GRAPHENE MANUFACTURING GROUP LTD

Management's Discussion and Analysis

For the three month period ended September 30, 2021

(in Australian dollars)

(Unless specified otherwise, all amounts are expressed in Australian dollars)

This Management's discussion and analysis ("MD&A") provides a review of Graphene Manufacturing Group Ltd's ("GMG" or the "Company") operations, performance and financial position for the three month period ended September 30, 2021. This MD&A should be read in conjunction with the condensed consolidated financial statements for the three month period ended September 30, 2021 and with the audited consolidated financial statements for the year ended June 30, 2021. The purpose of this document is to provide information on GMG's activities. The information contained herein is dated as of November 24, 2021. You will find more information about us on GMG's website and on SEDAR (the official site of the Canadian Securities Administrators, which is publicly available), including all news releases.

The period from July 1, 2021 to September 30, 2021 has been referred to as Q1FY22 and the period from July 1, 2020 to September 30, 2020 has been referred to as Q1FY21. The financial year ending 30 June 2022 has been referred to as FY22 and the financial year ended 30 June 2021 has been referred to as FY21.

The financial statements of GMG and extracts of those financial statements provided in this MD&A have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The Company has consistently applied the accounting policies used in the preparation of its IFRS financial statements, including the comparative figures. References to the symbol AUD or $ or A$ means the Australian dollar, the official currency of Australia. References to the symbol CAD or C$ mean the Canadian dollar. Except as otherwise set out herein, all amounts expressed herein are in Australian dollars, the functional currency of the Company. As a result of the rounding of dollar differences, certain total dollar amounts in this MD&A may not add exactly to their constituent amounts. Throughout this MD&A, percentage changes are calculated using numbers rounded as they appear. Readers are cautioned that this MD&A contains certain forward-looking information. Please see the "Forward Looking Statements" section which follows.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This MD&A contains "forward looking statements" that reflect the Company's expectations and projections about its future results. When used in this MD&A, forward looking statements can be identified by the use of words such as "may", or by such words as "will", "intend", "believe", "estimate", "consider", "expect", "anticipate", and "objective" and similar expressions or variations of such words. Forward looking statements are, by their nature, not guarantees of the Company's future operational or financial performance and are subject to risks and uncertainties and other factors that could cause the Company's actual results, performance, prospects or opportunities to differ materially from those expressed in, or implied by, these forward-looking statements. No representation or warranty is intended with respect to anticipated future results, or that estimates, or projections will be sustained.

In developing the forward-looking statements in the MD&A, the Company has applied several material assumptions, including the availability of financing on reasonable terms, the Company's ability and general business and economic conditions. Many risks, uncertainties and other factors could cause the actual results of GMG to differ materially from the results, performance, achievements or developments expressed or implied by such forward-looking statements. These risks, uncertainties and other factors include, but are not limited to the following: overall economic conditions, technical de-risking and market acceptance for GMG's products and solutions, the introduction of competing technologies/products, environmental and regulation requirements, competitive pressures, change in market conditions and other factors that may cause the actual results, performance or achievements to differ materially from those expressed or implied in these forward-looking statements.

Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of the MD&A or as of the date otherwise specifically indicated herein. Due to risks and uncertainties, including the risks and uncertainties elsewhere in this MD&A, actual events may differ materially from current expectations. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. All forward-looking statements contained in the MD&A are expressly qualified in their entirety by this cautionary statement.

CONTENTS

BUSINESS OVERVIEW

Company Overview

GMG is a clean-technology company which seeks to offer energy saving and energy storage solutions, enabled by graphene, including that manufactured in-house via a proprietary production process.

GMG has developed a proprietary production process to decompose natural gas (i.e. methane) into its elements, carbon (as graphene), hydrogen and some residual hydrocarbon gases. This process produces high quality, low cost, scalable, 'tuneable' and low/no contaminant graphene suitable for use in clean-technology and other applications. The Company's present focus is to develop commercial scale-up and secure market applications.

GMG is listed on the TSX Venture Exchange ("TSXV") under the ticker "GMG" and is also quoted on Tradegate in Germany under "0GF". GMG understand that its shares may have traded on OTCQB under "GMGMF". This quotation was initiated by third party market participants, not GMG. To date, GMG has not offered or sold any securities to investors in the United States. GMG share warrants trade on TSXV under the ticker "GMG.WT".

