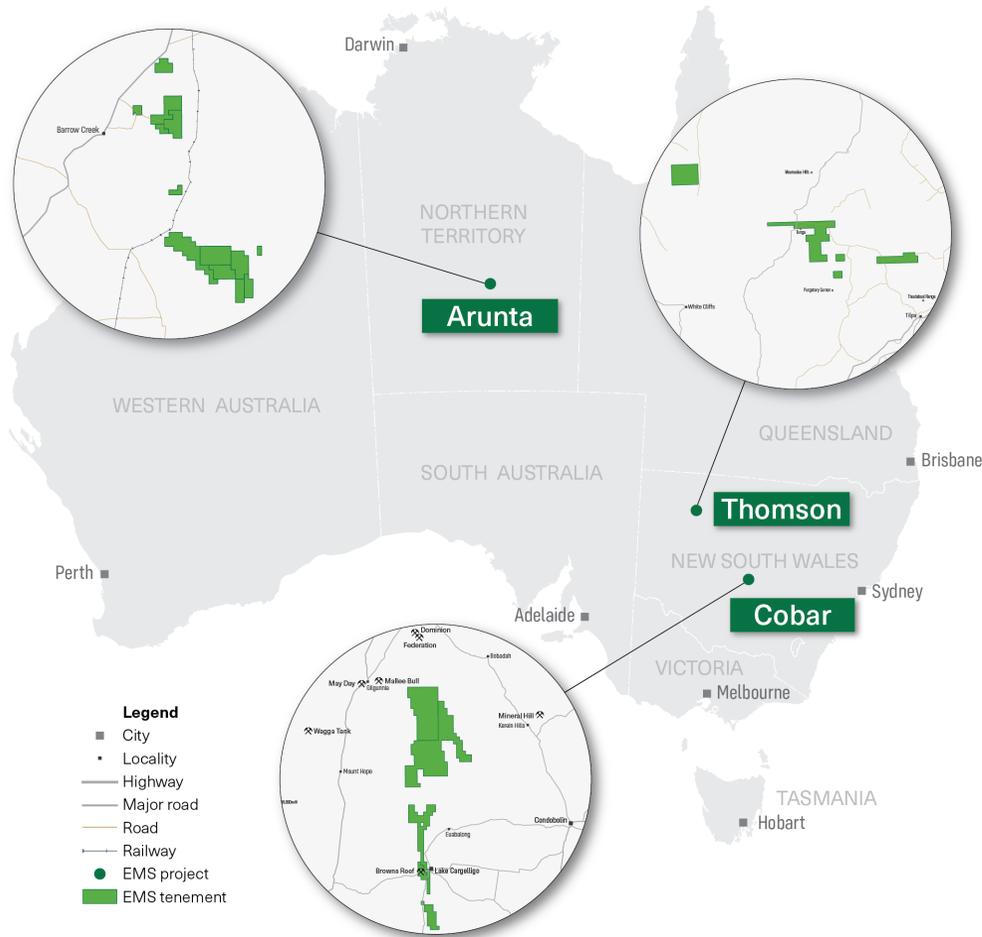




**AUSTEX LUNCH & FORUM**  
**4 SEPTEMBER 2023**  
PRESENTATION



# OVERVIEW – WHY INVEST?



- Eastern Metals holds three projects in New South Wales and the Northern Territory, including two 'Advanced Exploration Projects', **Browns Reef** and **Home of Bullion**
- **Browns Reef** (NSW) is strategically located in the southern **Cobar Basin**, a **tier-one base metals exploration and production** province:
  - ✓ 'Exploration Target'<sup>1</sup> consisting of **27-37 million tonnes** averaging between 1.3-1.4% Zn, 0.6- 0.7% Pb, 9-10g/t Ag and 0.2-0.3% Cu
- **Home of Bullion** is located to the east of Barrow Creek in the NT:
  - ✓ 'Mineral Resource Estimate'<sup>2</sup> of **3.1 million tonnes** averaging 1.7% Cu (**2.9% CuEq**), 2.0% Zn, 35g/t Ag, 1.1% Pb, 0.17ppm Au and 0.02% Co
- Multiple, brown- and green-field **walk-up drill targets**
- Eastern Metals is managed by a **highly experienced team** with a **strong track record** in record in mineral exploration, development and creating value for shareholders

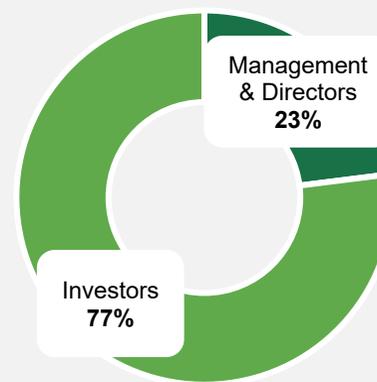
1. Kidman Resources Limited (ASX:KDR) ASX Announcement 20 January 2015, 'Clarification to Browns Reef Announcement'  
 2. Eastern Metals Limited (ASX:EMS) ASX Announcement 8 March 2023, 'Resource Grows at Home of Bullion Copper Project'

# CORPORATE SNAPSHOT

## CAPITAL STRUCTURE

<b>Shares on issue</b>	82,426,245
<b>Unlisted options*</b>	46,887,701
<b>Market capitalisation</b>	A\$3.29M
<b>Share price</b>	A\$0.04
<b>Cash (30 June 2023)</b>	A\$2.357M
<b>Debt</b>	Nil

\*\$0.30 and \$0.10 strike price



## BOARD

**Bob Duffin**  
Chairman

**Mark Dugmore**  
Independent Non-Executive Director

**Ian White**  
Independent Non-Executive Director

**Jason Berton**  
Independent Non-Executive Director

## MANAGEMENT

**Ley Kingdom**  
Chief Executive Officer

**Ian Morgan**  
Company Secretary & Chief Financial Officer

**Gary Jones**  
Principal Consultant, Geology

**Bob Richardson**  
Principal Consultant, Geophysics

# ZINC'S ROLE AS A 'NEW ECONOMY' METAL

## ZINC IS AN OLD, CURRENT AND NEW ECONOMY METAL

South32 says investors blind to coming zinc boom

Peter Ker Resources rep

Updated Jan 17, 2022 - 7:18pm, first published at 6:07pm

MINING AND METALS  
**Zinc is critical for the low-carbon economy. Here's why**

Mining

Apr 13, 2022

**A single wind turbine can contain up to \$350,000 worth of copper. Plus zinc. Plus tungsten...**

June 22, 2023 | Jessica Cummins



**Mission Critical: Australia's biggest zinc exporter says the metal needs Canberra's backing**

Mining

August 28, 2023 | Josh Chlat

- **Zinc** is the one of the world's most versatile and essential metals, and the fourth most used metal behind Fe, Al and Cu
- Zinc plays a critical role in enabling green technologies such as solar and wind power
  - One **13MW offshore wind turbine** requires **125t Cu, 7t Zn** and **700t coking coal**
- Zinc-ion batteries are also considered safer than lithium-ion batteries for use in electric vehicles

