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## HydroGraph's Graphene Outperforms Leading Cathode Catalyst in Li-O2 Battery Study

**VANCOUVER, British Columbia** (May 24, 2023) -- HydroGraph Clean Power Inc. (CSE: HG) (OTCQB: HGCPF) (the "**Company**" or "**HydroGraph**"), a manufacturer of high-quality nanomaterials, today announced a groundbreaking achievement in the field of energy storage. According to a study published in the *Journal of Electrochemical Energy Conversion and Storage*, HydroGraph's graphene surpassed the performance of the leading cathode carbon materials in a lithium-oxygen (Li-O2) battery test.

Lithium-oxygen batteries have emerged as one of the most promising energy storage solutions, but global adoption has been hampered in achieving efficient electrocatalysis, which impacts a battery's performance. Using HydroGraph's patented high-purity fractal graphene, battery scientists have overcome performance challenges, allowing for a better performing battery at a lower cost compared to the incumbent.

HydroGraph's graphene offers not only superior performance but also better economics, at a significantly lower cost. Extensive testing and analysis have demonstrated that HydroGraph's graphene delivers exceptional results, including the highest discharge capacity, superior cycling stability, and promising performance at higher current densities.

"This achievement marks a significant turning point in Li-O2 battery technology," said Ranjith Divigalpitiya, Chief Science Officer for HydroGraph. "Our graphene material showcases improved performance, surpassing the industry's leading catalyst and providing battery manufacturers and investors with renewed hope and confidence."

"We are incredibly proud of the breakthrough our team has achieved," stated Dr. Xianglin Li, the corresponding author of the publication and Associate Professor at the Department of Mechanical Engineering and Materials Science, Washington University in St. Louis. This work was done while Dr. Li was an Associate Professor at the University of Kansas.

"HydroGraph's graphene showcases unparalleled capabilities in electrocatalysis, unlocking new possibilities for Li-O2 batteries and accelerating the transition to cleaner energy solutions," said Dr. Li.

Read more about Dr. Xianglin Li's work involving HydroGraph's high-performance graphene in *The Journal of Electrochemical Energy Conversion and Storage* found <u>here</u>.

## **About HydroGraph**

HydroGraph Clean Power Inc. was founded in 2017 to fund and commercialize green, cost-effective processes to manufacture high-purity graphene, hydrogen and other strategic materials in bulk. The Company acquired the exclusive license to produce both graphene and hydrogen through their patented detonation process from Kansas State University. More information about the Company and its products can be found on the HydroGraph website. <a href="https://www.hydrograph.com/">hydrograph.com/</a>

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.

## 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: statements in respect of the Private Placement, the use of the net proceeds from the Private Placement, the timing and ability of the Company to close the Private Placement, if at all, the gross proceeds of the Private Placement, the timing and ability of the Company to obtain all necessary regulatory approvals, if at all, and the terms and jurisdictions of the Private Placement; the statements in regards to existing and future products of the Company; the Company's future personnel appointments; 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 favourable 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 forwardlooking 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.