GMG's strategy has evolved over time. While GMG graphene may be suitable for a wide range of industries, GMG has narrowed its focus to target select applications and industries. GMG's management team ("Management") believes that focusing on downstream applications will provide a higher return on in-house graphene production. Also, the vertically integrated approach will enable it to build a long-term competitive advantage. In line with this approach, GMG's initial focus has been developing applications for energy savings and energy storage.

In the energy savings segment, GMG has focused on graphene enhanced heating, ventilation and air conditioning ("HVAC-R") coating (or energy-saving paint), lubricants and fluids. In the energy storage segment, GMG and the University of Queensland are working collaboratively with financial support from the Australian Government to progress R&D and commercialization of graphene aluminium-ion batteries ("G+Al Batteries").

GMG and its customers have successfully demonstrated HVAC coating projects, offering customers improved heat transfer in space cooling (air-conditioning) and coolant units. Also, GMG is developing lubricants which reduce friction in engines. Both these offerings have the potential to enable lower energy consumption, reducing both cost and emissions.

Near-term revenue generation will depend largely on the ability of the company to generate sales of HVAC coating projects ("THERMAL-XR® powered by GMG Graphene" or "TXR") and to a lesser extent on being able to monetize the advanced research and testing work undertaken on graphene enhanced lubricants. Medium term, GMG remains focused on R&D and will continue to invest in new product development including in energy storage.

Business highlights

Overnight Marketed Offering and Non-Brokered Private Placement

In September 2021, GMG completed an overnight marketed public offering of units ("Units") of the Company, including exercise in full of an over-allotment option ("Offering"). A total of 5,635,000 Units were sold at a price of C$2.05 per Unit ("Offering Price") for gross proceeds of approximately C$11.55 million. Each Unit is comprised of one ordinary share in the capital of the Company (each, an "Ordinary Share") and one-half of one Ordinary Share purchase warrant ("Warrant"). Each Warrant entitles the holder to purchase one Ordinary Share at C$2.60 at any time until September 2, 2024. The Offering was completed pursuant to an underwriting agreement dated August 13, 2021 among the Company and Cantor Fitzgerald Canada Corporation, as lead underwriter and sole bookrunner, and a syndicate of underwriters including PI Financial Corp., Echelon Wealth Partners Inc. and Haywood Securities Inc.

The TSX Venture Exchange also accepted for listing the 2,817,500 Warrants underlying the Units issued pursuant to the Offering. The Warrants were listed for trading on the TSX Venture Exchange under the symbol "GMG.WT" on September 8, 2021.

The Company also completed a non-brokered private placement for gross proceeds of $909,500 through the sale of 425,000 units ("PP Units") at a price of $2.14 per PP Unit ("Private Placement"). Each PP Unit was comprised of one Ordinary Share and one-half of one Warrant. Each Warrant entitles the holder to purchase one Ordinary Share at $2.60 at any time on or before the date which is 36 months from the date of issuance.

The Company anticipates using the proceeds of the Offering and the Private Placement to, among other things, develop a commercial coin cell graphene aluminium-ion battery prototype, perform front end design and commence building of a battery manufacturing facility (subject to a successful prototype and a final investment decision) and for working capital and general corporate purposes.

Graphene Enhanced Aluminium-Ion Battery Development Project

The GMG G+AI Battery project, being undertaken with University of Queensland, aims to develop a new generation of high performance and low-cost cathode materials for rechargeable G+AI Batteries. To address the low-capacity issue of current cathodes, this project anticipates generating new knowledge in the material design of novel graphene materials. Also, by developing an innovative surface perforation technique coupled in a continuous production process, this project aims to produce scalable and cost-effective graphene cathodes with high capacity. A successful outcome of this project will create new intellectual property which will enable GMG to target a global market for batteries. The project has also been approved to receive grant funding of $390,000 from the Australian Government's Australian Research Council.

Initial trialling of G+AI Batteries indicate potential advantages over LI Batteries, including:

- 3 times energy storage density of LI Battery;
- Up to 60 times faster charging than LI Battery;
- Stable charging/de-charging capacity over 1000 cycles;
- Lower cost – of aluminium vs lithium;

- Higher potential for recycling [1];
- Security of supply as aluminium is more widely available than lithium and widely available in developed countries; and
- Significantly reduced risk of fire.

