

TSX-V:GMG
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Graphene Manufacturing Group

Transformative Graphene Energy Solutions

 graphenemg.com

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Certain statements made within this Presentation constitute forward-looking statements and forward looking information within the meaning of applicable Canadian securities legislation (collectively herein referred to as "forward-looking information"), which can often be identified by words such as "will", "may", "estimate", "expect", "plan", "project", "intend", "anticipate" and other words indicating that the statements are forward-looking, and include but are not limited to statements relating to: (a) GMG's business objectives and goals; (b) GMG's and other parties' planned or contemplated business (THERMAL-XR®, SUPA G® and G® LUBRICANT) and activities and timelines relating thereto; (c) potential applications and expected performance of GMG's products; (d) the development of the Graphene +Aluminum battery; (e) the Company's intention to engage third parties to assist in the development of its products and matters regarding GMG's existing relationships with third party partners; (f) the expectation that GMG will be able to improve its business operations; (g) GMG's expected target markets; (h) the timing, development, testing and commercialization of the Company's prototypes and products; (i) the sales channels and strategic partners the Company will engage in the marketing, sales, and development of its products; (j) the expansion of GMG's existing production facilities including the timing, expense, resulting productivity, and required machinery for any expansion; (k) potential distributor agreements, and the target markets for entering into distributor agreements; (l) the potential production capacity of the Company's existing facilities, including without limitation the Gen 2 Graphene Production Plant; (m) the progression of the Company's products along the Battery Technology Readiness Level scale and the Battery Cell Roadmap; (n) the nature and timing of sales to parties which have executed a non-disclosure agreement with the Company; (o) the expectation that the Company's products will be granted the necessary governmental approvals, including of the Environmental Protection Agency (the "EPA") in the USA; and (p) management's confidence in the development and scaling of production processes. Such forward-looking statements are based on a number of assumptions of management, including, without limitation, that the Company's cost and timing expectations are accurate, that GMG will be successful in generating revenue from its existing products, that the Company will be able to complete the development of its Graphene +Aluminum battery, that the Company will be able to achieve the expected results of its Graphene +Aluminum battery, that the Company will be successful in the deployment of its resources and personnel, that results of testing and development data will be consistent with anticipated results and estimates and are replicable in commercial applications, that the Company will be able to successfully identify and engage strategic partners, that the Company will be able to develop and test prototypes and products on the expected timelines, and that the results will align with management's current expectations, that existing production capability aligns with management's expectations, that an increase in GMG's existing production facility will result in a corresponding increase in production capacity, that the markets and sales channels for the Company's products will develop as expected, that the Company will enter into additional

distributor agreements, that the Company's products will be granted the necessary regulatory approvals, include that of the EPA; that the Company's operations and ability to develop its products will not be adversely impacted by the ongoing conflict in eastern Europe. Additionally, forward-looking information involve a variety of known and unknown risks, uncertainties and other factors which may cause the actual plans, intentions, activities, results, performance or achievements of GMG to be materially different from any future plans, intentions, activities, results, performance or achievements expressed or implied by such forward-looking statements. Such risks include, without limitation: (a) GMG's operations could be adversely affected by possible future government legislation, policies and controls or by changes in applicable laws and regulations, or by the failure to obtain all necessary regulatory approvals, including that of the EPA; (b) public health crises such as the COVID-19 pandemic may adversely impact GMG's business and the ability of the Company to develop its products; (c) the volatility of global capital markets; (d) political instability; (e) the failure of GMG to attract and retain skilled personnel; (f) unexpected development and production challenges; (g) GMG could face technology or software disruptions; (h) unanticipated costs; (i) risks relating to the extent and duration of the conflict in Eastern Europe and its impact on global markets; (j) that the Company will be unable to develop, market, and sell its products as currently anticipated; (k) that the Company will be unsuccessful in identifying and engaging strategic partners; (l) that the Company will be unable to acquire equipment to streamline its production process, or that the expansion of the production facility will not result in the benefits currently expected; (m) that companies currently working with GMG will not be interested in purchasing the Company's products; and (n) the risk factors set out under the heading "Risk Factors" in the Company's AIF dated November 4, 2025 available for review on the Company's profile at www.sedarplus.ca. Such forward-looking information represents management's best judgment based on information currently available. No forward-looking statement can be guaranteed and actual future results may vary materially. Accordingly, readers are advised not to place undue reliance on forward-looking statements or information. Neither GMG nor any of its representatives make any representation or warranty, express or implied, as to the accuracy, sufficiency or completeness of the information in this Presentation. Neither GMG nor any of its representatives shall have any liability whatsoever, under contract, tort, trust or otherwise, to you or any person resulting from the use of the information in this Presentation by you or any of your representatives or for omissions from the information in this Presentation. The forward-looking statements herein are made as of the date of this Presentation only, and the Company does not assume any obligation to update or revise them to reflect new information, estimates or opinions, future events or results or otherwise, except as required by applicable law. Historical statements contained in this Presentation regarding past trends or activities should not be taken as a representation that such trends or activities will continue in the future. In this regard, certain financial information contained herein has been extracted from, or based upon, information available in the public domain and/or provided by the Company. In particular, historical results should not be taken as a representation that such trends will be replicated in the future. No statement in this document is intended to be nor may be construed as a profit forecast. An investment in the Company is speculative and involves substantial risk and is only suitable for investors that understand the potential consequences and are able to bear the risk of losing their entire investment. Investors should consider the risks set out in the AIF, in addition to many others, and consult with their own legal, tax and financial advisors with respect to all such risks before making an investment.

THIRD PARTY INFORMATION

This Presentation includes market and industry data which was obtained from various publicly available sources and other sources believed by the Company to be true. Although the Company believes it to be reliable, the Company has not independently verified any of the data from third-party sources referred to in this Presentation or analyzed or verified the underlying reports relied upon or referred to by such sources, or ascertained the underlying assumptions relied upon by such sources. The Company acknowledges that it is responsible for such information.

