

TSX-V: GPH OTCQX: GPHOF

# An All-American Battery Materials Supply Chain Solution

OCTOBER 2024 INVESTOR PRESENTATION

**GRAPHITEONEINC.COM** 

# **Forward-Looking Statements**

### (All dollar amounts are in U.S. dollars, unless otherwise indicated)

All statements in this presentation, other than statements of historical facts, including those related to the timing and completion of the anticipated Feasibility Study, future production, establishment of a processing plant and a graphite manufacturing plant, establishment of a battery materials recycling facility, and events or developments that the Company intends, expects, plans, or proposes are forward-looking statements. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "proposes", "expects", "is expected", "scheduled", "estimates", "projects", "plans", "is planning", "intends", "assumes", "believes", "indicates", "to be" or variations of such words and phrases that state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". The Company cautions the prospects of successfully securing financing from EXIM on acceptable terms, or at all. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploitation and exploration successes, continuity of mineralization, uncertainties related to the ability to obtain necessary permits, licenses and title and delays due to third party opposition, changes in government policies regarding mining and natural resource exploration and exploitation, and continued availability of capital and financing, and general economic, market or business conditions. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date of this presentation, and the Company undertakes no obligation to update publicly or revise any forward-looking information, except as required by applicable securities laws. For more information on the Company, investors should review the Company's continuous disclosure filings that are available at www.sedarplus.ca.

# About Graphite One Inc.

Graphite One Inc. ("Graphite One" or the "Company") is headquartered in Vancouver, B.C. and, through its wholly-owned subsidiary, Graphite One Alaska Inc., owns the Graphite Creek property situated on the Seward Peninsula about 60 kilometers north of Nome, Alaska. According to U.S. Geological Survey, Graphite Creek has the largest known graphite deposit in the U.S. and among the largest in the world.

The Company continues to develop its Graphite One Project (the "**Project**") to become an American producer of high-grade anode materials that is integrated with a domestic graphite resource. The Project is proposed as a vertically integrated enterprise to mine, process and manufacture anode active materials primarily for the lithium-ion electric vehicle battery market. As set forth in the Company's 2022 Pre-Feasibility Study, graphite mineralization mined from the Graphite Creek Property would be processed into concentrate at an adjacent processing plant. Natural and artificial graphite anode active materials and other value-added graphite products would be manufactured from the concentrate and other materials at the Company's proposed advanced graphite materials manufacturing facility located in northeastern Ohio.

The Company intends to make a production decision on the Project upon the completion of the Feasibility Study, expected in the first guarter of 2025.

# **Executive Team**



## Doug Smith P.Eng., ICD.D

EXECUTIVE CHAIR & DIRECTOR

35+ years in international coal industry. Former President & CEO of First Coal (acquired by Xstrata in 2011). Former President & Director of Andalex Resources (acquired in 2006).



## Anthony Huston

FOUNDER, CEO & DIRECTOR

Successful entrepreneur with a background in tech, business development, and finance. Experienced as a Managing Partner for public and private companies, and integral in raising \$150M+ in his career.



## Gordon Jang CPA, CMA

Chief Financial Officer

25+ years in senior management with mid-to-large mining companies, including Fortuna Silver Mines, Augusta Resources (acquired by Hudbay in 2014), Lundin Mining, & Pan American Silver.



### Mike Schaffner

Senior VP, Operations

Experienced in mining operations and 3-time winner of the National Mining Association's Sentinels of Safety Award. Holds two patents related to bio-oxidation heap leaching.



#### Andrew Tan M.Sc.E

Vice-President, Advanced Graphite Materials

20+ years in graphite materials industry, including GM of SGL Carbon Group's graphite foil manufacturing plant. Specialized in manufacturing graphite anode materials and other advanced graphite products.

## **Board of Directors**

Independent

#### Scott Packman MBA, LLB

Formerly, General Counsel and Executive VP of Madison Square Garden Entertainment Corp and General Counsel of MGM Holdings Inc. for over 12 years. Mr. Packman is currently the Managing Member of SSP Partners, which identifies, evaluates and advises on strategic transactions.