GMG has commenced construction of a pilot battery plant located in a recently secured new headquarters and production facility in Brisbane. The pilot plant will have the capability to produce batteries in coin cell and pouch pack cell format and will potentially accelerate the development of G+AI Battery pouch packs and allow early collaboration with some of GMG's major customer prospects and their specific requirements. Pouch pack cells are typically used in personal electronics such as cell phones, laptops, as well as in electric vehicles and grid storage batteries.

Pilot production of a prototype coin cell battery is targeted before the end of 2021 and a pouch pack commercial prototype battery is targeted before the end of 2022. Subject to successful commercial prototypes and a final investment decision, GMG expects to construct an initial commercial coin cell G+AI Battery manufacturing facility, followed by first production and sales of G+AI Batteries. The location of this manufacturing facility is not yet decided but will likely be in Australia where GMG's headquarters and existing operations are located.

In October 2021, GMG announced that GMG and Robert Bosch Australia Pty Ltd ("BOSCH") have signed a non-binding Letter of Intent, with the aim to agree on the terms of binding agreements for BOSCH to design and deliver a Graphene Aluminium Ion Battery ("G+AI Battery") manufacturing plant.

Robert Bosch Australia Pty Ltd is a subsidiary of the BOSCH Group, a global provider of integrated production line solutions, automation, robotics and testing equipment. BOSCH will support GMG in learning and developing the automation of the battery assembly process and use the results from the GMG G+AI Battery pilot plant to support the scaling of these into fully automated plants. The parties' intent is for BOSCH to become GMG's engineering, design and construction contractor for GMG's near and long-term battery cell manufacturing facility needs (both coin cell and pouch pack).

THERMAL-XR® powered by GMG Graphene

THERMAL-XR® powered by GMG Graphene is a coating application for restoring and improving energy efficiency to refrigeration and air conditioning coils on both building and transport cooling systems. The process coats and rebuilds lost thermal conductivity to the coil by leveraging GMG's graphene to increase the heat transfer rate, resulting in efficiency improvement, and reductions in both energy and $CO2$ emissions.

GMG and its customers have continued to successfully demonstrate HVAC-R coating projects, offering customers improved heat transfer in space cooling (air-conditioning) and coolant units, including reduction and therefore cost savings in a range of situations.

Revenue for Q1FY22 of $13K mainly related to TXR sales. GMG's efforts during Q1FY22 were focussed mainly on the middle east region and in-country demonstrations and distribution agreement

[1] As per CSIRO, only two per cent of Australia's annual 3,300 tons of lithium-ion battery waste is recycled https://www.csiro.au/en/Research/EF/Areas/Grids-and-storage/Energy-storage/Battery-recycling.

negotiations with OPENIA Project Management Services LLC ("Openia"). The Company previously signed a non-binding Letter of Intent with Openia for the exclusive distribution of TXR throughout the United Arab Emirates.

G™ LUBRICANT

GMG blends its graphene into lubricating oil to make G™ LUBRICANT concentrates for lubricant manufacturers to then mix into their lubricant products (e.g. engine oil) for final blending, packaging and sale. GMG has developed mixing equipment, systems and processes at laboratory and commercial scale to make G™ LUBRICANT concentrates. GMG has also developed lubricant product testing equipment, systems and processes to optimize product formulations for graphene quality, lubricant type and customer performance data. GMG has also developed sales and marketing capabilities for selling G Lubricant concentrates to lubricant manufacturers worldwide.

Initial trials by GMG have shown a reduction in wear and subsequent reduction in co-efficient of friction in GMG graphene enhanced lubricants over those without graphene. GMG believes that further reduction is possible by codeveloping the product with an additive pack and better knowledge of the base oil molecules of the intended lubricants.

Coefficient of friction results from external sources have been positive. GMG dispersion and stability chemistry trials are in progress and appear to be positive. Client assessments are underway and we are awaiting progress reports in the coming months.

Graphene powder production

Graphene powder production in Q1FY22 increasingly focussed on manufacturing process technology related to product quality required for G+AI Battery production. This resulted in a reduction in graphene powder production volumes. Future production is likely to focus on this again and production of graphene powder for supply to GMG's TXR Supplier as required when TXR sales increase.

