HYDROGRAPH

UNLOCKING THE POTENTIAL OF GRAPHENE

Investor Presentation
May 2026

CSE: HG | OTCQB: HGRAF

FORWARD LOOKING STATEMENTS

This deck 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 use of the net proceeds from the previously announced private placement, anticipated benefits resulting from the Marketing Services Agreement, the future exercise of the Options, ability to successfully increase commercial scale production at its manufacturing facility, and the timing thereof, the potential valuation of Company, any EBITDA predictions, the commercialization of HydroGraph's products that lead to customer contracts resulting in our potential valuation and EBITDA predictions, and the Company's business 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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HYDROGRAPH produces the highest quality graphene in the industry at the greatest cost efficiency

HydroGraph's patented "explosion synthesis process" yields the highest purity, most powerful graphene in the industry.

- Most consistent, efficient production process in the world
- **Commercialization has begun** with more than **75 active customer development programs**
- Rapidly scalable modular production model: capacity is **10 tons per year, expanding to 30 tons**
- Proprietary Hyperion reactors **can be built in 2-3 months**
- **Low capital intensity** – US$10M to US$15M of capex to generate US$100M+ of sales

2026 milestones to include:

- [x] US EPA and UK/EU REACH clearance
- [x] Opening new Austin HQ
- [ ] Houston manufacturing facility and supply agreement
- [ ] Expanded global partnerships and application development
- [ ] Initial commercial off-take agreements with increasing sales volume
- [ ] Initiating new programs with US federal and military entities

HIGHLIGHTS

Founded 2017

20+ Employees

3 Patents Granted

9 Pending

7 Provisional

11 Graphene Products

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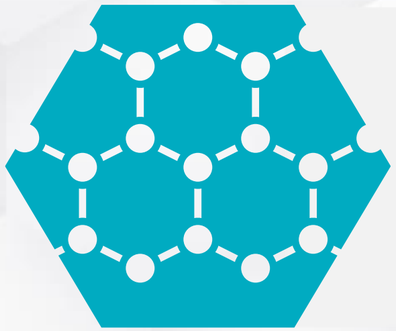
Investment thesis

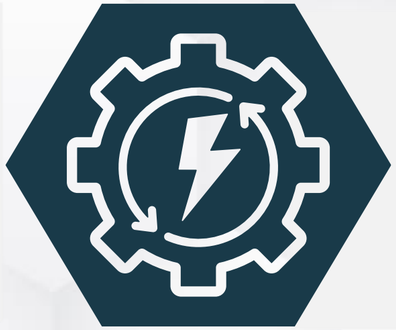


ULTRA-PURE GRAPHENE

Highest performing, purest carbon content graphene in the industry at industrial scale

CONSISTENT QUALITY

Reliable, identical batches to facilitate large scale manufacturing processes



EFFICIENT OPERATIONS

Proprietary Hyperion Reactors use ultra-pure inputs, the lowest energy in the industry, produce no waste

GLOBAL REACH

High-performance graphene can improve virtually every industry with near unlimited potential

STRONG VALUE PROPOSITION

Unlocks customer value by strengthening competitive advantages at minimal cost

SET FOR GROWTH

Low CAPEX, large end markets, rapid market growth, and differentiated products

The Problem: SUPPLY CONSTRAINTS in a Rapidly Growing Market

The global graphene market is projected to reach $15 billion by 2034 with a 36% CAGR

~300 companies worldwide claim to produce graphene
An analysis of 60 companies by Advanced Materials journal found:

MARKET CONSTRAINTS	Compared to HydroGraph	HYDROGRAPH SOLUTIONS
There is **almost no high-quality graphene** in the market as defined by ISO		**HydroGraph** makes identical batches of **pristine graphene** at industrial scale
No company produces over **50% graphene** content, with a majority producing less than 10%		**HydroGraph** produces **99.8%+ pure carbon content graphene**
Most companies are producing **fine graphite**, not graphene		**HydroGraph's** graphene is **tested as pure** by numerous labs and the Advanced Carbons Council

https://advancedcarbonscouncil.org/page/VERIFIED

Market estimates from Fortune Business Insights, January 6, 2026 https://www.fortunebusinessinsights.com/graphene-market-102930

