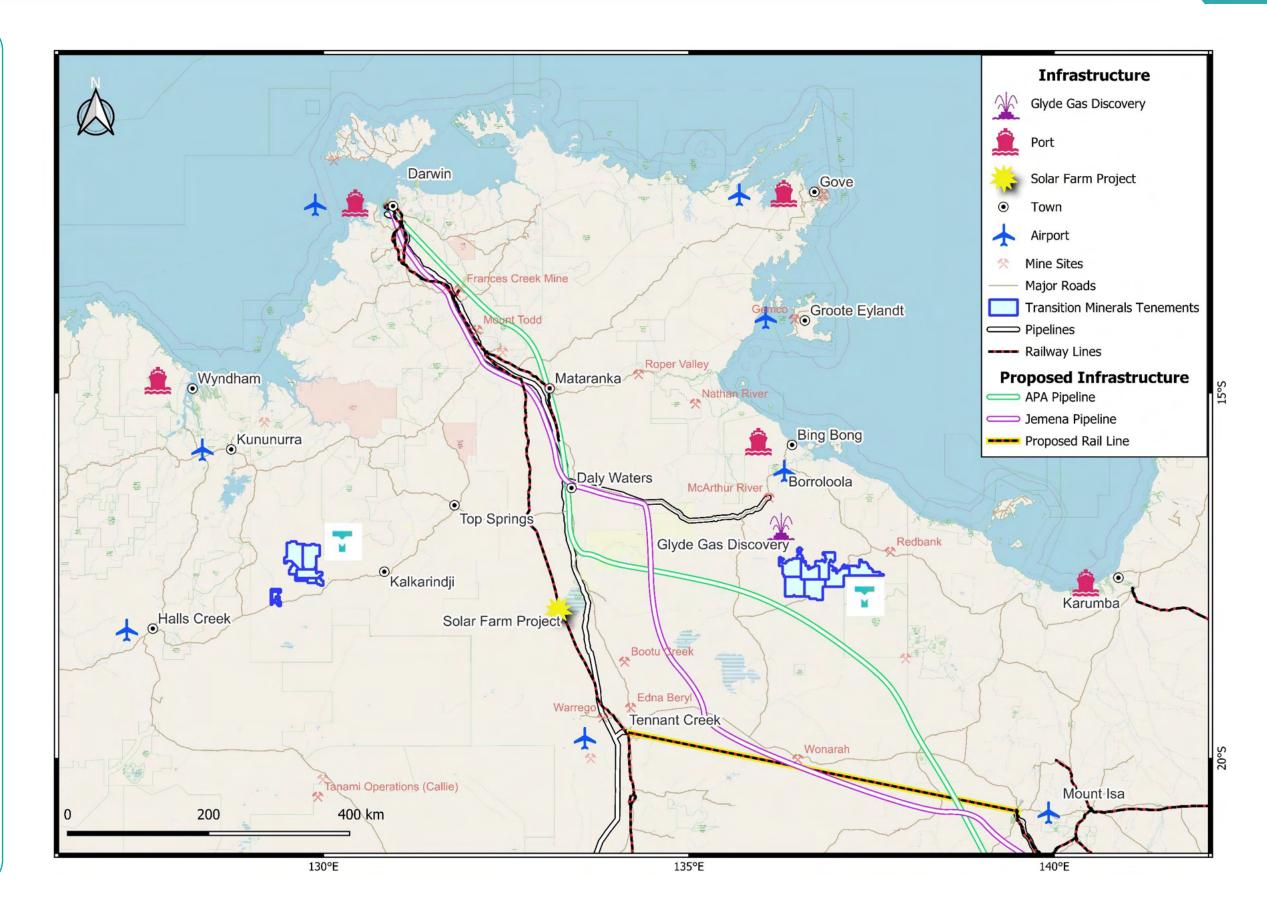
The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

See Exploration Target disclosure on Page 3. The potential quantity and grade of the Exploration Targets are conceptual in nature; there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

# **MAJOR INFRASTRUCTURE**

### **BARKLY INFRASTRUCTURE SUPPORT**

- Project area transected by State Route 16
- Situated on pastoral land
- Nearby mining export ports
- Proposed 4 GW Barkly solar farm, due west
- Natural gas supplies, discoveries and planned pipelines within 10s of km
- Rail lines for Darwin logistics, and planned connection through to Queensland ports via Mt Isa mining hub