FINANCIAL HIGHLIGHTS

Income Statement

$'000 unless otherwise stated	3 month period ended September 30 2021	2020	Variation $'000	%
Revenue from operations	13	51	*(38)*	*(75%)*
Other income including subsidies, grants and incentives	4	165	*(161)*	*(98%)*
Total revenue	**17**	**216**	***(199)***	***(92%)***
Employee expenses	(941)	(515)	*(426)*	*83%*
Plant expenses	(44)	(33)	*(11)*	*33%*
Occupancy expenses	(38)	(25)	*(13)*	*52%*
Overheads expenses	(515)	(263)	*(252)*	*96%*
Total operating expenses	**(1,538)**	**(836)**	***(702)***	***84%***
EBITDA	(1,521)	(620)	*(901)*	*145%*
Change in fair value of warrants	2,403	-	*2,403*	-
Finance costs	(5)	(1)	*(4)*	*400%*
Depreciation	(36)	(45)	*9*	*(20%)*
Profit / (loss) before income tax	**841**	**(666)**	***1,507***	***(226%)***
Income tax expense	-	-	-	-
Profit / (loss) for the period	**841**	**(666)**	***1,507***	***(226%)***
Non-IFRS financial measures [(1)]				
Adjusted loss before income tax	(1,562)	(666)	*(896)*	*135%*
Basic and diluted earnings / (loss) per share (cents)	1.18	(1.19)	*2*	*(198%)*
Adjusted basic and diluted loss per share (cents)	(2.18)	(1.19)	*(1)*	*83%*

(1) Refer to Non-IFRS Measures for further information.

Balance Sheet

$'000	As at 30 September, 2021	As at 30 June, 2021
Cash and cash equivalents	14,112	3,359
Trade and other receivables	52	56
Research and development grants receivable	736	736
Inventories	364	336
Other current assets	151	184
Property, plant and equipment	302	224
Intangible assets	47	49
Total assets	**15,764**	**4,944**
Trade and other payables	520	539
Financial liabilities	3,420	2,189
Employee benefit liabilities	191	162
Provisions	20	20
Long term liabilities	-	-
Total liabilities	**4,151**	**2,910**
Total equity	**11,613**	**2,034**

Summary of Cash Flows

	For the year ended September 30		Variation	
$'000	**2021**	**2020**	**$'000**	**%**
Cash flows from operating activities	(1,490)	326	*(1,816)*	*(557%)*
Cash flows from investing activities	(112)	(70)	*(42)*	*(60%)*
Cash flows from financing activities	12,355	360	*11,995*	*3332%*
Total cash flows	**10,753**	**616**	*10,137*	*1646%*

OPERATIONS

Non-IFRS financial measures

This MD&A refers to adjusted profit and loss for the period and adjusted basic and diluted loss per share that are measures with no standardised meaning under IFRS. They are non-IFRS measures and may not be comparable to similar measures presented by other companies. Their measurement and presentation is consistently prepared and is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

Adjusted loss for the period and adjusted loss per share

Adjusted loss for the period and adjusted loss per share are used by management and investors to measure the underlying operating performance of the Company. Adjusted loss for the period, excludes specific items that are significant but not reflective of the underlying operating performance of the Company, such as the impact of changes in the fair value of warrants. Adjusted loss per share amounts are calculated using the weighted average number of shares outstanding on a basic and diluted basis as determined by IFRS.

The following table provides the calculation of the adjusted loss for the period and adjusted basic and diluted loss per share, as adjusted and calculated by the Company:

	3 month period ended September 30	
$'000 unless otherwise stated	**2021**	**2020**
Profit / (loss) for the period	841	(666)
Less:		
Change in fair value of warrants	(2,403)	-
Total adjustment items	(2,403)	-
Adjusted loss for the period	**(1,562)**	**(666)**
Earnings / (loss) per share (1)		
Basic and diluted (cents) (2)	1.18	(1.19)
Adjusted basic and diluted (cents) (3)	(2.18)	(1.19)
Weighted average number of ordinary shares - basic and diluted	71,535,899	55,831,307

(1) Due to the loss recognised for the years, all outstanding stock options, warrants and broker warrants were excluded from the calculation of diluted loss per share due to their anti-dilutive effect.
(2) Calculated using loss for the period over the weighted average number of ordinary shares as per IFRS.
(3) Calculated using adjusted loss for the period over the weighted average number of ordinary shares (non-IFRS measure).