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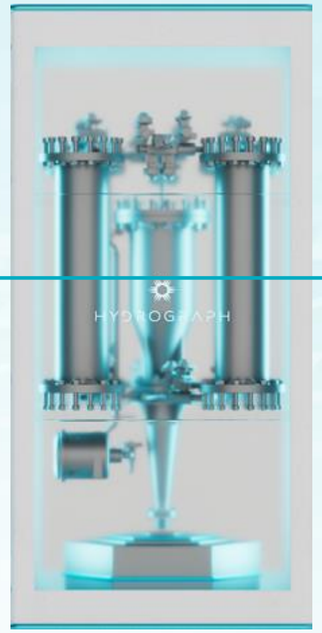
Our Solution: The Hyperion System

Acetylene

C_2H_2

Oxygen

O_2



Readily Available Local Feedstock

EXTENSIVE SUPPLY

Broadly available at low cost, ultra-pure input gasses drive a uniquely predictable, repeatable combustion reaction.

The Hyperion System

PATENTED EXPLOSION SYNTHESIS PROCESS

Proprietary low cap-ex system requires minimal energy and produces no waste. The world's most consistent, modular, scalable, and eco-friendly production solution.

Pure Graphene

HIGHEST QUALITY MATERIAL

We produce the highest-purity, highest-performing, most batch-consistent graphene in the market.

VERIFIED GRAPHENE PRODUCER

Advanced Carbons Council

HydroGraph's Synthetic FGA graphene is:

- **disruptive,**
- **patented,**
- **cost efficient, and**
- **scalable**

US EPA, EU REACH, UK REACH designations secured for commercial scale-up

Units can be produced in about three months to increase capacity – two in construction for 2026

Sourcing a larger US facility as demand grows. Not reliant on China for source of graphite.

Centralized production plants located adjacent to gas sources will be employed.

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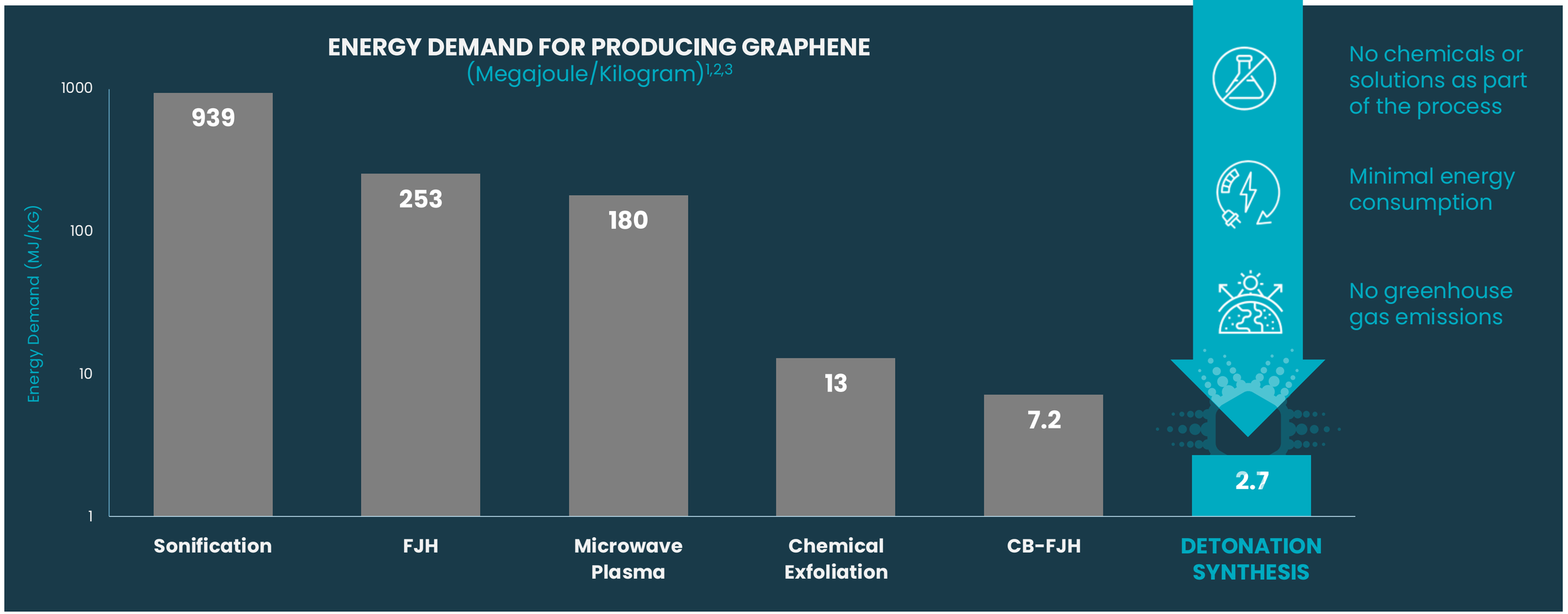
A LOW ENERGY SOLUTION FOR MASS PRODUCTION

