

Memorandum of Understanding (MOU) Between Bazalt Holdings (BH) & Carbon-2D (C-2D)

This AGREEMENT is entered into this 17th day of March, 2020 by and between Carbon-2D Graphene, Inc., a corporation having its principal office at #430-580 Hornby Street, Vancouver, B.C. V6C 3B6 (hereinafter referred to as "C-2D") and Bazalt Holding, S. A., ul Weteranów 157 05-250 Radzymin, Poland (hereinafter referred to as "BH").

Definitions:

The following terms, processes and concepts need to be defined before pre-requisites and deal points can be explained in this MOU. Definitions are as follows:

- **"Little Bang" Method to Produce Graphene Defined** - C-2D adds acetylene and oxygen into a sealed cylinder. Then with a spark from a sparkplug the gases are detonated. We just use the potential energy within the gases. No oven or furnace is needed for sustained heat. In a flash lasting for less than 10 milliseconds, the temperature in the cylinder momentarily flashes to 4,000 degrees Kelvin. Hydrogen is burned off leaving almost pure carbon in the form of gram amounts of Graphene flakes. We refer to this whole process as the Little Bang.
- **The Little Bang Method is Decentralized and fully Digital** - The Little Bang process is a simple method for a single detonation to produce gram scale amounts of Graphene. All controls and valves are fully digital and precisely controlled via a computer. In fact the detonation cylinder and the collection cylinder can be remotely controlled via the Internet. Hence the Little Bang is a decentralized system much like a computer server, and has been designed from inception to be fully digital and Internet enabled.
- **Graphene as a Service (GaaS)** - Just as Salesforce created the concept of Software as a Service (SaaS) in IT, where software is centrally controlled and managed, C-2D will introduce the concept of Graphene as a Service (GaaS). Since the Little Bang's equipment and processes are digitally and centrally controllable via the Internet, it is much like SaaS. Little Bang Cylinders and Feedstocks can be centrally controlled and managed using GaaS. This means that the Little Bang, controlled via GaaS, can be incorporated directly into the production lines of strategic partners. Otherwise shipping Graphene from a central location is much like shipping feathers. Feathers are very light but require large volume containers for shipping, thus incurring high shipping costs, just as does Graphene. For composite manufacturers requiring high volumes, GaaS is ideal.
- **Multi Layer Graphene (MLG)** - C-2D Graphene is what is characterized as Multi Layer Graphene (2 to 10 Layer). Third party testing has shown that C-2D Graphene falls well within the parameters of what is defined to be MLG Graphene. MLG Graphene exhibits the unique properties and features of monolayer Graphene but can be produced in bulk cost effectively. It is ideal for composites.
- **Royalty/Licensing Arrangement with Partners Using GaaS** - Since BH needs tonnage amounts of Graphene for rebar production, we will negotiate a royalty arrangement off gross sales of finished products. BH will be using our GaaS decentralized capabilities to produce Graphene at their facilities, while C-2D personnel will remotely control the Little Bang process (if required). This will be

done under license, and there will be annual royalty minimums to protect partners' vertical application exclusivity.

Pre-Installation Requirements:

This section defines the pre-installation requirements between BH and C-2D. A more formal Licensing/Royalty Agreement will ultimately supersede the MOU. The proposed pre-installation requirements for both companies are as follows:

- **GaaS Requirements C-2D** – Since BH will be producing Graphene on their premises; BH and C-2D have certain requirements for each other. First of all the requirements for C-2D equipment to achieve before shipment to BH, are as follows:
 - **Equipment Fabrication & Delivery** – Detonation Chamber, Collection Chamber, Digital Controls, Valves, Digital Controller etc. to be supplied by KSU through C-2D onsite in Poland as follows:
 - **Price of Equipment** – To be done at cost by C-2D for BH
 - **Onsite Fabrication (if required) & Training** – BH will need to pay for travel and accommodations and consulting fees for at least one specialist from KSU affiliated with the project
 - **Electrical Requirements** – Polish requirements for plugs and wiring are different and this must be taken into consideration before components are manufactured in the USA
 - **Ongoing Centralized Control** – BH will need to pay C-2D a small ongoing monthly monitoring fee for ongoing centralized GaaS support, from KSU at Manhattan KS
- **GaaS Requirements BH** – Second of all here are the requirements for BH to meet before Carbon-2D equipment can be delivered:
 - **Site Prerequisites** – The site in Poland needs to be prepared in advance of the C-2D equipment arriving there. The following needs to be taken into consideration:
 - **Natural Gas Lines to Factory** – Appropriately sized and configured gas lines need to be in place before we can ship the GaaS components to BH
 - **Natural Gas to Acetylene Process** – This process needs to be in place at the BH factory before we can ship the GaaS components
 - **Containment, Venting and Safety Systems** – All such safety systems for precursor materials and Graphene flakes must be in place before we can ship the GaaS components to BH
 - **Space Allocation in Factory** – C-2D needs sufficient space allocated for GaaS equipment in the BH factory before we ship the GaaS components
 - **Internet Connection** – BH to provide Internet to GaaS computer