### It's not all about EVs...

- In the US, the current 3 million EVs account for less than 1% of total electricity demand
- Even with a projected increase in EV adoption, their impact on electricity demand will likely remain relatively low
  - If the EV fleet in the US were to reach 41 million by 2030, it is expected to represent only about 5% of annual electricity usage
  - Significant Cu is required to update the transmission grid for EV charging stations

### Energy storage

- Zinc-bromine batteries (for example) have 3 distinct performance advantages over lithium batteries:
  - ✓ Low fire risk (lithium is highly flammable and prone to thermal runaway)
  - ✓ Can be adapted to operate across a wide range of ambient temperatures (-15 to 50 degrees celsius)
  - ✓ 100% depth of discharge capability

#### Sources:

- \* WEF, Mining & Metals, 'Zinc is critical for the low-carbon economy. Here's why', 13 April 2022
- \* Sprott Energy Transition Materials Monthly, 'Growing Urgency to Modernize U.S. Power Grid', 9 August 2023
- \* Redflow (ASX:RFX) Insights, Mark Higgins discusses all things ZBM flow battery with Nate Kirchofer on the 'Beyond Lithium' podcast, 13 March 2023

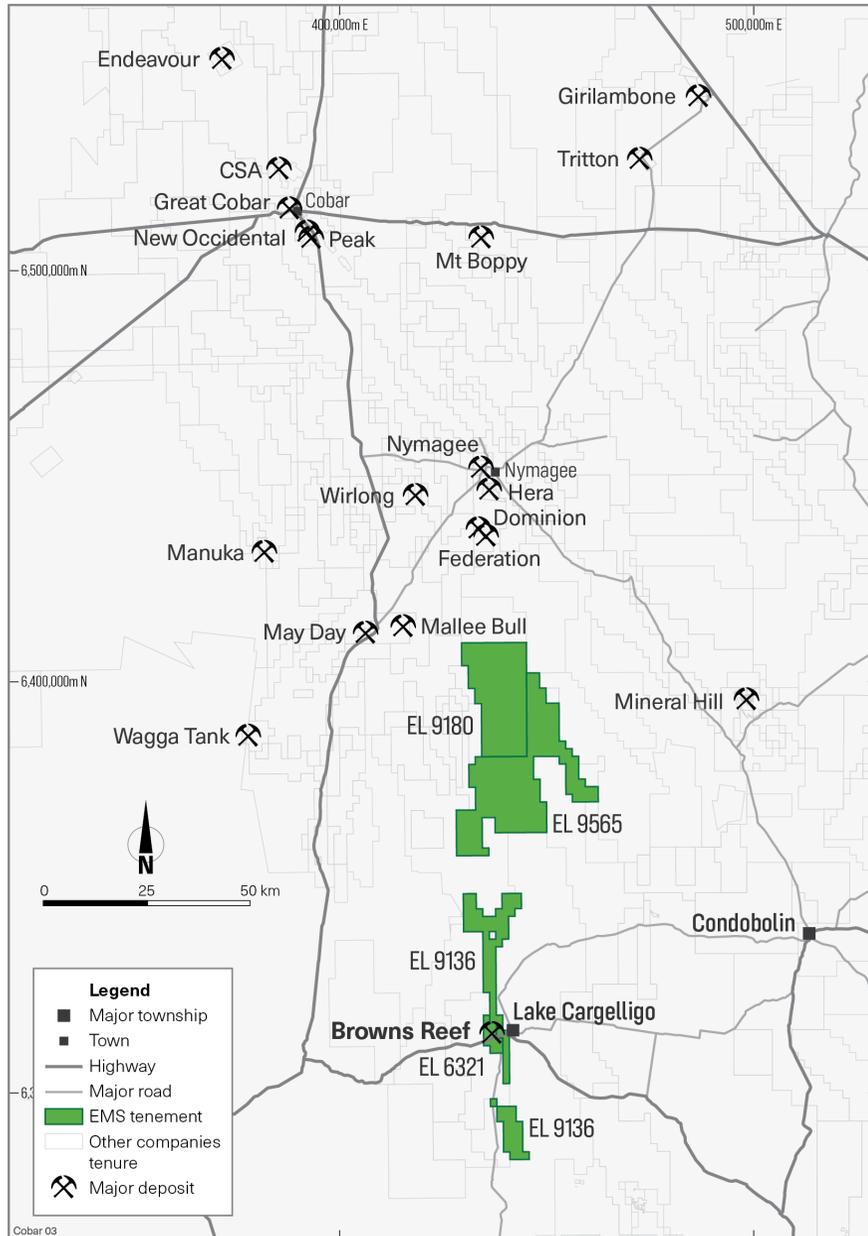


# EASTERN METALS' ASSETS

NSW & NT

ASX:EMS

# COBAR BASIN – KEY MINES AND PROJECTS



## CURRENT MINING OPERATIONS (including those under care and maintenance)

- **Aurelia Metals (ASX:AMI)** Currently mining at Hera and Peak, with Federation and Great Cobar in development. Two CIL/flotation plants
- **Kingston Resources (ASX:KSN)** Currently mining at Mineral Hill; CIL/flotation plant; intending to move from reprocessing tailings to mining in FY25, within 100km of Browns Reef
- **Polymetals Resources (ASX:POL)** Bought the Endeavour ('Elura') mine in March 2023 (under C&M)
- **Metals Acquisition (MTAL.N)** Purchased CSA mine from Glencore for US\$1.1 billion
- **Manuka Resources (ASX:MKR)** Winding down at Mt Boppy and Manuka (Wonawinta); unlikely to start again but infrastructure within 100km of Browns Reef and lies on a mining lease with TSF

