# Graphite One

A U.S.-based Supply Chain Solution to Meet the Tech Sectors' Rising Graphite Demand

#### Forward Looking Statements

This presentation includes certain statements that may be deemed to be forward-looking statements. All statements in this presentation, other than statements of historical facts, are forward-looking statements. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "intent", "intends", "preliminary", "projections", "projected", "trends", "approach", "suggests", "proposed", "expects", "is expected", "scheduled", "estimates", "assumes", "believes", "indicates", 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".

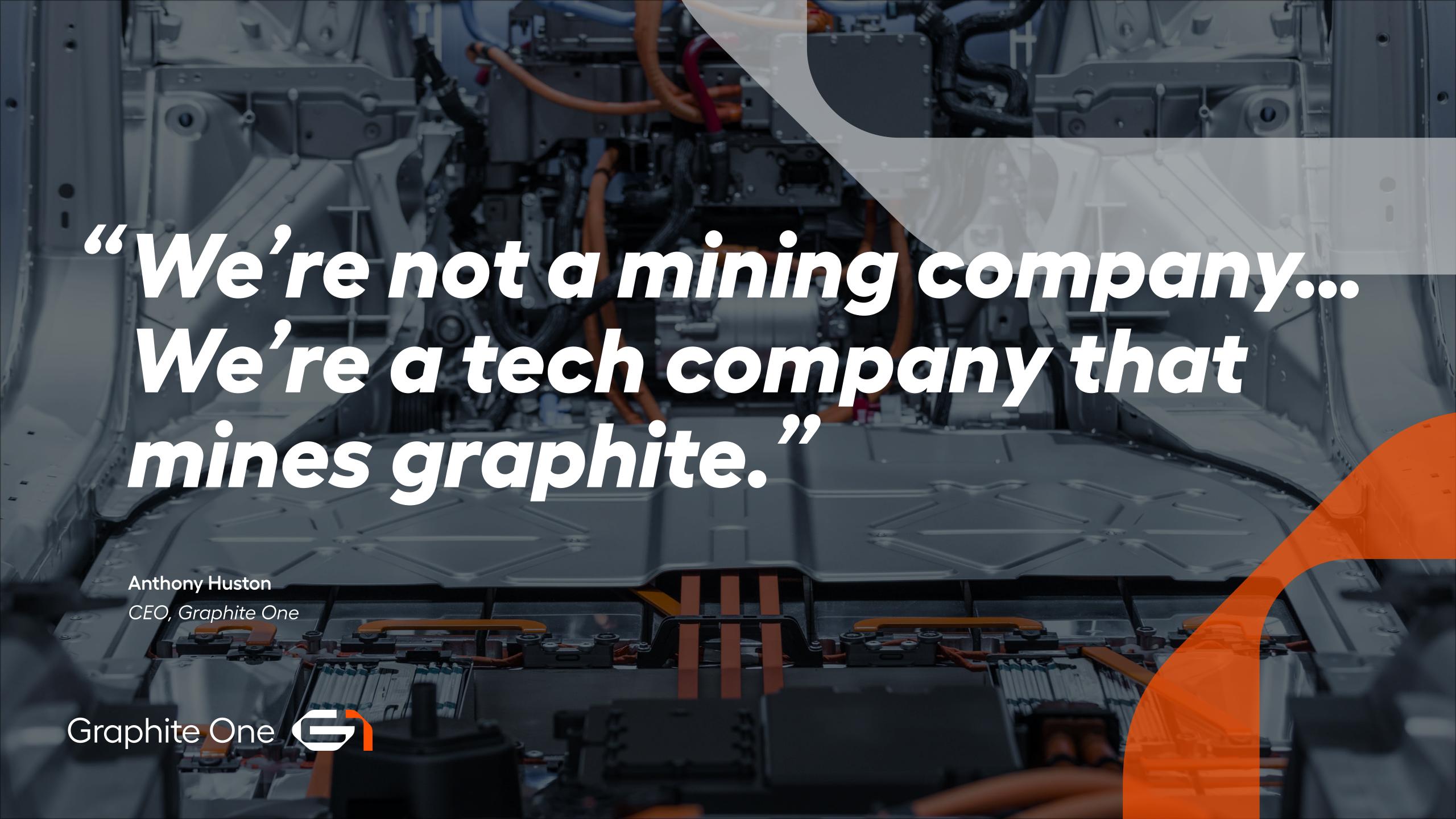
Forward-looking information in this presentation may include, but is not limited to, statements regarding the stage and progress of development of the Graphite One Project including the ability to actually produce spherical graphite and other value-added products, ultimate further and final results of additional test work, estimated capital and sustaining costs and the availability of equipment, labor and resources required, the anticipated applications of graphite in high-tech, clean tech, energy storage and national security applications and all other anticipated applications, market demand and ability to transport and enter into such markets, successful completion of the Pre-Feasibility Study and a subsequent Feasibility Study, successful completion of the 2021 Field Program, assessment of the results from the 2021 Field Program, the ability to produce new potential source of advanced graphite products, are all forward-looking statements. 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: (i) volatile stock price, (ii) the results of the product development test work may not be indicative of the advancement of the project as anticipated, or at all, (iii) market prices, (iv) exploitation and exploration successes, (v) continuity of mineralization, (vi) uncertainties related to the ability to obtain necessary permits, licenses and title and delays due to third party opposition, (vii) changes in government policies regarding mining and natural resource exploration and exploitation, (viii) competition faced in securing experienced personnel, access to adequate infrastructure and equipment to support mining, processing, development and product manufacturing activities, a

Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in 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 <a href="https://www.sedar.com">www.sedar.com</a>.

#### **Qualified Person Statement**

Mr. William T. Ellis, P. Geo. and Vice President of Alaska Earth Sciences Inc., has reviewed and verified the scientific and technical information contained in this presentation. Unless otherwise indicated, Mr. Ellis is a Qualified Person within the meaning of National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and an independent consultant to Graphite One Inc. For details of the Graphite One Project, including the quality assurance programs and quality control measures applied and key assumptions, parameters and methods used to estimate the mineral resource set forth in this website for the Company's Project, please refer to the NI 43-101 Technical Report entitled 2019 NI 43-101 Mineral Resource Update for Graphite Creek, Seward Peninsula, Alaska USA, prepared for Graphite One Inc. by Natalie King, Alaska Earth Sciences, Inc., Chris Valorose, Valorose Consulting, Inc. and William Ellis, P. Geol., Alaska Earth Sciences, Inc. dated May 2, 2019, available on the Company's profile at sedar.com.





Graphite One Inc. has defined North America's largest high-quality graphite deposit — Graphite Creek, situated on the Seward Peninsula, about 60 kilometers (37 miles) north of Nome. Graphite Creek is projected to be a long-life source of supply for the proposed second link in Graphite One's advanced graphite materials supply chain — the Company's advanced material manufacturing plant.

