



ASX:GCM

ersonal use only

Investor Update

Pathway to Revenue

gcm minerals.com.au



Disclaimer



This presentation has been prepared by Green Critical Minerals Limited (GCM or the Company). It contains general information about the Company's activities current as at the date of the presentation. The information is provided in summary form and does not purport to be complete. This presentation is not to be distributed (nor taken to have been distributed) to any persons in any jurisdictions to whom an offer or solicitation to buy shares in the Company would be unlawful. Any recipient of the presentation should observe any such restrictions on the distribution of this presentation and warrants to the Company that the receipt of the presentation is not unlawful. It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company that would require a disclosure document under the Corporations Act 2001 (Cth) or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this presentation or any information, opinions or conclusions expressed in the course of this presentation.

Some statements in this presentation regarding future events are forward-looking statements or opinions. Such forecasts, projections and information are not a guarantee of future performance and involve unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied. There are a number of risks, both specific to GCM, and of a general nature which may affect the future operating and financial performance of GCM, and the value of an investment in GCM including and not limited to title risk, renewal risk, economic conditions, stock market fluctuations, commodity demand and price movements, timing of access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve estimations, native title risks, foreign currency fluctuations, and mining development, construction and commissioning risk. You should not act or refrain from acting in reliance on this presentation, or any information, opinions or conclusions expressed in the course of this presentation. This presentation does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the prospects of GCM. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation before making any investment decision. Recipients of this presentation must undertake their own due diligence and make their own assumptions in respect of the information contained in this presentation and should obtain independent professional advice before making any decision based on the information. To the maximum extent permitted by law, no representation, warranty or undertaking, express or implied, is made and, to the maximum extent permitted by law, no responsibility or liability is accepted by the Company or any of its officers, employees, agents or consultants or any other persons as to the adequacy, accuracy, completeness or reasonableness of the information in this presentation. To the maximum extent permitted by law, no responsibility for any errors or omissions from this presentation whether arising out of negligence or otherwise is accepted. An investment in the shares of the Company is to be considered highly speculative.

This Presentation contains estimates and information concerning our industry and our business, including estimated market size and projected growth rates of the markets for our products. Unless otherwise expressly stated, we obtained this industry, business, market, and other information from reports, research surveys, studies and similar data prepared by third parties, industry, and general publications, government data and similar sources. This Presentation also includes certain information and data that is derived from internal research. While we believe that our internal research is reliable, such research has not been verified by any third party. Estimates and information concerning our industry and our business involve a number of assumptions and limitations. Although we are responsible for all of the disclosure contained in this Presentation and we believe the third-party market position, market opportunity and market size data included in this Presentation are reliable, we have not independently verified the accuracy or completeness of this third-party data. Information that is based on projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, which could cause actual results to differ materially from those expressed in these publications and reports. The Company cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of the Company only as of the date of this release.

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

Turning VHD Validation into Market Value



Tech Validated by Independent Experts

VHD graphite has been modelled by Prof. Qing Li (USYD) – confirming best-in-class thermal performance.



Production Is Live

GCM's first module is operational and producing saleable VHD blocks – a critical step beyond the lab.



Global OEM Engagement Underway

Discussions in progress with major chipmakers, data centres (e.g. GreenSquareDC), and thermal integrators.



International Market Access Activated

Distributor networks opened across North America, Europe, and APAC – with online registration underway.

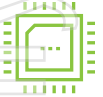


Revenue Path Is Real and Multichannel

GCM's Go-To-Market strategy includes OEMs, integrators, and distribution.

The Thermal Bottleneck

Current materials can't meet modern cooling demands



Modern chips are pushing the limits

CPUs and GPUs now routinely demand 300W+.

Power density is growing – but cooling performance hasn't kept pace.



Legacy materials are failing

Aluminium, copper, and isotropic graphite.

Inadequate at dissipating heat fast enough.

Limited thermal dissipation.

Contribute to overheating and performance throttling.