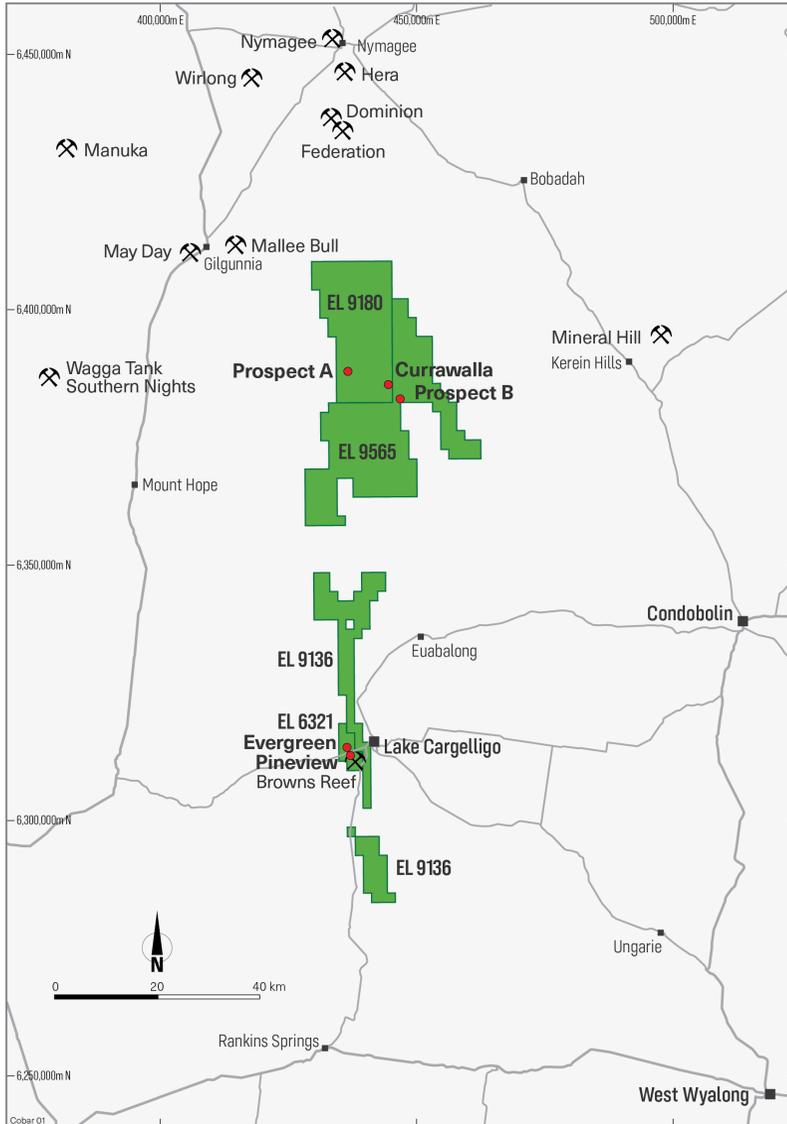
## DEVELOPMENT PROJECTS

- **Peel Mining (ASX:PEX)** Owns Mallee Bull, Wirlong and Southern Nights-Wagga Tank underground mining projects, and an open pit project at May Day

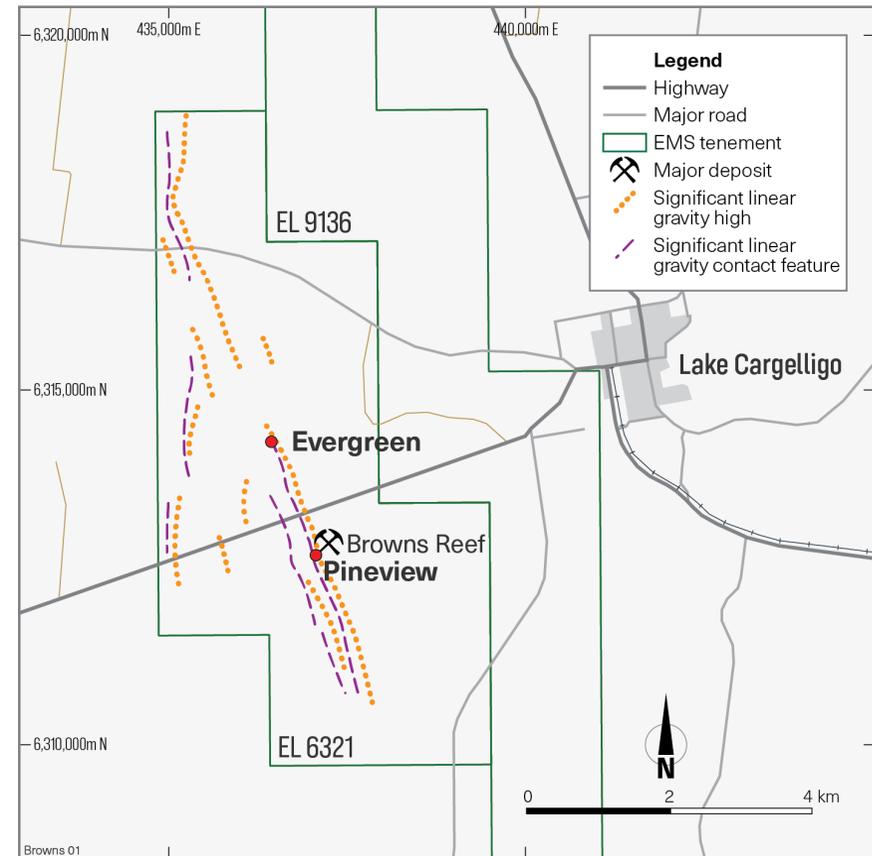
Information extracted from each company's website, market announcements, presentations and reports lodged during the FY2022 and FY2023 periods.

# COBAR PROJECT – BROWNS REEF

EASTERN METALS' FLAGSHIP ZN-PB-CU-AG ASSET



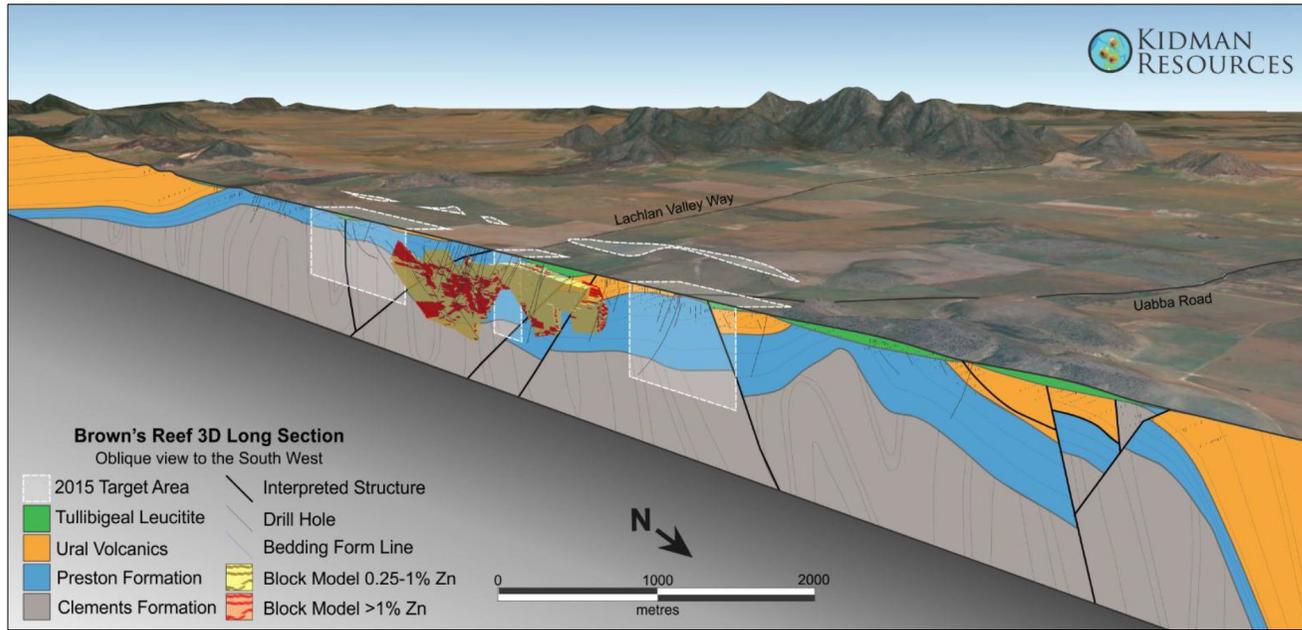
- **Browns Reef** is associated with a linear gravity feature and anomalous surface geochemistry
- The gravity data effectively delineates the contact between the Clements and Preston formations, the locus for the Browns Reef mineralisation