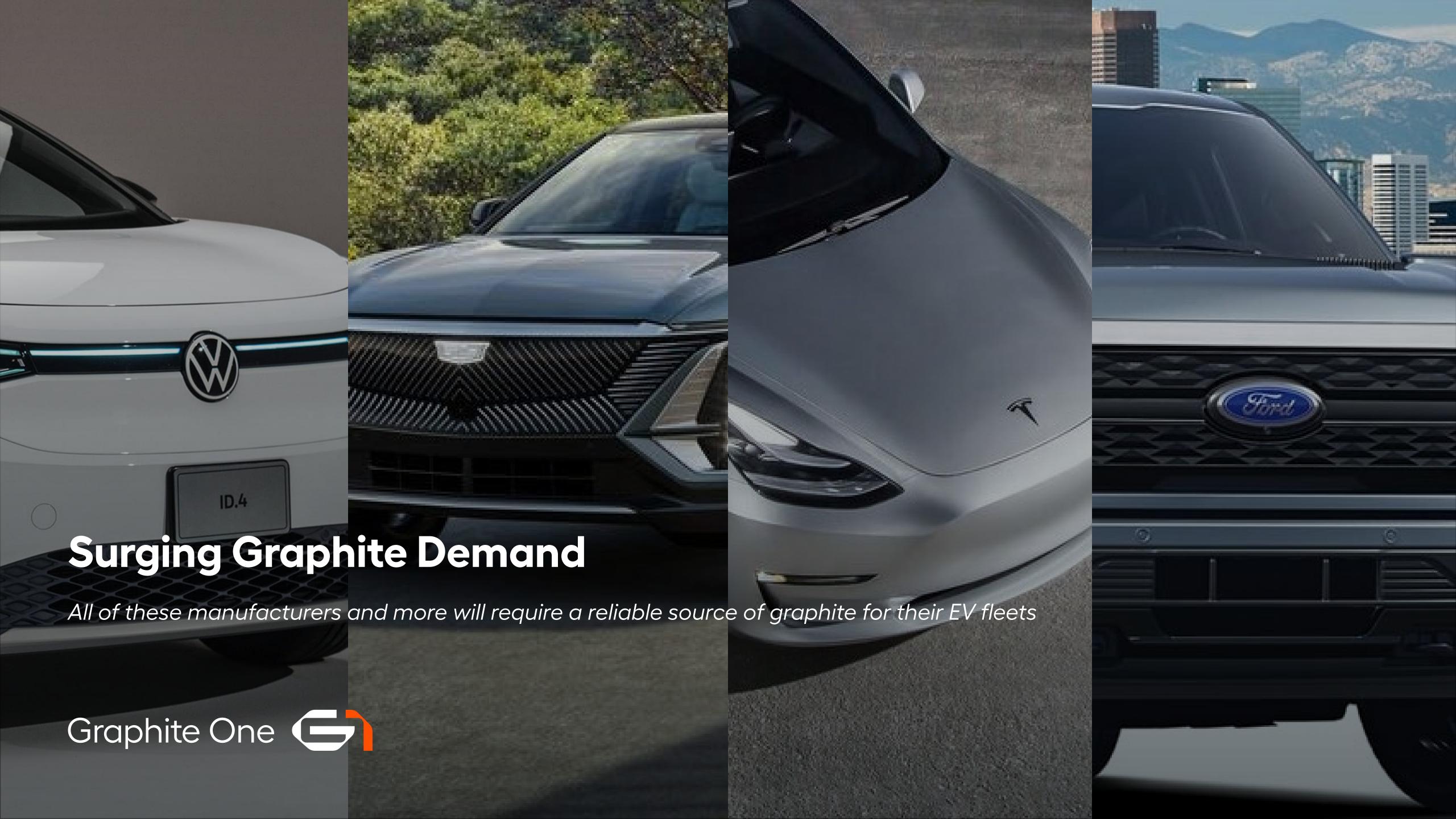


## From Mine to Material Manufacturing

With its vertically-integrated approach from mine to material manufacturing, Graphite One's intent is to produce high-grade anode material for the lithium-ion Electric Vehicle battery market and Energy Storage Systems, with additional production for a range of value-added graphite applications.