# BARKLY REE PROJECT COMPARISON

# GEOLOGICAL CHARACTERISTICS OFFER BEST OF ALL WORLDS

Deposit Comparison	Barkly	Hard Rock	Ionic Clay
Location	Tier 1		Sovereign Risk
Scalable and homogenous Deposit		×	X
High NdPr/TREO proportion — payable rare earths	33%	18%	21%
Highly beneficiable			X
Valuable by-products	*		X
Processing	hydro met*	pyro met	hydro met
Shallow deposit		X	
Low energy mining and comminution	*	×	
Low Penalty Elements (U/Th)		×	

<sup>\*</sup> Pending additional test work by Transition Minerals

# EARN-IN AGREEMENT WITH DEVEX RESOURCES



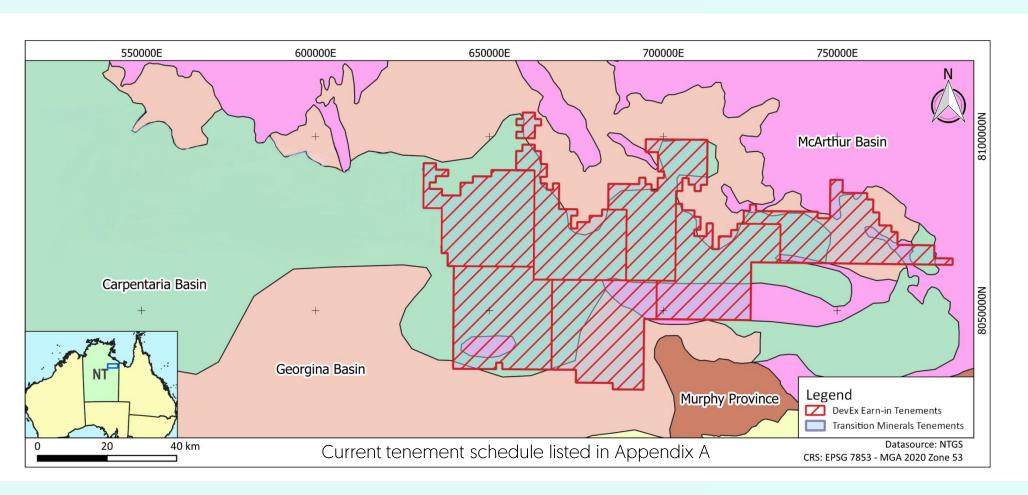
### FREE CARRIED URANIUM INTEREST

### PROVINCE-SCALE URANIUM EXPLORATION

Earn-In by DevEx Resources Limited (ASX: DEV)

- DevEx has the right to earn 75% in the uranium mineral rights only by spending AUD 3.5 m within 5 years
- Transition Minerals free-carried to conclusion of Feasibility Study
- Same geological host rocks as

  Queensland's Westmoreland uranium
  deposits
- AUD 85,000 annual administrative payment to Transition Minerals
- Uranium price at 15-year high (Miningnews.net 24/11/2023)



The DevEx team comprises experienced explorers under the leadership of an invested and highly motivated Board. The company's Chairman and major shareholder, Tim Goyder, is a Perth-based mining investor who is also Chairman of Liontown Resources Limited (ASX:LTR) and the largest shareholder of Chalice Mining Limited (ASX:CHN).