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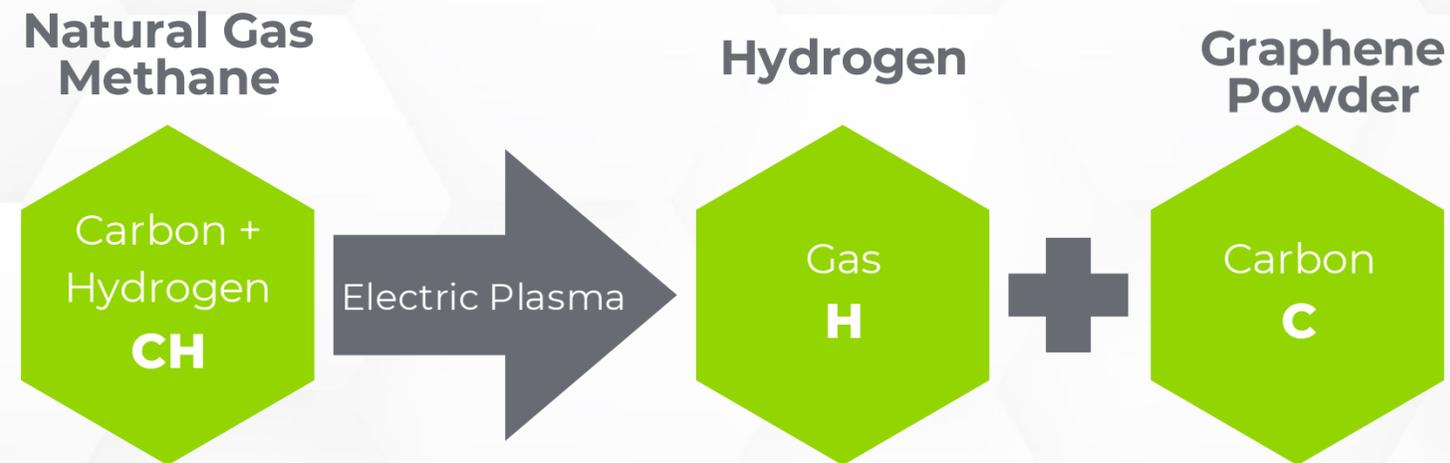


PROPRIETARY CLEAN TECHNOLOGY PLATFORM

GMG Graphene Production

GMG manufactures graphene in-house using a proprietary process that converts natural gas into high-quality graphene, **bypassing typical graphite mining** dominated and controlled by China.

This graphene then supports GMG's energy-saving and energy storage applications.



Bypassing:
Graphite Mining & Processing

***GMG is expecting to bring online its Gen 2 Graphene Production Project in Jun'26 with up to 20 times higher production rate per unit.**

- Instantaneous & Continuous
- Low-Cost Inputs and Setup
- Fast Scalability Unconstrained by Resource
- Controlled Definability
- High-Quality Grade Graphene (University Verified)
- Cogeneration Capabilities
- Low environmental footprint



GMG HIGH MARGIN, SCALABLE & DISRUPTIVE APPLICATIONS

Graphene Manufacturing Group

GMG targets two major markets:

- **Energy Efficiency: Graphene** coatings, lubricant additive and lithium-ion battery additive improve efficiency in HVAC-R, engines and lithium-ion batteries. Lowering energy use and reducing emissions for commercial and industrial clients.
- **Energy Storage:** In collaboration with the University of Queensland, GMG is developing graphene aluminium-ion batteries that are expected to surpass lithium-ion batteries on charging speed, cycle life, safety, and sustainability. Aluminium is more abundant and less costly than lithium, and GMG's batteries reduce the risk of thermal runaway.



THERMAL-XR®

Heat exchanger coatings system

N. America Distribution Partner



GMG® LUBRICANT

Automotive fluids additives

Product Launched – sales starting



SUPA G®

Additive for lithium-ion battery

Undergoing customer testing



GRAPHENE ALUMINIUM-ION BATTERY

Energy battery storage

Co-developing with



LAUNCH: AUSTRALIAN ROLL OUT OF THERMAL-XR® COATING ON BEIJER REF COILS

BEIJER REF

Beijer Ref is one of the world's largest global refrigeration and HVAC wholesalers, headquartered in Malmö, Sweden, with operations spanning more than 40 countries and over 500 branches worldwide, 6,000 employees and 200,000 customers.



- Beijer Ref has agreed to offer THERMAL-XR® ENHANCE as an optional coating solution on self branded refrigeration evaporator coils.
- ~ 73 wholesale locations in Australia.
- Roll out to launch on November 17, 2025



WORLD FIRST PALLETISED GRAPHENE PRODUCTS AVAILABLE FOR ORDER FOR GLOBAL* DISTRIBUTION

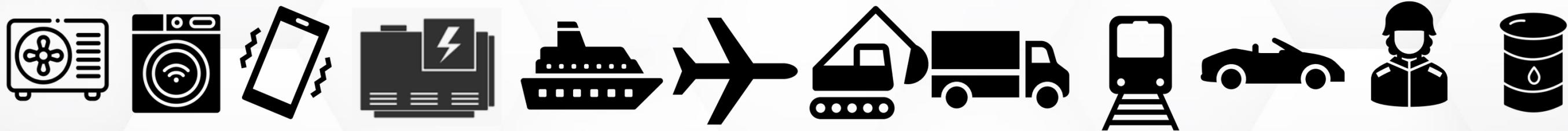


SIGNIFICANT MARKET OPPORTUNITY & REVENUE GROWTH POTENTIAL



STRATEGIC PARTNERS AND GLOBAL REACH

GMG has established confidential partnerships and distributor relationships with large manufacturers covering applications in automotive, personal electronics, aviation, energy, and heavy industry.



The company received support from tier-one industry participants like Rio Tinto (AU\$6M joint product development agreement), and ongoing collaborations with academic institutions and government grants reinforce technical leadership and commercialization credibility.

PRODUCTION EXPANSIONS – 10 TONNE PER ANNUM SECOND GEN TECH.

GMG HEADQUARTERS RICHLANDS, BRISBANE, AUSTRALIA

Value chain on one site - for easier global replication and further scaling.