#### **Trends & Projections**

4947 GROWTH

Projected Graphite Demand by 2050

- World Bank Group, 2020

105X HIGHER

Paris Accord Graphite Supply Target by 2040

- IEA Report, 2020





# 83,000 METRIC TON SHORTFALL

U.S. DEPARTMENT OF DEFENSE REPORTED GRAPHITE SHORTFALL FOR CONFLICT SCENARIO

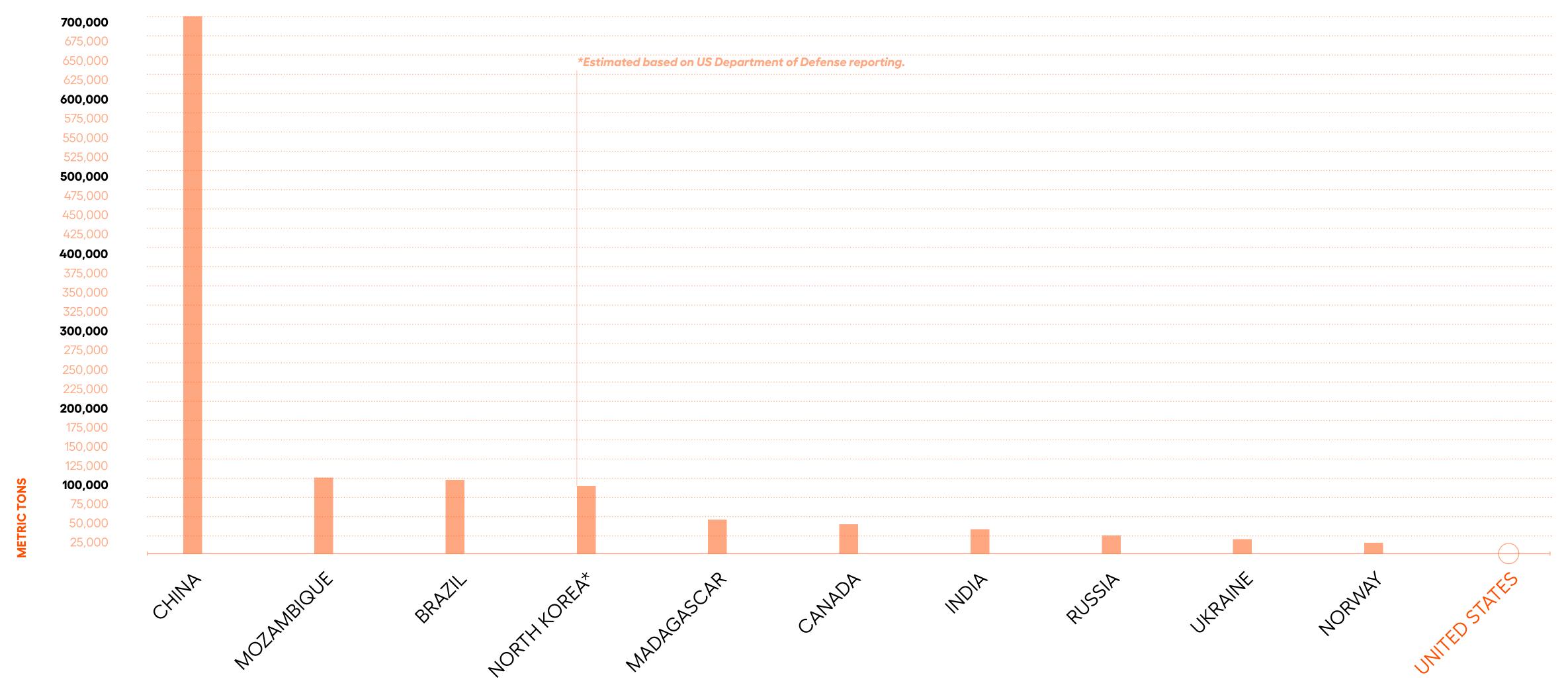
\*National Defense Stockpile Requirements Report, October 2021

"Without these materials, history shows that industrialized nations have been compelled to make performance trade-offs..., which contributed to their defeat on the battlefield."

White House Report on Supply Chains
June 2021



### **Natural Graphite Production 2020**



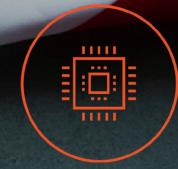


## Critical Industry Risks

U.S. Technology Manufacturing Sector

> U.S. Renewable Energy Transition

> > U.S. National Security











# 55,340 METRIC TONS

#### **Graphite One Project's Proposed Annual Production**

41,840 MT Coated Spherical Graphite 13,500 MT Graphite Powder

In 2020, the United States imported 58,000 metric tons of natural graphite to meet demand – an amount nearly equal to Graphite One's projected annual production.

The Property consists of 176 mining claims covering 9,583 hectares (23,680 acres) and is comprised of:

- One hundred and thirty-five State of Alaska state mining claims; and,
- Forty-one State selected mining claims.