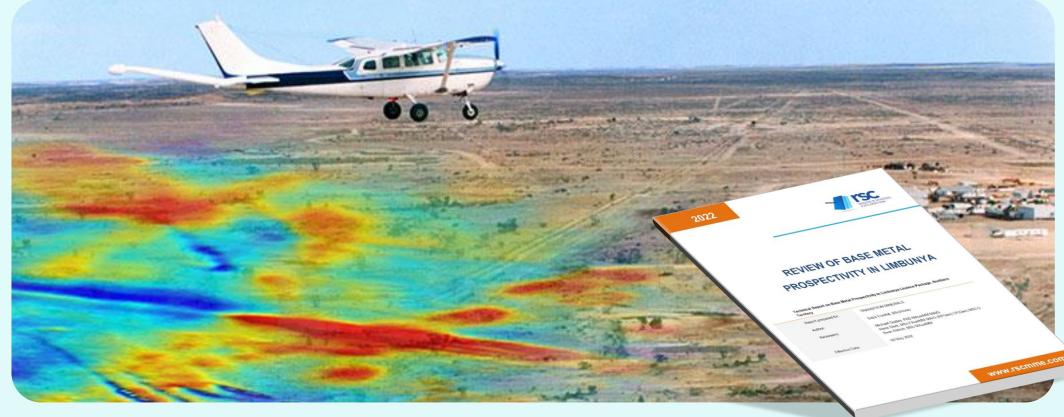
# WORK PLAN VALUE GENERATION AHEAD













## **Clear Goals for Value Generation**

- **S** IPO
- Orilling AC and RC for resource extent and definition
- Sesource expansion and upgrade
- Regional reconnaissance exploration
- Further discovery
- Marketing:
  - Limbunya Base Metals Project promotion
  - Strategic partnering
- **Geophysics**
- Metallurgy & Mineralogy
- Preliminary Scoping

# TRANSITION MINERALS: SUMMARY



### UNMATCHED, FIRST-MOVER, PRE-IPO RARE EARTHS AND VANADIUM OPPORTUNITY

### First-Mover Advantage

New NT REE + V district 16 ELs granted Expansive holding 100% of 7,796 km<sup>2</sup>

# Market-Leading NdPr Ratio 33%

• permanent magnets

**Critical Material for:** 

- electric vehicles
- wind turbines
- energy transition & decarbonisation

### DevEx Earn-In for 75% U rights

Transition Minerals free-carried to conclusion of Feasibility Study

### Flagship High-Grade

Barkly Regolith-Hosted Rare Earths Inferred Resource JORC (2012)

### 40 Mt @ 2,100 TREO

with overlying 200 Mt vanadium resource @  $0.12\% V_2O_5$ 

### Potential Supply Game Changer REE and V with Demonstrated Extractability & Upgradeability

- low strip
- bulk mining
- low OPEX

### **Rapidly Expanding Demand**

**REE:** global electrification

**Vanadium:** stored-energy, aerospace and steel markets

### **Blue Sky Potential**

Barkly REE and Vanadium Vast Exploration Targets\*

### Future Upside: Giant Cu/Pb/Zn System in Emerging District

### **Discovery Holes Results:**

6 m @ 4,173 ppm Cu incl. 2 m @ 9,250 ppm 4 m @ 1,525 ppm Cu, 9 m @ 1,749 ppm Cu 4 m @ 2,420 ppm Zn and 775 ppm Pb

# **Experienced Technical** and Management Team

Proven track record of discovery

\*The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. For original announcements and full disclosure, refer to company announcements at:

www.transitionminerals.com/announcements







+61 460 344 628



t.foster@transitionminerals.com



13–15 Rheola St, West Perth WA 6005 Australia



www.transitionminerals.com

# **APPENDIX A: TENEMENT SCHEDULE**

Title ID	Status	Project	Held By	Ownership	<b>Granted Date</b>	<b>Expiry Date</b>	Area km <sup>2</sup>	<b>Graticular Bloc</b>
EL32456	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	815	249
EL32474	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	743	233
EL32453	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	659	201
EL32473	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	659	201
EL32455	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	815	249
EL32452	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	728	222
EL32454	Current	Barkly	Transition Minerals Limited	100%	21/05/2021	20/05/2027	629	192
							5,047	1,547
EL32529	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	436	133
EL32530	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	215	66
EL32531	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	39	12
EL32532	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	128	39
EL32534	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	91	28
EL32535	Current	Buntine	Transition Minerals Limited	100%	29/06/2021	28/06/2027	91	28
EL33086	Current	Buntine	Transition Minerals Limited	100%	3/11/2022	2/11/2028	816	249
EL33087	Current	Buntine	Transition Minerals Limited	100%	3/11/2022	2/11/2028	817	249
EL33162	Current	Buntine	Transition Minerals Limited	100%	3/11/2022	2/11/2028	116	37
							2,749	841
Total Tenu	ıre						7,796	2,388