Modular Graphene
Production Plant-Phase 1.0
(operational)
Modular Gen 2 Graphene
Production Plant
(under design)

THERMAL-XR® Blending Plant,
G® Lubricant Pilot Plant &
SUPA G® Pilot Plant
(operational)

Battery Development
Centre
(operational)

Materials & Liquids
QA & QC Laboratory
Offices
(operational)

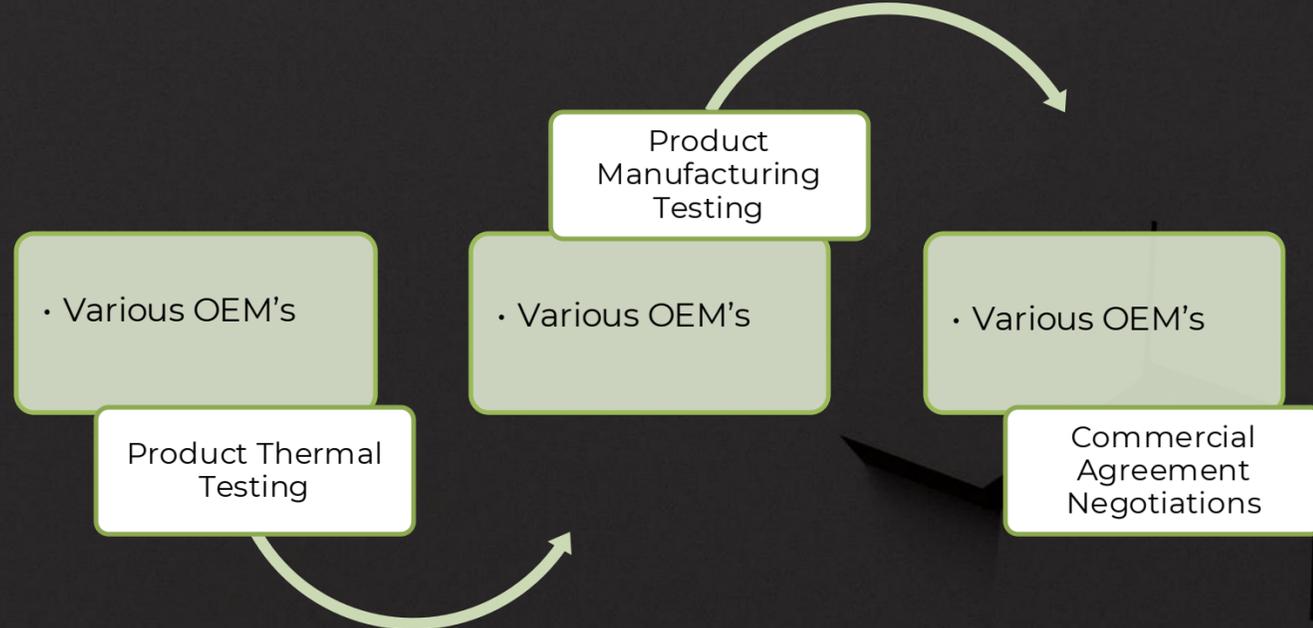
Utilising ~3500m2 of warehouse/office

GMG have approved the investment of **AU\$900k** for the early works of an expected **10 tonne per annum** Gen 2.0 Graphene Manufacturing Technology plant (the “Gen 2.0 Plant”) for an estimated AU\$2.3 million total capital cost. Gen 2.0 Plant is expected to be commissioned by mid-2026.

THERMAL-XR® COMMERCIAL PROGRESS

Some of our customers trialing THERMAL-XR® are considered world market leaders in their industry and bring considerable large scale opportunity potential

THERMAL-XR Customer Adoption Process



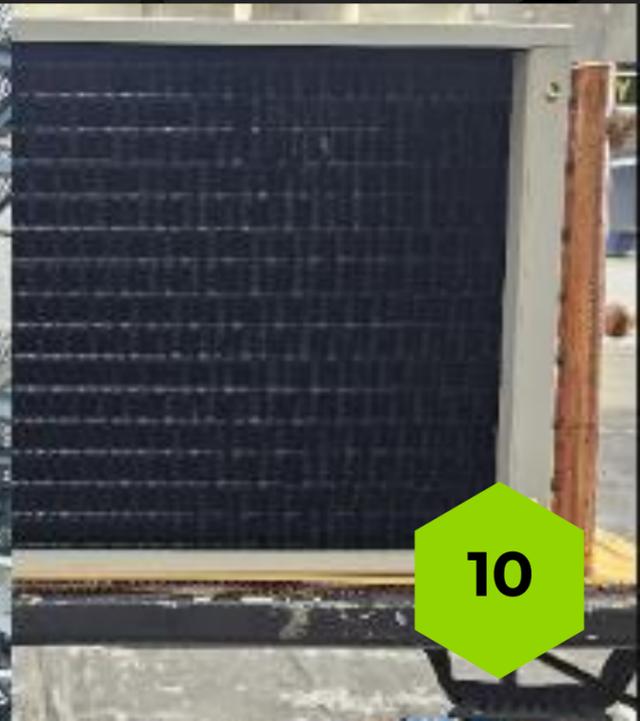
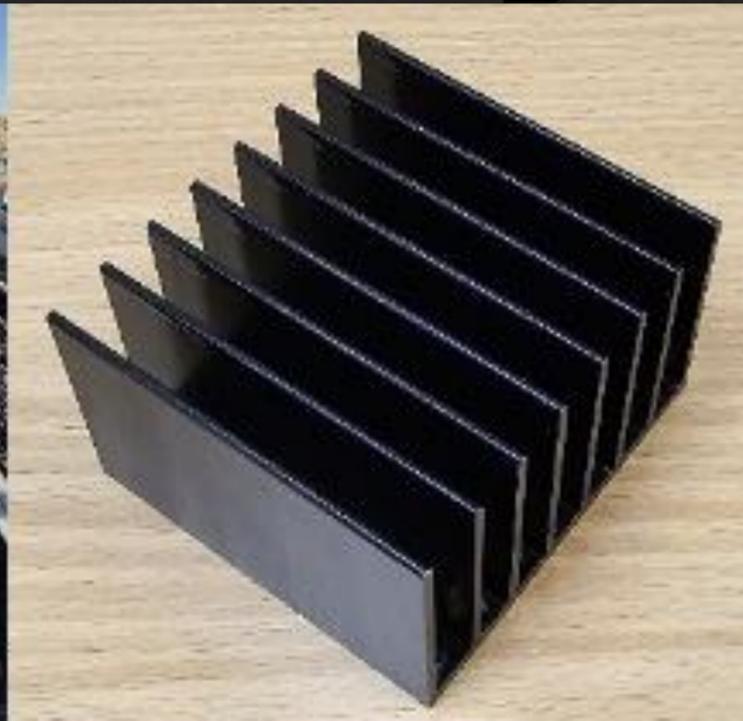
AIR CONDITIONERS

