



## HydroGraph and EMP Shield to Create Next-Gen EMI Shielding

### Collaboration Will Develop Advanced Coatings to Protect Sensitive Electronic Equipment Used in Defense, EVs, Telecom, and More

TORONTO, Sept. 11, 2023 -- [HydroGraph Clean Power Inc.](#) (CSE: HG) (OTCBQ: HGCPF) (the “Company” or “HydroGraph”), a manufacturer of pristine graphene, today announced its collaboration with Kansas-based [EMP Shield Inc.](#), a leader in protecting devices from destructive electromagnetic interference. Under this collaboration, the Company and EMP Shield are developing advanced electromagnetic interference (EMI) shielding using HydroGraph’s high-purity graphene.

EMI is a common threat to electronics. It is generated by lightning, solar storms and flares, high-power microwave weapons (HPMW) and other electrical sources. All electronic devices are vulnerable, including commercial ones, such as those used in telecommunications and consumer electronics, and those used in industries like medical, defense, automotive, and others. Electronic equipment can be protected from EMI by conductive or absorptive materials and coatings. HydroGraph’s nanoscale graphene, with its impressive conductivity, along with its lightweight and corrosion resistance advantages, make it ideally suited for EMI application. HydroGraph and EMP Shield are working together to develop coatings and insulated barriers to protect electronic devices by blocking unwanted disruptions or transmission of electronic data.

“It is an exciting opportunity to be the first company to utilize graphene-enhanced EMI coatings,” said Tim Carty, EMP Shield’s founder and lead engineer. “This fits well with our product offerings and will benefit the goals of our new \$1.9 billion, gallium nitride microchip foundry being built near Burlington, Kansas, expected to be completed by the end of 2026.”

EMP Shield has the support from the State of Kansas to apply for funding via the bipartisan CHIPS and Science Act, part of the Biden-Harris Administration’s efforts to advance U.S. economic and national security as they relate to the technology sector.

“EMI shielding is just one of the many critical uses we are discovering for graphene,” said Stuart Jara, HydroGraph’s CEO. “EMI interference with your TV or smartphone might be an inconvenience, but interference with a bank account, pacemaker or military facilities would be extremely detrimental. The prospect of HydroGraph’s graphene fortifying the devices that make our world run is truly exciting.”

HydroGraph continues to expand its customer engagements. With this announcement, HydroGraph is now in discussion with 55 customers, 23 NDA/testing agreements, and 20 customers testing the benefits of graphene in their products and applications.

The global graphene market was valued at \$90 million in 2019 and is projected to reach a value of \$2.5 billion globally by 2028.<sup>1</sup> The global EMI shielding market was valued at \$6.6 billion in 2022 and is expected to increase at a compound annual growth rate of 5.4% from 2022 to 2027 to reach \$8.6 billion.<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.

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#### 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.globenewswire.com/en/news-release/2022/01/20/2370036/0/en/By-2028-Global-Graphene-Market-Will-Surpass-USD-2525-7-Million-at-19-5-CAGR-Growth-Vantage-Market-Research.html>

<sup>2</sup> <https://www.marketsandmarkets.com/Market-Reports/emi-shielding-market-105681800.html>