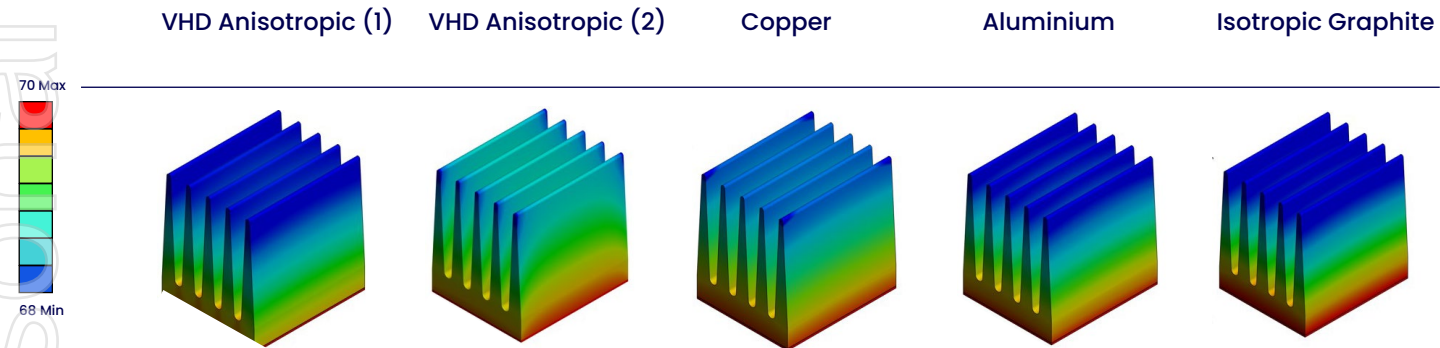
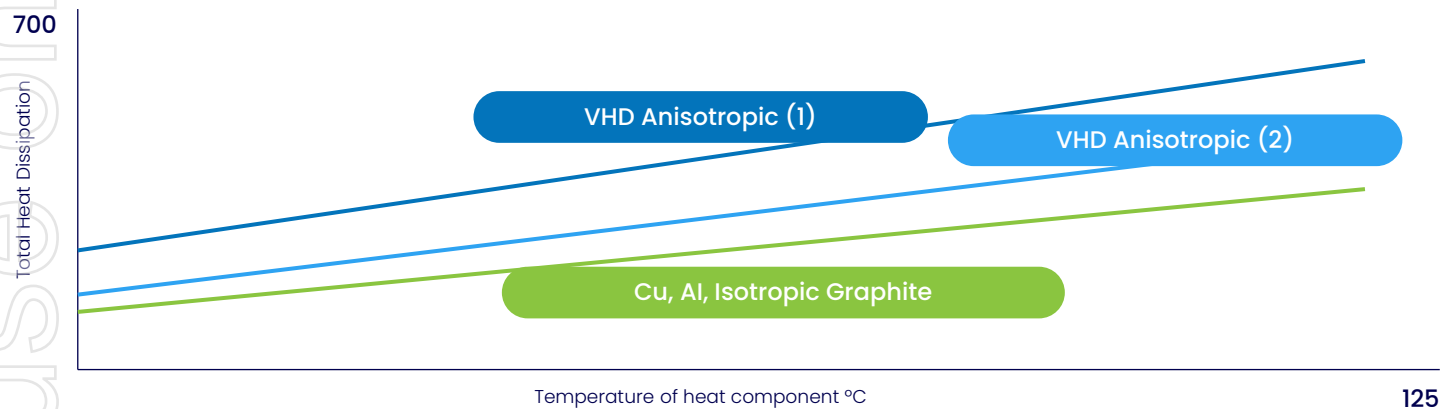


Legacy materials are leading to more expensive cooling solutions required

Proof of Performance

FE Modelling Confirms Exceptional Thermal Performance of VHD¹

Total Heat Dissipation on Heat Sinks vs Temperature for Different Materials



Independent FE by Prof. Qing Li (University of Sydney)

Objectively compare VHD to aluminium, copper, isotropic graphite.