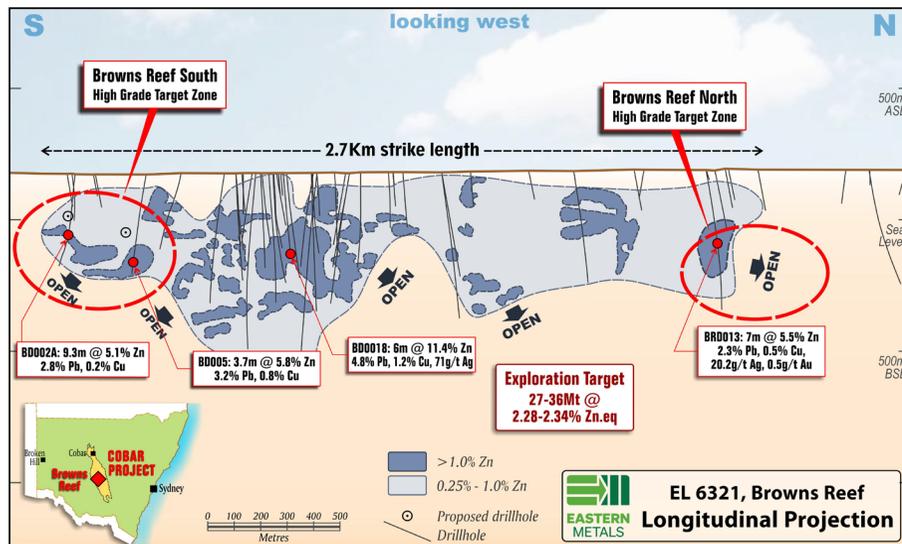
Source: Eastern Metals Limited (ASX:EMS) ASX Announcement 14 February 2023, 'Browns Reef Gravity Survey Provides New Drill Targets'

# COBAR PROJECT – BROWNS REEF

EASTERN METALS' FLAGSHIP ZN-PB-CU-AG ASSET



- Browns Reef is a steeply-dipping stratabound, **structurally controlled** system, with a total strike length of about 2.7km
- **True widths** have varied along the known mineralised corridor, with an average of approx. 10m in drilling to date
- Individual deposits have a relatively small strike length typically, 150-500m



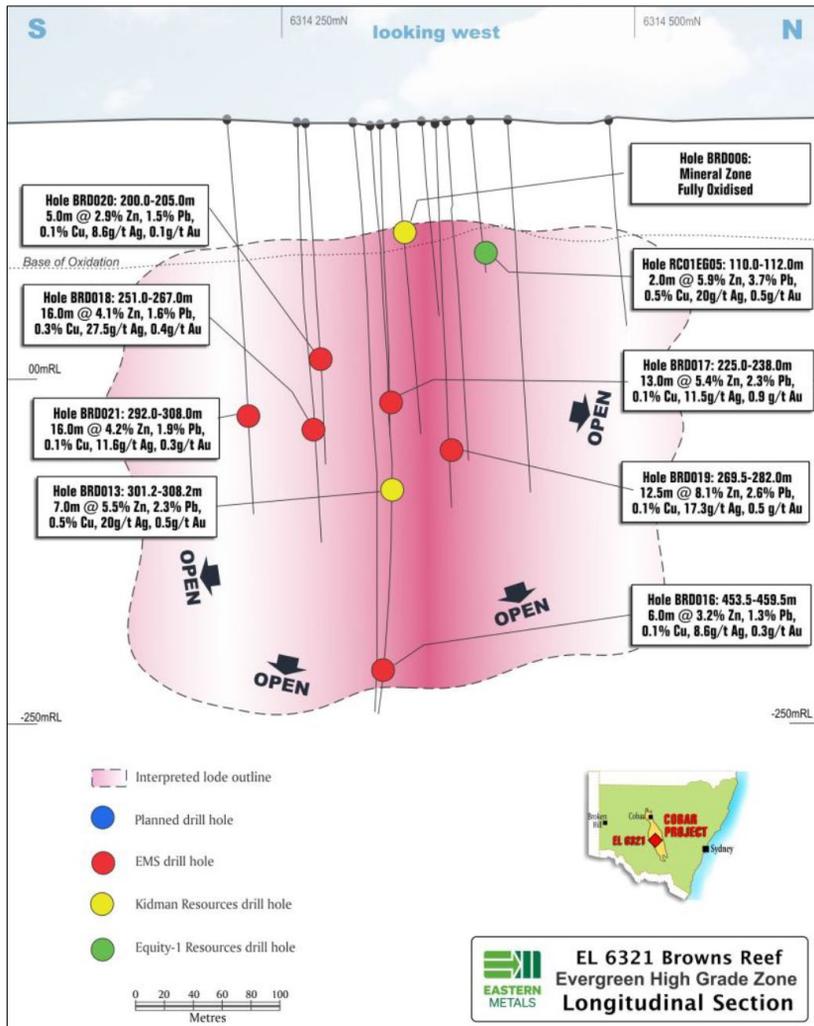
- Strike length of **Browns Reef** is comparable to Peel Mining Ltd's (ASX:PEX) **Southern Nights-Wagga Tank Zn-Pb system** (about 2 km in length)
- **Exploration Target** consists of **27-37 million tonnes** averaging between 1.3-1.4% Zn, 0.6-0.7% Pb, 9-10g/t Ag and 0.2-0.3% Cu

Sources:

- \* Kidman Resources Limited (ASX:KDR) ASX Announcement 16 October 2014, 'New mineralised extensions at Browns Reef'
- \* Kidman Resources Limited (ASX:KDR) ASX Announcement 20 January 2015, 'Clarification to Browns Reef Announcement'
- \* Peel Mining Ltd (ASX:PEX), Investor Presentation November 2022

# COBAR PROJECT – BROWNS REEF

## DISCOVERY OF EVERGREEN HIGH-GRADE ZONE



In 2022, EMS completed six DDH for 2,075m and discovered the ‘Evergreen’ high-grade zone within Browns Reef.