#### Bedi A. Singh ACA

A seasoned senior executive with decades of public company experience primarily in the media, entertainment and technology sector. Previously served as Chief Financial Officer of News Corp from 2012 to 2017 and has held senior executive positions at MGM Studies, Gemstar-TV, and Sony Pictures.

management, corporate development, strategic planning and exploration in natural resource industry. Mr. Smith had a 32-year career with Rio Tinto where he was the Director of Exploration for the Australasia Region and has been involved with globally diverse exploration and development projects in gold, copper, molybdenum, iron ore,

Patrick Smith CPG

40+ years in senior

molybdenum, iron ore diamonds, industrial minerals and lithium.

#### Brian Budd

Extensive management and corporate development background with over 25 years of entrepreneurial and sales leadership experience in the resource and hightech industries. His business acumen includes the development and execution of comprehensive business and financing plans, corporate communication programs as well as strategic planning for both domestic and international markets.

#### **Anthony Huston**

Doug Smith, P.Eng, ICD.D

Non-Independent

Refer to Executive Team slide for BIO.

# Advisors

#### **Daniel McGroarty**

Principal of Carmot Strategic Group, an issues management firm in Washington, DC

#### John Robins

Principal of Discovery Group, an alliance of junior exploration companies.

### Jerry Birch & Kevin Greenfield

Co-owners of Taiga Mining Corp. – a respected, successful Alaskan placer mining company they founded in 1990, which has since received numerous industry awards.

#### **Clark Penney**

Partner with Cypress Wealth Services, a wealth management firm with over \$1 billion in assets under management.

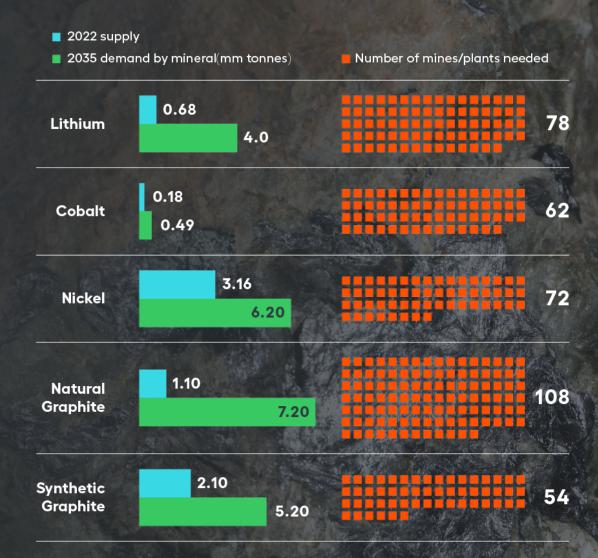
# Capital Structure (as of October 21, 2024)

Basic Shares outstanding	138,969,294
Options (AEP <sup>(1)</sup> CA\$1.06)	12,230,738
Warrants (AEP <sup>(1)</sup> CA\$1.02)	5,307,873
Broker Warrants (AEP $^{(1)}$ CA\$1.50)	39,264
Performance Share Units	3,200,436
Restricted Share Units	6,833,151
Fully Diluted	166,580,756

	TSX-V (CA\$)	OTCQX (US\$)
Share Price	\$0.88	\$0.64
Market Cap (\$M)	\$122.3	\$88.9
Average Daily Volume	45,690	37,207