INDUSTRIAL PLANTS

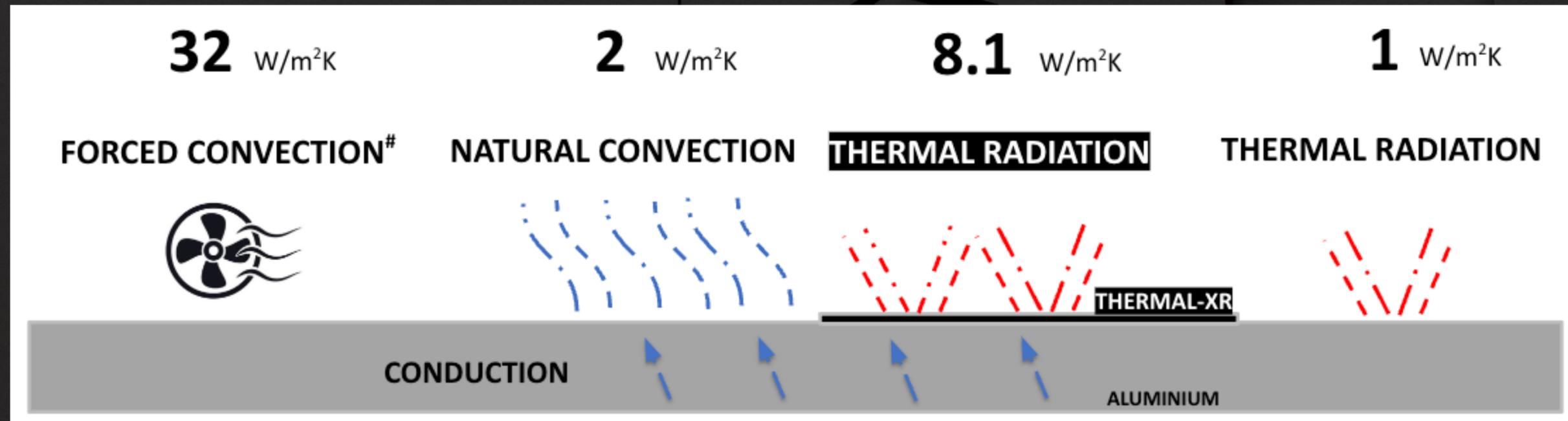
HEAT SINKS FOR ELECTRONICS

DATA CENTRES

REFRIGERATION



THERMAL-XR® GRAPHENE COATING ADDS THERMAL RADIATION TO FORCED AND NATURAL CONVECTION



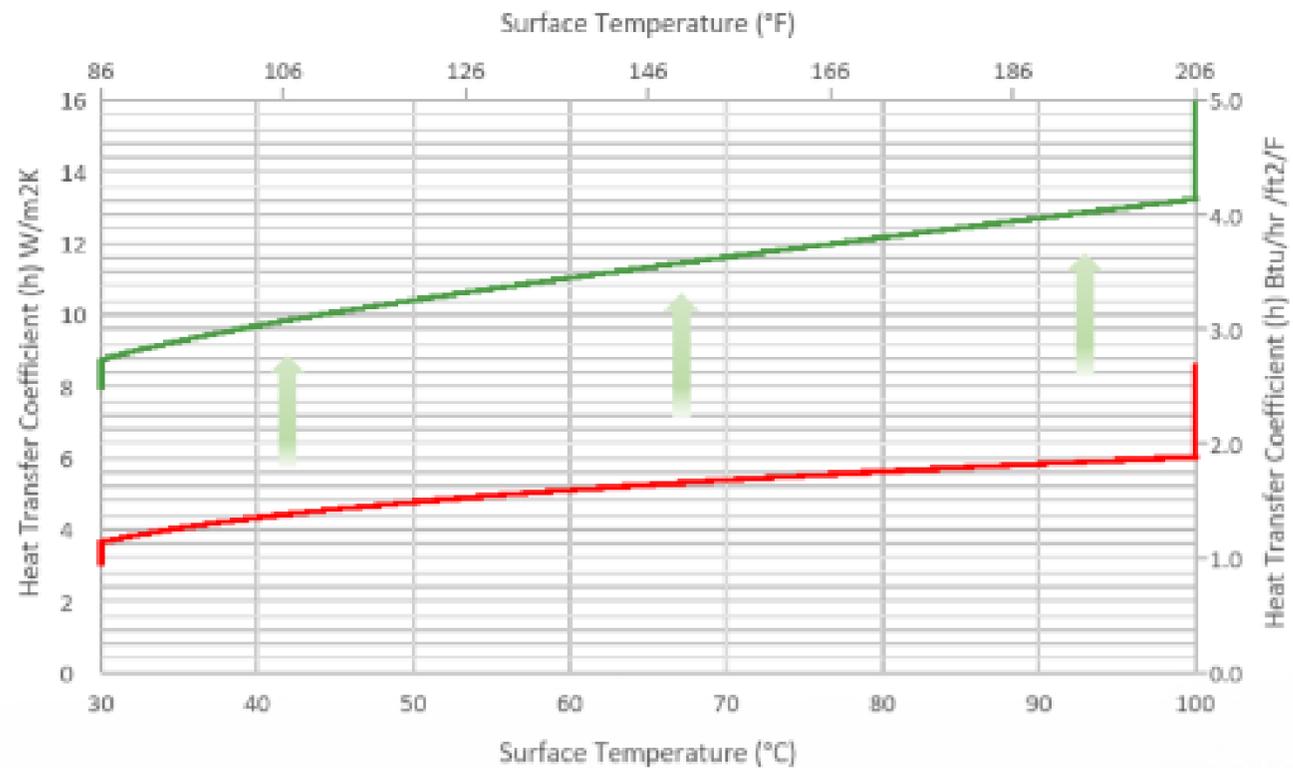
- **Convection** is the passing of heat in a fluid (e.g. air or water)
- **Conduction** is the passing of heat through a solid material
- **Thermal Radiation** is the passing of heat in the form of waves or particles

*Based on Internal GMG testing and calculations for 720 mm wide aluminium plate on ceramic kiln and thermal radiation calculations.

