NOUVEAU MONDE GRAPHITE

# GREEN BATTERY MATERIALS TO POWER THE CLEAN ENERGY TRANSITION

High-Purity, Carbon-Neutral Anode Material – Vertically Integrated In North America

May 2023

# CAUTIONARY STATEMENTS REGARDING FORWARD LOOKING INFORMATION

This presentation contains forward-looking information and forward-looking statements (collectively, "forward-looking statements"), which relate to future events or future performance and reflect management's expectations and assumptions regarding Nouveau Monde Graphite Inc.'s (the "Company" or "NMG") growth, results, performance and business prospects and opportunities. Such forward-looking statements reflect management's current beliefs and are based on information currently available to it. In some cases, forward-looking statements can be identified by words such as "may", "would", "could", "will", "should", "expect", "intend", "aim", "attempt", "anticipate", "believe", "study", "target", "estimate", "forecast", "predict", "outlook", "mission", "aspire", "plan", "schedule", "potential", "progress" or the negative of these terms or other similar expressions concerning matters that are not historical facts. In particular, statements regarding the Company's future results, the intended construction and commissioning timeline of the Company's Matawinie mine (the "Matawinie Mine"), commercial value-added graphite products transformation plant (the "Bécancour Battery Material Plant"), the potential development of the Uatnan mining project (the "Uatnan Mining Project"), results of the preliminary economic study and feasibility study, the Company's projected capital and operating expenditures, the Company's intented marketing strategy, the projected annual production of the Company Phase-2 and Phase-3 operations, the intended electrification strategy and its intended results and benefits, the potential results and benefits of the Company's proprietary technologies, the timelines and costs related to the various initiatives, deliverables and milestones described in this presentation and their expected results, the Company's expected financial and operational performance, future demand for batteries and electric vehicles, the objective of developing the largest fully integrated natural graphite operation in North America, the production of carbon neutral material, the future outlook, corporate development and strategy of the Company, Mineral Resource and Mineral Reserve estimates (including assumptions and estimates used in preparing same), the Company's development activities and production plans, the general business and operational outlook of the Company, the Company's future growth and business prospects, the Company's ESG commitments, initiatives and goals, market trends, the economic performance and product development efforts, the Company's goals and objectives, the government regulation of mining operations, environmental regulation and compliance, the realization of the expected economics of the construction and operation of the Matawinie Mine project, the Bécancour Battery Material Plant project and the Uatnan Mining Project, the ability to obtain sufficient financing and the permitting required for the development of the Matawinie Mine project, the Bécancour Battery Material Plant project and the Uatnan Mining Project, the initiatives described in this presentation, as well as the Company's achievement of milestones, including the ability to obtain sufficient financing for the Matawinie Mine project, the Bécancour Battery Material Plant project and the Uatnan Mining Project, are or involve forward-looking statements.

Forward-looking statements are based on assumptions management believes to be reasonable, including but not limited to: general business and economic conditions; there being no direct operational impacts resulting from infectious diseases or pandemics such as the ongoing COVID-19; the limited financial resources available to the Company, the uncertainty regarding regional and global financial stability; the outbreak of war between Russia and Ukraine; the dependence of the Company's operations on an uninterrupted supply of production inputs, and other supplies and resources; the supply and demand for, deliveries of, and the level and volatility of prices for graphite products; the speculative nature of mineral exploration and development; changes in mineral production performance, exploitation and exploration successes; the risk that exploration data may be incomplete and additional work may be required to complete further evaluation, including but not limited to drilling, engineering, and socioeconomic studies and investment; the timing of the receipt of necessary regulatory and governmental permits and approvals for the Matawinie Mine project, Bécancour Battery Material Plant project and Uatnan Mining Project; the availability of financing for the Company's development of its properties and construction of its facilities and installations on reasonable terms; the ability to procure equipment and operating supplies in sufficient quantities and on a timely basis; increased costs, delays, suspensions and technical challenges associated with the development of the Matawinie Property, the Bécancour Battery Material Plant project and Uatnan Mining Project; the ability to attract and retain skilled staff; development and production timetables; competition and market risks; pricing pressures; the accuracy of the Company's mineral resource and mineral reserve estimates (including, with respect to size, grade and recoverability) as well as the geological, operational and price assumptions on which they are based; the fact that certain business improvement initiatives are still in the early stages of evaluation, and additional engineering and other analysis is required to fully assess their impact; the fact that certain of the initiatives described in this presentation are still in the early stages and may not materialize; business continuity and crisis management; current technological trends; the business relationship between the Company and its stakeholders; the ability to operate in a safe and effective manner; the timely delivery and installation of the equipment supporting the production; the development of the Uatnan Mining Project, the Company's business prospects, opportunities and estimates of the operational performance of the equipment; and such other assumptions and factors as set out in this presentation.

Forward-looking statements are subject to known or unknown risks and uncertainties that may cause actual results to differ materially from those anticipated or implied in the forward-looking statements. Risk factors that could cause actual results or events to differ materially from current expectations include, among others, delays in the scheduled delivery times of the equipment, the ability of the Company to successfully implement its strategic initiatives and whether such strategic initiatives will yield the expected benefits, the availability of financing or financing on favorable terms for the Company, the dependence on commodity prices, the impact of inflation on costs, the risks of obtaining the necessary permits, the operating performance of the Company's assets and businesses, competitive factors in the graphite mining and production industry, changes in laws and regulations affecting the Company's businesses, political and social acceptability risk, environmental regulation risk, currency and exchange rate risk, technological developments, the impacts of the global COVID-19 pandemic and the governments' responses thereto, and general economic conditions, as well as earnings, capital expenditure, cash flow and capital structure risks and general business risks. A further description of risks and uncertainties can be found in the Company's latest Annual Information Form, including in the section thereof captioned "Risk Factors", which is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. Unpredictable or unknown factors not discussed in this Cautionary Note could also have material adverse effects on forward-looking statements.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that may cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking statements. **The Company does not undertake to update or revise any forward looking statements that is included in this presentation, whether as a result of new information, future events or otherwise, except in accordance with applicable securities laws.**

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction.

# MARKET AND INDUSTRY DATA

Market and industry data presented throughout this presentation was obtained from third party sources and industry reports, publications, websites and other publicly available information. The Company believes that the market and industry data presented throughout this presentation is accurate as of the date of publication, but there can be no assurance as to the accuracy or completeness thereof. The accuracy and completeness of the market and industry data presented throughout this presentation are not guaranteed and the Company does not make any representation as to the accuracy of such data. Actual outcomes may vary materially from those forecast in such reports or publications, and the prospect for material variation can be expected to increase as the length of the forecast period increases. Although the Company believes it to be reliable as of the date of publication, the Company has not independently verified any of the data from third-party sources referred to in this presentation, analyzed or verified the underlying studies or surveys relied upon or referred to by such sources, or ascertained the underlying market, economic and other assumptions relied upon by such sources. Market and industry data are subject to variations and cannot be verified due to limits on the availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. In addition, certain of these publications, studies and reports were published before COVID-19 and therefore do not reflect any impact of COVID -19 on any specific market of globally.