(1) AEP – Average exercise price

# Demand for critical minerals is accelerating



Source: Benchmark Mineral Intelligence

# America's Graphite Crisis

# 100%

U.S. import reliance on China as primary graphite import source

U.S. GEOLOGICAL SURVEY

494%

Expected growth of the graphite market by 2050

WORLD BANK GROUP



of the world's graphite supply comes from China

REUTERS

# 95%

of anode materials in lithium-ion batteries is based on graphite

EUROPEAN CARBON & GRAPHITE ASSOCIATION

2,500%

Expected growth of graphite demand by 2040

JOE BIDEN'S 100-DAY REPORT

15:1

Ratio of graphite to lithium in electric car batteries

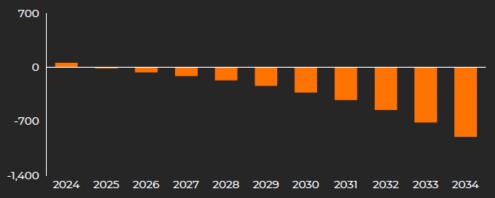
LOMIKO METALS<sup>(1)</sup>

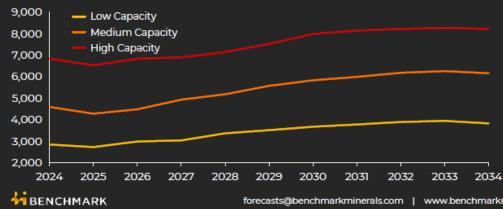
# AAM SUPPLY DEFICIT

Q3 2024 Anode Forecast Report

## Natural AAM supply to face shortage by 2025, supporting upward price movements

Natural AAM Market Balance 2024 - 2034, Unit: kt





Natural AAM Prices 2024 - 2034, Unit: \$/t

- Although the total AAM supply outlook appears robust through 2040, the natural AAM market tells a different story.
- In 2024, the natural AAM market faces a surplus of 57 kt. This surplus. combined with 2023's inventory overhang and lower-than-expected EV sales, has led to falling prices across all grades in 2024; average natural AAM price are forecast to drop by 15% in 2024 from their 2023 levels.
- Another factor contributing to this price drop is the greater decline in synthetic AAM prices, with low and medium capacity grades now priced below their natural counterparts. Historically, this has not been the case, causing many lower tiered Chinese cell makers to shift to using synthetic AAM. This has led to lessened near term demand for natural AAM, driving players to lower prices to remain competitive.
- This trend is likely to persist, resulting in further price declines throughout the year and into H1 2025.
- Following this period, prices are expected to rise due to increasing feedstock costs and a tightening supply situation, with the natural AAM market set to face a deficit of 14 kt in 2025. This upward price trend is forecast to continue in tandem with the escalating feedstock prices and a widening market deficit.
- For instance, natural AAM prices are to average \$4,510/t in 2025 under a 14 kt market deficit. By 2033, the average AAM price is expected to reach \$6,158/t, coinciding with a notable market deficit of 713 kt.

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# Graphite One's Supply Chain Solution

Meet graphite demand and decrease dependency on China



Advance America's largest graphite deposit

- Production of natural graphite from Alaska graphite concentrate
- Graphite Creek is the largest natural flake graphite deposit in the U.S.
- 300+ jobs to be created in rural Alaska
- Foster partnerships
- Community engagement

## Production target – 2030

- PEA 2017 completion
- PFS 2022 completion
- FS Q1 2025 target completion funded by \$37.5 million DoD grant in July 2023



Create America's first advanced anode manufacturing facility

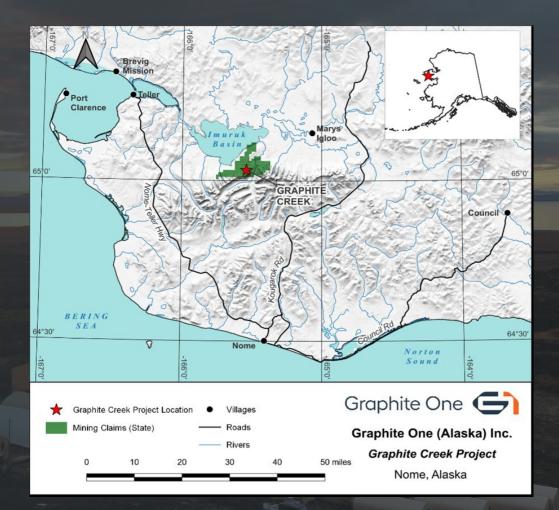
- Plan to produce both natural graphite and artificial graphite anode materials
- 400+ est. high-tech jobs to be created in the U.S.
- Hydro power Clean and renewable energy
- Technology License Agreement (TLA) signed
- G1 to own 100% of Infrastructure and Plant
- Facility engineered to accept used EV batteries for feedstock