Graphite One's intent is to produce and process graphite concentrate into Coated Spherical Graphite for use in lithium-ion batteries – including EV Batteries. The Company intends to produce other forms of advanced graphite for industrial and technology manufacturing. Preliminary test work suggests that STAX Graphite could be well-suited for processing into high-purity nuclear-grade graphite, fire suppressant graphite foam, and industrial diamonds for next-gen semiconductor substrates.

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#### Financials

# S1.9B NPV pre-tax

- Pre-tax net present value of \$1.93 billion
- Post-tax net present value of \$1.36 billion before accounting for tax credits enacted by the U.S. Inflation Reduction Act of 2022, effective December 31, 2022

# 26% IRR pre-tax

- Pre-tax 26% internal rate of return (8% discount rate) with a payback period of 4.6 years
- Post-tax internal rate of return of 22% (8% discount rate) and a payback period of 5.1 years, before accounting for tax credits enacted by the U.S. Inflation Reduction Act of 2022, effective December 31, 2022

# 26-Vear Project life

- The PFS assumes the STP's operational life is 26 years based on its startup with purchased graphite and continued operation with graphite from the Mine
- The average production over 26 years in the PFS is 75,026 tonnes of advanced graphite products per year
- Project life based on exploration of 1 square km area of 16 km deposit

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## **Share Structure**

	87,823,611	SHARES OUTSTANDING
	8,352,429	OPTIONS
	28,849,537	WARRANTS
	264,601	BROKER WARRANTS
	125,290,263	FULLY DILUTED
\$~104,000,000 CDN	\$~79,00,000 USD	MARKET CAP
36,170 CDN	41,071 USD	AVG DAILY VOL.



As of August 18, 2022 • TSX-V: GPH•OTCQX: GPHOF



#### Management

#### **Anthony Huston**

President and CEO + Director

Anthony Huston is a successful entrepreneur with a background in the tech sector, business development and finance. Having served as Managing Partner in both public and private companies, he has played an integral role in raising more than \$150 million in his career. Mr. Huston has served as an advisor on financial and acquisition transactions in industries ranging from the resource sector and real estate development to bio-technology and information technology.

#### Doug Smith, B.Sc.EE, P.Eng., ICD.D

Executive Chair + Director, Chair, Audit Committee

Mr. Smith has over 35 years of experience in the international coal industry as a senior executive and corporate director. He was General Manager of Xstrata Coal Canada from mid-2011 to mid-2013 following Xstrata Coal's purchase of First Coal Corporation in 2011. As President, CEO and Director of First Coal since May 2007 Mr. Smith raised over \$50 million in equity and directed its sale to Xstrata. For the preceding twelve years, Mr. Smith served as President and Director of Andalex Resources Inc., a private U.S. coal company, until he successfully directed its sale in 2006.

#### Gordon Jang, CPA, CMA

Chief Financial Officer

Mr. Jang has over 25 years of experience in senior management roles with mid-to-large mining companies. He has a wealth of expertise in capital markets, M&A, SOX compliance, external financial reporting, corporate restructuring, cost analysis and process improvements. Mr. Jang was previously the Vice-President of Finance and Accounting at Fortuna Silver Mines, and prior to that, has held senior positions at Augusta Resources, Lundin Mining and Pan American Silver.



#### Management

#### Mike Schaffner

Senior Vice President, Mining Operations

Prior to joining G1, Mr. Schaffner worked at Ambler Mining, where he oversaw engineering work for the Ambler pre-feasibility study and managed the metallurgical test work program for the company's drilling program. He joined Ambler after 15 years with Newmont Mining, rising through positions of increasing responsibility to the level of General Manager at the Carlin Gold Mine, Cripple Creek and Victor Mines,

Mr. Schaffner's operations are three-time winners of the National Mining Association's Sentinels of Safety award, recognizing the U.S.'s safest mines for continuous injury-free operations. He holds two patents related to bio-oxidation heap leaching.