# CAUTIONARY NOTE TO UNITED STATES INVESTORS

Disclosure regarding Mineral Reserve and Mineral Resource estimates included in this presentation were prepared in accordance with Regulation 43-101 respecting Standards of Disclosure for Mineral Projects (“NI 43-101”). This presentation use the terms “Pre-Feasibility Study,” “Feasibility Study,” “Mineral Resource,” “Inferred Mineral Resource,” “Indicated Mineral Resource,” “Measured Mineral Resource,” “Mineral Reserve,” “Probable Mineral Reserve,” and “Proven Mineral Reserve” in connection with the presentation of resources, as each of these terms is defined in accordance with the CIM Definition Standards on Mineral Resources and Reserves adopted by the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Council (the “CIM Definition Standards”), as required by NI 43-101. Unless otherwise indicated, all reserve and resource estimates contained in this presentation have been prepared in accordance with the CIM Definition Standards, as required by NI 43-101.

NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 differs significantly from the disclosure requirements of the U.S. Securities and Exchange Commission (the “SEC”) generally applicable to U.S. companies. For example, the terms “mineral reserve”, “proven mineral reserve”, “probable mineral reserve”, “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are defined in NI 43-101. These definitions differ from the definitions in the disclosure requirements promulgated by the SEC. Accordingly, information contained in this presentation will not be comparable to similar information made public by U.S. companies reporting pursuant to SEC disclosure requirements.

# SCIENTIFIC AND TECHNICAL INFORMATION

Scientific and technical information presented in this presentation was reviewed and approved by André Allaire, P.Eng. (BBA), Yann Camus, P.Eng. (SGS Geological Services), Jeffrey Cassoff, P.Eng. (BBA), Claude Duplessis (GoldMinds Geoservices), and Merouane Rachidi, P.Geo. (GoldMinds Geoservices), Qualified Persons as defined under NI 43-101. The Mineral Resource and Mineral Reserve estimates contained in this presentation have been prepared in accordance with the requirements of securities laws in effect in Canada, including NI 43-101, which governs Canadian securities law disclosure requirements for mineral properties.

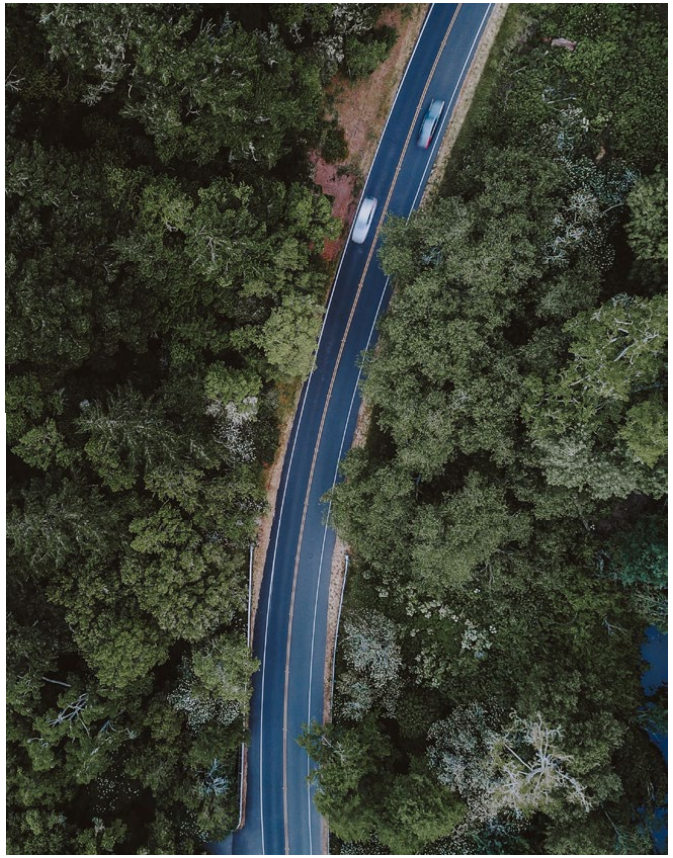
# POWERING THE CLEAN ENERGY TRANSITION

# + THE DRIVERS OF THE CLEAN ENERGY MEGATREND

- Governments globally are phasing out sales of new internal combustion vehicles
- EV sales expected to reach 21M units by 2025[1]

**29%**

**ELECTRIC VEHICLES 10 YEAR CAGR**



**41%**

**STATIONARY ENERGY STORAGE 10 YEAR CAGR**

"Electricity to grow twice as fast as overall energy growth demand"

– IEA

"Post 2035, more than 50% of power generation will be renewable"

– McKinsey

**THE ENERGY STORAGE REVOLUTION WILL DRIVE EXPONENTIAL GROWTH IN BATTERY MATERIAL DEMAND… IN EXCESS OF 25X OVER THE NEXT DECADE**

*Sources: Benchmark Mineral Intelligence, McKinsey's Metal Mining Constraints on the Electric Mobility Horizon report , Rho Motion*
*1 BloombergNEF's (BNEF) Long-Term Electric Vehicle Outlook, June 2022*

# A SUSTAINABLE SOURCE OF BATTERY MATERIAL TO MEET RAPIDLY GROWING DEMAND

- "Electrification of Everything" and electric vehicle (EV) adoption driving exponential demand growth for natural graphite anode material
- North America's largest and most advanced operation providing a localized and carbon-neutral alternative to Chinese supply
- Tier-1 operating jurisdiction, with access to exceptional infrastructure and low-cost hydroelectricity
- De-risked development plan through ongoing operation of demonstration plants and ongoing stakeholder engagement
- Scaled growth beyond that supported by vertically-integrated high-purity natural graphite operations
- Committed to industry leading ESG principles, sustainable and carbon-neutral development
- An experienced and diverse global team of 100+ professionals has been assembled to execute our vision

# + VERTICAL INTEGRATION TO DELIVER LITHIUM-ION BATTERY ACTIVE ANODE MATERIAL

**Integrated Anode Material Producer**

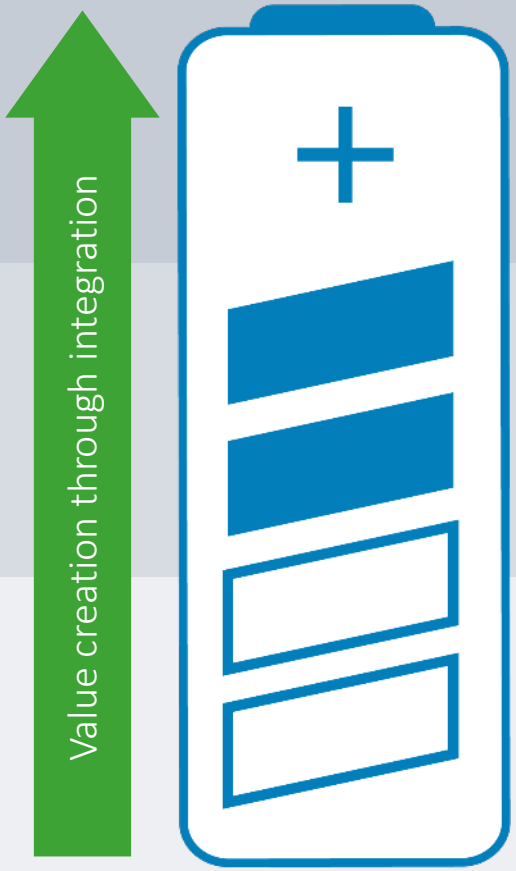
- Planned to become the **North America's largest and fully integrated lithium-ion battery anode material producer**
- **Carbon neutrality** across its entire production value chain – "green" operations, driven by renewable hydropower, with full traceability
- A local, turnkey alternative to Chinese production, at the market's doorstep

