



ASX:GCM

NOVEMBER 2024

# Green Critical Minerals Ltd

An Australian-based mineral exploration  
and development company

Annual General Meeting | FY 2024





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This document has been authorised for release by the Company's Board of directors.

# Portfolio Overview



## McIntosh Graphite Project Progress



### Achieved 51% earn-in

Advanced to 80% earn-in complete



### Metallurgical test work

Demonstrates high-purity graphite suitable for SPG battery anode production.



### Strong alignment with global demand for critical minerals

Particularly in the EV and renewable energy sectors.

## Strategic Acquisition of Very High Density (VHD) Technology



### Enhancing product value

Through superior thermal management solutions.



### Positioning GCM as a leader

In high-performance graphite applications.



### Potential exposure

To the large and growing high performance computing, data centres, AI, defense, aerospace, automotive, nuclear and renewables sectors.

## Diversified Asset Portfolio



### Torrington Topaz-Tungsten Project

JORC-compliant resource, contributing to supply in tech and industrial markets, potential downstream technology to support product development for supply into aerospace, automotive and defense.



### Greenfields opportunities

Northern Territory and Queensland tenements with IOCG and REE prospects.



# Corporate Snapshot



## Board of Directors

**Charles Thomas**

Non-Executive Chairman

**Christopher Zielinski**

Non-Executive Director

**Clinton Booth**

CEO and Managing Director

### New Leadership

Clinton Booth appointed as CEO and Managing Director in 2024, bringing extensive experience in mineral exploration, project and corporate development, and corporate strategy.



## Commitment to Growth

With a robust leadership team and solid financial position, we are well-positioned to advance our strategic initiatives and deliver value to our shareholders.



### Market Capitalisation

**\$12.21M<sub>AUD</sub>**

As of 1st November 2024



### Cash on Hand

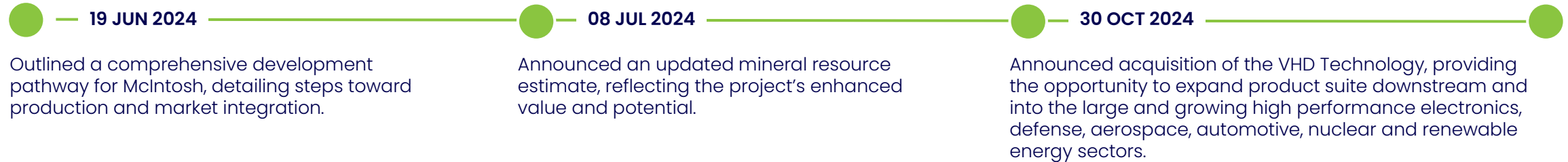
**\$3.12M<sub>AUD</sub>**

September Quarterly Report +  
Capital Raise in November  
2024

# Strategic Development



## Development Pathway



## Critical Mineral Status and Geopolitical Importance

### Graphite's Critical Role

Recognised globally as a critical mineral essential for clean energy technologies, including electric vehicle batteries and renewable energy storage systems.

### Geopolitical Significance

Securing a domestic supply of high-purity graphite positions the McIntosh Project as a strategic asset in reducing reliance on international sources, aligning with national interests in resource security.

## Integration with VHD Technology

### Mine-to-Market Strategy

The progression of the McIntosh Project provides the potential for a mine-to-market pathway, leveraging very high density (VHD) technology to produce high-performance graphite products.

### Technological Synergy

Potential opportunity to combine McIntosh's high-purity graphite with VHD technology resulting in enhanced product quality, meeting the stringent requirements of advanced technological applications and solidifying GCM's position in the critical minerals market.