#### Zhengli (Andrew) Tan, M.SC.E

Director, Graphite Products Manufacturing

Mr. Tan has been an independent consultant to the carbon and graphite materials industry for the past eight years, with particular emphasis on manufacturing graphite anode materials and other advanced graphite products. He has over two decades of industry experience, including as General Manager of SGL Carbon Group's graphite foil manufacturing plant in China and having held several technical positions in the industry in the United States and Canada.

#### Brian Flanigan, B.S., M.S., CPG

Chief Geologist

Mr. Flanigan is a mineral exploration and mining geology expert with more than 25 years of experience in Alaska and Yukon Canada. He is published in scientific journals as author or coauthor and recognized as one of the pioneers in conceptualizing and defining the Tintina Mineral Belt. He has used his extensive experience, knowledge, and skillset to inspire, mentor, and achieve results normally considered out of reach. Brian earned a Bachelor of Science degree in Solid Earth Sciences from Purdue University-West Lafayette and a Master of Science degree in Economic Geology from the University of Alaska-Fairbanks. He is a Certified Professional Geologist registered with the American Institute of Professional Geologists.



# Strong Alaskan Support

Graphite One has strong support from the Alaska federal delegation.

"Graphite Creek is the largest deposit of graphite in the Nation, and would be a superior domestic supply of this critical mineral, which is necessary for modern batteries, renewable energy technology, and many other high-tech uses."

The Honorable Mike Dunleavy
Governor of Alaska, October 2019

Graphite One

## A High-Priority Infrastructure Project

Alaska Governor Mike Dunleavy nominated Graphite One project as a High-Priority Infrastructure Project in October 2019.

The nomination entitled Graphite One to put its project before the Federal Permitting Improvement Steering Council (FPISC), which assesses projects against 9 "covered sectors" under the Fixing America's Surface Transportation Act (FAST Act), signed into law Dec. 4, 2015 by President Obama. Graphite One's project was found to qualify under both the "renewable energy" and "manufacturing" sectors — which demonstrates the versatility of natural graphite.

The Dashboard ensures that federal permitting agencies coordinate their project review authorities, resulting in a more efficient process, with more transparency for state agencies and the public. FPISC designation does not remove any of the environmental standards or permitting requirements necessary for the Graphite One project. FPISC designation enhances and illuminates Graphite One's ongoing commitment to local stakeholders for a transparent and thorough permitting process.



## Work Program: Complete PFS & 2021 FIELD PROGRAM

With additional funding completed in February 2021, work on the PFS resumed in March 2021. Metallurgical test work was completed. Design of the mine, mine facilities and infrastructure, primary processing and infrastructure, and secondary (product) processing and infrastructure is ongoing and in the final review stage. The PFS report is progressing with release of final results expected to be in Q4 2021. Project updates to local communities and interaction with our Subsistence Advisory Council are ongoing.

The 2021 summer field program was carried out to collect information for the planned Feasibility Study ("FS"). The Field Program included infill and step out core drilling in the resource area and additional core and sonic drilling for geotechnical data collection in the proposed mill site and dry tailings/waste rock storage areas. Other work included access route engineering, surface water and groundwater hydrology studies, wetlands mapping and aquatic life surveys. A total of 2,052 meters were drilled during the 2021 program including 1,695 meters of HQ core drilling and 357 meters of sonic drilling. Results from 8-hole core holes completed in the resource area are expected to be released in Q1 2022 when data analysis is completed. Additional core drilling was completed to collect detailed geotechnical information for open pit and mill site engineering, and for groundwater investigations. The 5 sonic holes completed in the dry tailings/waste rock storage area will provide detailed geotechnical information to advance the engineering of these facilities. The drill program will generate additional information to update the resource model and provide technical data for the FS expected to be initiated in 2022. The field program began in June and was substantially completed in mid-October.



# The Right Time for Graphite One

- Demand rapidly rising
- U.S. currently 100% import-dependent
- Renewable Energy / Tech Manufacturing / National Security all depend on reliable graphite supply chain



tech materials
for global ingenuity.



Anthony Huston,

President, CEO + Director

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