**Value-Added Conversion Facility**

- Shaping to a variety of customers' specs
- **Green proprietary purification**, hydrofluoric-free
- Coating for optimal battery performance

**Mining and Concentration Operations**

- **Large, quality deposits with capacity to expand** yielding high-purity flake concentrate
- Advanced electrification strategy and responsible mining practices
- Low-cost operations in a tier-1 jurisdiction



# + PLANNED TO BE NORTH AMERICA'S LARGEST INTEGRATED NATURAL GRAPHITE PRODUCER

## MATAWINIE

### MINE & CONCENTRATOR

**High-purity flake graphite**

Mine and concentrator to produce **103 ktpa of high-purity flake** concentrate

Advanced strategy to become the **world's first all-electric open-pit mine** for carbon-neutral operations – underpinned by renewable hydropower

**25-year life of mine**, with the scale to expand

## BÉCANCOUR

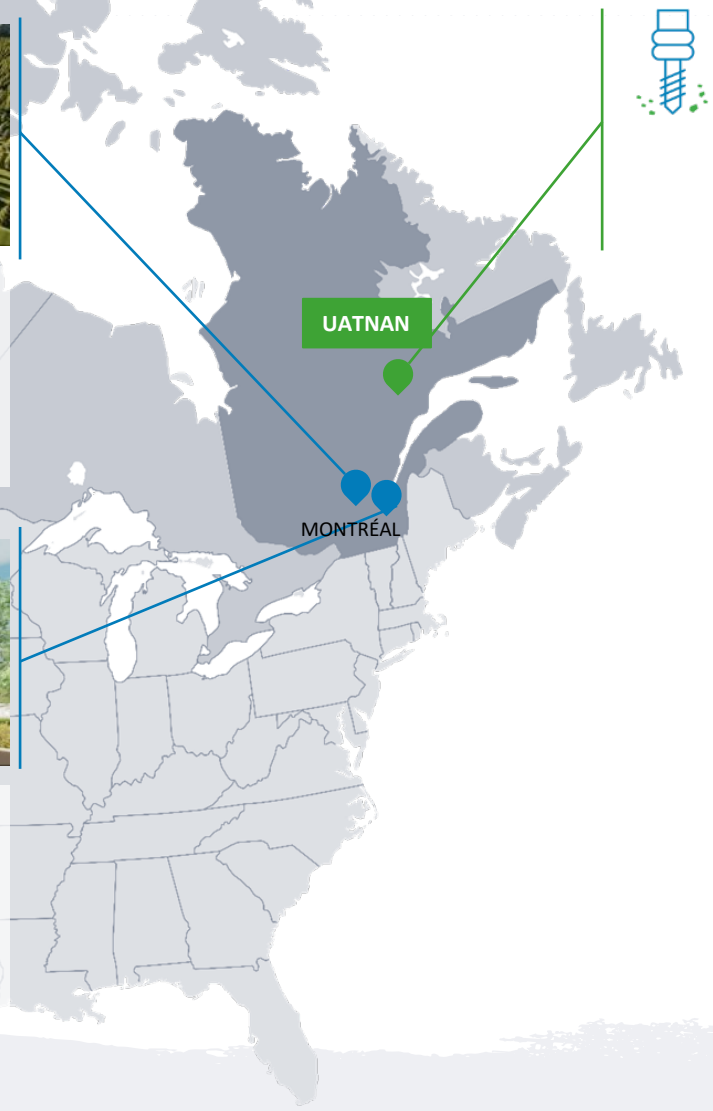
### BATTERY MATERIAL PLANT

**Active anode material & more**

Beneficiation of graphite concentrate from Matawinie to be transformed into approximately **46 ktpa of active anode material and specialty products**

**Short road transport** (150 km) from the Matawinie Mine to the Bécancour Battery Material Plant

**Modular design** to allow for scalable expansion as the market grows




## UATNAN

### MINE & CONCENTRATOR

**Large volume production of flake graphite concentrate**

Mine and concentrator to produce **500 ktpa of flake** concentrate

Onsite extraction and concentration operations to optimize production efficiency, limit transportation and reduce environmental impact

**24-year life of mine**

Projected to become the **largest natural graphite production in the world**

After-tax IRR of 25.9% and an 8% discount rate NPV of C$ 2,173 million

ESG standards reflected into the mining project design

# + THE POTENTIAL EVOLUTION OF NMG AS A GLOBAL ANODE MATERIAL LEADER

**OUR PLAN**
PHASE 1

**2017-2022**
**"DE-RISKING"**

- Demonstration facilities for fully-integrated operations
- ~2 ktpa of anode material
- Product qualification

**OUR GOAL**
PHASE 2

**2023-2025**
**EXECUTION**

- Matawinie Mine: ~103 ktpa of **high-purity flake graphite**
- Bécancour Battery Material Plant: ~46 ktpa of **anode material** and purified jumbo flake
- Offtake with **Panasonic Energy** for active anode material

**OUR VISION**
PHASE 3

**2025+**
**GROWTH**

- Develop the Uatnan Mining Project (Lac Guéret deposit) for a targeted production of **500 ktpa of flake graphite concentrate** [1]
- Expand Bécancour Battery Material Plant for anode material production and/or
- Build and commission U.S. & European anode material facilities

A leading supplier of "green" anode material for the lithium-ion battery industry

[1] *Based on potential option and joint venture agreement with Mason Graphite that could be exercised if conditions are met (joint press release, May 16, 2022)*

# + ESG PRINCIPLES EMBEDDED IN THE BUSINESS MODEL

## Zero-Harm Philosophy

Health, safety, and environmental stewardship come first

- 0 OSHA Recordable Incident Rate[1]
- 0 environmental incidents[1]

## Responsible Mining

Developing the mine of the future

- Progressive land management via innovative tailings co-disposal and gradual backfilling
- All-electric fleet powered by hydroelectricity
- Water and biodiversity protection
- Ecoengineering of facilities and life of mine

## Driving the Transition to a Green Future

Efforts and partnerships for greater impact

- R&D targeting the next generation of battery materials with the smallest footprint
- Fostering synergy with other industries for a circular economy
- Promotion of sustainability through our value chain

## Leadership in Action

Governance and accountability

- Experienced and international Board guiding the disciplined development of the business
- Commitment to the Paris Agreement, TCFD, UN Global Compact and the UN SDGs
- Disclosure as per GRI and SASB standards providing ESG metrics and transparency
- Fostering diversity and inclusion; 29% of women in Company[1]

## SUSTAINABILITY RATING

MOODY'S | ESG Solutions

A2

## Partnered Development

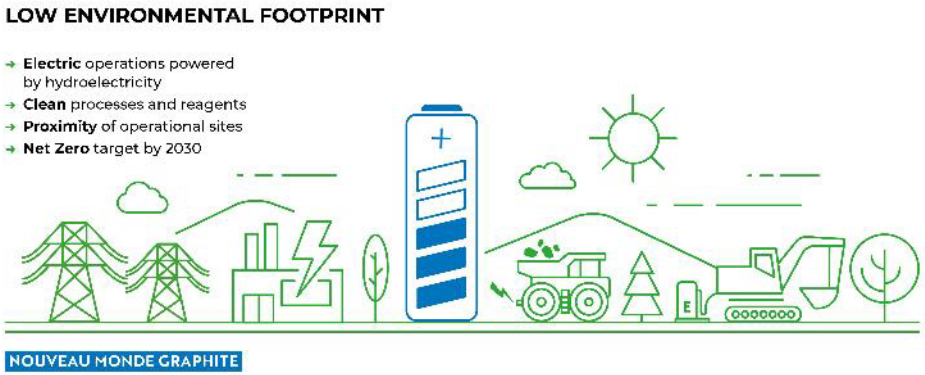
Active engagement with First Nations and communities