Revenue

$'000	3 month period ended September 30 2021	2020	Variation $'000	%
Revenue from operations	13	50	*(37)*	*(74%)*
Grants, subsidies and tax incentives	-	166	*(166)*	*(100%)*
Interest, sundry and forex gains	4	-	*4*	-
Total revenue	**17**	**216**	***(199)***	***(92%)***

Revenue from operations decreased from $50K in Q1FY21 to $13K in Q1FY22. In Q1FY21 revenue was primarily due to sales of graphene powder, which included a 'take or pay' style agreement with a customer under which it purchased graphene powder for a research project for a fixed quarterly fee. This research project ended on 30 June 2021, and Q1FY22 mainly included early stage sales revenue for TXR with new customers.

Other income

Other income for Q1FY22 was $4K compared to Q1FY21 which mainly included $165K of government subsidies received relating to COVID-19.

Operating costs

Shown in the table below are total operating expenses, which exclude finance costs and depreciation and amortization.

$'000	3 month period ended September 30 2021	2020	Variation $'000	%
Employee expenses	941	515	*426*	*83%*
Plant expenses	44	33	*11*	*33%*
Occupancy expenses	38	25	*13*	*52%*
Overheads expenses	515	263	*252*	*96%*
Total operating expenses	**1,538**	**836**	***702***	***84%***

Following is a description of, and commentary on the high-level expense categories of GMG:

Employee expenses

Employee expenses consist of salaries, on-costs (e.g. superannuation), and share based payments for all employees, directors and certain contractors. The total amount to be expensed as share based payments is determined by reference to the fair value of the options granted under the employee share option plan:

- including any market performance conditions (e.g. the entity's share price); and

- excluding the impact of any service-based vesting conditions (for example, remaining an employee of the entity for a period of time).

The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. Total salary costs have increased with increases in the number of employees and any adjustments to salaries of existing employees during the relevant period.

Plant expenses

This includes raw materials and production inputs, general warehouse expenses, Health, safety and environment ("HSE"), machinery parts and consumables, repairs and maintenance ("R&M") and other costs. While expenses on items such as consumables can be estimated, there are various expenses relating to R&M and machinery spares that depend on plant performance and cannot be estimated with a high degree of certainty.

Plant expenses, excluding raw materials and production inputs, were $36K in Q1FY22 and $28K in Q1FY21. The $8K increase was primarily $3K in machinery consumables, repairs and maintenance, as well as $5K in in general warehouse expenses including health and safety equipment.

Occupancy

Occupancy expenses relate primarily to leased premises for both the production facilities and the Company's head office. As for the Company's other leases, these are short-term leases recognised on a straight-line basis as an expense. The rent expenses increased from $25K to $38K from Q1FY21 to Q1FY22 primarily due to the head office lease which commenced in October 2020.

Other expenses in this category include cleaning, light, power, heating, telephone internet, R&M and outgoings which all had minor increases with the extra premises.

In respect of leases recorded under AASB 16 *Leases*, there are no right of use assets or corresponding lease liabilities required to be recorded on the balance sheet by the Company at this stage. This is due to the short-term lease exemption being applied to the Company's leases.

Overheads

Insurance, IT, legal, travel, sponsorships, other R&D related expenses, and various other expenses have been classified as 'Overheads'. While expenses such as IT related expenses, travel and marketing are expected to increase as the business grows, others such as licensing and registration, website, other R&D, and filing fees will be uncorrelated to the number of employees, product offerings or number of customers. Following are various sub-items that constitute 'Overheads', for which the change from Q1FY21 to Q1FY22 has been greater than $10,000:

- Accounting and tax planning expenses decreased from $61K in Q1FY21 to $31K in Q1FY22 mainly due to additional expenses incurred in Q1FY21 associated with the Cuspis Capital Ltd ("Cuspis") review and acquisition process;

- Legal expenses decreased from $72K in Q1FY21 to $49K in Q1FY22 which was also attributable to the Cuspis acquisition process in Q1FY21;
- Investor relations expenses of $205K were incurred in Q1FY22 associated with the Company's transition to public markets;
- Listing expenses of $11K were incurred in Q1FY22 compared to nil in Q1FY21;
- Testing and quality control expenses increased to $16K in Q1FY22 from $3K in Q1FY21;
- Insurance increased from $6K in Q1FY21 to $32K in Q1FY22, mainly due to additional policies taken on post listing and insurance on additional business premises; and
- Consultants and contracting expenses increased from $72K in Q1FY21 to $125K in Q1FY22, mainly due to higher costs associated with regulatory compliance costs post listing and the commencement of director fees.