# APPENDIX B: RESOURCE DATA AND SOURCES

Project	Stage	Citation	<b>Details</b>	Code	URL
Deep Leeds and Rubble Mound	Resource definition	Abx Group Limited ASX announcement 20 March 2023		JORC 2012	https://www.abxgroup.com.au/site/pdf/db1cb4cd-4f2b-4ce5-adc2-70a34a32d8d9/REE-Resource-Triples-at-Deep-Leads-Tasmania.pdf
	_	Aclara Resources Inc. TSX News Release 1	· · · · · · · · · · · · · · · · · · ·	NI 43-101	https://www.sedarplus.ca/csa- party/records/document.html?id=bdd65fe1738c456e7b00ab8d2fa4018 216bb8be0c5f7ff2687d9b6e4dc042750
Carina Module		Rare Earth Element Project, Nova Roma, Brazil,		NI 43-101	https://www.sedarplus.ca/csa-party/records/document.html?id=9736139de219012703b5beeeb109a0d 4ce9a730aad87d000c1f3cbf39a739cc0
PCH Project	Resource definition	Resource Estimate for the PCH Project, State			https://appiareu.com/wp-content/uploads/2024/04/PCH-Project-2024-NI-43101-Technical-Report-for-Appia-FINAL-1.pdf
Koppamurra	Resource definition	Australian Rare Earths Limited ASX announcement 7 February 2024	184 Mt @ 712 ppm TREO incl. 154 ppm NdPr (Measured 0.8 Mt @ 747 ppm TREO incl. 155 ppm NdPr; Indicated 95 Mt @ 716 ppm TREO incl. 154 ppm NdPr; Inferred 88 Mt @ 709 ppm incl. 153 ppm NdPr).	JORC 2012	https://ar3.com.au/19-9-23-84-increase-to-koppamurra-resource/
Halleck Creek			Inferred 925 Mt @ 3,041 ppm. NdPr was calculated by applying the NdPr:MREO (incl. Sm2O3) declared in the initial Halleck Creek Mineral Resource estimate, dated 30/3/23.		8792257aa7a6ba16af9fa6
Nolans Bore	Pre-FID		Mt @ 27,000 ppm TREO incl. 7,100 ppm NdPr; Inferred 21 Mt @ 23,000 ppm TREO incl. 6,100 ppm NdPr) including Reserves (Proven 4.3 Mt @ 31,000 ppm TREO incl. 8,100 ppm NdPr; Probable 14.9 Mt @ 29,000 ppm TREO incl. 7,700 ppm NdPr).		https://wcsecure.weblink.com.au/pdf/ARU/02073274.pdf
Rocha da Rocha		•	Inferred 510.3 Mt @ 1512 ppm TREO incl. 271 ppm NdPr	JORC 2012	https://investors.brazilianrareearths.com/announcements/5801319
Ema	Resource Definition	Brazilian Critical Minerals Limited ASX announcement 22 April 2024	Inferred 1017 Mt @ 793 TREO incl. 199 ppm NdPr	JORC 2012	https://www.braziliancriticalminerals.com/pdf/94eb28de-cce6-4a6d-8b19-fc405da41067/Massive-Maiden-Mineral-Resource-for-Ema-Project.pdf
Wudinna	Resource definition	Cobra Resources announcement 7 September 2023	Inferred 41.6 Mt @ 699 ppm TREO incl. 146 ppm NdPr.	JORC 2012	https://polaris.brighterir.com/public/cobra_resources/news/rns/story/w0986pw
Cowalinya	Resource definition	Heavy Rare Earths Limited ASX announcement 3 October 2023	Inferred 159 Mt @ 870 ppm TREO incl. 214 ppm NdPr.	JORC 2012	https://wcsecure.weblink.com.au/pdf/HRE/02720133.pdf
Makuutu	Advancing Ore Reserve		ppm TREO incl. 140 ppm NdPr].		https://wcsecure.weblink.com.au/pdf/IXR/02806927.pdf
Mt Clere	Resource definition	Krakatoa Resources Limited ASX announcement 21 November 2022	drill hole data, using the average length-weighted values of intercepts which exceeded the resource cut off grade.		https://wcsecure.weblink.com.au/pdf/KTA/02600437.pdf
Circle Valley	Resource definition	Meeka Metals Limited ASX announcement 14 June 2023	Inferred 98 Mt @ 890 ppm TREO incl. 220 ppm NdPr.	JORC 2012	https://wcsecure.weblink.com.au/pdf/MEK/02675778.pdf
Caldeira	Resource definition		619 Mt @ 2538 ppm TREO incl. 572 ppm NdPr (Measured 11 Mt @ 3888 ppm TREO incl. 808 ppm NdPr; Indicated 160 Mt @ 2812 ppm TREO incl. 627 ppm NdPr; 448 Mt Inferred @ 2408 ppm TREO incl. 546 ppm NdPr)	JORC 2012	https://wcsecure.weblink.com.au/pdf/MEI/02816939.pdf