- Promotion of Indigenous participation and shared perspective
- Collaboration and benefit sharing agreement with the local community for job creation, skills training and community development
- Extensive stakeholder consultation

1 *As at March 31, 2023*

# + CARBON NEUTRAL YESTERDAY, TODAY AND TOMORROW TO SUPPORT GLOBAL DECARBONIZATION

- Historical **carbon neutrality secured** and climate action plan to transition to **Net Zero by 2030**
- **All-electric open-pit mine and processing facilities underpinned by clean hydroelectricity**
  - Partnership with Caterpillar to constitute a zero-emission fleet for the Matawinie mine
  - Dedicated low-cost (~C$0.04/KWh[1]) hydroelectricity line for the mine – better for the environment and highly economic
- **Proprietary anode material purification process** to reduce energy and harmful chemical consumption – de-risked through demonstration operations
  - Hydrofluoric acid-free ecotechnology submitted for patent
- **Partnership with world-class research centres** and strategic advisors to be at forefront of technology advancements and continually improve the environmental footprint of products
- Testing **traceability** parameters as part of the Global Battery Alliance's Battery Passport to help shape a responsible battery value chain
- Collaboration on **battery recycling to support graphite circularity**


(1) *Hydro-Quebec Industrial Rate L- Industrial rate for large-power customers*

# + INDUSTRY-LEADING CLIMATE CHANGE IMPACT

| Extraction and concentration | Advanced manufacturing | GWP (kg $CO_2$ eq per kg) |
|---|---|---|
| China | China | 14.1 |
| Mozambique | U.S. | 6.1 |
| Sweden | Sweden | 3.1 |

*Streamlined Life Cycle Assessment Study of Global Anode Grade Natural Graphite Manufacturing, Minviro, March 2022.*

| Synthetic graphite production | GWP (kg $CO_2$ eq per kg) |
|---|---|
| Industry range | 24 to 40 |

*Industry data compiled through private sources.*

**GWP of NMG's CSPG**
(kg $CO_2$ eq per kg)

1.23

*LCA of Natural Graphite-Based Products Manufactured by NMG, CT Consultant, July 2022.*

- Cradle-to-gate ISO-compliant life cycle assessment verified by 3rd party
- Hydroelectricty leveraged at mining and processing sites
  - Main energy source
  - All-electric mining fleet
  - Purification proprietary technology
  - $CO_2$ emission factor representing 0.30% of regional average of electricity utilities[1]
- Cleaner processes and reagents
- Close-by operational sites

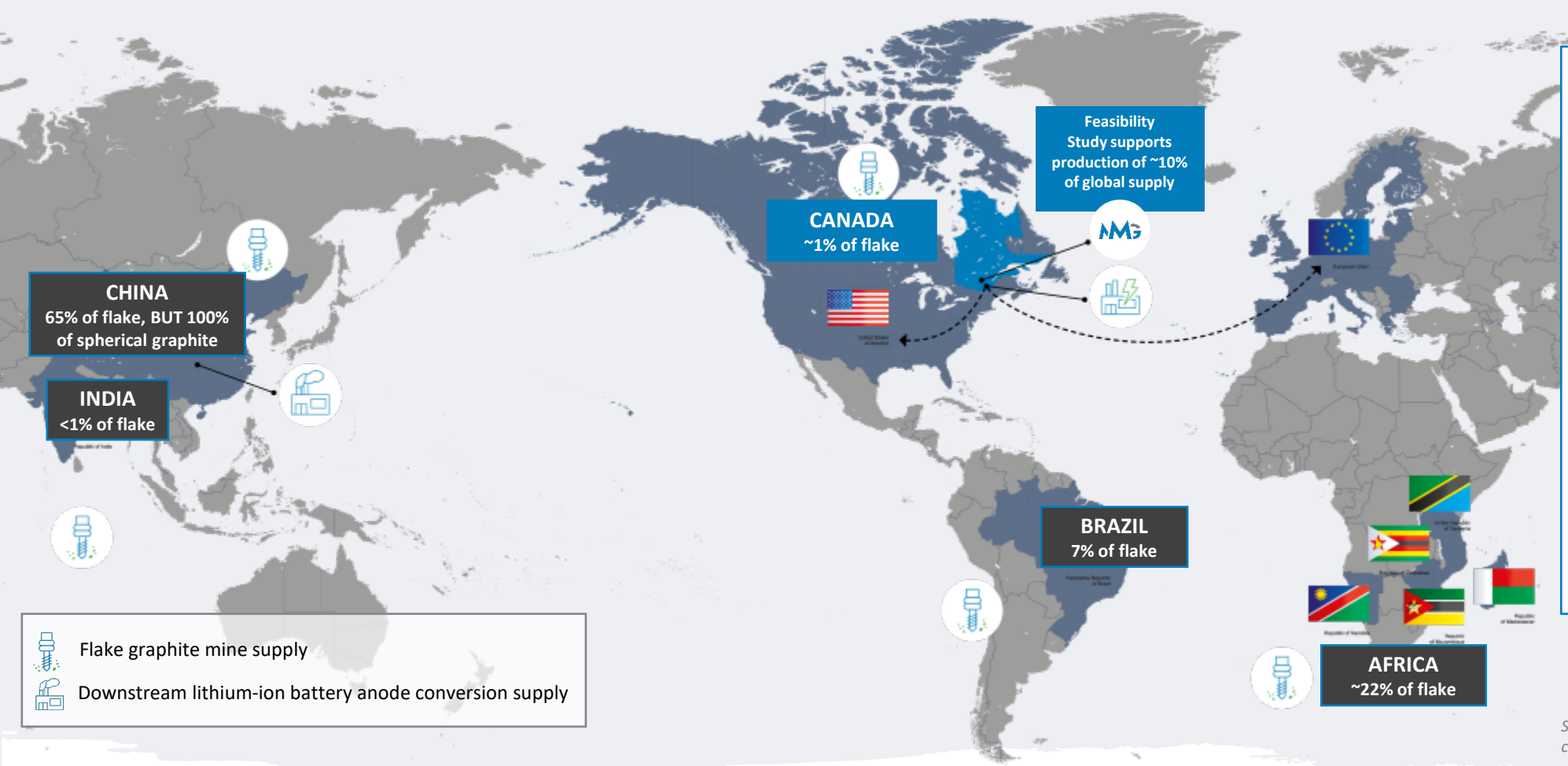
(1) *Hydro-Québec's Electricity Facts: Electricity Supply and Air Emissions, 2020*

# AN EXCEPTIONAL MARKET OPPORTUNITY

# GRAPHITE 101
# KEY THEMES

- Unprecedented growth in electric vehicle adoption and production driving demand for lithium-ion batteries
- Lithium-ion battery demand from grid storage applications to surpass traditional portables by 2024
- Graphite is an essential input for Lithium-Ion Batteries making up >95% of anode material
- Specialty and traditional graphite markets are expected to continue to grow in line with GDP
- Natural and synthetic graphite are both expected to grow supply to meet this demand
- Natural graphite provides a superior environmental profile and is expected to experience the highest growth
- China dominates the current supply chain – OEMs are seeking diversity of supply