Fair value of warrants

Change in fair value of warrants of $2,403K included the additional warrants issued during September 2021 as part of the marketed offering and private placement. The gain was driven by the fair valuation adjustment which is in particular highly sensitive to the share price at each reporting date compared to the previous reporting date among other factors.

The share purchase warrants impacted by this adjustment are certain warrants that are recognised by the Company as a financial liability due to their Canadian dollar, fixed exercise price being different to the Company's functional currency. There are no cash obligations for the Company. Due to movement in share price between the last reporting date (or initial recognition date for those issued in Q1FY22) and the reporting period end date, the fair value change of the warrants recorded liability value decreased accordingly resulting in the significant change at reporting date. Changes in fair value will continue to be reported in subsequent periods until the warrants are exercised or expire and the liability ceases.

A number of factors influence the warrant liability valuation including share price, interest rates and assumed volatility. For example, share price increases may result in an expense recorded in the profit and loss in conjunction with any increase in the fair value of the warrant liability, while warrant exercises or a reduced time to expiry with the passage of time would result in a gain and decrease in the fair value of the warrant liability.

Projects

The Company has not generated significant revenue to date. Graphene powder is a commercialized product that has generated revenue, but sale of graphene powder is not the Company's core strategy. The G+AI Battery Project has been described in detail above. TXR is a product in early commercial production stage (produced by TXR Supplier), and the business is focusing on developing the market for TXR. The Company is also undertaking significant product development activities to commercialize various other products. This section provides a summary of projects (each project corresponds to a product under development). These are not capital-intensive projects with well-defined project plans, but are ongoing initiatives driven by certain employees, with the cost of the employees being the key expense associated with the projects.

G™ LUBRICANT

This product is under development and testing internally and with prospective customers. Results achieved so far are encouraging. The research and development for this product is being undertaken in-house. Research is ongoing and there is no fixed end date. Customer engagement is taking place simultaneously, and hence timing of commercial production will be based on customer accepted scientific results, energy savings calculations and receipt of substantial orders. In a business-to-business environment with large corporate counterparties, the timeline for product validation and acceptance is uncertain. There is no significant operating cost for development, other than the salary costs of the Head Product Scientist and Marketing Manager. Necessary capital equipment has already been acquired.

Several large global lubricant blending and marketing companies and original equipment manufacturers are either testing or have expressed interest in testing G Lubricant concentrates for their performance characteristics for potential adoption as an additive for their products. Some smaller lubricant blending and marketing companies have purchased GMG's graphene for initial trials and/or early-stage small scale commercial production. The Company intends to pursue these opportunities for commercialization of G Lubricants. The Company's staff undertake multiple projects simultaneously and a project cost tracking system has not been required to date. Therefore expenditures made to date on each project cannot be separately identified.

G™ COOLANTS and G™ FLUIDS

These products are currently under development and testing. The research and development for this product is being undertaken in-house. Research is ongoing, but with lesser focus than on G™LUBRICANTS, and there is no fixed end date. Customer engagement is taking place simultaneously, and therefore timing of commercial production will be based on customer accepted scientific results, energy savings calculations and receipt of substantial orders. There is no significant operating cost for development, other than the salary costs of the Head Product Scientist responsible for development. Necessary capital equipment has already been acquired.

The Company intends to continue to develop these products with a view to commercialization in the future. The Company's staff undertake multiple projects simultaneously and a project cost tracking system has not been required to date. Therefore expenditures made to date on each project are not separately identified.

G™DIESEL and bio-Diesel

This application is still in the early stages of development and testing, which has not been prioritized in the near term. The potential for this product has been identified from third party research studies conducted using graphene in diesel and bio-diesel. Research will likely require use of local university facilities to enable performance testing in a controlled environment. As of now, the Company remains interested in this product and is engaged with potential collaboration partners towards the progression of this project, but at this time does not plan to spend significant amounts on this project in the next 12 months. There is no timeline or end date for development of this product. The Company's staff undertake multiple projects simultaneously and a project cost tracking system has not been required to date. Therefore expenditures made to date on each project are not separately identified.

FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents have increased by $10,753K due to cash outflows being offset primarily by the Offering and Private Placement in September 2021, raising gross proceeds of C$11.55 million and C$909K respectively. Further information regarding the share capital movements, as well as warrants and options exercised during Q1FY22, is disclosed in the condensed consolidated interim financial statements for the three month period ended September 30, 2021.

Trade and other receivables were low at 30 September 2021, due to the level of sales achieved to date. The balance is primarily the $44k of GST receivables at period end.

The gross R&D tax incentive relating to FY21 of approximately $736K remains as a receivable at Q1FY22, and has been subsequently received in cash during November 2021.

Inventories increased by $28K to $364K as at 30 September 2021, due to purchase of TXR also linked to expanded distribution rights in Singapore and Malaysia.

Other current assets of $151K is largely $125K of prepayments, primarily $97K for insurance and $10K for consultancy costs and health and safety projects.

The trade and other payables relate to expenses in the ordinary course of business, including accounts payable, wages payable, PAYG withholding tax payable, superannuation payable, and other accrued expenses. The balance of $520K as at 30 September 2021, was lower than 30 June 2021 mainly due to payments released for the invoices which were billed and the services completed by the reporting period end. The accruals reduction is offset by the progress invoices now in trade payables for services performed in Q1FY22 in respect of the FY21 reporting year.

The financial liability relates to certain share purchase warrants issued with an exercise price denominated in Canadian dollars. As the Company's functional currency is the Australian dollar, these warrants are considered a derivative as a variable amount of cash in the Company's functional currency will be received on exercise. The fair value of the warrants is determined using the Black Scholes option pricing model at the period-end date, or the market trading price in respect of GMG's traded warrants. At 30 September 2021, a financial liability of $3,420K was recognised based on the fair value of certain share purchase warrants on that date. The Company has no obligation to settle this liability in cash. The fair value will be adjusted over time until the warrants are exercised or expire when the liability will cease.

Liquidity and capital resources

GMG has generated limited revenue to date. Cash expenses mainly relate to operations and R&D activities. Capital raised has been mainly used to fund the development of the Company's proprietary graphene powder production technology, associated graphene enhanced products and solutions, associated plant and equipment and expenses for manufacturing and marketing these products. Development of G+AI Battery technology, production and commercialisation planning has been an increasing focus area for GMG's employees and intended use of proceeds for recent capital raised.

Revenue in the near term is targeted to be generated from TXR. Growth in customer demand for this and other product offerings, and timing for commercialisation of G+AI Batteries, will influence the future funding requirements for GMG. The go-to-market strategy for TXR will evolve as GMG receives more feedback from customers, has more referenceable energy savings data and more customer success stories. Based on these parameters, GMG will determine how much to invest to achieve rapid market penetration of TXR in different geographies. A rapid penetration strategy may require additional capital, but deployment of capital for marketing purposes would be controllable by Management. Timing for commercialisation of G+AI Batteries will depend on the successful development of a commercial G+AI Battery prototype, timing for completion of front end design and construction of a battery manufacturing facility (subject to a final investment decision).

As at September 30, 2021, the cash and cash equivalents were $14,112K with the increase in funds since FY21 due mainly to the Offering and Private Placement in September 2021, raising gross proceeds of C$11.55 million and C$909K respectively.

Following completion of the Offering and Private Placement, Management believes GMG has sufficient cash to meet its growth objectives for at least 12 months. To date, the Company has relied on grants, subsidies and R&D incentives and external funding from investors. There is no guarantee that revenue generated by the business will be sufficient to fund the business for a longer period of time. There can be no assurance that adequate funding will be available in the future, or on terms that are favourable to the Company.

Although the operating and investing cash flow for FY21 were negative, it is assumed that the Company has neither the intention nor the need to liquidate any of its assets to discharge its liabilities and commitments in the normal course of business. Though not guaranteed, Management believes that investors will continue to support the business to fund its expansion and development of products and solutions until the business becomes profitable.

