



ASX:GCM

# VHD Graphite

## Building a New Future

[gcm minerals.com.au](https://gcm minerals.com.au)





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

# Why VHD Technology is Exciting?



## Legacy materials can't meet modern cooling needs

Customer feedback confirms current materials are limiting performance



## VHD Graphite represents cutting-edge innovation

Converts an abundant mineral into a product with properties not seen in the mass market sector



## World class, award-winning team in materials scientists and engineers



## Wholly owned revolutionary process

GCM is the sole holder of the global rights to VHD Technology



## Customer validation with major industry players

Customer interest confirmed with qualification advancing at great pace



# The Need for a Downstream Strategy

Future-proofing growth required a downstream capability

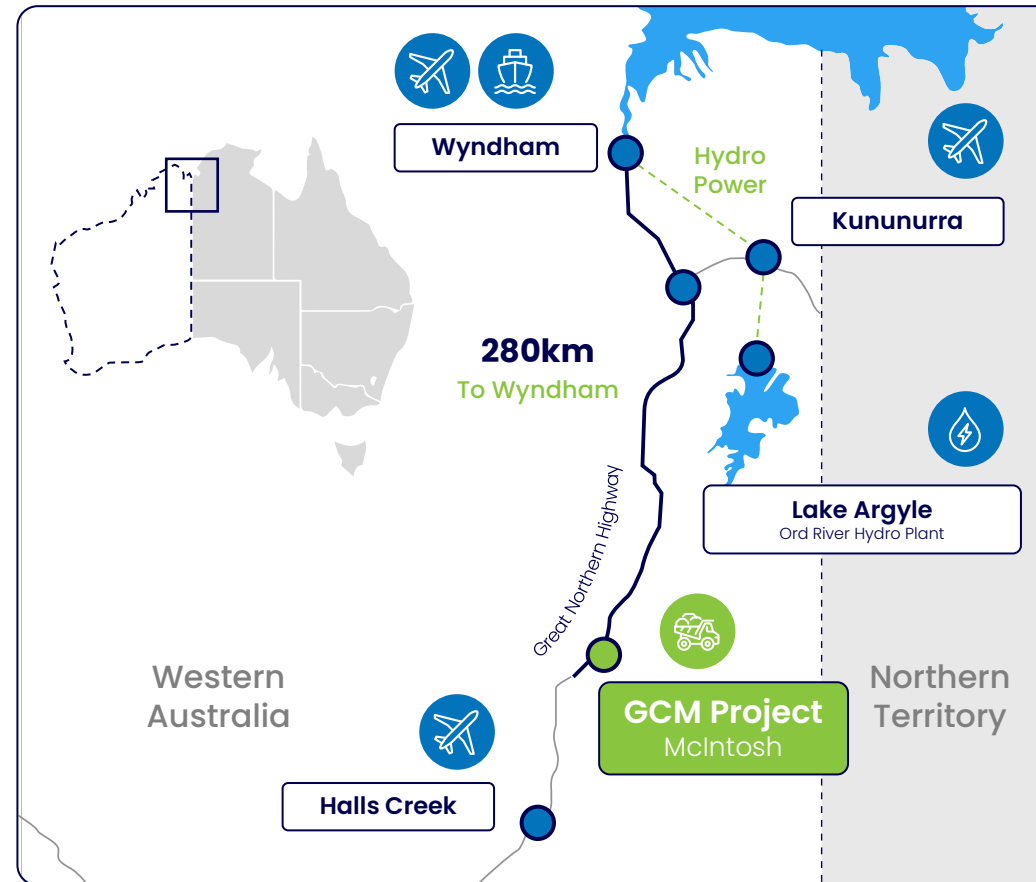
## McIntosh Graphite Project

GCM entered McIntosh earn-in agreement in Q4 2022.

Extensive metallurgical testing has validated a fine flake concentrate suitable for traditional graphite powder markets.

Pre-Feasibility Study now underway, targeting completion in Q2 2025 to define development path.

Strategic focus on supplying high-quality, processable graphite from an Australian source.



## Changing graphite market demands integrated solutions

Demand is shifting toward processed, high-performance graphite used in batteries, energy storage, and high-tech applications.