Serra Verde	Plant commissioning	, ,	911 Mt @ 1,230 ppm TREO (Measured 22 Mt @ 2,100 ppm TREO; Indicated 368 Mt @ 1500 ppm TREO; Inferred 521 Mt @ 1000 ppm TREO) including Reserves (Proven 22 Mt @ 2100 ppm; Probable 329 Mt @ 15000 ppm TREO). NdPr was derived from the elemental weight distributions converted to oxide equivalent grades.	NI 43-101	https://clientesinterativa.com.br/bccc-events/uploads/files/2017- 03/58c6d7b3e9c66.pdf
Splinter Rock	Resource definition	OD6 Metals Limited ASX announcement 29 May 2024	682 Mt @ 1338 ppm TREO incl. 350 ppm NdPr (Indicated 119 Mt @ 1632 ppm TREO incl. 277 ppm NdPr; Inferred 562 Mt @ 1275 ppm TREO incl. 290 ppm NdPr).	JORC 2012	https://www.od6metals.com.au/wp-content/uploads/2024/05/61209490.pdf
Ampasindave	Resource definition	Tantalus Rare Earths AG Updated NI 43-101 10 June 2016, Table 1-1	ppm TREO). NdPr was derived from the contained oxide tonnages in Table 1-2.		https://reenovagroup.listedcompany.com/newsroom/20160722_17454 3_5EC_LHQ3DXU7H7RN0R9F.2.pdf
North Stanmore		•			https://clients3.weblink.com.au/pdf/VTM/02693394.pdf
Colossus	Resource definition				https://wcsecure.weblink.com.au/pdf/VMM/02813769.pdf
Salazar	Resource definition	West Cobar Metals Limited ASX announcement 9 August 2023	ppm TREO incl. 247 ppm NdPr).		https://www.investi.com.au/api/announcements/wc1/2753b06f-7f2.pdf
Yangibana	Updating Ore Reserves	Hastings Technology Metals Ltd ASX announcement 11 October 2022	NdPr of updated Mineral Resource, Table 2.	JORC 2012	https://www.investi.com.au/api/announcements/has/1bc9611f-31d.pdf
	Deep Leeds and Rubble Mound Penco Module  Carina Module  PCH Project  Koppamurra  Halleck Creek  Nolans Bore  Rocha da Rocha  Ema  Wudinna  Cowalinya  Makuutu  Mt Clere  Circle Valley  Caldeira  Serra Verde  Splinter Rock  Ampasindave  North Stanmore  Colossus  Salazar	Deep Leeds and Resource definition Rubble Mound Penco Module PEA, advancing EIA  Carina Module PEA, advancing PFS  PCH Project Resource definition  Koppamurra Resource Definition  Halleck Creek Resource Definition  Nolans Bore Pre—FID  Rocha da Rocha Resource Definition  Ema Resource Definition  Wudinna Resource definition  Cowalinya Resource definition  Makuutu Advancing Ore Reserve  Mt Clere Resource definition  Circle Valley Resource definition  Caldeira Resource definition  Serra Verde Plant commissioning  Splinter Rock Resource definition  Ampasindave Resource definition  Colossus Resource definition  Colossus Resource definition  Resource definition  Resource definition	Deep Leeds and Resource definition Rubble Mound   PEA, advancing EIA   Aclara Resources Inc. TSX News Release 1   December 2022, Table 2   December 2022, Table 2   December 2022, Table 2   PCH Project   PEA, advancing PFS   Preliminary Economic Assessment Carina Rare Earth Element Project, Nova Roma, Brazil 22 January 2024   PCH Project   Resource definition   Technical Report on the Maiden Mineral Resource Estimate for the PCH Project, State of Goias, Brazil, 15 April 2004   Australian Rare Earths Limited ASX announcement 7 February 2024   PCH Project State of Goias, Brazil, 15 April 2004   Australian Rare Earths Limited ASX announcement 7 February 2024   American Rare Earths Limited ASX announcement 7 February 2024   Pre-FID   Arafura Rare Earths Limited ASX announcement 7 February 2019   Rocha da Rocha   Resource Definition   Independent Technical Report, Brazilian Rare Earths Limited ASX announcement 7 February 2019   Rocha da Rocha   Resource Definition   Brazilian Critical Minerals Limited ASX announcement 2 April 2024   Published Prospectus, 19/12/23   President P	Death Lands and Resource distriction   Abs Corough Limited ASX announcement 20   58 Mile 2 (0.55 ppm 1850 incl. 148 ppm Molf*)   100 pm Molf*   100 pm Mol	Post   Post