HydroGraph produces pristine graphene with the smallest energy and environmental footprint



Legend:
CB-FJH: Carbon Black – Flash Joule Heating
FJH: Flash Joule Heating

References:
1. Juong et.al., Nature | Vol577 | 30January 2020 | 647
2. Wyss et al., Communications Engineering, (2022)
3. US patent application US2017/0113935A1

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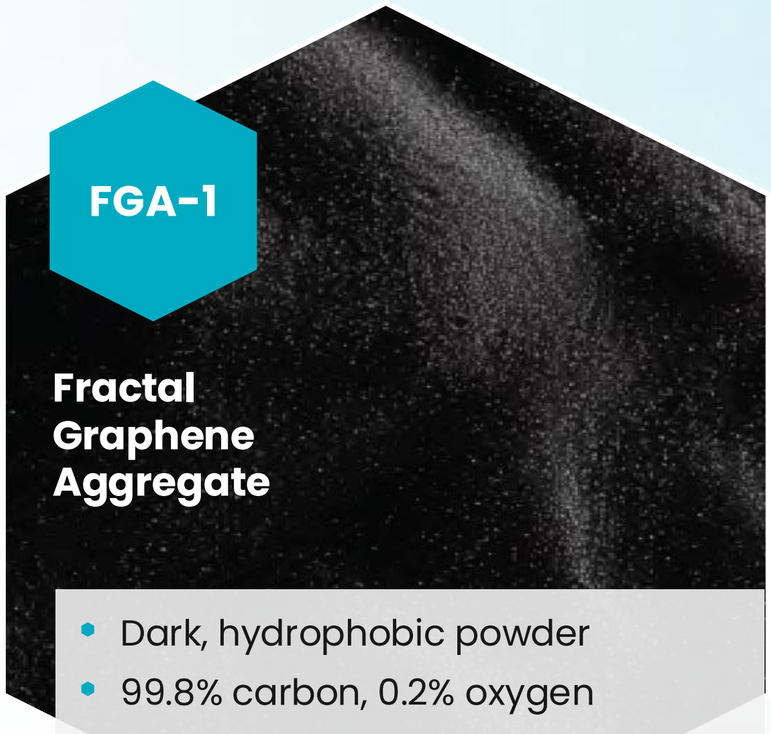
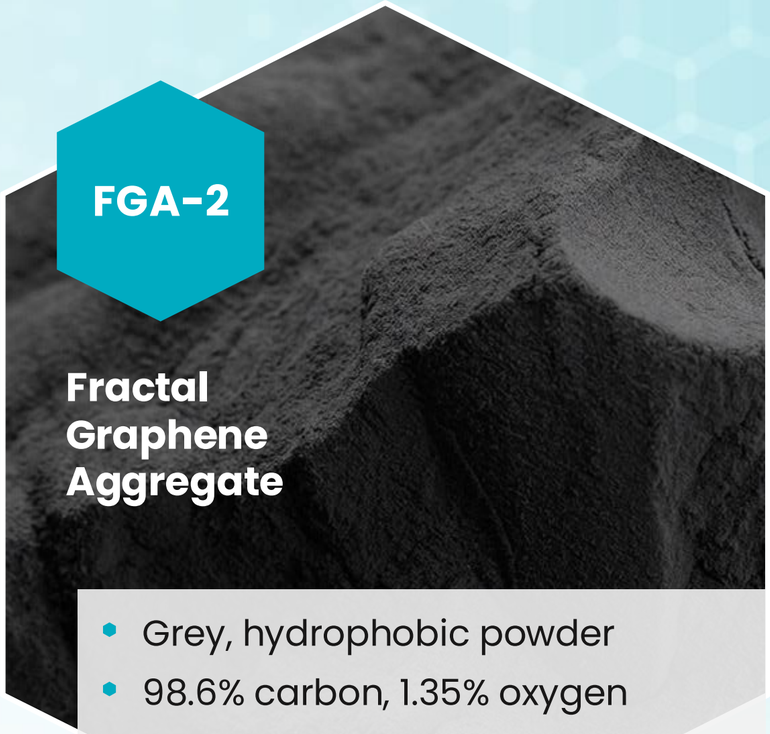
Product Portfolio – Highest Purity, Highest Performance



