



## 5,500km<sup>2</sup> Belt-Scale Exploration Package Secured in NSW

Numerous “bullseye” magnetic and gravity targets present Tier-1 copper-gold opportunities

### Exploration and discovery opportunity

- The Thomson Project is a standout opportunity for Legacy Minerals and is highly prospective for Iron Oxide Copper-Gold (IOCG) and Intrusion Related Gold (IRG) discoveries.
- Located west of Bourke, NSW the Project covers 5,500km<sup>2</sup> of tenure and sits in one of the most under-explored geological provinces in Australia.
- Havieron (IRG, 8.4Moz AuEq<sup>i</sup>) and Carrapatenna (IOCG, 50.4Mt Cu, 7Moz Au<sup>ii</sup>) are notable undercover discoveries similar to those being targeted on the Thomson Project.

### Clear Tier-1 geophysical targets

- **Across the project there are numerous, undercover targets defined by discrete, “bullseye” magnetic and gravity anomalies with similar character to other Tier-1 deposits.**
- The limited historical drilling has been either too shallow, or mis-targeted, to have tested the magnetic and gravity anomalies but has intersected widespread alteration and mineralisation<sup>iii</sup>.

### Portfolio and funding strategy

- Legacy Minerals will be systematically progressing the project and will implement the latest generation of geophysics, geochemistry, and machine learning to refine drill targets.
- **The Company will be examining opportunities for partnerships on the Project similar to those on LGM’s Bauloora (Newmont Earn-In<sup>iv</sup>) and Glenlogan Projects (S2 Resources Earn-In<sup>v</sup>).**
- Legacy Minerals’ primary focus, and use of funds, will remain on its existing priority projects.

### Acquisition Terms

- Exploration Licences (EL9190 and EL9194) will be acquired for \$200k in cash from Eastern Metals Limited (ASX: EMS), including a royalty with an option for Legacy Minerals to purchase at any time.

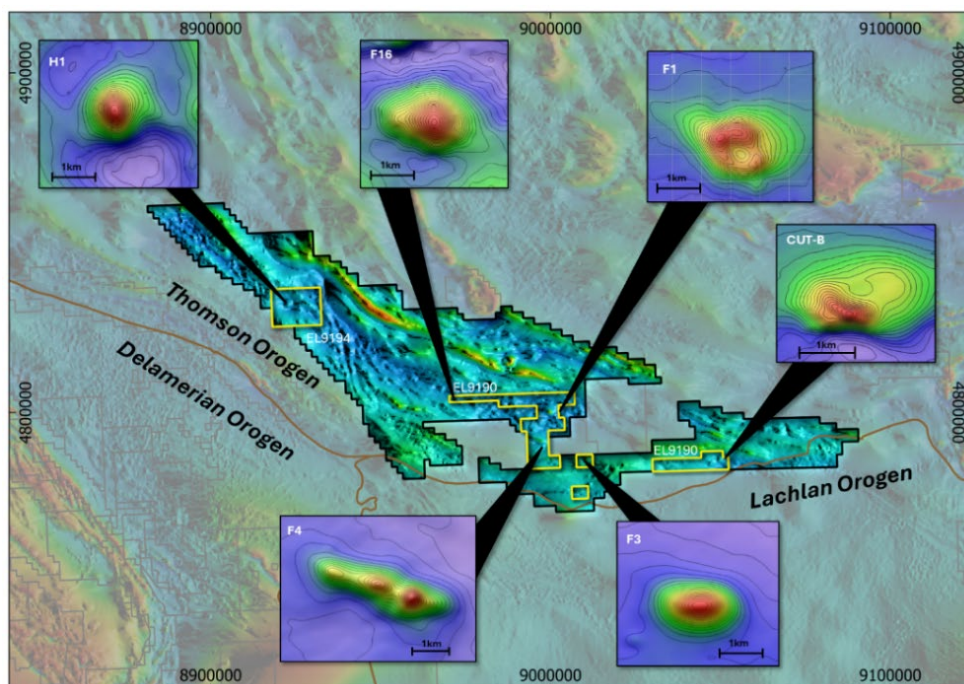


Figure 1: Project overview showing EL9190, EL9194, ELA6777 and examples of “bullseye” magnetic targets (inset).