Modelled identical 60mm x 50mm x 60mm heat sink blocks.

Passive air cooling scenario across various temperatures.

VHD handled 300–400W power loads at 70–85°C.

Legacy materials: capped at ~200–250W.

Validates VHD's ability to cool next-generation chips under real-world conditions.

¹. See ASX announcement dated 08 July 2025

What This Means for GCM

From Technical Validation to Commercial Execution



Why it matters

Data centre chips now require 300W+

Industry advancement has outpaced material performance.

VHD is demonstrating the potential to enable cooling chips in higher-performance systems.

Without the thermal throttling seen in copper and aluminium.

Opens opportunity for new high-value applications.

Opportunities for extending into liquid cooling (cold plates) being explored.

Next Steps Underway

GPU/CPU-specific FE modelling in progress

Prototype production planning underway.

Using thermal management products from GCM's operational facility.

Aligning designs to customer hardware.

Customer collaborations underway.

Includes thermal solution providers, OEMs, and data centre operators.



Production Readiness Accelerates as Validation Deepens



Module 1 is now operational

The plant is operational and producing saleable VHD graphite blocks.

Facility is modular and scaleable

Ready to expand output as demand accelerates.

Transition from pilot to production complete

Marks a critical shift in GCM's path to commercialisation.

Prototype production

Next step is to design and then manufacture VHD cooling solutions into customer products.



Global Engagement Validates Market Demand

Strategic Conversations Are Converting into Commercial Pathways



GCM is now in active discussions with²

Semiconductor and chip manufacturers

To co-develop next-generation thermal solutions.

Major data centres

Including GreenSquareDC in Australia.

Machining partners and distributors

Across North America, Europe, and Australia.

Online electronic component retailers

Registration and qualification process underway.

² See ASX announcements dated 15 April, 23 April, 5 May, and 2 June 2025



Multi-Channel Go-To-Market Strategy



Segmenting by Use Case, Channel and Speed to Revenue

Segmented Customer Strategy

Thermal Performance Specialists in designing and deploying advanced cooling systems for data centres, AI infrastructure, and industrial applications.

→ VHD offers a next-generation material to embed directly into thermal system designs.

Online Distribution

Registration, qualification and onboarding with global electronic distributors.

→ Fast-tracks access to customers and system builders globally.

Direct OEM Collaboration

Active engagement with semiconductor and chip manufacturers to co-develop custom heat sinks, spreaders, and cold plates.

→ Deep integration into hardware designs ensures long-term supply partnerships.

Revenue Model Flexibility

Products range from raw graphite blocks, to machined blanks, to fully finished thermal components.

→ This layered product model activates multiple revenue streams tailored to customer size, readiness, and technical maturity.

Near Term Milestones

Key Catalysts on the Path to First Revenue

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 high performance electronics, data centres, industrial providers and machine shops – widening GCM's commercial pipeline.

Expanding Market Applications

Advancing customer testing to develop prototypes and specialised VHD graphite products, identifying growing market potential and expanded applications in other thermal management technologies.

Milestones to Watch Out For



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

Production of commercial VHD graphite products, building inventory to support future customer demand and in line with global distribution strategy.

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.