#Forced Convection value is for 5 m/s of air speed.

THERMAL-XR® **DOUBLES HEAT TRANSFER*** WITH OVER 20,000 HOURS OF CORROSION RESISTANCE

Heat Transfer Coefficients for TXR vs Bare Aluminium (thermal radiation and natural convection)



GRAPHENE MANUFACTURING GROUP, WO# C-0258657

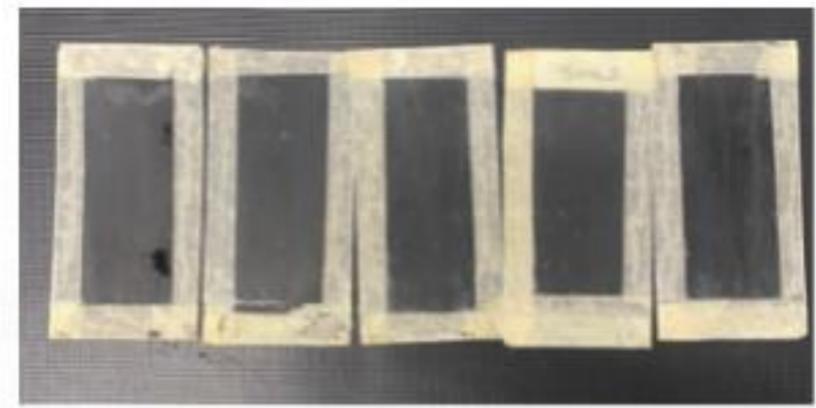


Figure 2- Samples After 20,000 Hours of Exposure

**TXR doubles the heat transfer rate
*at 60 degrees Celsius or 140 degrees Fahrenheit**

TXR successfully passed 20,000 hours of salt sea spray testing in third party independent laboratory (ASTM B117)

Natural Convection Model Notes:
 1. Radiation heat transfer coefficient for TXR calculated using an emissivity of 0.95 (conservative) and 0.11 for BARE.
 2. Radiation coefficient calculated with $h_R = \epsilon_s \sigma (T_s^2 + T_\infty^2)(T_s + T_\infty)$.
 3. High emissivity => significantly more radiated heat.
 4. Natural convection coefficient evaluated with Nusselt number correlation for flat plate with hot side facing down.

THERMAL-XR® DISTRIBUTION



Distribution/Logistics

Nu-Calgon is GMG's exclusive distribution partner for AFTER MARKET HVAC in North America

- Nu-Calgon is the largest specialty chemical provider to the HVACR market
- 37 person sales team; 4000 distribution points
- Cool Worx is Nu-Calgon's private brand name for THERMAL-XR®
- Nu-Calgon introduced Cool Worx to the HVACR industry at the Chicago AHR Expo in January 2024, generating tremendous interest

GMG is distributing TXR directly and through distribution partners in other markets globally

Regulatory

THERMAL-XR® is approved for sale in Australia, Canada, Mexico, and China; Europe, Chile, Thailand, Singapore and South Korea.

The U.S. EPA requested a full Pre-Manufacture Notice (PMN) resubmission for THERMAL-XR®. This enables a comprehensive examination and the possibility of flexible approval conditions not available under a PMN LVE. The full PMN was submitted in 1H 2025, and was expected to take up to 12 months for the EPA to approve.

Supplying USA Customers for R&D purposes for now.



Graphene Manufacturing Group



4158-20

Nu-Calgon

COOL WORX™
Thermal Conductive Coating For HVAC/R Coils

- ◆ Saves Energy-Improves Coil Performance
- ◆ Provides Long-Term Corrosion Protection
- ◆ Extends Equipment Life



G[®] LUBRICANT PERFORMANCE

Graphene from G[®] LUBRICANT reduces fuel consumption by up to 10% by lowering the friction on the critical boundary lubrication zones of pistons

~ 30% of fuel burned in an engine is to overcome internal friction.

More than 60% of engine friction is generated in the piston area.

\$1 spent on G-Lubricant equates to ~ \$10 saved in fuel*



G[®] Lubricant is mixed into engine oil at a 1:100 ratio.

G[®] Lubricant contains ~ 1% GMG Graphene

So the end mixed ratio of GMG Graphene to engine oil is 1:10,000

No other additive has 10% fuel reduction benefit claim with a dosage rate of 0.01%.

www.g-lubricant.com

* Results vary and the figures are sourced from client performance testing, GMG 4 ball wear testing, and third-party laboratory testing on a variety of base oils and fully formulated engine oils with 0.01% GMG Graphene.

Note: the Company notes that the data presented here should be considered preliminary, and that test results are not necessarily indicative of realized performance.

GRAPHENE ADDITIVE FOR LITHIUM-ION BATTERY

- GMG's SUPA G® is an additive for Lithium-Ion Batteries
- It can be used as a Cathode Additive (1%) and/or after further development work it has potential for an Anode Alternative to Graphite - which is largely export controlled from China
- BIC Indiana is currently testing SUPA G® with Lithium-ion Batteries and the results for this work should be available shortly.