GCM has recognised to compete long-term, it needs to move beyond raw ore – and deliver finished, customer-ready materials.



# GCM's VHD Graphite Technology



Potential to Disrupt a

**+\$700 B**

**US Market <sup>1</sup> (2023)**

with Superior Graphite  
Blocks at Fraction of  
the Time and Cost <sup>2</sup>



1. Refer ASX announcement dated 11 November 2024

2. The VHD Graphite technology is not yet produced at a commercial level. The technology is in the development phase with the aim to commercialise within the next 12 months



An aerial photograph showing a two-lane asphalt road that curves through a dense, vibrant green forest. To the left of the road is a calm, dark blue lake, and to the right is a more turbulent, lighter blue body of water. A single white car is visible on the road, moving away from the viewer. The overall scene is serene and natural.

# Progress to date

01

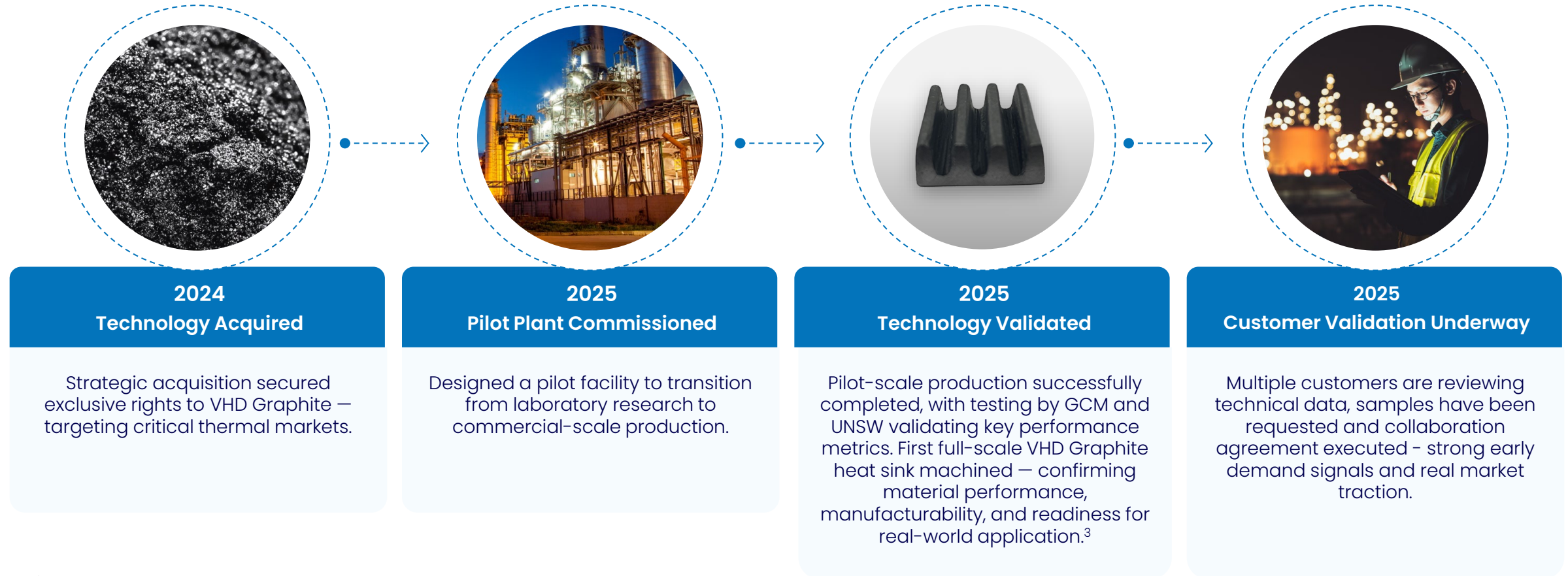


# Milestones To Date



## Ahead of schedule and building momentum

GCM is advancing VHD Graphite from proven pilot production to early commercial engagement with reputable customers.



3. Refer to announcements dated 16 January 2025, 13 February 2025 and 17 February 2025

# Commercialisation Roadmap



Customer demand demonstrated for advanced materials able to provide energy-efficient cooling

Complete

## Stage 1 Pilot Plant and Technology validation



Pilot production operational: Line 1 running; Line 2 on track for H1 2025.