Evergreen extends over an estimated strike length of ~150m, a vertical depth of 300m and remains open along strike in both directions and at depth.

Highlights include:

### BRD016

**6.0m @ 3.2% Zn**, 1.3% Pb, 0.12% Cu, 8.6g/t Ag and 0.3g/t Au from 453.5m

### BRD017

**13m @ 5.4% Zn**, 2.3% Pb, 0.14% Cu, 11.5g/t Ag and 0.9g/t Au from 225m

### BRD018

**16m @ 4.1% Zn**, 1.6% Pb, 0.33% Cu, 27.5g/t Ag and 0.4g/t Au from 251m

### BRD019

**12.5m @ 8.1% Zn**, 2.6% Pb, 0.10% Cu, 17.3g/t Ag and 0.5g/t Au from 269.5m

### BRD020

**5.0m @ 2.89% Zn**, 1.50% Pb, 0.08% Cu, 8.6g/t Ag and 0.14g/t Au from 200m

### BRD021

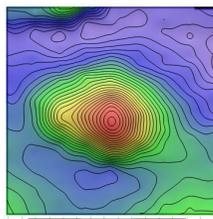
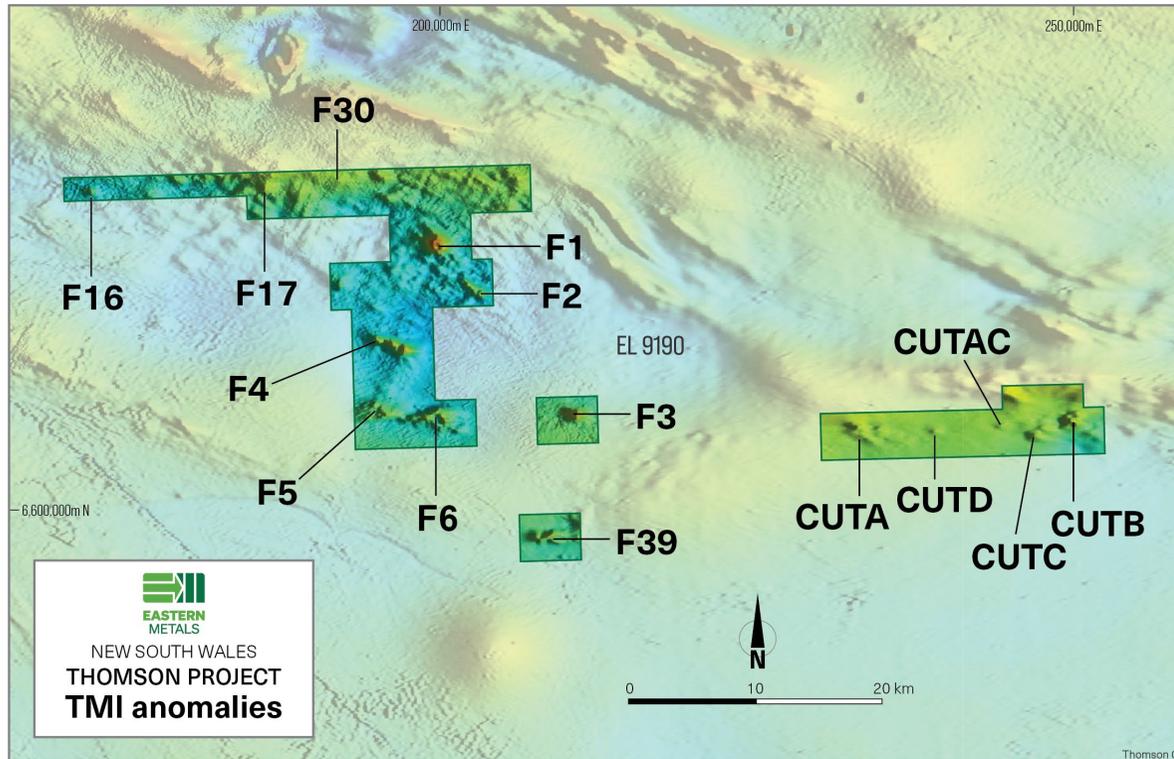
**16m @ 4.18% Zn**, 1.86% Pb, 0.12% Cu, 11.6g/t Ag and 0.3g/t Au from 292m

Sources:

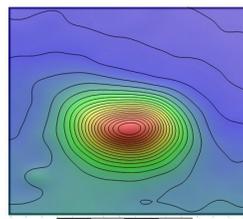
- \* Eastern Metals Limited (ASX:EMS) ASX Announcement 27 June 2022, ‘Evergreen Discovery Zone Expanded at Browns Reef’
- \* Eastern Metals Limited (ASX:EMS) ASX Announcement 2 August 2022, ‘More High Grade Assays in Evergreen Discovery at Browns Reef’