# McIntosh Project<sup>1</sup>



## Project Expansion Milestones

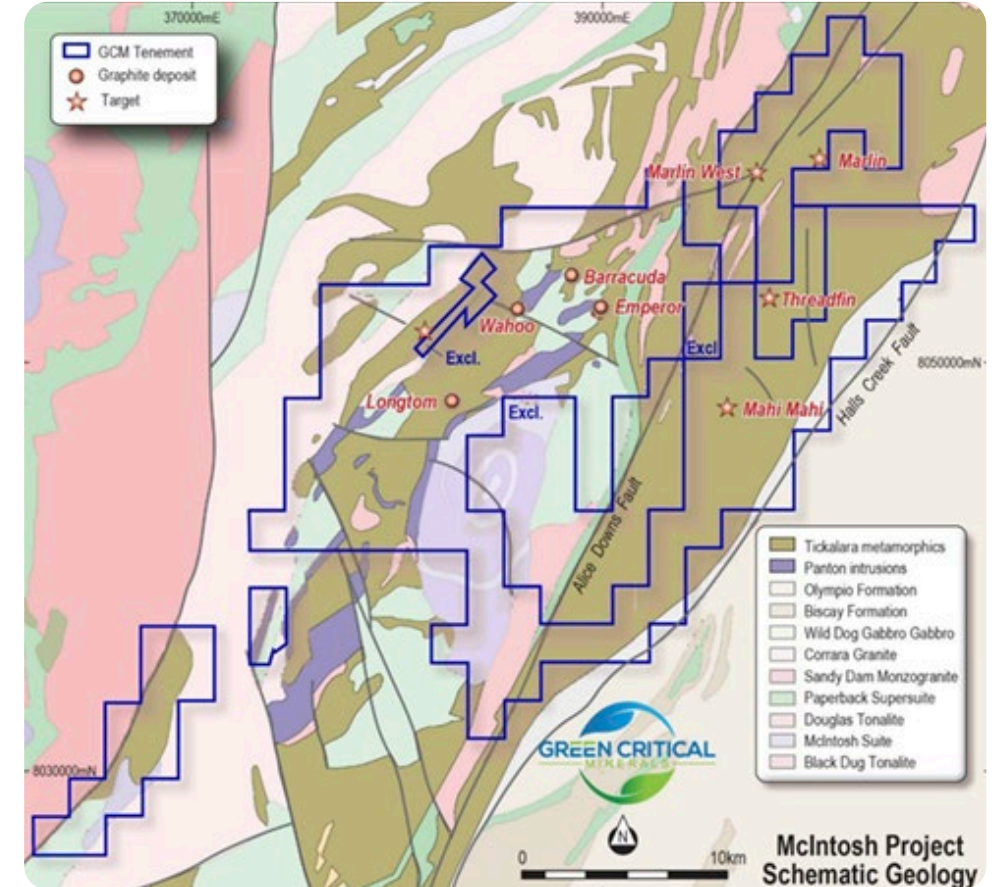
- 18 JUL 2023** ● Announced significant expansion at the Emperor target within the McIntosh Graphite Project, indicating a large-scale graphite discovery.
- 20 SEP 2023** ● Updated exploration target estimate for McIntosh, reflecting increased potential and resource size.
- 01 NOV 2023** ● Reported further advancements in exploration activities, reinforcing the project's growth trajectory.

## Advancements in Battery Anode Suitability

- 21 NOV 2023** ● Released metallurgical test results confirming McIntosh graphite's high purity, making it suitable for spherical graphite (SPG) battery anode applications.
- 18 DEC 2023** ● Provided additional data supporting the graphite's compatibility with SPG battery anode production, enhancing its market appeal.

## Earn-In Achievement

- 06 DEC 2023** ● Progressed the McIntosh Project and achieved a 51% interest in the McIntosh Project.
- 25 NOV 2024** ● Achieved 80% interest in the McIntosh Project.



# Torrington Project

## Unlocking Future Potential



### Strategic Resource

#### Tungsten

Classified as a globally critical mineral, essential for industrial and defence applications.

#### Strategic Importance

In the geopolitical landscape ensures robust demand and aligns with GCM's focus on critical minerals.



### Resampling of Existing Drill Core

#### Ongoing analysis of historical drill cores

To refine resource estimates and assess new development opportunities.

#### This work supports preparation

For potential advancements in the Torrington Project.



### R&D on Single Crystal Mullite Fibres

#### GCM is reviewing previous research

with plans to restart research and development on single crystal mullite fibres.

#### Advanced material holds significant promise

With potential for high-performance applications in aerospace, automotive and defense industries.



#### Future Outlook

While this year's activity has been limited, our focus remains on leveraging Torrington's strategic value through potential R&D and further exploration.

# Boulia Project

## Strategic Greenfields Exploration



### Strategic Location

Situated in the fertile Mt Isa / Cloncurry district and adjacent to tenements held by Anglo American.