FGA-1

Fractal Graphene Aggregate

- Dark, hydrophobic powder
- 99.8% carbon, 0.2% oxygen
- 100% sp^2 carbon structure
- Lateral: 20–50 nm
- Thickness: 2–3 nm (~6 layers)
- BET surface area: 150 m^2/g
- No PAHs, no volatiles to 700°C



FGA-2

Fractal Graphene Aggregate

- Grey, hydrophobic powder
- 98.6% carbon, 1.35% oxygen
- 80% sp^2 carbon structure
- Lateral: 75–200 nm
- Thickness: ~10 nm (~32 layers)
- BET surface area: 25 m^2/g
- No PAHs, no volatiles to 700°C

RGA-COOH-1

Reactive Graphene Aggregate

- Dark, hydrophilic powder
- 96.3% carbon, 2.1% oxygen
- Carboxylic acid functional groups
- Lateral: 10–50 nm
- Thickness: 2–3 nm (~5 layers)
- BET surface area: 165 m^2/g
- Enables covalent bonding

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Strategic Partnership

HydroGraph expanded to Tier 1 status in 2026

- HG has worked in partnership with the leading graphene R&D centre, the GEIC, since 2023
- The GEIC, contains all relevant industrial prototyping machines and characterization devices needed to commercialize graphene materials,
  is expediting the path to market
- As a university-affiliated institution, GEIC staff must maintain impartiality when selecting graphene for customer projects
- This cost-effective gateway facilitates customer engagement for the Company
- HG to explore new application areas and attract new customers through partnership
- HG's business development team utilizes data obtained from new materials testing
- HG collaborates on application development with both the GEIC and our own HydroGraph team onsite, gaining access to customers through the GEIC network

HydroGraph Production & Development Facility
Manhattan, Kansas, US

HydroGraph Industrial Production Facility (Announced)
Houston, Texas, US

HydroGraph HQ
Austin, Texas, US

Graphene Engineering Innovation Centre (GEIC)
Manchester, UK – Birthplace of graphene

Manchester, where graphene was discovered in 2004, remains a hub for graphene activity and talent.

The GEIC serves as a key hub for customers to interact with graphene experts.

MANCHESTER 1824
The University of Manchester
Graphene Engineering Innovation Centre

James Baker
HydroGraph Advisory Board

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ESTABLISHED RELATIONSHIPS

In Large Global Target Markets

- 80% reduction of wear
- 24X improvement of lifetime
- 70% increase of lubricity
- Environmental benefit: less oil extracted and less spent oil to be disposed of
- Applicable to greases, motor oils, machining fluids, and more uses

- 8 orders of magnitude increase in conductivity
- Low (< 1-wt%) loading for double digit mechanical improvement
- Improves barrier properties
- 25 – 30% improvement in strength in PET and epoxy
- Indication that graphene enhances recyclability

- Enhanced durability
- Light-weighting
- Enhanced electrical conductivity (static dissipative)
- Anti-corrosion
- EMI shielding capable
- Anti-fouling coatings
- UV protection
- Multi-functional improvements