<sup>1</sup> See ‘Endnotes’ on Page 7 for references

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Legacy Minerals Holdings Limited (ASX: LGM, “Legacy Minerals” or the “Company”) is pleased to advise that it has secured a new belt-scale exploration opportunity for large-scale mineral deposits through the acquisition of the Thomson Project in NSW (EL9190, EL9194, and ELA6777).

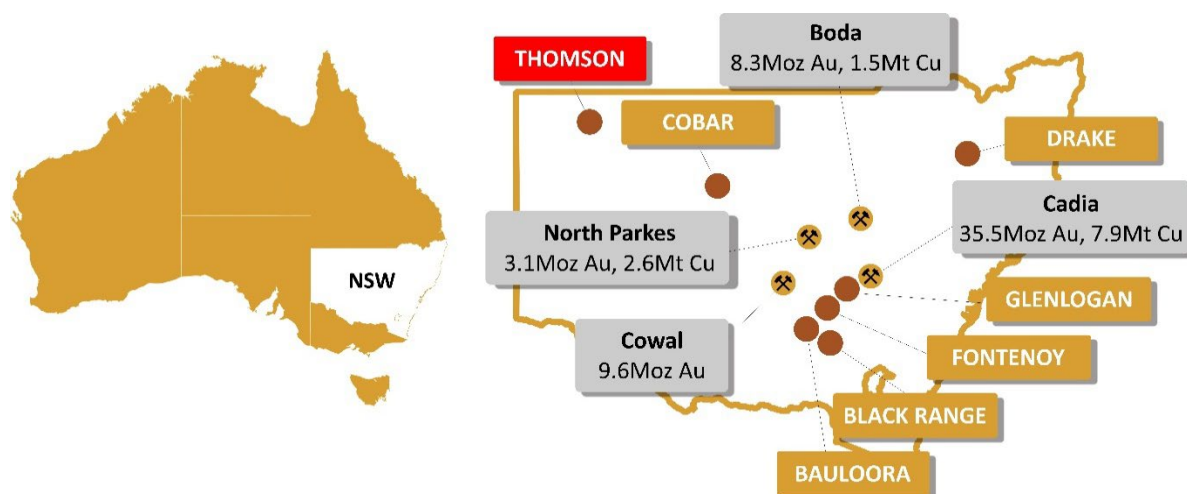


Figure 2: Location of Legacy Minerals Projects in NSW, Australia<sup>vi</sup>

**Management comment** – Legacy Minerals CEO & Managing Director, Christopher Byrne said:

*“With the opportunity to target large-scale gold and copper discoveries, the Thomson Project brings a significant addition of high-quality, Tier 1 drill targets to the Legacy Minerals portfolio. Like our projects at Black Range, Bauloora, Glenlogan, and Drake, the Thomson Project fits Legacy Minerals' strategy of acquiring projects where the discovery opportunity is wide open.*

*“We consider the Southern Thomson region to be one of the most under-explored orogens in Australia and our reason for staking a significant position here is in line with the belief that the next major new mineral province will be undercover and is yet to be found.*

*“The limited historical testing of the known mineral systems, which has already been defined at Thomson, presents Legacy Minerals with the opportunity of aiming to discover very large deposits based on the geophysical expression of their often very large alteration signature.*

*“Characterised by discrete, “bullseye” magnetic and gravity anomalies, the targets in the Thomson Project are of a similar character to other Tier-1 IOCG and IRG deposits. Not only do they represent significant discovery potential, but further upside is also secured through Legacy Minerals control of virtually the entire southern portion of the belt.*

