

## HydroGraph Announces Business Updates; Patent for Carbon Additive Manufacturing

### Patent Enables HydroGraph to Bring Superior 3D-Printing of Carbon Fiber to Market

VANCOUVER, British Columbia, April 29, 2022 -- HydroGraph Clean Power Inc. (HG.CN) (OTCMKTS:HGCPF) (the “Company” or “HydroGraph”), a commercial manufacturer of high-quality nanomaterials and alternative-energy fuels, has announced business updates and continued build-out of its patent portfolio.

HydroGraph technology can manufacture strategic products such as the super-material graphene used in dozens of industries and alternative-energy fuels in high-demand, such as hydrogen. This is done through an industry-leading patented process that achieves the highest quality, at a low cost. Unlike conventional processes, HydroGraph’s process is environmentally friendly. The technology — the Hyperion detonation system — is ideal for commercial scale: compact and modular, the small footprint allows for deployment virtually anywhere. The Company’s initial go-to-market product of graphene, with hydrogen production process in development, marks the beginning for a platform of products in the advanced materials and energy spaces.

### HydroGraph Business Updates 4.29.22:

- HydroGraph management team has begun implementing the company’s operational and strategic growth plan after completing a 90-day strategic review.
- The Manhattan, KS manufacturing plant is on pace for commercial scale production for Q3 of this year.
- HydroGraph leadership will be attending [The Advanced Materials Show](#) at the NEC Birmingham, Marston Green, Birmingham, UK, on June 29-30, 2022.
- For the latest news, announcements, and updates from HydroGraph, please sign up for our company announcements [here](#).

### Carbon Additive Manufacturing Patent Enables HydroGraph to Bring Superior 3D-Printing of Carbon Fiber to Market

HydroGraph has added to its growing technology portfolio with a Carbon Additive Manufacturing license, opening up the application of the company’s high-quality graphene into a range of new markets from high-performance sports parts to engineering resins.

The “Additive Manufacturing of Continuous Fiber Thermoplastic Composites” patent, licensed to HydroGraph, provides for the company’s graphene to be used in 3D-printing, a process of making three dimensional solid objects from a digital file.

3D Printing, or “Additive Manufacturing,” uses computer-aided-design (CAD) software or a 3D object scanner to deposit material layer upon layer in precise geometric shapes. It is “additive” in that it does not require a block of material or a mold to manufacture physical objects, which means less environmental impact than traditional manufacturing.

HydroGraph’s graphene (a two-dimensional form of carbon) can be used as the carbon “additive,” supporting a manufacturing process that enables the creation of lighter, stronger parts, and systems that can produce objects at a lesser expense. This type of Carbon Additive Manufacturing (CAM) has been widely used in the production of bicycle parts, athletic footwear, earbuds, dental resins, engineering resins, and more. Due to the strength of the products and bonding – twice the tensile strength of conventional methods – as well as fuel consumption advantages due to its light weight, CAM also holds immense future applications for the automotive and aerospace industries.

“This really is revolutionary when it comes to the 3D printing of carbon fiber,” notes Dr. Dong Lin, associate professor of industrial and manufacturing systems engineering at Kansas State University. HydroGraph has the worldwide exclusive license from Kansas State University to produce both graphene and hydrogen through their patented detonation process. Dr. Lin leads a team of researchers at K-State focused on 3D printing of carbon fiber composites.

This license along with other licensed technologies and R&D innovation continue HydroGraph’s momentum in the graphene realm. The US patent is [No. 11,254,048 B2](#) at the U.S. Patent and Trademark Office.

Kjirstin Breure, President at Hydrograph, said that the company intends to bring graphene enhanced carbon fiber composite to market. “Our long-term goal here is to implement graphene in additive manufacturing to commercialize carbon fiber,” she said, “and this is one successful step closer.”

### About HydroGraph

HydroGraph Clean Power Inc. was founded in 2017 to fund and commercialize green, cost-effective processes to manufacture graphene, hydrogen and other strategic materials in bulk. Publicly listed on the Canadian Securities Exchange Dec. 2, 2021, the Company owns the worldwide exclusive license from Kansas State University to produce both graphene and hydrogen through their 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](#).

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*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 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.*