# + NMG POSITIONED TO PROVIDE A LOCALIZED, CARBON-NEUTRAL ALTERNATIVE TO CHINA

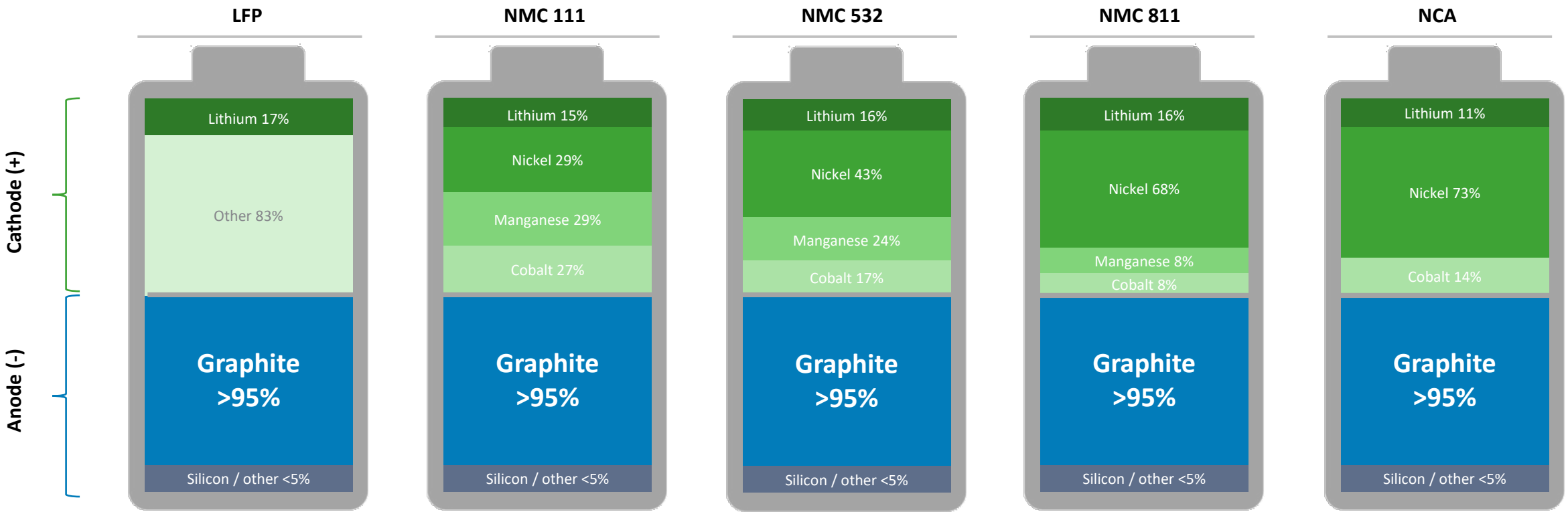



- Graphite mines exist across the globe – **but** 100% is processed in China for battery anode materials
- Global battery and EV manufacturers seek alternative, sustainable sources of supply
- The E.U., U.S., Canada, Japan, Australia and India have declared graphite a critical mineral
- NMG is strategically located for the U.S. and European markets

*Source: US Geological Survey, January 2023. Only the largest countries/regions shown (accounting for >90% of production).*

# + GRAPHITE IS FUNDAMENTAL TO EVERY BATTERY CHEMISTRY

» **Graphite** dominates half the lithium-ion battery – 1.2kg per Kwh required to drive strong demand

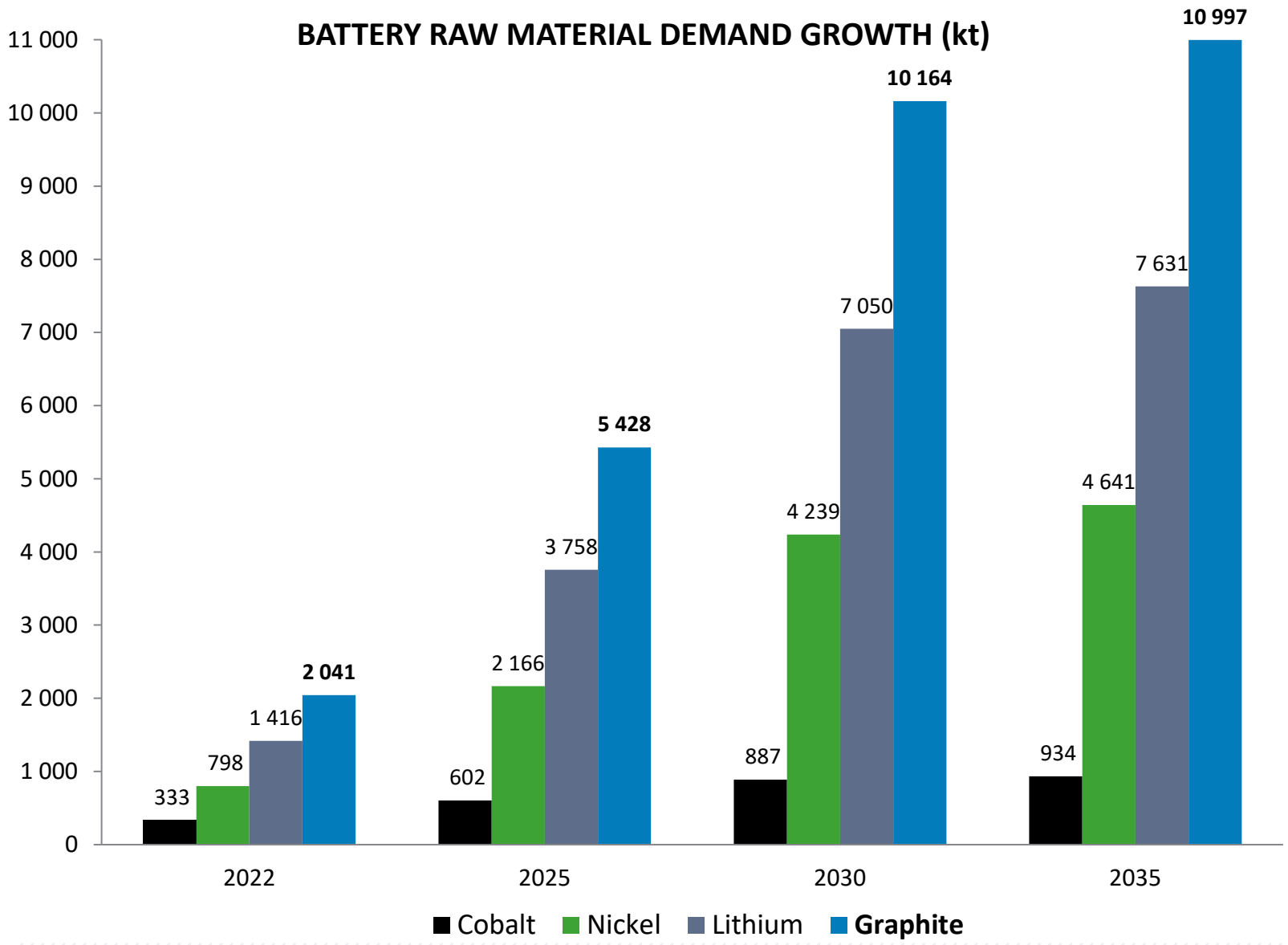



*Source: Pallinghurst-Traxys battery analysis. %s represent the proportions of cathode and anode in each battery respectively. NCA batteries contain 2% aluminium (not shown)*