*“We have a simple plan to realise value on the Project. As there has been no on-ground exploration here for over 10 years Legacy Minerals are looking to conduct a systematic review of the targets, historical drilling and geophysical data. We are also in a position to capitalise on the extensive Government pre-competitive geophysical and geological data that has been collected over the terrain for a number of years.*

*“Legacy Minerals’ tenure in NSW now covers over 8,000km<sup>2</sup> and encompasses several significant, district sized projects. With a focus on being good stewards of shareholder capital we plan to maintain our attention on drilling and target generation at Black Range and Drake while our Bauloora Project, under a farm-in and joint venture with Newmont, and Glenlogan Project, under a farm in and joint venture with S2 Resources Earn-In, are in the process of being drill tested.”*

## Details of the Acquisition

Legacy Minerals wholly owned subsidiary, Starlight Exploration Pty Ltd (Starlight), will acquire Exploration Licences EL9190 and EL9194 for A\$200k in cash from Eastern Metals Limited. A\$50k is to be paid within 7 days of an executed HOA and \$150k upon transfer of the tenements. Starlight will grant a 1.5% royalty to EMS and have the option to buy back 0.75% of the royalty for A\$2M and the remaining \$0.75% for A\$4M at any stage.

## Project Overview

Located west of Bourke, the Thomson Project covers 5,500km<sup>2</sup> of tenure under granted and pending exploration licenses, securing a belt-scale exploration opportunity for Legacy Minerals shareholders. Legacy Mineral's is now exploring across eight projects in NSW, with three under farm-in and joint venture agreements and an alliance agreement, covering more 8,000km<sup>2</sup> of tenure.

The Thomson Project is located near the southern margin of the Thomson Orogen nearby the interpreted contact with the Lachlan Fold Belt and the Delamerian Orogen. The Thomson Orogen covers a large area of Queensland and north-western New South Wales, mostly under cover of the Mesozoic Eromanga Basin. The dominant basement rocks are interpreted to consist of Cambrian to Ordovician volcanics, metamorphosed turbidite, siltstone, and slate that are intruded by Silurian to Devonian felsic and mafic igneous rocks.

Current knowledge of the basement geology of the southern Thomson Orogen is very limited however the following datasets provide key insights into the geology and prospectivity of the area:

- Several deep stratigraphic drillholes completed by the NSW Geological Survey (such as Tongo1, Laurelvale 1).
- Historic drillholes completed by previous exploration companies.
- The incorporation and interpretation of regional geophysical data (aeromagnetic, gravity and seismic) conducted by the NSW Geological Survey (GSNSW) with geology logged in drill holes.

The Thomson Project is covered by younger sediments that ranges up 280m thick. These sediments are part of the Eromanga and the Surat Basin cover sequences. This cover has historically in part deterred exploration and has limited the realisation of the Thomson Orogen's mineral potential. Importantly, historical work indicated that this cover sequence is geophysically transparent with a number of the key geophysical targeting methods such as magnetics and gravity providing highly useful and important data sets.

The GSNSW have suggested that the basement rocks within the Thomson Orogen have the potential to hold similar mineral potential to the adjoining belts, including the base metal and gold endowment of the Lachlan Orogen to the south which is over 80Moz gold and 13Mt copper<sup>vii</sup>. A series of major belt-scale faults are observable that may act as major fluid flow conduits during both early extensions and later deformation of the belt.

## Exploration Rationale

Legacy Minerals is searching for high-grade copper-gold intrusion-related deposits in what is considered to be one of the most under explored orogenic belts in Australia. These deposits can often have a magnetic signature that reflects either magnetic minerals associated with the alteration or ore bearing fluids. The opportunity offers Legacy Minerals a huge discovery upside, that if successful, positions the Company as the major tenement holder in a new mineral province with-in a top tier, stable jurisdiction.