SUPA G®

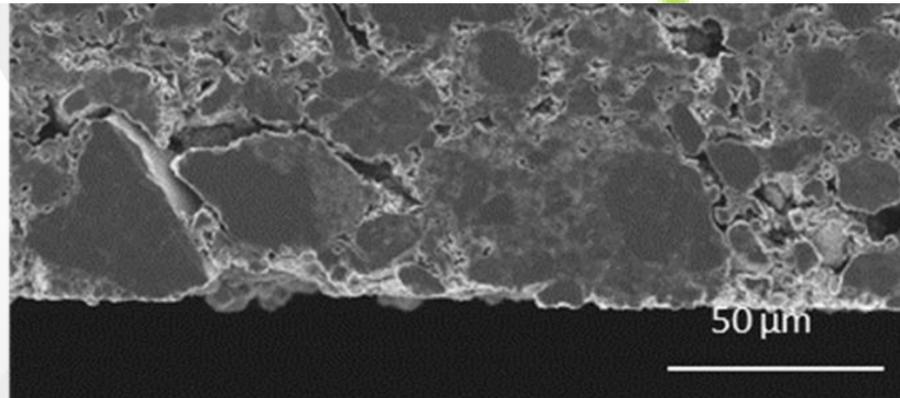
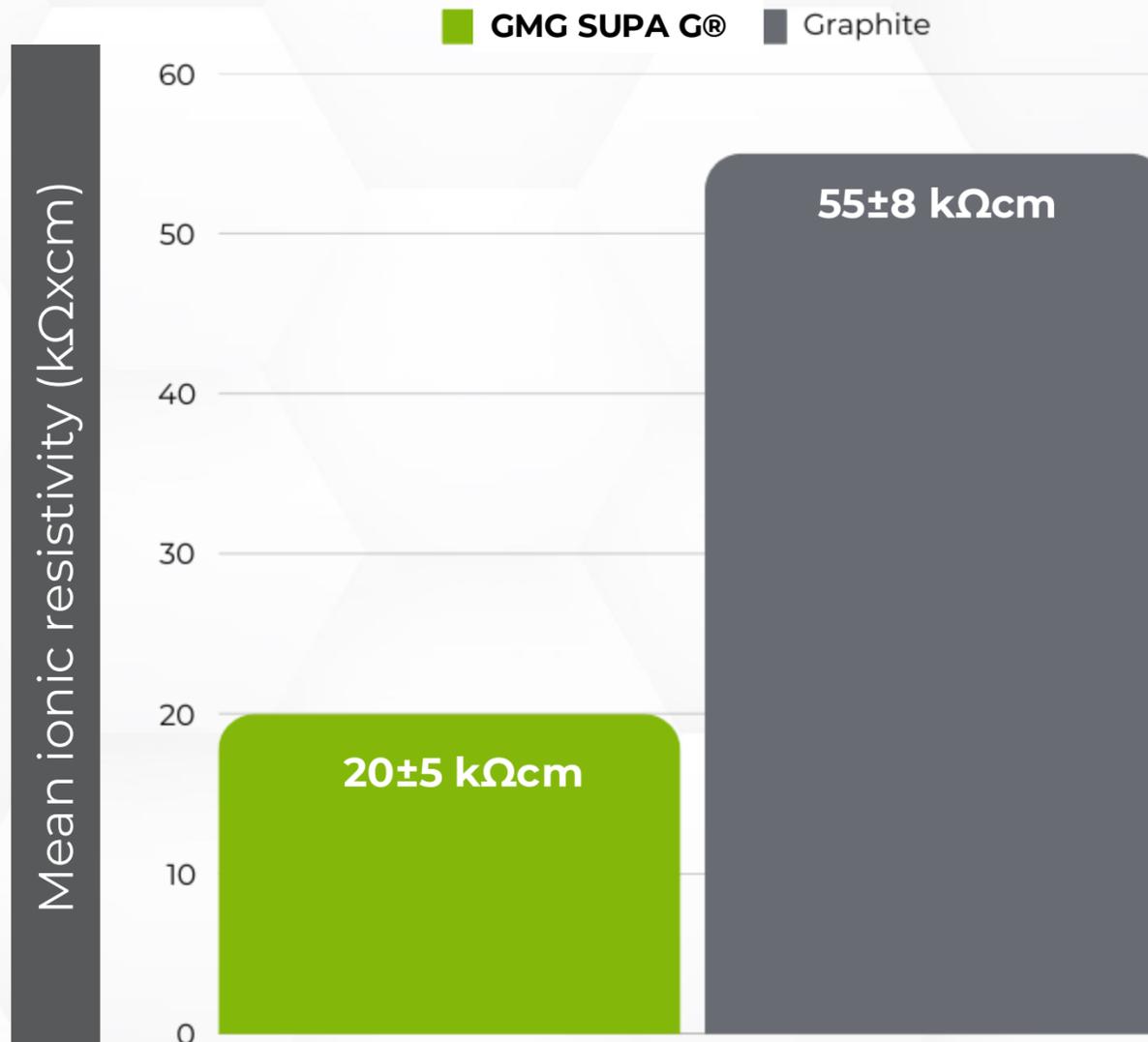


Image: Cross-section prepared using wide-beam Ar+ ion polishing EDX pixel assignment filtered with 95% confidence interval threshold



World Leading University study showed SUPA G® has very attractive properties:

- Apparent ionic resistivity 2.5× lower than compared to typical graphite electrode
- Multimodal active particle distribution (~20 um large particles + sub-1 um particles)
- Calendaring does NOT significantly damage the binder layer

GRAPHENE ALUMINIUM ION BATTERY ADVANTAGES

Battery Performance

- 1 Very Fast Charging/Discharging (60x faster)*
- 2 Long Life (>1000 full cycles)
- 3 Economic Energy Density at high charging speeds
- 4 Battery Thermal Management Likely Not Needed

Supply Chain

- 5 Supply Chain Simplicity (< 1 km vs 50,000 km)
- 6 Availability of Raw Materials and their Reserves

Health, Safety and Environmental

- 7 Product Supply Environmental Concerns
- 8 Recyclability of Product
- 9 Safety of Product Regarding Fires and Toxicity

Capex/Cost

- 10 Battery Structural CAPEX Cost Advantages
- 11 Lower bill of material cost

Current Expectations
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓



Targeted Battery Use Case:

- Business/Industrial use vehicles
- Safety First – no Lithium chemical fires
- Similar recharging time as diesel refueling (~5 mins)
- Long life cycle > 1000 cycles ++
- Energy Density enough to be economic
- High recyclability of materials
- Strategic Supply Chain and Simplicity
- High value / Low overall cost (when produced at scale)

BATTERY TECHNOLOGY READINESS LEVEL (BTRL)

RioTinto

Rio Tinto is GMG's Joint Product Development Partner for use of the battery in heavy mobile equipment & grid energy storage applications in the mining and mineral industry

GMG Progress

G+AI Battery has progressed to BTRL 4

GMG is currently optimizing electrochemical behaviour for pouch cells

Lab-Scale Production and Basic Property Research

Electrochemical Development

Component Production Process Development

Cell Production Process Development

Commercialisation

1

2

3

4

5

6

7

8

9

Phase 1 | Proving the Science (1-3)