# THOMSON PROJECT – FALCON (EL9190)

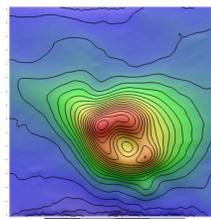
DISTINCT GEOPHYSICAL ANOMALIES IN THE UNDER-EXPLORED THOMPSON OROGEN PROVINCE



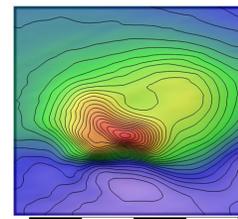
F16



F3



F1

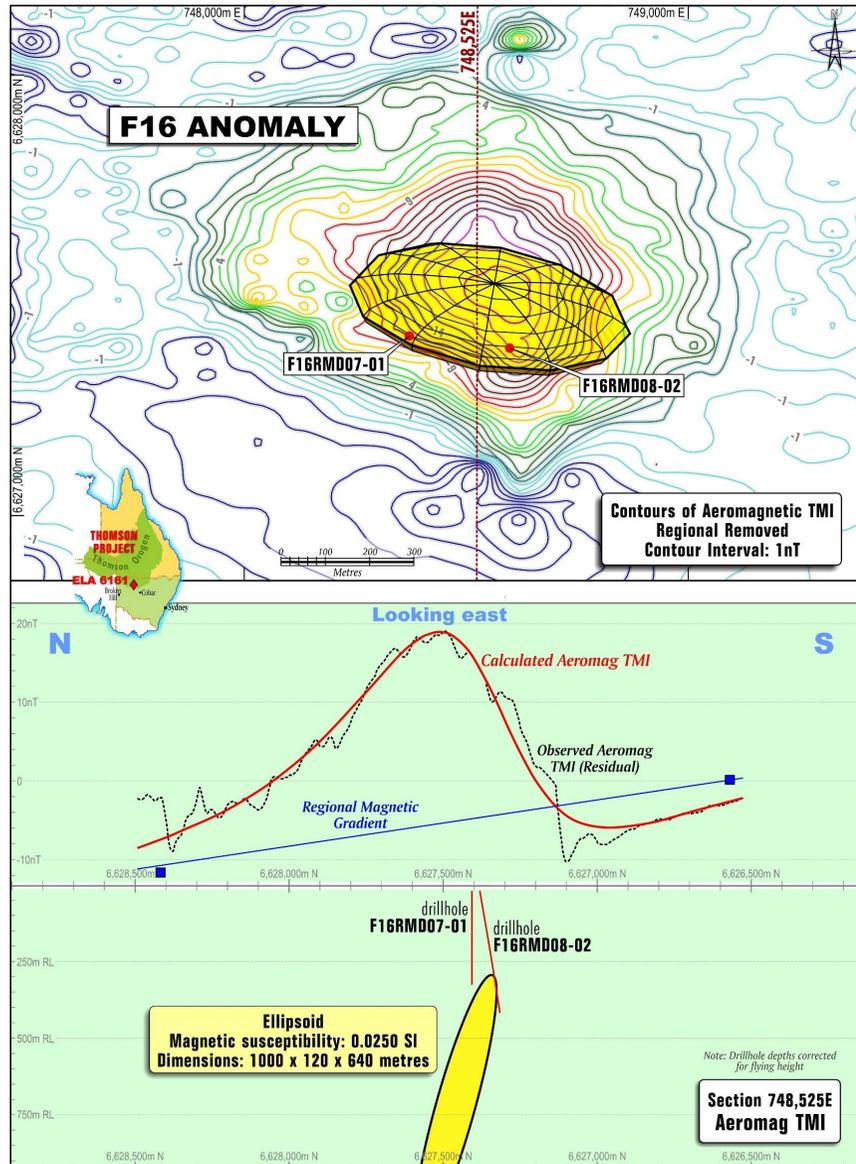


CUTB

- At least **nine walk-up drill targets** with potential for large base and precious metals deposits
- Some targets are defined by **discrete** or “**bull’s eye**” magnetic anomalies (e.g. F16 and F3), similar to Cobar Basin deposits such as Endeavor (Elura), Great Cobar, Great Chesney and The Peak
- Other targets are defined by more complex magnetic anomalies considered to have **potential for IRG-style mineralisation** (e.g. F1 and CUTB)
- All targets have modelled, and drill targets defined by Eastern Metals
- No further field work is required before drilling

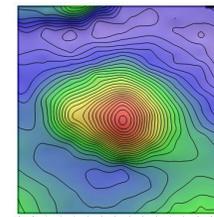
# THOMSON PROJECT – ANOMALY F16

DISTINCT GEOPHYSICAL ANOMALIES IN THE UNDER-EXPLORED THOMPSON OROGEN PROVINCE



## Geophysical modelling of F16

- Geophysical modelling of the magnetic anomalies gives some clue to the upside size of the causative deposits
- The magnetic modelling provides an **estimate of the size of the causative magnetic body, not the size of the economic mineral body**
- Drill holes F16RMD07-01 (308m) and F16RMD08-02 (402m) failed to intersect the main causative body



F16

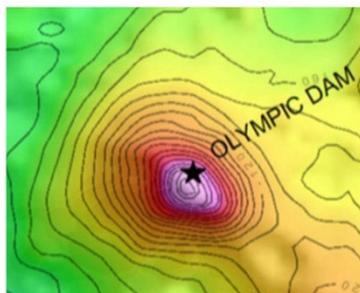
Sources:

\* Annual & Final Report for Exploration Licence 6664 "Klondyke" for the period 21 November 2012 to 22 August 2013, Thomson Resources Ltd

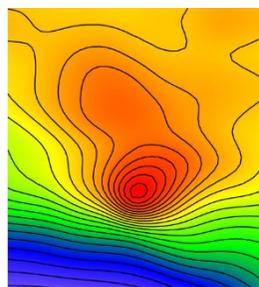
\* F16 geophysical modelling prepared by Bob Richardson, Principal Consultant - Geophysics