The Company has been drawn to the Thomson due to its lack of exploration and early encouragement from previous explorers who have confirmed mineralisation in association with these magnetic high anomalies. These undercover targets are defined by discrete, "bullseye" magnetic and gravity

anomalies, are of a similar character to other Tier-1 deposits characteristics. Limited historical drilling on some of these targets has confirmed the presence of widespread alteration and mineralisation in association with the magnetic targets. Of the 14 historical holes, 7 failed to intersect the causative magnetic bodies, 4 were sighted on the wrong target area and of the 3 holes that partially tested the causative magnetic bodies all delivered encouraging assay results worthy of follow-up drilling. Historical drilling has generally been either too shallow or mis-targeted to have tested targets.

The Company notes that many of the targets share similar intrusion related gold signatures to that of the Greatland Gold (AIM: GGP) Havieron deposit (8.4Moz AuEq, IRG<sup>1</sup>) including:

- Bulls-eye to sub-circular magnetic high anomalies;
- Meta-sedimentary host rocks;
- Pyrrhotite related mineralisation; and
- Related gravity high anomalies.

## Target Overview Examples

### F1 Anomaly<sup>viii</sup>

A fence of three Reverse Circulation (RC) and Diamond (DD) core holes was completed at the F1 anomaly. Drilling intercepted an I-type intrusive granodiorite with hydrothermal alteration was noted as occurring with pyrrhotite, minor chalcopyrite and molybdenite intergrown with coarse muscovite, interstitial to igneous quartz, feldspar and biotite, within granodioritic host rocks. The easternmost drillhole (F1DD01), passed through anomalous molybdenum (up to 0.2% Mo) as well as other IRG pathfinders including Bi, As (up to 1%) and Au (up to 0.24g/t). The overall pattern between the three drillholes suggests a pathfinder zonation in the F1 anomaly, pointing to potential for high gold zones in association with magnetic high responses, outside the centre of the intrusion. Modelling indicates no drilling tested the discrete magnetic high anomaly.

### H1 Anomaly<sup>viii</sup>

A discrete magnetic high where regional aeromagnetics suggests the anomaly is underlain by a large intrusive. Drilling intersected significant fluorite in veins indicating the influence of igneous fluids and hydrothermal mineralisation. Disseminated magnetic pyrrhotite becomes more abundant towards the bottom of the hole corresponding to increasing Zn anomalism. Modelling indicates the magnetic target was not tested.

### CUT-B Anomaly<sup>viii</sup>

The coincident gravity high and magnetic high anomaly shows the close spatial relationship between magnetic material and dense material located in a favourable structural position. Historical drilling appears to have missed the magnetic anomaly however mineralised veins were noted with assays up to 113g/t Ag, 0.5% Cu and 4.2% Zn. These veins are within a 300 m zone of strong carbonate and silica alteration indicative of a large, metalliferous, hydrothermal system which the Company interprets to have not been tested.

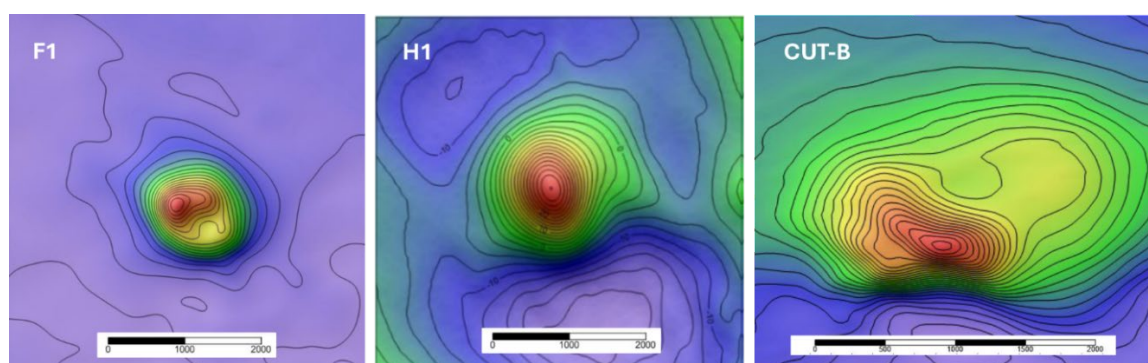


Figure 3. Aeromagnetic RTP images showing examples of discrete magnetic targets on the project.