# APPENDIX C: METALLURGICAL DATA AND SOURCES

			Mir	neral Resou	urce Data				Mean metallurgical extraction rate								
Project	Resource Classification	Tonnage (Mt)	TREO Grade (ppm)	MREO Grade (ppm)	Pr <sub>6</sub> O <sub>11</sub> (ppm)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>4</sub> O <sub>7</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	MREO %	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub> %	Mineral Resource Data Citation	Test Conditions	Samples	Metallurgical data citation
	Measured	40.1	975	227	47	158	3	19						https://links.sgx.com/FileOpen/Updated%20Nl%2043- 101%20Technical%20Report%20issued%20by%20SGS%20C	1M		https://smedg.org.au/wp-
Ampassindave	Indicated	157.6	878	189	39	131	3	17	85	86	86	77		anada%20lnc%20-%2010%20June%202016%20-	$(NH_4)_2SO_4$	OE7-OE12, CM6	content/uploads/2023/05/Phillip-Hellman-Rare-Earths-
	Inferred	430	894	196	42	137	3	15 15							рН4	CIVIO	Assessment-of-Ionic-Adsorbed-Deposits.pdf
	Total Measured	627.7	895 3888	193 842	41 222	135 586	6	15 28						&AnncID=LHQ3DXU7H7RN0R9F			
	Indicated	160	2812	656	165	476	5	23							2-4%	Samples	https://wcsecure.weblink.com.au/pdf/MEI/02614652.p
Caldeira	Inferred	448	2408	574	139	407	5	23	60	52	64	47	39	https://wcsecure.weblink.com.au/pdf/MEI/02816939.pdf	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	Samples 1–4	df
	Total	619	2538	600	147	425	5	23							pH 4-5		
	Indicated	62	2590	653	154	467	5	26							0.5M	NC, CS,	
	Inferred	139	2591	675	158	486	5	27	۸ - ،	۸	۸	۸ - ،	۸			CSO, RA x	https://wcsecure.weblink.com.au/pdf/VMM/02796686.
Colossus	Total	201	2500	660	157	400	_	27	^64	^61	^65	^64	^60	https://wcsecure.weblink.com.au/pdf/VMM/02813769.pdf	•	4 sub- sample	pdf
	Total	201	2590	668	157	480	5	27							30 min.	tests each	
	Measured	0.8													0.714		Results may be overstated, as AR3 did not disclosed
Koppamurra	Indicated	95							60	59	62	52	53	https://ar3.com.au/19-9-23-84-increase-to-koppamurra-	0.3M MgSO <sub>4</sub> pH	ARE <75	the proportion of TREO within the -75 $\mu$ m fraction.
Корраніана	Inferred	88							00	03	02	52 53	55	resource/	1.0	μM	https://ar3.com.au/16-5-23-metallurgical-tests-show-
	Total	183.8	818	175	32	122	3	18									pathway-to-reduced-processing-costs/
	Measured	207	3720	3720	<sup>1</sup> 160	<sup>-</sup> 599	19	<sup>1</sup> 42							1M H <sub>2</sub> SO <sub>4</sub> ,		
Halleck Creek	Indicated	1210	3223	3323	<sup>1</sup> 138	<sup>1</sup> 516	.– 18	<sup>1</sup> 36	80					https://app.sharelinktechnologies.com/announcement/as x/fe7802a1b88792257aa7a6ba16af9fa6	75°C for 2		https://app.sharelinktechnologies.com/announcement/
	Inferred	925	3041	3041	<sup>1</sup> 131	<sup>1</sup> 488	⁺7 	<sup>1</sup> 34						X/16/802a1D88/9225/dd/d6Dd16d191d6	hours		asx/8925284518f7ea3327ac2bdad723e51f
	Total Indicated	2342 518	3195 650	3195 152	<sup>1</sup> 137 30	<sup>1</sup> 512	· /	<sup>1</sup> 36									
Makuutu	Inferred	99	560	142	30	100	2	10	40	36	40	54	55	https://wcsecure.weblink.com.au/pdf/IXR/02806927.pdf	1M (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>		https://wcsecure.weblink.com.au/pdf/IXR/02262747.p
mandada	Total	617	630	148	30	105	3	10	40	30	40	34	55	Tittps://wesecure.webiink.com.au/pai/i/ki/02000927.pai	pH 1	9136	df
	Total	017		110		100	J	10							MgSO <sub>4</sub> for		
_															4 hours at		https://clients3.weblink.com.au/pdf/VTM/02806463.pd
North Stanmore	Inferred	250	520	112	20	70	2	20	93	94	94	91	92	https://clients3.weblink.com.au/pdf/VTM/02693394.pdf	100°C	Composite	f
															pH not stated		
															0.5M		
Rocha da Rocha	Informad	F10	1517	ŧ000	800	800=	<b>8</b> →	8	Σ4.0					https://investors.brazilianrareearths.com/announcements/	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>		https://investors.brazilianrareearths.com/announcemen
NUCIIA DA ROCNA	illierred	510	1513	<sup>‡</sup> 290	§66	§205	§3	§16	<sup>ε</sup> 19					5801319	pH 4 stirred for 1		ts/5801319
															hour		
Mudio	InfancI	41.0	600	10.4	77	117	7	15		47	60	70	60	https://polaris.brighterir.com/public/cobra_resources/ne	m11.7.6.1	Sample	https://cobraplc.com/wp-
Wudinna	Inferred	41.6	699	164	33	113	3	15		47	60	79	68	ws/rns/story/w0986pw	pH 3, 6 hr	•	content/uploads/2023/09/Cobra-Resources-Sep-23_Final_130923-NB.pdf