Phase 2 | Scaling Cell Size (4-6)

Phase 3 | Scaling Output for Demand (7-9)

BIC Indiana is a world leading battery innovation centre which has completed over 500 battery development projects to date

COLLABORATION:

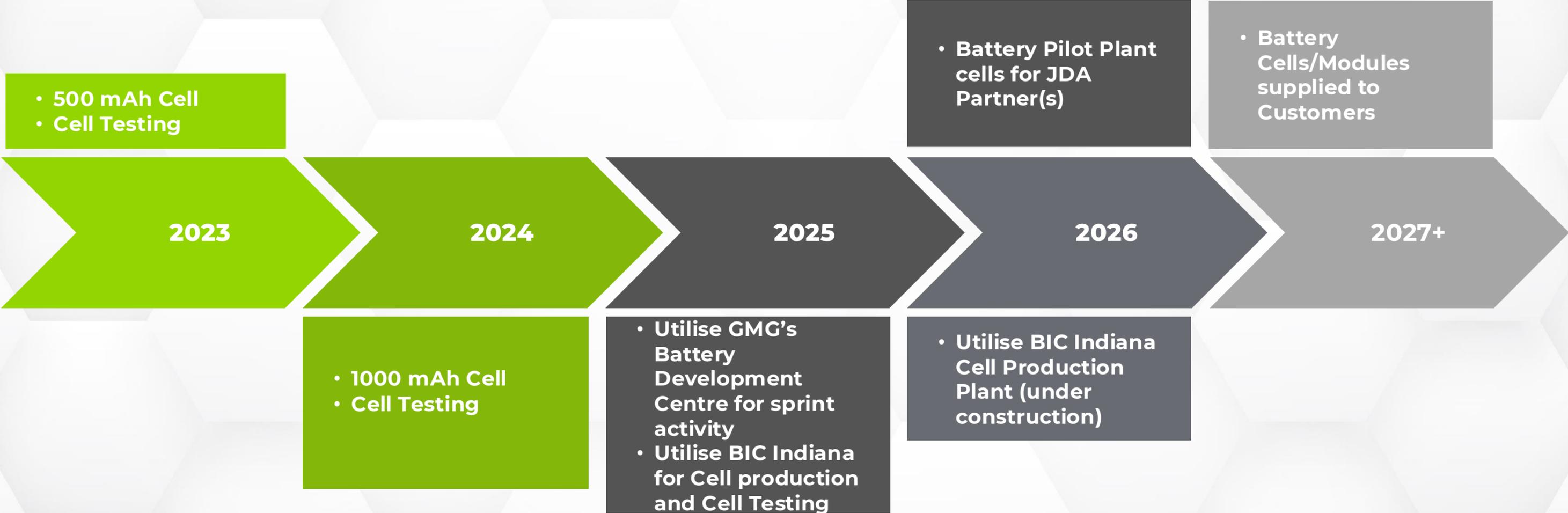
- CELL MODEL & DESIGN
- ELECTROLYTE DEVELOPMENT
- CATHODE MANUFACTURING
- CELL ASSEMBLY
- MATERIAL SUPPLY
- SEMI AUTOMATED CELL PLANT



GMG has engaged BIC with a monthly fee service to support BTRL 4 to 8 battery development.

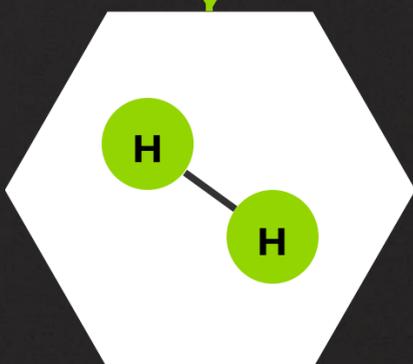
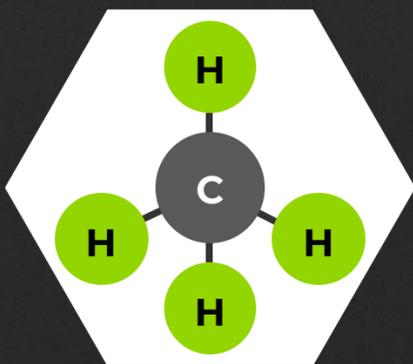


BATTERY CELL ROADMAP

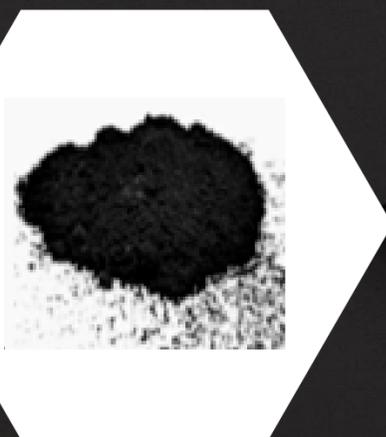


GMG OPERATIONS

NATURAL GAS



HYDROGEN enriched Natural Gas



GRAPHENE MANUFACTURING PLANT

Phase 1
Operational



HEAT EXCHANGER COATING

Coating Blending Plant (<2% Graphene)

1 Million Litres p.a.
Operational



@LUBRICANT

Lubricants Blending Plant (<1% Graphene)

Pilot Blend Plant
Operational



GRAPHENE SLURRY

(~90% Graphene)

Pilot Production Plant
Operational



ALUMINIUM-ION BATTERY TECHNOLOGY

(~50% Graphene)

Battery Development Centre
Operational



MATURING **FINANCIAL** CAPABILITY



Build Revenue

Maturing sales and marketing team, processes and systems

New Distributors in Asia, Europe & North America (**Awaiting EPA Approval for USA**)

NDA's with global companies targeting increase in sales



Develop

First leading segment partner – Rio Tinto JDA (AU\$ 6M)

Exploring JDA's with other global sector leaders for the battery.