# GRAPHITE DEMAND GROWTH IS EXPECTED TO OUTPACE OTHER BATTERY METALS

**387 BATTERY GIGAFACTORIES IN THE PIPELINE FOR A COMBINED CAPACITY OF ~8.6 TWh BY 2030**

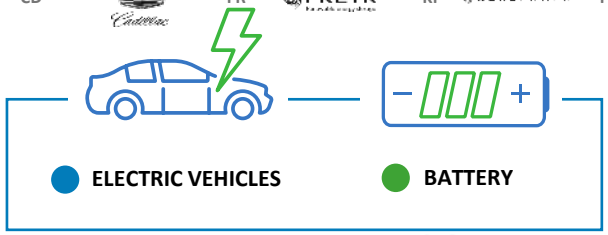
**Over 500% growth** in demand through 2035 for graphite, the strongest increase of all key battery raw materials



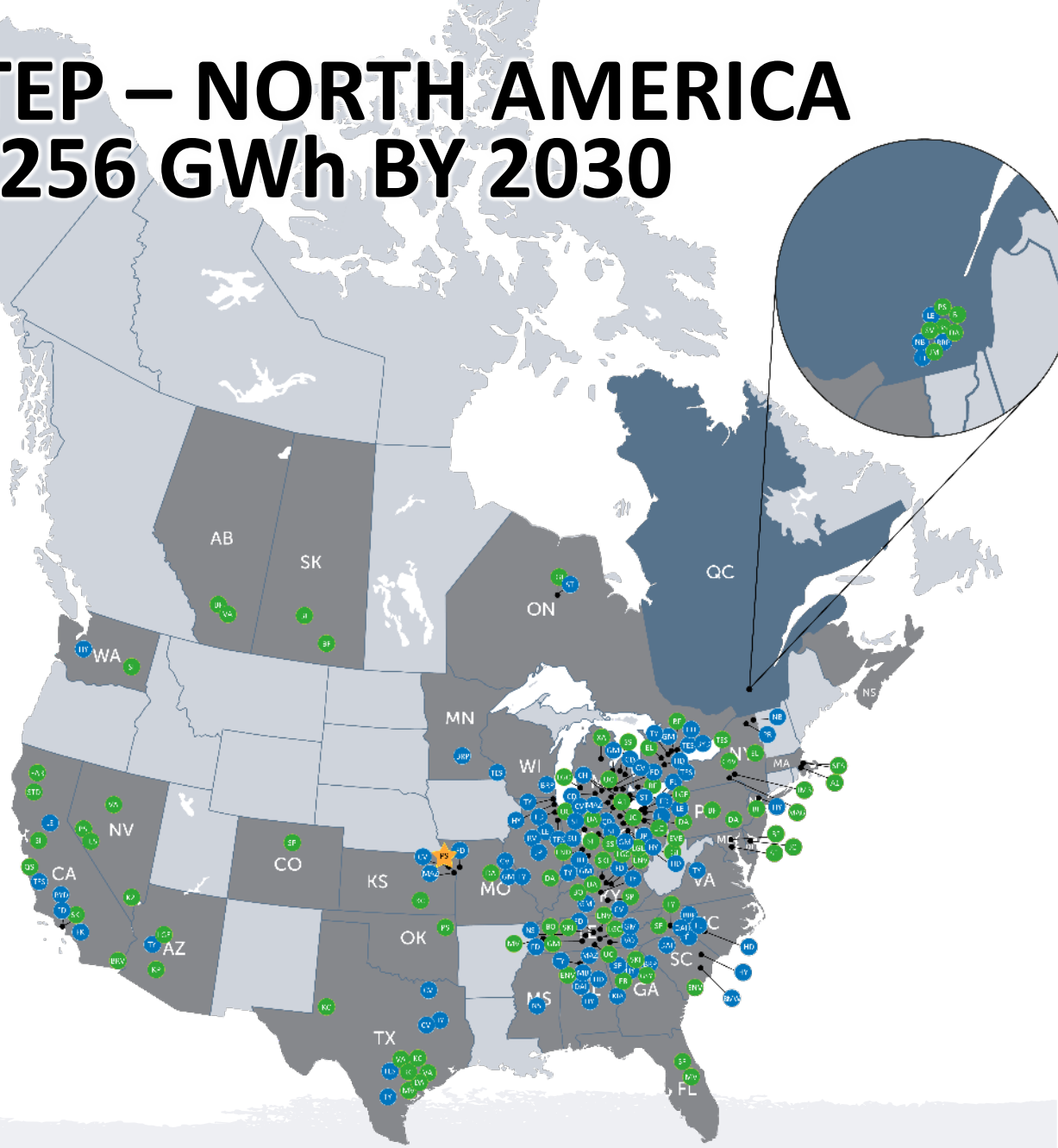

*Source: Benchmark Mineral Intelligence, May 2023*

# + AT THE MARKET'S DOORSTEP – NORTH AMERICA RAMPING UP CAPACITY: 1,256 GWh BY 2030

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | A123 SYSTEMS | CV | CHEVROLET | GM | GM | LE | LION ELECTRIC | POS | posco | STD | StoreDot |
| BASF | BASF | CH | CHRYSLER | HD | HONDA | LGC | LG Chem | PR | PREVOST | SP | Solid Power |
| BO | BlueOval SK | DAI | DAIMLER | HY | HYUNDAI | LGE | LG Energy Solution | QS | QuantumScape | ST | STELLANTIS |
| BS | BlueSolutions | DA | DANA | IM3 | iM3 | LT | LORDSTOWN | RV | RIVIAN | SU | SUBARU |
| BMW | BMW | EL | electrovaya | JP | Jeep | MG | MAGNIS | ROS | ROSATOM | TES | TESLA |
| BL | BOLLORÉ | END | ENERDEL | JM | JM | MAZ | mazda | SF | saft | TY | TOYOTA |
| BRV | BRITISHVOLT | ENV | Envision AESC | JC | Johnson Controls | MB | Mercedes-Benz | SS | SAMSUNG | UC | ultium cells |
| BRP | BRP | FK | FISKER | K2 | K2 ENERGY | NS | microvast | SES | SES | VA | valence |
| BYD | BYD | FD | Ford | KIA | KIA | NB | NISSAN | SI | SILA | VW | VW |
| C4V | C4V | FL | FREIGHTLINER | KC | KOCH SEPARATION SOLUTIONS | NB | NOVABUS | SKI | SK innovation | VO | VOLVO |
| CD | Cadillac | FR | FREYR | KP | KOREPOWER | PS | Panasonic | STV | STROMVOLT | XA | XALT Energy |