# THOMSON PROJECT

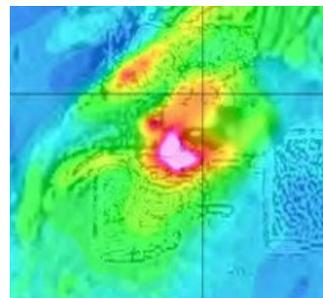
## EXAMPLES OF MAGNETIC SIGNATURES ASSOCIATED WITH WORLD CLASS DEPOSITS



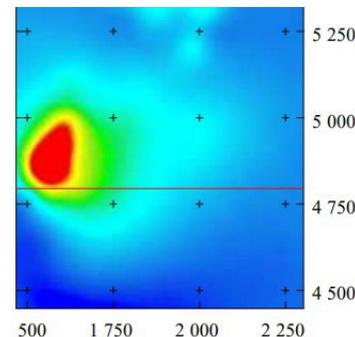
**OLYMPIC DAM, SA**  
Copper-Uranium



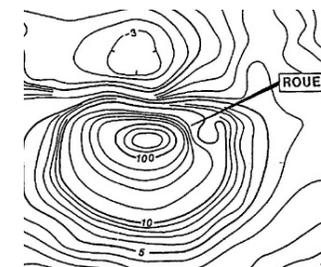
**JUNO, NT**  
Gold



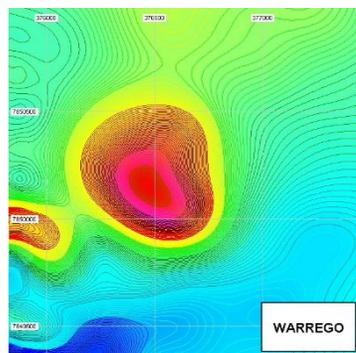
**ERNEST HENRY, QLD**  
Copper-Gold



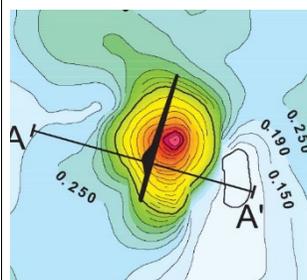
**CANNINGTON, QLD**  
Silver-Lead



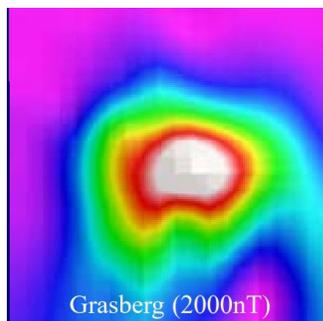
**ROUEZ, France**  
Gold-Silver



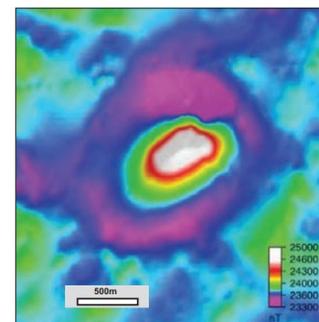
**WARREGO, NT**  
Copper-Gold-Bismuth



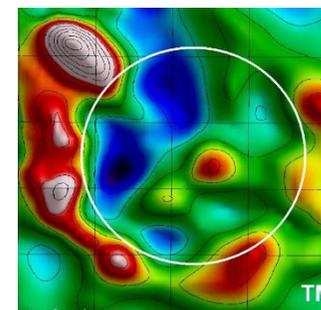
**ARMSTRONG, Canada**  
Gold



**GRASBERG, PNG**  
Copper-Gold



**ALUMBRERA, Argentina**  
Copper-Gold

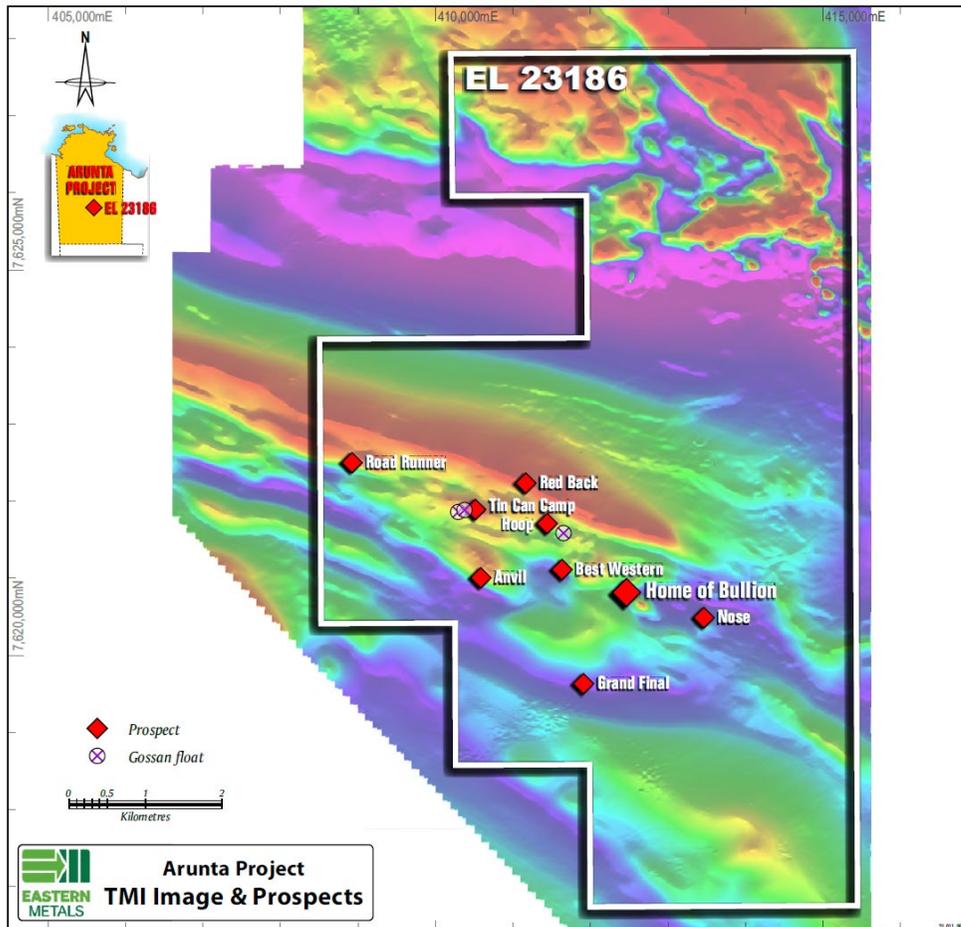


**BUENOVISTA DEL COBRE, Mexico**  
Copper-Silver-Zinc

Prepared by Bob Richardson, Principal Consultant - Geophysics. Not to scale

# ARUNTA PROJECT – HOME OF BULLION

EXISTING COPPER RESOURCE 3.1Mt AT 2.9% CuEq



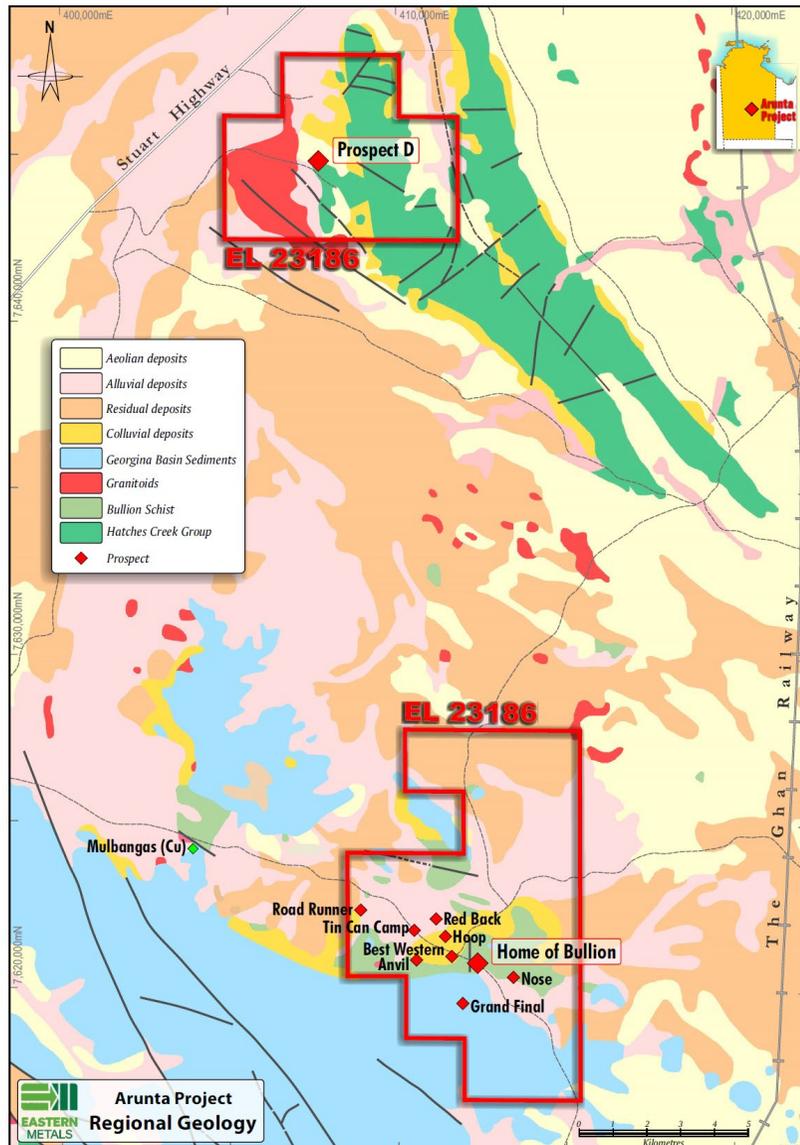
Base and precious metal prospects near Home of Bullion