Partner

Australian Government R&D Tax Rebate Support (2025: AU\$ 2.0M)

Exploring Grants and incentives



Cash on Hand

AU\$12.9M^(a)

Canada's TSX-V (TSX Venture) Exchange **GMG**



117,945,911^(b)



2,903,483^(a)
WAEP AU\$1.26



~C\$135 M^(b)



21,636,304^(b)
WAEP AU\$1.50
2,460,952^(a)

(a) As at September 30, 2025

(b) As at November 11, 2025

INVESTMENT THEME COMPARABLES

- 1 PROPRIETARY **LOW COST SCALABLE GRAPHENE** PRODUCTION TECHNOLOGY
- 2 PATENTED OR PATENT PENDING **GLOBAL SCALE HIGH MARGIN APPLICATION WORLD LEADERS**
- 3 LOW COST **SCALABLE PRODUCTION TECHNOLOGIES** FOR COATINGS, LUBRICANTS AND BATTERIES
- 4 DEVELOPING **GRAPHENE SPRAY COATING BUSINESS**
- 5 DEVELOPING **BULK GRAPHENE COATING SUPPLY BUSINESS**
- 6 DEVELOPING **SMALL PACK DISTRIBUTION GRAPHENE COATING BUSINESS**
- 7 DEVELOPING **BULK GRAPHENE LUBRICANT ADDITIVE BUSINESS**
- 8 DEVELOPING **SMALL PACK DISTRIBUTION BUSINESS GRAPHENE LUBRICANT ADDITIVE**
- 9 DEVELOPING **BULK SUPPLY BUSINESS OF GRAPHENE ADDITIVE FOR LITHIUM ION BATTERY**
- 10 DEVELOPING **NEXT GEN BATTERY TECHNOLOGY ALUMINIUM ION**
- 11 DEVELOPING **NEXT GEN BATTERY TECHNOLOGY ALUMINIUM ION ELECTROLYTES**
- 12 POISED FOR **MULTIPLE SOURCES OF SIGNIFICANT POTENTIAL REVENUE WITH LOW COSTS**



Other graphene companies



INVESTMENT HIGHLIGHTS

- 1 PROPRIETARY **LOW-COST SCALABLE** PRODUCTION TECHNOLOGY
- 2 **HIGH MARGIN** FIRST TO MARKET PRODUCTS IN **GLOBAL SCALE SECTORS**
- 3 MULTIPLE **REVENUE OPPORTUNITIES** POISED FOR GROWTH
- 4 ENERGY EFFICIENCY AND ENERGY STORAGE **MARKET FORCES TIMING**
- 5 POTENTIAL EXPANSION TO **NORTH AMERICA**



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OTCQX:GMGMF



Graphene Manufacturing Group

Transformative Graphene Energy Solutions

INVESTOR RELATIONS

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Board of Directors & Advisory Team

Craig Nicol | Founder, Managing Director & CEO

Craig Nicol has a career of over 20 years in delivering large scale innovation including leading multi-billion-dollar gas and LNG value chains in Australia and Asia Pacific and managing sales and marketing teams across Asia Pacific working for Shell International. Craig has a Bachelor of Engineering degree in Manufacturing Systems (Honours) and a bachelor's degree in Business Marketing from the Queensland University of Technology. Craig is the chair of the Advanced Materials and Battery Council. Craig is a member of the Australian Institute of Company Directors (AICD).

Jack Perkowski | Chair & Director

Mr Perkowski founded ASIMCO Technologies in 1994, and from 1994 to 2008, served as the Chairman of ASIMCO's Board of Directors and the company's Chief Executive Officer. Under Mr Perkowski's leadership, ASIMCO became one of the most important players in China's automotive components industry and gained a reputation for developing local management and integrating a broad-based China operation into the global economy. ASIMCO was later sold to Bain Capital in 2010 and is still regarded as one of the most successful automotive component manufacturing companies in China. Prior to this Mr Perkowski was Managing Director of Paine Webber, an investment bank that was eventually acquired by UBS in 2000. In 2009, Mr Perkowski founded JFP Holdings, a merchant banking firm focused on China, where he now serves as Chairman.

Bob Galyen | Non-Executive Director

Bob is a highly experienced executive in the battery energy storage world and science/engineering-based communities. Bob was previously the Chief Technology Officer (CTO) of Contemporary Amperex Technology Company Limited (CATL). CATL is widely known as the largest lithium-ion battery manufacturer in the world – supplying electric vehicles and high-efficiency storage systems. He serves on multiple Committees of Directors and Technical Advisory Boards.

Andrew Small | Non-Executive Director

Andrew was a Founder and Director of Innogence, a SAP Business Intelligence consultancy in Australia which following significant growth was acquired by the Japanese multinational company NTT Data. Andrew has supported and invested in GMG since 2017, remains a significant shareholder of the Company and is committed to actively supporting the Company's drive to deliver on its plans and set it up for the next stage of maturity. Andrew has a Bachelor of Engineering (Manufacturing Systems) and a Bachelor of Business (Marketing) from Queensland University of Technology.

Professor Emeritus Doug Hargreaves AM | Technical Advisor

Doug is Professor Emeritus of Engineering at Queensland University of Technology, a member of the Order of Australia, previous National President and an Honorary Fellow of the Engineers Australia, Board Member of the Federation of Engineering Institutions in the Asia Pacific and the Executive Officer of the Australian Council of Engineering Deans. Doug has a Doctor of Philosophy (PhD) and a Masters of Science (MSc) with Distinction in Tribology from the University of Leeds.

What is Graphene?

The carbon wonder product*

Graphene is the first two-dimensional material and is classed as a “super-material”* offering many properties.

GMG focuses on Ion Storage, Superior Thermal Conductivity, and Enhanced Lubrication.

GMG Graphene has significant potential to enhance the performance of a wide range of materials and is expected to drive development of disruptive technologies and transform industries. It is classified as a nanomaterial (i.e. its dimension is on the nanoscale between 1-100nm) and looks like black powder.

*Nobel Prize refers to Graphene a wonder material. A wonder product or super material is any material with remarkable physical properties. This can encompass a wide range of materials, from those that are incredibly strong or hard to those that are excellent conductors of electricity or heat.



Ion Storage

High density capacity for ion storage



Thermal Conductivity

Extreme Heat Diffusivity



Enhanced Lubrication

Extreme lubrication & wear reduction



Weight Aspect Ratio

Up to 300m²/gm of surface area



Melting Point 950° C+

Stability in oxygen free environment



Tensile Strength

Very strong when integrated into materials