## Proposed Exploration

Initial work will focus on the compilation and interpretation of the existing exploration datasets as well as a review of historical drill core stored at the Londonderry Core Library. This work will be completed in parallel with activities currently ongoing across the Company's portfolio within our existing budget.

**Approved by the Board of Legacy Minerals Holdings Limited.**

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## DISCLAIMER AND PREVIOUSLY REPORTED INFORMATION

Information in this announcement is extracted from reports lodged as market announcements referred to above and available on the Company's website <https://legacyminerals.com.au/>. The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

This announcement contains certain forward-looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Legacy Minerals Holdings Limited (LGM). These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward-looking statements. Any forward-looking statements in this announcement reflect the views of LGM only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, LGM does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward-looking statements is based.

## COMPETENT PERSON'S STATEMENT

The information in this Report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Thomas Wall, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Wall is the Technical Director and a full-time employee of Legacy Minerals Pty Limited, the Company's wholly-owned subsidiary, and a shareholder of the Company. Mr Wall 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 Wall consents to the inclusion of the matters based on his information in the form and context in which it appears in this announcement.

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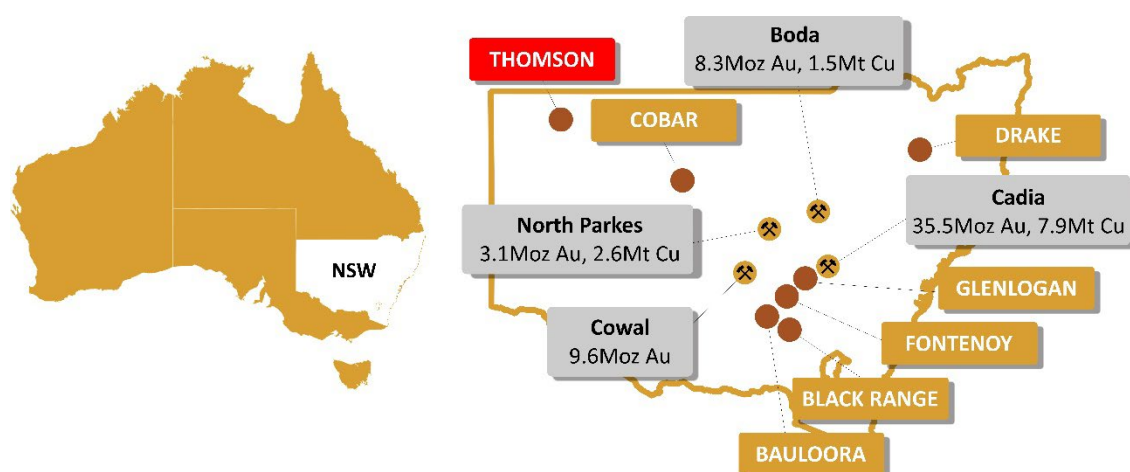
## About Legacy Minerals

Legacy Minerals is an ASX listed public company that has been involved in the acquisition and exploration of gold, copper, and base-metal projects in NSW since 2017. The Company has nine projects that present significant discovery opportunities for shareholders.