- 21% increase strength with 0.02 wt-% to binder
- 15% reduction in energy demand and Global Warming Potential as LCA benefits
- Reduced porosity leading to reduced water permeability, lowering freeze/thaw damage and rebar corrosion
- Significantly decreases the cure time allowing for 3D printing at scale

- 47% increased Charge Acceptance Rate in lead acid batteries resulting faster charging
- Extends battery life by reduced sulfation
- Outperforms leading cathode catalyst in lithium-air batteries
- 4X capacity improvement in supercapacitors compared to high surface carbon black

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2026: Commercialization Under Way

Large automotive company: Multiple successful trials completed for automotive composites	**Next:** Pilot industrial scale-up, followed by commercial scale-up negotiations targeting 2026. Tonnage volumes anticipated.
Biosensors: Hawkeye Bio achieves distributor contract and published data in Nature	**Next:** Production ramp up begins in 2026 with additional biosensors in development targeting 14 different diseases.
Technical Fibers: Scale up order expected based on repeated results	**Next:** Pilot industrial scale-up to commence at completion of current trial. Rapidly growing defense interest.

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PATENTED TECHNOLOGY

Fractal Graphene Patented No: 9,440, 857 B2

The 2016 patent for the high-yield production of fractal graphene via detonation is the founding technology for HydroGraph. The detonation closed system produces the highest quality products, while conserving energy, preventing emissions and is modular and scalable for clients.

Additionally, the HydroGraph portfolio now contains patents relating to the production of nanomaterials, applications involving nanomaterials and clean energy.

REACTIVE GRAPHENE

Disc. No.: 2019-064; Attorney Docket No.: 52468

Title: "Graphene/Graphene Oxide Core/Shell Particulates and Methods of Making and Using the Same"

PCT Application No.: PCT/US2020/038055

Filing Date: June 17, 2020

GRAPHENE INK

RE: Disc. No. 2019-066

Title: "Nano-inks of Carbon Nanomaterials for Printing and Coating"

PCT Patent Application No.: PCT/US2020/039547

Filing Date: June 25, 2020

GRAPHENE ENHANCED CARBON FIBER

Disc. No.: 2017-008; Docket No.: 49240-US

Title: "Additive Manufacturing of Continuous Fiber Thermoplastic Composites"

U.S. Application No.: 16/487,622 (PCT/US2018/018800)