Financial instruments and risk management

Financial assets and financial liabilities are recognised in the balance sheet when the Company becomes party to the contractual provisions of the financial instrument. GMG's financial instruments are its cash and cash equivalents, trade and other receivables, trade and other payables. The Company is exposed to a variety of financial risks, which result from its financing, operating and investing activities. The objective of financial risk management is to contain, where appropriate, exposures in these financial risks to limit any negative impact on the Company's financial performance and position.

The risks arising from the Company's financial instruments are mainly credit risk and foreign currency risk. The risk management policies employed by the Company to manage these risks are discussed below:

Credit risk

Credit risk arises when a failure by counterparties to discharge their obligations could reduce the amount of future cash inflows from financial assets on hand at the balance sheet date. The maximum exposure to credit risk at balance date in relation to each class of recognised financial assets is the gross carrying amount of those assets.

As the company expands and increases sales, this will become a larger consideration. Management closely monitors, the activities of its counterparties and potential counterparties.

Liquidity risk

Liquidity risk is the risk that arises when the maturity of assets and the maturity of liabilities do not match. Some financial assets may not be able to be monetised in a timely manner. Following the Offering and Private Placement completed in Q1FY22, Management considers liquidity risk to be low. While the company does not have any credit facilities from banks, GMG ensures it maintains enough cash, to fulfil its near-term liabilities.

Currency risk

Currency risk is the risk that the value of financial instruments will fluctuate due to changes in foreign exchange rates. Currency risk arises when future commercial transactions and recognized assets and liabilities are denominated in a currency that is not the Company's functional currency. The Company is exposed to foreign exchange risk, however, at present, this risk is relatively low as revenue is limited and most expenses are denominated in Australian dollars. However, in the past, the company has sourced funding from investors and will increasingly source capital equipment from overseas. Because of the relatively low level of foreign currency exposure, the Company has not considered it necessary to enter into any currency hedging transactions.

Off-balance sheet arrangements

As of the date of this MD&A, the Company did not have any off-balance sheet arrangements, except for the non-cancellable operating leases for warehouses and portable office units. The Company has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets, as well as short-term leases, including for leased premises and portable office units, and recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

The Company recognises a contingent liability as at September 30, 2021 of approximately C$102,195 relating to the repatriation of cash acquired in the Cuspis transaction at the time of listing, prior to the dissolution of Cuspis Capital Ltd on August 12, 2021. The contingent liability relates to a potential withholding tax obligation in Canada at the rate of 5% of the amount of cash distributed. The transaction is being treated as a return of capital for Australian tax purposes. At the date of this report, GMG is consulting with the Canadian tax authorities in relation to this amount.

Outstanding shares

As at November 19, 2021, the Company has:

- 76,664,585 ordinary shares issued and outstanding;
- 5,278,427 options outstanding with expiry dates ranging between March 12, 2024 and March 11, 2028, with exercise prices between A$0.36 and C$1.00. If all the options were exercised, 5,278,427 shares would be issued for proceeds of A$2,829,084[2]; and
- 4,353,411 warrants outstanding with expiry dates ranging between October 12, 2022 and September 2, 2024, with exercise prices between C$0.65 and C$2.60. If all the warrants were exercised, 4,390,424 shares would be issued for proceeds of A$10,269,071[5].

For further details on recent issues of shares and other securities, please refer to the final short form prospectus of the Company dated August 27, 2021 (the "Prospectus") available on the Company's SEDAR profile.

RISKS AND UNCERTAINTIES

The Company's business is subject to numerous risks and uncertainties, including those described elsewhere in this MD&A, as well as general economic and market risks. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward-looking information relating to the Company.

For a detailed description of risks and uncertainties, please refer to the Prospectus available on the Company's SEDAR profile.

CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

The key reported numbers requiring the use of estimates and critical judgments that may potentially have a significant impact on the Company's earnings and financial position are the useful life of property and equipment and the recognition and amortization of intangible assets.

Intangible assets and property and equipment are amortized or depreciated over their useful lives. Useful lives are based on Management's estimates of the period that the assets will generate revenue, which are periodically reviewed for continued appropriateness. Changes to estimates can result in significant variations in the amounts charged to the statement of comprehensive income in specific periods.

Intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

[5] Assuming a C$/A$ exchange rate of 1.09.