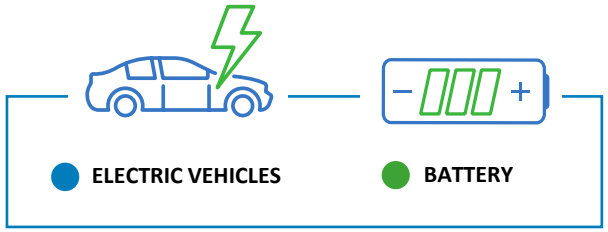



*Industry announcements & Benchmark Mineral Intelligence, May 2023*



# + AND SO IS EUROPE: 1,129 GWh by 2030

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACC | acc | BRV | BRITISHVOLT | EVE | EVE | LC | Leclanché Energy Storage Solutions | PSA | PSA GROUPE | ST | STELLANTIS |
| AK | AKASOL | BYP | BYD | FAM | FAAM | LGC | LG Chem | QS | QuantumScape | SV | SVOLT |
| AP | amte power | CLB | CALB Trust Efficient Win-Win | FAR | FARASIS | LIA | LIACON | RE | RENAULT | TER | TERRAE |
| AX | Anodox Energy Systems | CTL | CATL | FR | FREYR | MES | MES MAGNA ENERGY STORAGE | ROS | ROSATOM | TES | TESLA |
| BV | BASQUEVOLT | CF | CELLFORCE | GSY | GS YUASA | MV | microvast | SF | saft | VAR | VARTA |
| BY | BEYONDER | CC | CUSTOMCELLS | H3D | HE3DA | MRW | MORROW | SS | SAMSUNG | VK | VERKOR |
| BR | Blackstone Resources | DAI | DAIMLER | IMP | IMPACT | NV | northvolt | SCB | SCB+ | VW | VW |
| BMW | BMW | EES | ElevenEs Empower Everything | INB | InoBat | PS | Panasonic | SEA | SEAT | WM | WEST MIDLANDS GIGAFACTORY |
| BL | BOLLORÉ | ENV | Envision AESC | ITV | ITALVOLT | P4T | Phi4tech | SKI | SK innovation | | |

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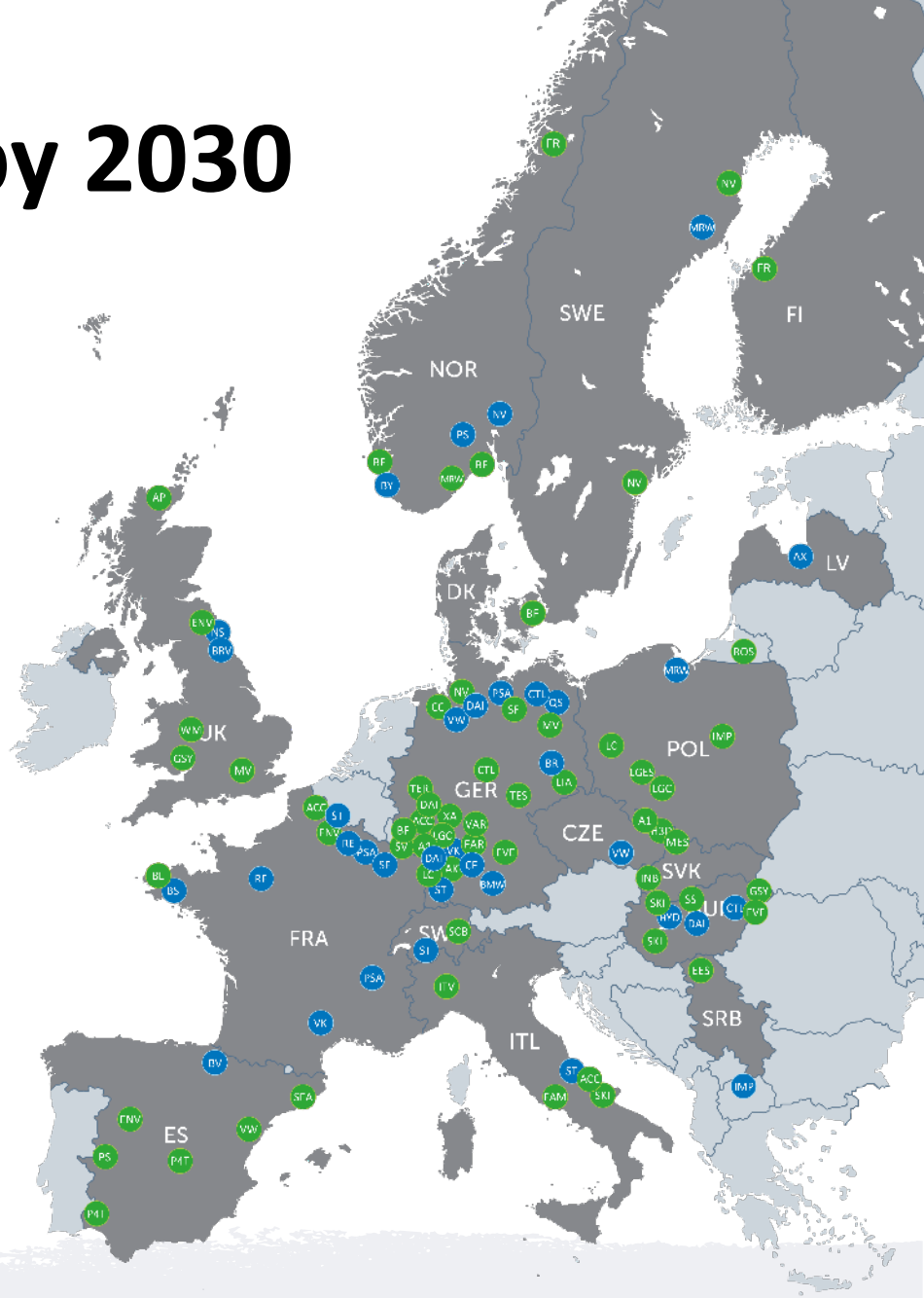


# DEMAND EXPECTED TO OUTSTRIP SUPPLY

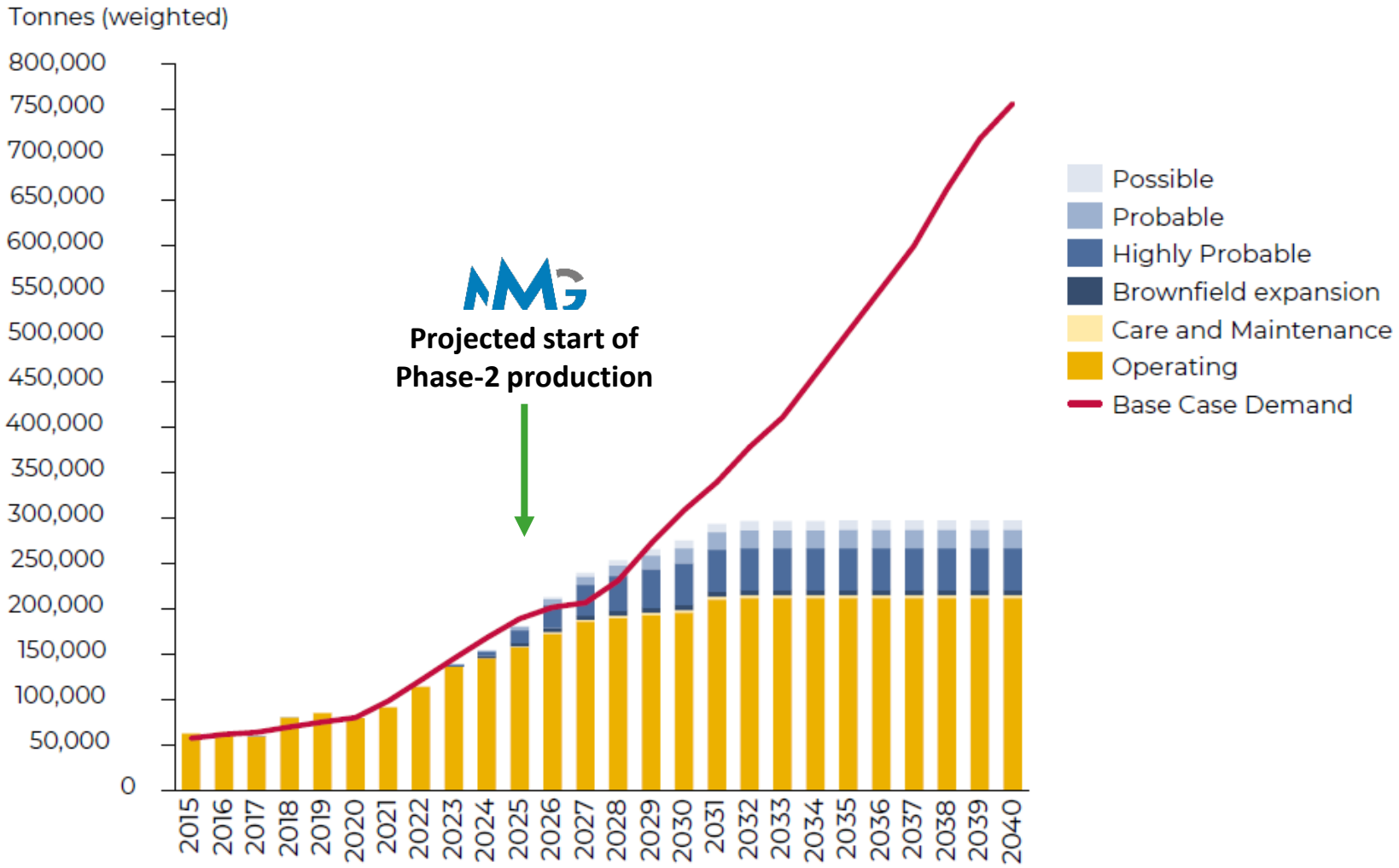
**Market projection for graphite demonstrates structural deficit:**