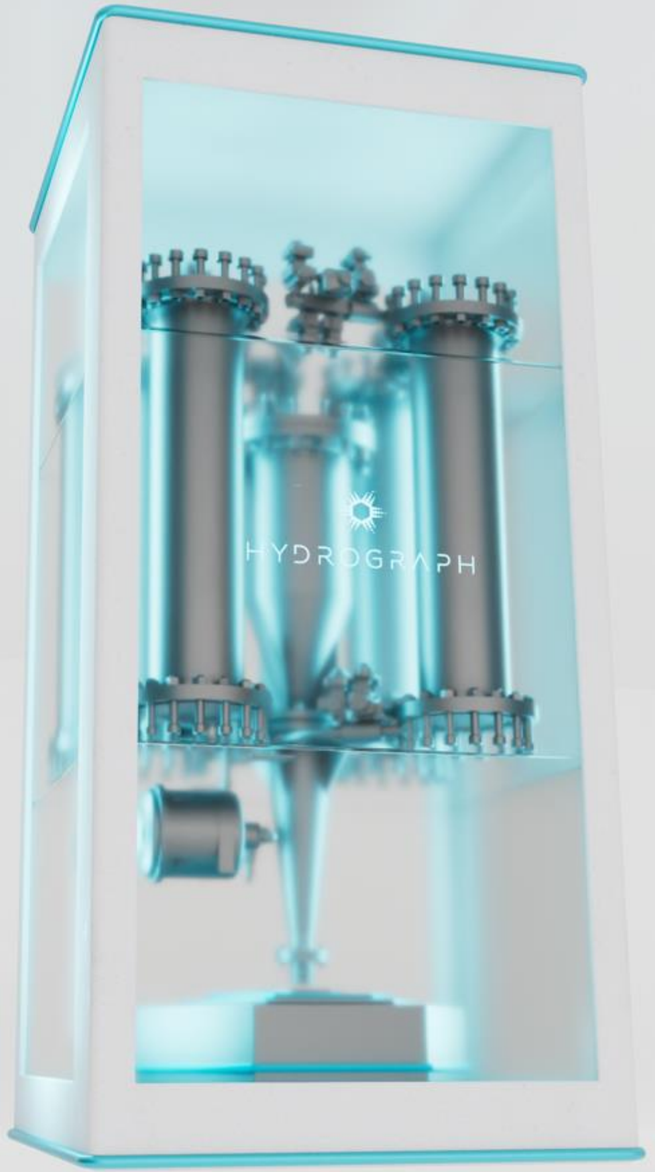
HYDROGEN PRODUCTION

Disc. No.: 2021-027; Attorney Docket No.: 54713-PCT

Title: "Process for Synthesis of Syngas Component"

U.S. Provisional Patent Application No.: 63/161,625

Filing Date: March 16, 2021



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HydroGraph

Investment thesis

Key Catalysts

Capital Structure

350.1M	Basic Shares Outstanding
20.3M	Options Outstanding
8.4M	Warrants Outstanding
0.6M	RSU Outstanding
379.4M	Fully Diluted

CAD $2.69B Market Cap (as of May 12, 2026)

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THANK YOU

Kjirstin Breure
President and CEO

Matt Kreps
Senior Vice President
Matt.Kreps@HydroGraph.com
+1-214-597-8200

CSE: HG | OTCQB: HGRAF | FRA: M98

What Makes Graphene a Supermaterial

A nano material, is made up of pure carbon atoms and is the strongest and most conductive material known to man. As a supermaterial, it will help usher in an age of nanotechnology, which will touch virtually every known industry.

HydroGraph's graphene helps customers increase the mechanical properties of their materials, allowing for less to be used while reaching the same or improved performance targets. This significantly reduces carbon emissions without increasing cost to the customer.

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Thermal Conductivity
Highest ever measured at ~4000 Wm^{-1} K^{-1}

Flexibility
Graphene can stretch up to 25% of its original length

Electron Mobility
As high as 200,000 $cm^2/V{\cdot}s$, much higher than silicon

Thinness
A single layer of graphene is just 0.345Nm

High Surface Area
As much as 2,630 m^2/g, very high surface area

UV Resistance
Blocks harmful UV rays by up to 70%

Impermeability
Blocks all other elements, even hydrogen

Flame Resistant
Graphene significantly reduces flammability if added to polymers

Strength
Graphene has a strength of 130 GPa, higher than steel

Transparent
Single layer graphene transmits approximately 97.2% of light

Electrical Resistance
Graphene electrical resistivity of just $0.2x10^{-6}\Omega{\cdot}cm$

Stiffness
Young's modulus 0.95 to 1.1 TPa, some of the highest ever measured

HydroGraph's History

- Product testing completed, entering commercialization in 2025

2014
Discovery
Dr. Chris Sorensen at KSU discovers Detonation Process for producing high-quality, low-cost graphene

Q3 2016
Patent
U.S. patent awarded for the high-yield production of graphene based via detonation synthesis

Q2 2017
Launch
HydroGraph formed to fund and commercialize green, cost-effective manufacture of pristine graphene at scale

Q1/Q2 2021
Funding/Graphene plant
Private placement of $7.5M by PowerOne and Haywood

Groundbreaking for production and commercialization facility in Manhattan, Kansas

Q4 2021
Public listing
HydroGraph Clean Power (HG) lists on the CSE

Q2 2022
Tech platform
Hyperion technology platform proof of concept and prototype of scalable and consistent production of graphene

Q1 2023
Scale-up
Commercial scale production capacity of graphene. Business development team engaging with customers and partners.

Q2 2024
Change in management
Ms. Breure appointed CEO. Changes made to business model and strategy.

Initiated UK application development capabilities to meet growing customer demand

2026
Transition to commercial relationships
HydroGraph plans large scale production within US to meet anticipated customer demand. First contracts expected.

Q1+ 2026
New facilities
Opening new Austin HQ with administration, sales, research and production resources, new large scale Texas production facility with pipeline access to acetylene

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