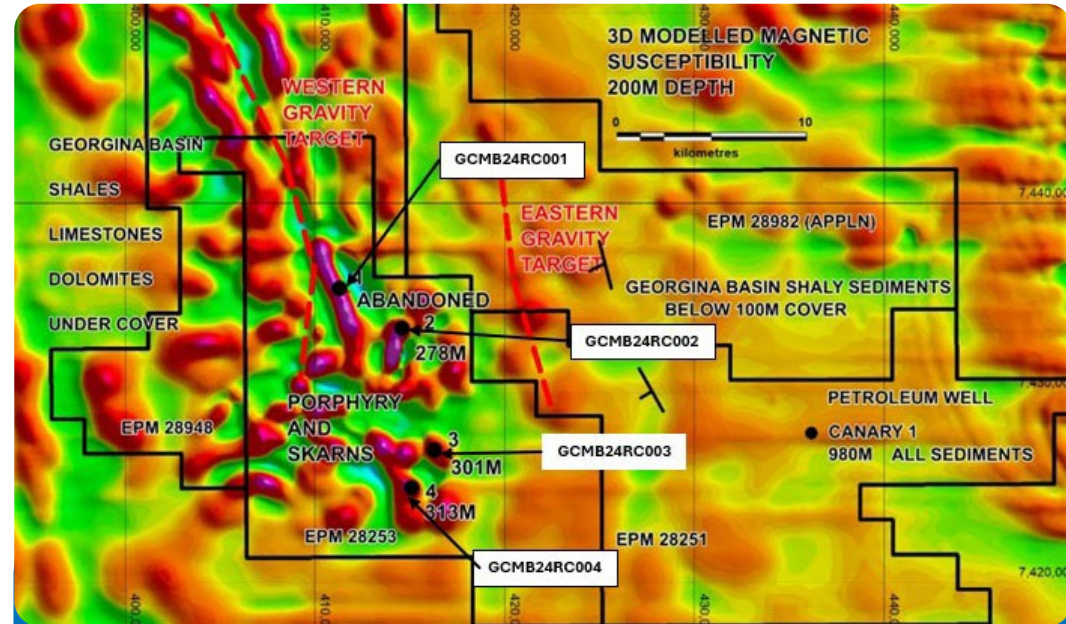
### Novel Geological Interpretation

Drilling confirmed the novel geological interpretation of porphyries and skarns, resulting in the first instances of veined intrusions and associated alteration systems in the Georgia Basin<sup>2</sup>.



### Active Exploration Focus

Ongoing geophysical surveys, geochemical analysis, and planning to advance and unlock the mineral potential at Boulia.



## Exploration Activities and Drilling Results

### Mineral Targets

Focused on identifying Iron Oxide Copper Gold (IOCG) deposits.

### Drilling Program

Initiated in July 2024, with results announced on November 18, 2024, confirming the presence of porphyries and skarns, with detectable zones of copper and gold encountered.



# North Barkly Project Strategic Expansion and Exploration

## Minerals Targeted and Drilling Results

### Surface geochemical surveys and drilling

Identified significant rare earth elements (REE), Iron Oxide Copper Gold (IOCG), and base metal targets.



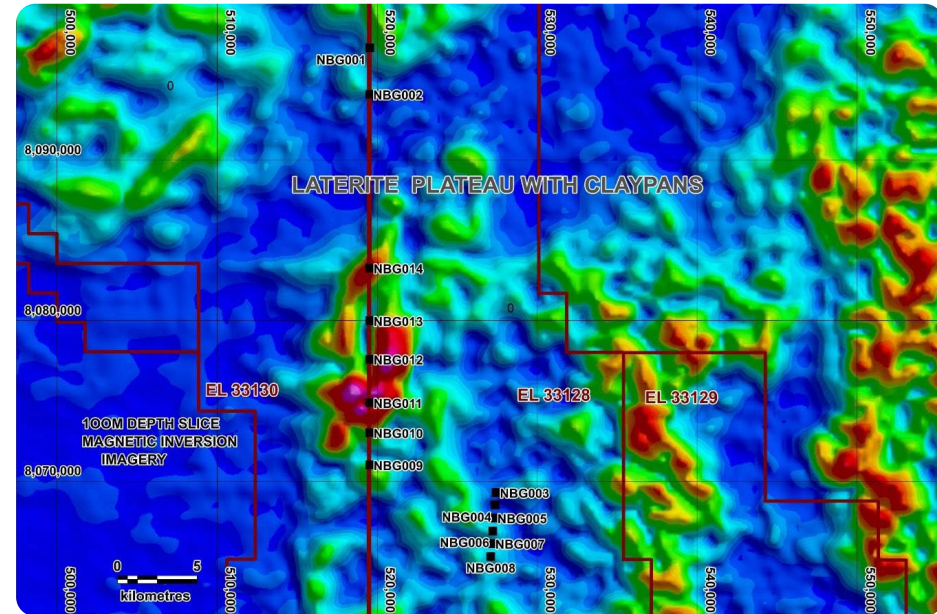
### Follow-up drilling

Confirmed extensive REE mineralization, including high-grade zones, supporting the project's advancement.

## Tenements Granted and Applications

### GCM has expanded its North Barkly project area

With multiple granted tenements and additional exploration applications, significantly increasing its landholding.



## Active Landholding and Exploration Focus



### Large land package

GCM holds a large and strategically important land package in the North Barkly region.

### Ongoing exploration

Including geochemical surveys and drilling, demonstrates a strong commitment to advancing the project and unlocking its mineral potential.



# GCM

## Positioned For Growth



### Advancements in Very High Density (VHD) Technology



Acquisition of a revolutionary technology to produce very high-density graphite blocks with the highest thermal conductivity and lowest electrical resistivity recorded for any bulk graphite material.

### McIntosh Project Development



Significant progress in the McIntosh Graphite Project, including a 26% upgrade to the Mineral Resource Estimate (MRE)<sup>3</sup> and the commencement of the Pre-Feasibility Study (PFS).

### Progress in Single Crystal Mullite Fibre Development



GCM is reviewing previous research with plans to restart research and development on single crystal mullite fibres. This advanced material holds significant promise for high-performance applications in aerospace, automotive and defence industries.

### Strategic Outlook



These developments position GCM for substantial growth in the coming year, enhancing our capabilities in advanced materials and expanding our resource base to meet increasing market demands.





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# Thank you

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