- The **Home of Bullion** deposit lies on EL23186, in the Arunta Province, 290km northeast of Alice Springs
- Home of Bullion was mined in several campaigns up to the 1950s
- It is a high-grade volcanogenic massive sulphide (VMS) style deposit developed as two main lodes
- The total **Mineral Resource Estimate (MRE)** was updated in March 2023 to:
  - ✓ **3.1 million tonnes** averaging 1.7% Cu (**2.9% CuEq**), 2.0% Zn, 35g/t Ag, 1.1% Pb, 0.17ppm Au and 0.02% Co
  - ✓ Tonnage has increased by 0.6Mt or 24% from KDR's 2014 MRE and the grade by 0.1% CuEq (or 4%)
  - ✓ Contained CuEq increased from 70kt to 89.9kt of metal – **an increase of 28%**
- Preliminary metallurgical testing showed good copper flotation recovery

Source: Eastern Metals Limited (ASX:EMS) ASX Announcement 8 March 2023, 'Resource Grows at Home of Bullion Copper Project'

# ARUNTA PROJECT – PROSPECT D

EXTENSIVE COPPER-NICKEL MINERALISATION UNTESTED AT DEPTH



- **Prospect D** contains **Cu-Ni** sulphide mineralisation that has been mapped over a length of 2km
- A **high-grade zone** has been **traced for over 250m** and remains largely **untested at depth**
- The mineralisation forms a tabular body that is folded with the sedimentary rocks
- This deposit could be either a replacement unit within the dolerite, or a VMS deposit
- Located 4km off the Stuart Highway with **good access to infrastructure**

Source: Eastern Metals Limited (ASX:EMS) Prospectus released on 18 August 2021

# FORWARD WORK PROGRAM

REMAINDER OF FY2024

## COBAR PROJECT

- Build on previous drilling to move towards a JORC resource for Browns Reef; proposed DDH drill program currently undergoing regulatory assessment
- Finalise rehabilitation of 2022 Browns Reef DDH program
- Undertake follow-up surface sampling and detailed mapping in areas of anomalous geophysical data (EL9180 and EL9565)

## ARUNTA PROJECT

- Plan Phase 2 drilling at Home of Bullion +/- resource extension and infill drilling
- Plan RC drilling at Prospect D; undertake detailed mapping and sampling
- Define, map and undertake systematic sampling of pegmatites

## THOMSON PROJECT

- Finalise prospect ranking and drillhole design for highest priority geophysical anomalies
- Seek potential JV partnership

# INVESTMENT SUMMARY

Eastern Metals holds two 'Advanced Exploration Projects', its flagship **Browns Reef** in the Cobar Basin, NSW and **Home of Bullion** in the NT

The Cobar Basin is a **tier-one base metals exploration and production** province, with established production and transport infrastructure

Shareholder value driven by **de-risking and advancing** Browns Reef and Home of Bullion, both with excellent potential for expansion and discovery

Multiple, brown- and green-field **walk-up drill targets**, including distinct geophysical anomalies in the under-explored Thomson Orogen province

**Highly experienced team** with a **strong track record** in mineral exploration, development and monetisation

## DISCLAIMER

This presentation may contain certain statements and projections provided by or on behalf of Eastern Metals Limited (ASX:EMS, Eastern Metals, or the Company) with respect to the anticipated future undertakings. These forward-looking statements reflect various assumptions by or on behalf of Eastern Metals. Accordingly, these statements are subject to significant business, economic and competitive uncertainties and contingencies associated with the mining industry which may be beyond the control of Eastern Metals which could cause actual results or trends to differ materially, including but not limited to price and currency fluctuations, geotechnical factors, drilling and production results, development progress, operating results, reserve estimates, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates, environmental risks, ability to meet funding requirements, share price volatility. Accordingly, there can be no assurance that such statements and projections will be realised. Eastern Metals makes no representations as to the accuracy or completeness of any such statement of projections or that any forecasts will be achieved.

Additionally, Eastern Metals makes no representation or warranty, express or implied, in relation to, and no responsibility or liability (whether for negligence, under statute or otherwise) is or will be accepted by Eastern Metals or by any of their respective officers, directors, shareholders, partners, employees, or advisers as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this presentation or any omission from this presentation or of any other written or oral information or opinions provided now or in the future to any interested party or its advisers. In furnishing this presentation, Eastern Metals undertakes no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise.

Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in Eastern Metals. This presentation contains exploration results and historic exploration results as originally reported in the Company's Prospectus dated 18 August 2021 (ASX:EMS released 22 October 2021).

### **Competent Person Statement**

The information in this Presentation that relates to Exploration Results, Mineral Resources or Ore Reserves (as those terms are used and defined in the JORC Code), except where otherwise noted, is based on information compiled by Mr Gary Jones who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Jones is a full-time employee of Geonz Associates, Consultant Geologists, a former director of Eastern Metals, and Principal Consultant, Geology to the Company. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Jones consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

### **Previously Reported Information**

The information pertaining to the Browns Reef Exploration Target was extracted from the report entitled "Browns Reef Mineral Resource Estimate" dated 12 December 2014 prepared by Geos Mining. The information for the Browns Reef Project was first disclosed by Kidman Resources Limited (ASX:KDR) under the JORC Code 2012 on 29 December 2014 and further clarified on 20 January 2015 and is available on [www.asx.com.au](http://www.asx.com.au).

The information pertaining to the Home of Bullion project mineral resource estimate was extracted from the report entitled "Home of Bullion Resource Estimate" dated September 2014 prepared by SRK Consulting (Australasia) Pty Ltd. The information for the Home of Bullion Project was first disclosed by Kidman Resource Limited Resources (ASX:KDR) under the JORC Code 2012 and released on 29 July 2014 and is available to view on [www.asx.com.au](http://www.asx.com.au).

Eastern Metals has not undertaken any work on the project that would impact the published resource estimates. The information in this report that references previously reported Exploration Results, Mineral Resources or Ore Reserves is extracted from the Company's Prospectus released on 18 August 2021 (ASX:EMS 22 October 2021). The Prospectus is available to view on the Company's website or on the ASX website ([www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. 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 market announcements.



[www.easternmetals.com.au](http://www.easternmetals.com.au)  
ASX:EMS

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Chief Executive Officer  
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# REFERENCES

## IN CHRONOLOGICAL ORDER

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