Tested in real-world conditions: Performance validated in advanced composite applications.

Key metrics confirmed: Outperforms aluminium and copper on thermal efficiency.

In Progress

## Stage 2 Customer acceptance and qualification



Customer engagement and technical data provided.

Customer reviews technical data.

Customer recognises product potential, seeks samples to perform due diligence.

Completes due diligence and progresses to prototype design collaboration.

Target H1 2026

## Stage 3 Sales agreements and first revenue



Commercial discussions tied to successful customer trials.

First sales agreements targeting late 2025.

On track for initial revenue in H1 2026.



# Near Term Milestones

## Key Catalysts on the Path to Commercialisation

GCM is well-positioned to move from validation to revenue, with clear near-term catalysts and a strong execution plan.

### Customer Testing to Expand Across Sectors

Samples delivered and collaboration activities underway with partners in electronics, data centres, and HPC – widening GCM's commercial pipeline.

### Collaboration Agreements Progressing

Finalise agreements with early-stage partners to co-develop prototypes and define application-specific use cases.

## Milestones to Watch Out For



**Developing customer prototypes** – Delivery of first jointly developed, tailored customer prototypes.

**Customer prototype testing outcomes** – Receiving and reporting results from in-field testing across high-performance applications.

**Preparation for sales agreements in late 2025** – Laying the groundwork for initial commercial deals with early adopters.

**Expanding supply chain capabilities in the USA** – Initial activities to provide warehousing and logistics capabilities, supporting future manufacturing capabilities