### Production target - 2027

• 4,500 TPY to 24,500 TPY expandable to 100,000 TPY

# Graphite Creek – a generational resource

- Supported by the US Government
- Asset is located on 100% state-owned land and supported by the Alaska state government
- Resource is cited as the "largest known graphite deposit in the U.S." by the USGS. Deposit remains open to West, East and down dip.
- PFS was based on a proven and probable reserve that utilized 7% of anomaly's strike length
- Adding 300+ jobs
- Fostering cooperative engagement with local and regional communities





"The largest known graphite deposit in the United States is the Graphite Creek deposit in Alaska where recent industry exploration has identified a measured and indicated resource of more than 10 million metric tons of ore with 7.8 to 8.0 percent graphite."

USGS UPDATES MINERAL DATABASE WITH GRAPHITE DEPOSITS IN THE UNITED STATES

# Graphite One & Ohio's "Voltage Valley" Partnership

## **OHIO & GRAPHITE ONE PARTNERSHIP**

- Graphite comprises 95% of the anode for EVs, and nearly 30% of a typical EV battery by weight. According to Biden Admin., demand for graphite will increase by 2,500% by 2040.
- The US currently imports 100% of natural graphite primarily from China.
- Graphite has not been mined in the US since 1991.
- Graphite Creek in Alaska is the largest natural flake graphite deposit in the US, according to USGS.
- Graphite is designated critical minerals essential to national security and eligible for Department of Defense Defense Production Act Title III funding by President Biden in March of 2022.

### OHIO ANODE MANUFACTURING

- Material will be transported via Port of Nome to still-to-be-built manufacturing facility in Ohio.
- Technology for anode manufacturing does not currently exist in the United States, and without responsible technology transfer, it would take many years to develop.

Meet EV Demand

3-5 Million Tons by 2032

- Both natural and synthetic graphite are needed to create the anode of a lithium battery.
- Facility will be built to incorporate used EV batteries for feedstock.



400 +Est. High Tech American Jobs created

First Anode Manufacturing



Recycled Decrease Dependency on China Materials



Partnership



300 +**Rural Alaska jobs** created



Raw Materials

Facility in the US

LUCID SUPPLY CHAIN AGREEMENT EVENT AT THE U.S. CAPITAL

## The Future of Domestic Critical Mineral Partnerships and the Battery Supply Chain

Congressional Briefing | July 25, 2024

Mary Peltola Representative, Alaska

> Peter Rawlinson CEO, Lucid Motors

Lisa Murkowski Senator, Alaska

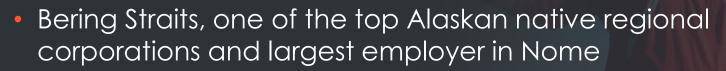
> Anthony Huston CEO, Graphite One

Dan Sullivan Senator, Alaska

> Juan Ciscomani Representative, Arizona

# Strategic Investment from Bering Straits Native Corporation

- Initial Investment of \$2 million and a one-year option to invest an additional \$8.4 million, including exercise of warrants
- Graphite One and Bering Straits to partner on continued regional and community development







**DAN GRAHAM** Chief Executive Officer

"This is not just an investment in Graphite One, it is a long-term investment in our region. We at BSNC have watched for years as Graphite One has worked to advance the Graphite Creek project and become a friendly neighbor in the region.

Graphite One has told us of its intent to develop an environmentally responsible project and provide an exciting economic opportunity for the region that hopefully will play a crucial role in the nation's transition to a clean energy future. This is at the heart of our Board's unanimous support of the project."

