



## HydroGraph's EMI Shielding Results Surpass Thresholds for Consumer, Automotive and Aerospace Applications

TORONTO, Dec. 13, 2023 -- [HydroGraph Clean Power Inc.](#) (CSE: HG) (OTCBQ: HGCPF) (the "Company" or "HydroGraph"), a manufacturer of pristine graphene, today announced successful testing of its flagship product, FGA-1, fractal graphene, in electromagnetic interference (EMI) shielding as it relates to consumer, electronics, automotive and aerospace applications.

The integration of HydroGraph's pristine graphene in epoxy resin was able to achieve substantial EMI shielding properties by reaching an 80-decible (dB) attenuation (a reduction of signal strength during transmission) in shielded enclosures of less than 1 mm thick. Minimum ratings for consumer protection are 30 dB and ranges from 60 dB to 80 dB for automotive and aerospace applications.

Samples were produced by HydroGraph's Manhattan, Kansas, facility, with analytical results obtained from the Graphene Engineering and Innovation Center (GEIC) where HydroGraph is expanding its application development capabilities with a team of commercially focused scientists.

"Our work in EMI shielding started with our partnership with EPM Shielding after they [announced their plan](#) to build a US\$1.9 billion semiconductor facility on Feb. 20, 2023. These results in EMI shielding have exceeded our expectations," said Chris Sorensen, HydroGraph's vice president of R&D. "We believe we have a path to reach military applications that require 100 dB to 120 dB, which would open an enormous market for HydroGraph."

EMI shielding is used to protect electronics from unwanted signals. For example, it is a critical technology for the accuracy of self-driving vehicles, GPS and other electric vehicle technologies. Shielding is accomplished by insulating sensitive electronics with conductive enclosures which, in turn, reduce signal errors and abnormalities. Graphene, a nanomaterial, does not compete with the current standards of conductive materials used for these enclosures but further improves performance by enhancing them. This shielding effect is used in electronics, medical equipment, various industries including automotive and aerospace, and with military equipment.

HydroGraph was recently highlighted as being part of the Greater Manchester US\$200 million-plus investment zone, and included in a market forecast report by IDTechEx as a key player in the graphene industry.

The global graphene market was valued at US\$337 million in 2022 and is projected to grow to US\$2,957.9 million by 2030.<sup>1</sup> It is expected that the EMI shielding market will be worth US\$9.4 billion globally by 2028.<sup>2</sup>

### ABOUT HYDROGRAPH

HydroGraph Clean Power Inc. was founded in 2017 to fund and commercialize green, cost-effective processes to manufacture high-purity graphene, and other strategic nanomaterials in bulk. Publicly listed on the Canadian Securities Exchange in December 2021, the Company acquired the exclusive license from Kansas State University to produce both graphene and hydrogen through its patented detonation process. More information about the Company and its products can be found on the HydroGraph website: [www.hydrograph.com](http://www.hydrograph.com). For company updates, please follow HydroGraph on [LinkedIn](#) and [Twitter](#).

The Canadian Securities Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this news release.

### CONTACTS

HydroGraph Investor Relations Contact  
Salisha Ilyas, Target IR  
[salisha@targetir.com](mailto:salisha@targetir.com)

Bob Wowk, HydroGraph CFO  
[bob.wowk@hydrograph.com](mailto:bob.wowk@hydrograph.com)  
908.627.1315

Media Contact  
Kristin Schaeffer  
[kristin@amfmediagroup.com](mailto:kristin@amfmediagroup.com)

### Forward-Looking Statements

This release contains certain "forward-looking statements" and certain "forward-looking information" as defined under applicable Canadian securities laws. Forward-looking statements and information can generally be identified by the use of forward-looking terminology such as "may", "will", "expect", "intend", "estimate", "upon", "anticipate", "believe", "continue", "plans" or similar terminology. Forward-looking statements and information include but are not limited to: the timing of trading of the Company's common shares on the OTCQB, the potential benefits of listing on the OTCQB, the statements in regards to existing and

future products of the Company; the ability to successfully scale the commercialization of the products, the Company's plans and strategies.

Forward-looking statements and information are based on forecasts of future results, estimates of amounts not yet determinable and assumptions that, while believed by management to be reasonable, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Forward-looking statements and information are subject to various known and unknown risks and uncertainties, many of which are beyond the ability of HydroGraph to control or predict, that may cause HydroGraph's actual results, performance or achievements to be materially different from those expressed or implied thereby, and are developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to: HydroGraph's ability to implement its business strategies; risks associated with general economic conditions; adverse industry events; stakeholder engagement; marketing and transportation costs; loss of markets; volatility of commodity prices; inability to access sufficient capital from internal and external sources, and/or inability to access sufficient capital on favorable terms; industry and government regulation; changes in legislation, income tax and regulatory matters; competition; currency and interest rate fluctuations; and other risks. HydroGraph does not undertake any obligation to update forward-looking information except as required by applicable law. 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.

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<sup>1</sup> <https://www.fortunebusinessinsights.com/graphene-market-102930>

<sup>2</sup> <https://www.prnewswire.com/news-releases/emi-shielding-market-worth-9-4-billion-by-2028---exclusive-report-by-marketsandmarkets-301998755.html>