# Corporate Overview

02



# Corporate Snapshot



## Board of Directors

**Charles Thomas**

Non-Executive Chairman

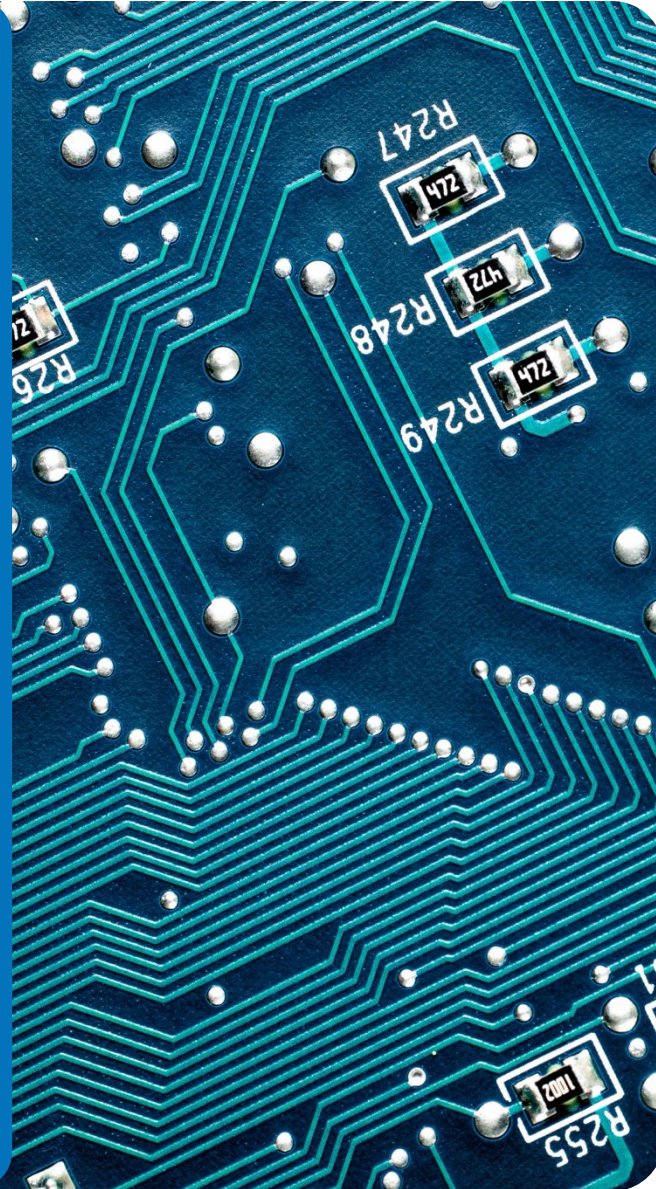
**Christopher Zielinski**

Non-Executive Director

**Clinton Booth**

CEO and Managing Director

ASX:GCM



## Commitment to Growth

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



## Market Capitalisation

**\$23.54M<sub>AUD</sub>**

As of 1st May 2025



## Cash on Hand

**\$1.32M<sub>AUD</sub>**

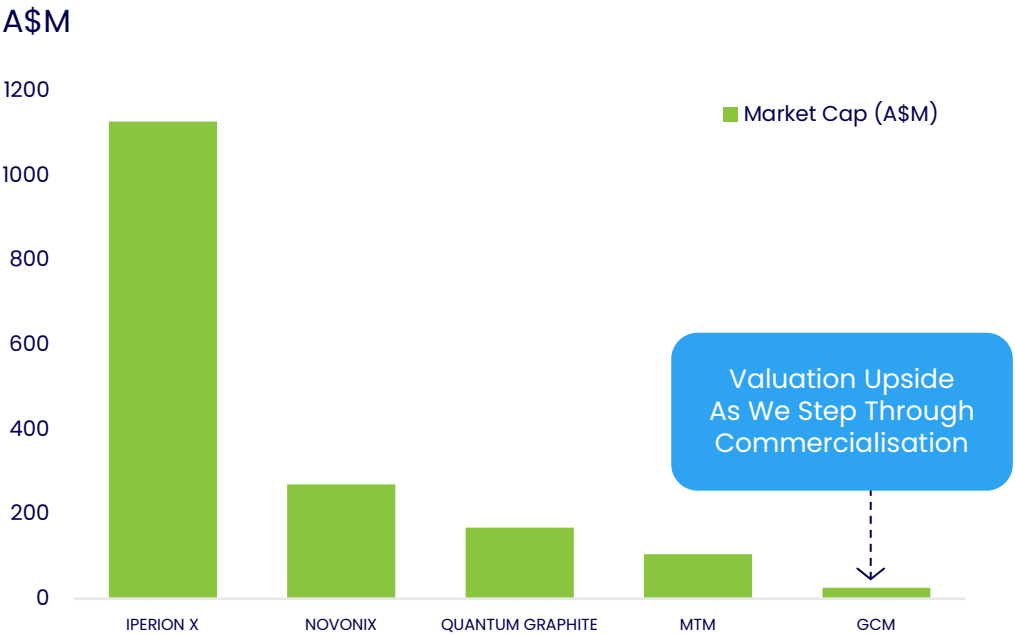
March Quarterly



# Comparable ASX Listed Companies<sup>4</sup>



## Market Cap Comparison<sup>5</sup>



Company	ASX Code	Market Cap <sup>5</sup>	Stage	
IperionX Limited	IPX	\$1.128B	Pilot	<div></div>
Novonix Limited	NVX	\$270.31M	Pilot	<div></div>
Quantum Graphite Limited	QGL	\$168.00M	Pilot	<div></div>
MTM Critical Mineral Limited	MTM	\$105.50M	Pilot	<div></div>
Green Critical Minerals Ltd	GCM	\$23.54M	Pilot	<div></div>

4. The peer comparison presented in this slide is subjective and based on GCM's internal assessment of industrial tech companies operating within similar sectors of mineral processing and extraction. This comparison does not necessarily adhere to any industry-recognised standards and should not be interpreted as an exact like-for-like comparison in terms of stage of development, market cap, or technology maturity. GCM's VHD Graphite technology is currently at a development / pilot plant stage. The companies compared are in various stages of development (as noted in the table), and their progress is based on publicly available information as of the date of this presentation. The development stages referenced in this comparison are for indicative purposes only and are not meant to represent a formal independent analysis based on industry standard. GCM notes that entities listed may be selling different commodities (compared to GCM) or may be selling to different customers / end users. Investors are advised to consult independent sources for a detailed assessment of each company's projects and their stage of development. GCM does not warrant the accuracy of third-party data used for this comparison.

5. As at 01/05/2025, Yahoo Finance



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# Thank you

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