# Advanced Anode Manufacturing Facility

## (Warren, Ohio)

## **Financial Economics**

<ul> <li>Annual production</li> </ul>	<u>25,000 tpy</u>	<u>100,000 tpy</u>
<ul> <li>Initial capital<sup>(1)</sup></li> </ul>	\$436 M	\$1,224 M
<ul> <li>Average annual revenue <sup>(2)</sup></li> </ul>	\$236 M	\$ 944 M
<ul> <li>Average annual cost of production</li> </ul>	\$124 M	\$ 496 M
<ul> <li>Average annual operating profit</li> </ul>	\$112 M	\$ 448 M
<ul> <li>Average annual EBITDA</li> </ul>	\$141 M	\$ 530 M

## Catalysts

- Signed technology licensing agreement on October 18, 2024
- Federal government funding (EXIM bank) available

(1) Includes ~25% contingency

(2) Forecast revenue based on long-term Benchmark Minerals real prices, China DDP, inflated ~10% for US market

Ohio Anode Material Manufacturing Plant (AMM)	CAPEX <sup>(1)</sup>
Mid 2027 <ul> <li>Commissioning of AMM finishing and blending plant</li> </ul>	\$76M
<ul> <li>Mid 2028</li> <li>Commissioning of a graphitization plant, production expected at 8,000 tons</li> </ul>	\$150 M
<ul> <li>End of 2029</li> <li>Commissioning of precursor line - 25,000-tonne annual capacity plant</li> </ul>	\$210 M
<ul> <li>End of 2036</li> <li>Targeting 100,000-tonne annual capacity AMM</li> </ul>	\$1,224 M
Annual Capacity 25,000 tonnes 25,000 additional tonnes 50,000 additional tonnes 100,000 total tonnes	\$ 436 M \$ 263 M <u>\$ 525 M</u> \$1,224 M

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# **Onshoring IP Processing Expertise**

- Chenyu Technology License Agreement and Consulting Agreement
  - Experienced anode active material (AAM) manufacturer
  - Strictly fee-for-service
  - No equity, no Board seat and no influence on management or strategy
  - Provide consulting and advisory services in the design, construction, commissioning and operating of an AAM facility

#### About Chenyu

Chenyu is a supplier to several global top EV battery companies with 5 production facilities and annual production capacity of 120,000 TPY. In addition, Chenyu is planning on building an additional 150,000 TPY production facility and has a research and development center for new AAM materials development. Their professional team consists of a chief scientist who has over 200 publications and received over 100 patents and senior AAM experts with 8 to 20 years of senior management and R&D experience in leading AAM companies.

## EXPORT-IMPORT BANK FINANCING – G1 OHIO PRODUCTION PLANT \$325 MILLION NON-BINDING LETTER OF INTEREST

- Financing will facilitate the build-out of our Ohio Anode Active Material Plant
- G1 to submit application in 2025
- Path to Revenue Generation Sale of anode battery materials
   Synthetic Graphite first, followed by Natural Graphite



# **Government Grants**

## Awarded \$37.5 Million DPA Title III Grant

- Awarded a Department of Defense Technology Investment Agreement grant of \$37.5 million Grant under Title III of Defense Production Act, funded through IRA
- Grant to fund accelerated Feasibility Study to modernize and expand domestic production capacity for supply of battery anodes for EVs and alternative energy batteries
- Target Feasibility Study completion date Q1 2025
- Grant covers 75% of the estimated total cost of the Feasibility Study

## Awarded \$4.7 Million from Defense Logistics Agency

- Graphite One receives \$4.7 million contract from Department of Defense's Department Logistics Agency ("DLA") to develop a graphite and graphene-based foam fire suppressant as an alternative to chemical-based (PFAS) fire suppressant materials
- Teaming Agreement with Vorbeck Materials Corp. of Maryland to develop new and safer alternatives for existing PFAS fire-suppressants for the DLA

U.S. Congress passed National Defense Authorization Act to phase out the use of AFFF, subject to limited exceptions, at all military sites by October 1, 2024





# Graphite One

## CONTACT

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