Graphene Manufacturing Group Commences Graphene Aluminium-Ion Battery Pilot Plant Operations

Brisbane, Queensland, Australia--(Newsfile Corp. - December 9, 2021) - Graphene Manufacturing Group Ltd. (TSXV: GMG) (FSE: 0GF) ("GMG " or the "Company") is pleased to advise that the pilot production and testing plant ("Battery Pilot Plant") for its graphene aluminium-ion batteries ("G+Al Batteries") is operational and that the first G+Al Batteries in coin cell format have been manufactured. Additional equipment to enable the manufacture G+Al Batteries in pouch pack cell format is expected to arrive in early 2022.

GMG's Managing Director and CEO, Craig Nicol, commented: "The commissioning of our Battery Pilot Plant is an important milestone for GMG. Not only will it allow us to develop, manufacture and test our own G+Al Battery coin cell and subsequently pouch packs in-house, it will also enable the Company to accelerate the commercial development of our G+Al Batteries, work with future customers and further build on our internal expertise. We also expect the Battery Pilot Plant to accelerate optimisation of our G+Al Battery prototypes, building on the encouraging results we have already achieved which are generating so much interest from prospective customers."

"Having our own manufacturing and testing capability also supports collaboration efforts with industry partners that continue to express strong interest in the initial performance results and future potential of G+Al Batteries. The lessons we learn from this process will be highly valuable as we work towards commercialisation of this technology," Nicol said.

As previously announced, subject to successful commercial prototypes and a final investment decision, GMG aims to construct an initial commercial coin cell G+Al Battery manufacturing facility, followed by first production and sales of G+Al 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. As previously announced on the 25th October 2021, 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 this manufacturing facility.

GMG's current cash balance is approximately A$15.6m, leaving the Company well-funded for the next stage of its growth plans.

About GMG

GMG is an Australian based clean-tech company listed on the TSX Venture Exchange (TSXV: GMG) that produces graphene and hydrogen by cracking methane (natural gas) instead of mining graphite. By using the company's proprietary process, GMG can produce high quality, low cost, scalable, 'tuneable' and no/low contaminant graphene - enabling demonstrated cost and environmental improvements in a number of world-scale planet-friendly/clean-tech applications. Using this and other sources of low input cost graphene, the Company is developing value-added products that target the massive energy efficiency and energy storage markets.

The Company is pursuing opportunities for GMG graphene enhanced products, including developing next-generation batteries, collaborating with world-leading universities in Australia, and investigating the opportunity to enhance the performance and energy efficiency of engine oils, biodiesel and diesel fuels.

For further information, please contact:

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Cautionary Note Regarding Forward-Looking Statements

This news release includes certain statements and information that may constitute forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements relate to future events or future performance and reflect the expectations or beliefs of management of the Company regarding future events. Generally, forward-looking statements and information can be identified by the use of forward-looking terminology such as "intends", "expects" or "anticipates", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "should", "would" or will "potentially" or "likely" occur. This information and these statements, referred to herein as "forward-looking statements", are not historical facts, are made as of the date of this news release and include without limitation, statements regarding the expectation that the Pilot Battery Plant will allowthe Company to develop, manufacture and test its own G+AI Battery coin cell and pouch packs in-house and that such capability may accelerate the development of the Company's G+AI Batteries; the expectation that additional equipment to enable the manufacture of G+AI Batteries in pouch pack cell format will arrive in January 2022; GMG's expectations relating to construction of an initial commercial coin cell G+AI Battery manufacturing facility, production and sales of G+AI Batteries and the anticipated timing of such events; the proposed location of the anticipated manufacturing facility; and the potential full commercialization of the Company's technology.

These forward-looking statements involve numerous risks and uncertainties and actual results might differ materially from results suggested in any forward-looking statements. These risks and uncertainties include, among other things, risks related to the deployment of the Company's resources, including its personnel; the intention of the Company to research, develop and produce certain products; the ability of the Company to acquire additional equipment to enable the manufacture of G+AI Batteries in pouch pack cell format and the timeline for such acquisition; the ability of the Company to complete construction of an initial commercial coin cell G+AI Battery manufacturing facility, including obtaining necessary permits; timing of anticipated construction; and fluctuations in the market for graphene.

In making the forward looking statements in this news release, the Company has applied several material assumptions, including without limitation, assumptions regarding the Company's ability to research, develop and test its products within anticipated timelines; the ability of the Company to acquire additional equipment to enable the manufacture of G+AI Batteries in pouch pack cell format in a timely manner; the costs associated with construction of an initial commercial coin cell G+AI Battery manufacturing facility; the ability of the Company to obtain necessary production permits; the continued demand for graphene; sufficient demand for the Company's products; and that in-house production of G+AI Batteries by the Company will be cost-effective.

Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. Readers are cautioned that reliance on such information may not be appropriate for other purposes. The Company does not undertake to update any forward-looking statement, forward-looking *information or financial out-look that are incorporated by reference herein, except in accordance with applicable securities laws. We seek safe harbor.*

Graphene Manufacturing Group

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