<p><b>Au-Ag Black Range</b> (EL9464, EL9589)</p> <p>Extensive low-sulphidation, epithermal system with limited historical exploration. Epithermal occurrences across 30km of strike.</p>	<p><b>Cu-Au Drake</b> (EL6273, EL9616, ELA6642)</p> <p>Large caldera (~150km<sup>2</sup>) with similar geological characteristics to other major pacific rim low-sulphidation deposits.</p>
<p><b>Cu-Au Rockley</b> (EL8926)</p> <p>Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks with historic high-grade copper mines that graded up to <b>23% Cu</b>.</p>	<p><b>Au-Cu (Pb-Zn) Cobar</b> (EL9511)</p> <p>Undrilled targets next door to the Peak Gold Mines. Several priority geophysical anomalies and gold in lag up to <b>1.55g/t Au</b>.</p>
<p><b>Au-Ag Bauloora</b> (EL8994, EL9464) <a href="#">Newmont JV</a></p> <p>One of NSW's largest low-sulphidation, epithermal systems with a 27km<sup>2</sup> epithermal vein field.</p>	<p><b>Au Harden</b> (EL9657)</p> <p>Large historical high-grade quartz-vein gold mineralisation. Drilling includes <b>3.6m at 21.7g/t Au</b> 116m and <b>2m at 17.17g/t Au</b> from 111m.</p>
<p><b>Cu-Au Glenlogan</b> (EL9614) <a href="#">S2 Resources JV</a></p> <p>Large, undrilled magnetic anomaly underneath Silurian cover located 55kms from Cadia Valley.</p>	<p><b>Au-Cu Fontenoy</b> (EL8995) <a href="#">Earth AI Alliance</a></p> <p>An 8km long zone of Au and Cu anomalism defined in soil sampling and drilling. Significant drill intercepts include <b>79m at 0.27% Cu</b> from 1.5m.</p>

### **Cu-Au Thomson** (EL9190, EL9194, ELA6777)

Perspective for iron oxide copper-gold and intrusion related gold systems, the project contains numerous 'bullseye' magnetic and gravity anomalies that remain untested.



**Figure 4:** Location of Legacy Minerals Projects in NSW, Australia<sup>vi</sup>

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## ENDNOTES

<sup>i</sup> Greatland Gold, Half Year Report for the half year ended 31 December 2023

<sup>ii</sup> Carrapatenna 2022 Mineral Resources and Ore Reserves Statement and Explanatory Notes, 30 June 2022

<sup>iii</sup> Geophysical Report Thomson Projects EL9190 And EL9194 For Eastern Metals Limited

<sup>iv</sup> LGM ASX: 2 April 2023 *Newmont Farm-in at Bauloora Project*

<sup>v</sup> LGM ASX: 29 January 2024 *S2 Resources enter \$6M Farm-in at Glenlogan Porphyry Project*

<sup>vi</sup> Evolution Mining 2022 Annual Report, Newmont 2023 Reserves Statement, Newmont 2023 Reserves Statement, ASX EVN: 8 May 2024 *Macquarie Conference Presentation*, ASX ALK: 29 April 2024 *Revised Kaiser Resource Est Improves Confidence and Grade*

<sup>vii</sup> Lachlan Fold Belt Project <https://www.ga.gov.au/about/projects/resources/lachlan>

<sup>viii</sup> Eastern Meals Limited Prospectus, Dated 18<sup>th</sup> August 2021, Thomson Resources Limited Prospectus, dated 22 October 2010.

**Table 1:** Major Mineral Resources of NSW

Project & Company	Mineral Resource	Measured Resource	Indicated Resource	Inferred Resource
Boda-Kaiser, NSW (Alkane Resources Ltd)	7.26Moz Au, 1.38Mt Cu	-	-	8.28Moz Au, 1.46Mt Cu
Tomingley, NSW (Alkane Resources Ltd)	1.75Moz Au	0.13M Au	1.019Moz Au	0.59Moz
McPhillamys, NSW (Regis Resources Ltd)	2.29Moz Au	-	2.28Moz Au	0.001Moz Au
Cadia-Ridegway, NSW (Newmont Corporation)	35.3Moz Au, 7.8Mt Cu	0.3Moz Au, 0.045Mt Cu	30.9Moz Au, 6.9Mt Cu	4.1Moz, 0.9Mt Cu
Cowal, NSW (Evolution Mining Limited)	9.618Moz Au	0.367Moz Au	7.33Moz Au	1.92Moz Au
Nth Parkes, NSW (CMOC Mining Pty Ltd)	3.09Moz Au, 2.63Mt Cu	1.64Moz Au, 1.2Mt Cu	1.1Moz Au, 1.1Mt Cu	0.35Moz Au, 0.33Mt Cu