Deal Points Between BH & C-2D:

This section defines the deal points between BH and C-2D. A more formal Licensing/Royalty Agreement will ultimately supersede this MOU. The proposed deal points between the two companies are as follows:

1. **Proposed Royalty Percentage** - Since BH will be producing Graphene on their premises under license from C-2D there will be a Royalty of 1.5% off Gross Sales of finished BH Basalt Fiber/Graphene products
2. **Investment in Carbon-2D** - BH will invest a minimum of \$1,000,000 USD into Carbon-2D for shares in C-2D and for exclusive markets for BH. The first \$500,000 will be at 5 cents USD/share and the next \$500,000 will be at 10 cents USD/share. However if third parties invest the \$500,000 initial amount before BH at 5 cents USD/share, then the BH investment of \$1,000,000 USD shall all be at 10 cents USD/share.
3. **Exclusive Verticals for BH** - C-2D will offer exclusivity for BH for all Basalt Fiber/Graphene composite products worldwide in all vertical markets, providing that there is an initial investment of \$1,000,000 (as per deal point #2) and a royalty of 1.5% (as per deal point #1)
4. **Royalty Payment** - BH will pay C-2D monthly within 30 days of BH delivering product to their customers
5. **Maintenance of Exclusivity** - The maintenance of the exclusivity conferred by Carbon-2D to Bazalt Holdings as per deal points above, shall be renewed on an annual basis provided that the following occurs:
 - a. **Minimum Net Royalty** - Of \$4,000,000 per year to maintain exclusivity and/or:
 - b. **Minimum Net Investment** - Of \$1,000,000 per year to maintain exclusivity or:
 - c. **Combination Royalty/Investment** - Any combination of 4a) and 4b) above in any proportion thereof combining to a total of \$5,000,000 per year
6. **BH Bears All Costs for Onsite GaaS Installation** - As in the "Pre-Installation Requirements" Section above, BH shall agree to bear all costs associated with the installation and implementation of GaaS in their facility in Poland.
7. **C-2D Pre-conditions GaaS Equipment at Cost for BH Installation** - As in the "Pre-Installation Requirements" Section above, C-2D shall prepare and precondition beforehand all GaaS equipment for BH for installation in their facility in Poland at C-2D's cost.
8. **Monthly Monitoring Fee for GaaS Support** - BH agrees to pay C-2D a monthly monitoring support fee for centralized GaaS equipment and process support
9. **Mutual Sharing of GaaS Technology Developments** - If C-2D develops new enhancements to GaaS technology or the GaaS process; C-2D agrees to share such developments with BH. If BH develops new enhancements to GaaS technology or the GaaS process, BH agrees to share such developments with C-2d.
10. **GaaS Project Teams on Both Sides** - C-2D agrees to assemble a BH project team with a C-2D project lead as the main liaison between C-2D and BH. BH agrees to assemble a C-2D project team with a BH project lead as the main liaison between BH and C-2D. Both project teams to be introduced to each other.
11. **Clearly Defined and Published Roles & Responsibilities for Team Members** - The roles and responsibilities for project team members shall be clearly defined, published and shared for both teams to be able to synchronize resources between each other
12. **Sharing of Ongoing GaaS Findings** - As both sides discover relevant novel findings concerning the GaaS process, such findings shall be published and shared between each other

13. **Standardization of Communications & Project Management Technology** - Both sides agree to standardize on communications and project management technologies to more efficiently control the initial build project and the ongoing GaaS process in Poland

Signature page below

CARBON-2D GRAPHENE, INC.

By: H. Davidson

Printed Name: Harold Davidson

Title: CEO

Date: March 17, 2020

BAZALT HOLDING, S.A.:

By: Stanley Rokicki

Printed Name: Stanley Rokicki

Title: CEO

Date: March 18. 2020