WWW.TRANSITIONMINERALS.COM \_\_\_\_\_\_\_ 22

# APPENDIX C CONTINUED



This appendix and the pages of the attached presentation include the most recent regolith-hosted mineral resources reported under different reporting codes, and by companies at varying stages of exploration and resource development, which have been disclosed, effective 1 July 2024. Where required, mineral resource categories have been combined to provide an average grade. Metallurgical test data was chosen to represent the companies' preferred test, or that which provided the highest extraction rates, but has included all samples subjected to that test as provided in public company data.

In February 2022, Adamas Intelligence estimated rare earth oxide prices for  $Pr_6O_{11}$  (USD 201.00/kg),  $Nd_2O_3$  (USD 212.00/kg),  $Tb_4O_7$  (USD 2,493.00/kg), and  $Dy_2O_3$  (USD 587.00/kg) as 2025–2030 average forecast values, as reported in Search Minerals PEA dated 31 May 2022.

Resource grade neodymium-equivalent formula:

$$Nd_2O_3(equivalent\ ppm) = Nd_2O_3(ppm) + \sum_{PTD} \left\{ PTD\ (ppm)\ x\ \frac{PTD(extraction\ rate)}{Nd_2O_3(extraction\ rate)}\ x\ \frac{PTD(price)}{Nd_2O_3(price)} \right\}$$

where PTD =  $\{Pr_6O_{11}, Tb_4O_7, Dy_2O_3\}$ 

### **Notes**

- § Calculated as the concentration of NdPr in the Minerals Resource Statement, multiplied by the average of the eight deposits' mean REO:NdPr in Appendix B of the source document.
- <sup>‡</sup> Summed as the normally reported four-oxide MREO grade, removing  $Gd_2O_3$ ,  $Ho_2O_3$  and  $Y_2O_3$  that were reported within MREO in the source document.
- <sup>ε</sup> Calculated as the resource-mass weighted average recovery for each of the Monte Alto, MA high-grade, and Riacho de Areia resources, as stated in Section 8.4.1 of the source document.
- ^ Average weighted by the mass of each deposit Mineral Resource.
- $^{\text{F}}$  Calculated by applying the REO:MREO (incl.  $\text{Sm}_2\text{O}_3$ ) declared in the initial Halleck Creek Mineral Resource estimate, dated 30/3/23, MREO was summed to remove the  $\text{Sm}_2\text{O}_3$  that was reported within MREO in the source document.