ersonal use only

Corporate Overview

02

Corporate Snapshot



Board of Directors

Charles Thomas

Non-Executive Chairman

Clinton Booth

CEO and Managing Director

Christopher Zielinski

Non-Executive Director



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

\$56M AUD

As of 10th July 2025



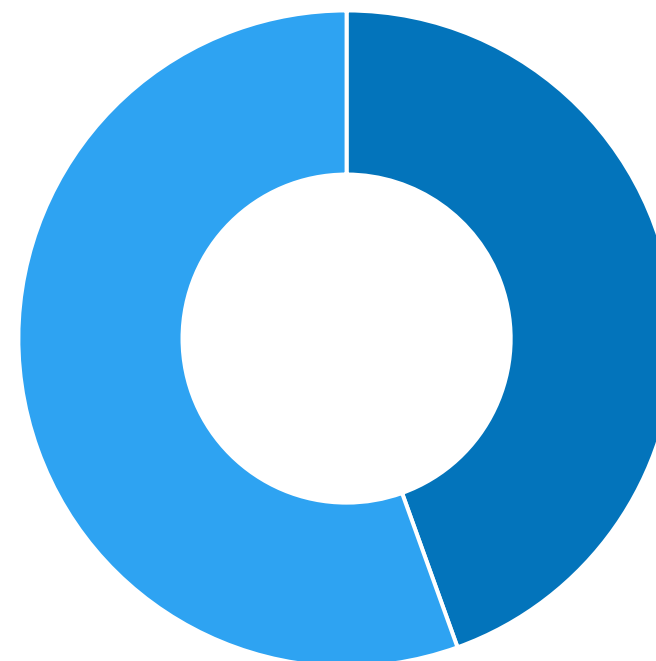
Recently Completed Capital Raise

\$7M AUD

02 June 2025

Top 20 Shareholding³

55.49%
Other



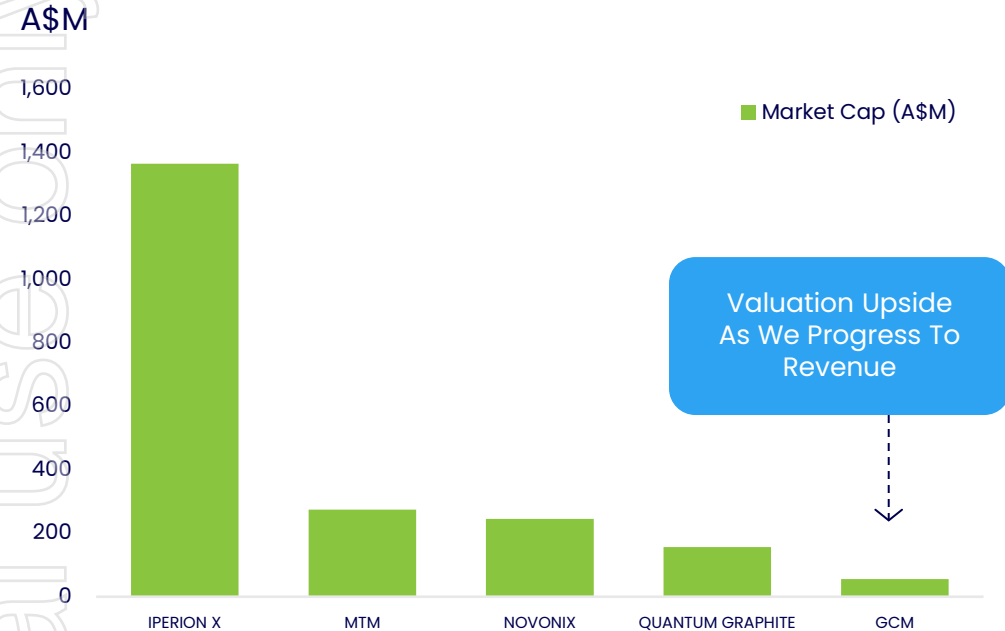
44.51%
Top 20

³ As at 10/07/25

Comparable ASX Listed Companies⁴



Market Cap Comparison⁵



Company	ASX Code	Market Cap ⁵	Stage
IperionX Limited	IPX	\$1.4BN	Pilot
Novonix Limited	NVX	\$245M	Pilot
MTM Critical Metals Limited	MTM	\$278M	Pilot
Quantum Graphite Limited	QGL	\$175M	Pilot
Green Critical Minerals Ltd	GCM	\$56M	Production

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 10/07/2025, Yahoo Finance



ASX:GCM

ersonal use only



Thank you

Corporate Office

349 Hay Street
Subiaco WA 6008

T +61 (08) 9388 0051

E enquiry@gcminerals.com.au

gcminerals.com.au