- New production needed to come online to meet the strong growth market
- NMG will be well positioned in what we expect to be a "seller's market" over the next decade

*"Existing production for graphite's other uses has kept the market well supplied to this point and prevented price spikes, but analysts expect that to change as batteries become the largest source of demand."*

The Wall Street Journal, January 2023

## SUPPLY SHORTAGES EMERGING AS EV DEMAND RAMPS UP




*Source : Benchmark Mineral Intelligence, Q1-2023*

# + INFLATION REDUCTION ACT

**$370 billion US dedicated to the climate agenda**

- Incentives for the purchase of electric vehicles
- Measures for the development of charging infrastructure
- Eligibility criteria for credits related to battery composition, component source
  - After 2024, critical minerals that are mined, processed, or recycled in a "foreign entity of concern" will prevent EV manufacturers from receiving the clean vehicle credit.
- Manufacturers are rushing to find alternatives to Chinese supplies

**NMG offers procurement that complies with U.S. law requirements**

# FACILITATING A GREEN, LOCAL SUPPLY OF A STRATEGIC AND CRITICAL MATERIAL

# + FULLY-INTEGRATED DEVELOPMENT SUPPORTED BY PHASE 1 OPERATIONS

## MATAWINIE

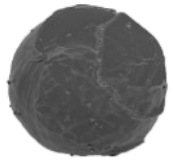
**High-purity flake**

Flake graphite

CONCENTRATION

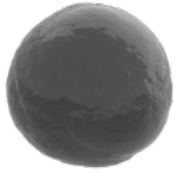
## BÉCANCOUR

**Advanced materials for energy and niche applications**



Spherical graphite

SHAPING



Purified graphite

PURIFICATION

Coated spherical purified graphite

COATING

Each step is engineered to add value and increase margins.

**US$ 1,675/t** C$ 2,135/t — FORECASTED PRICING — **US$ 9,051/t** C$ 11,540/t

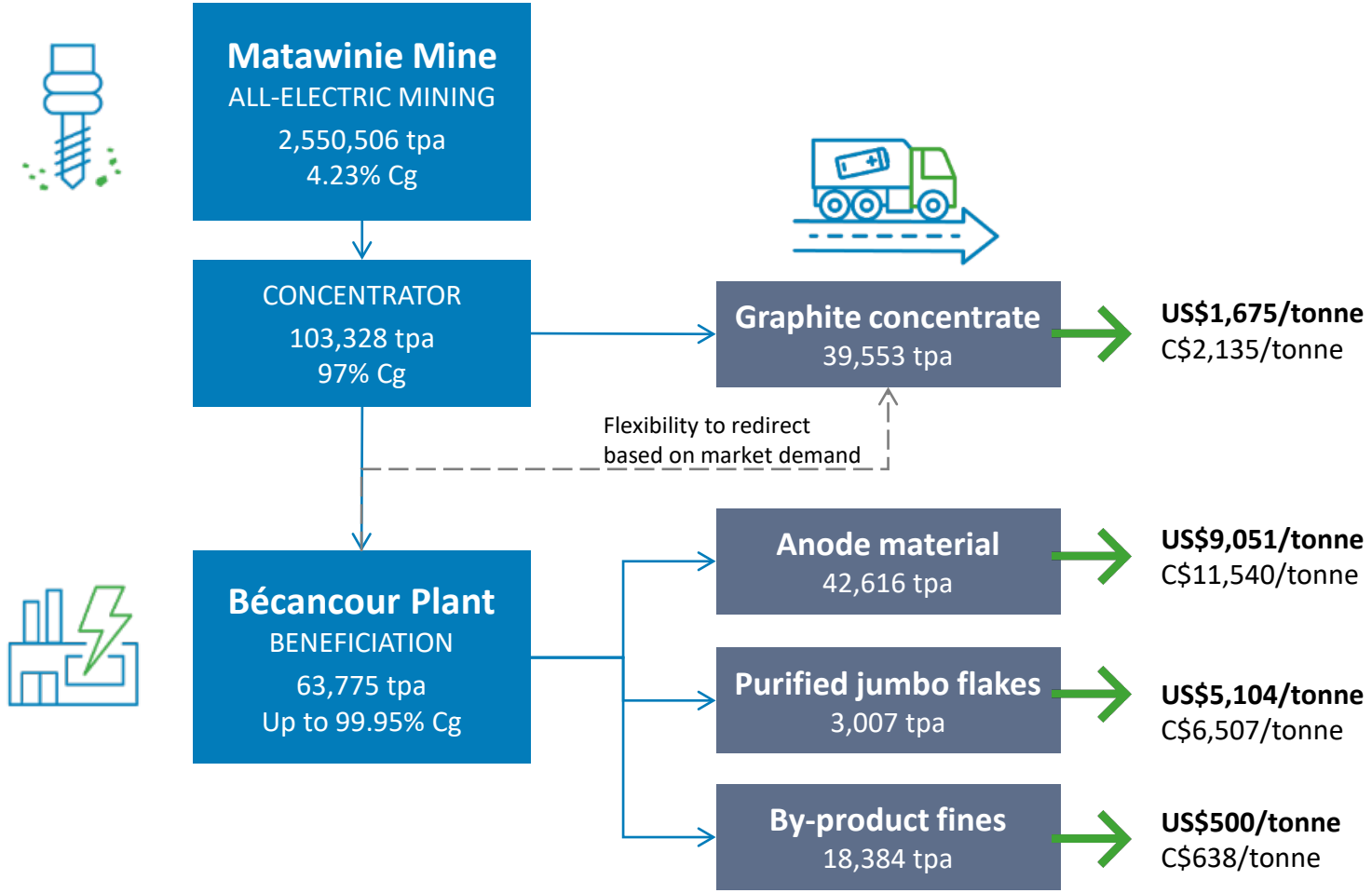
** Exchange Rate USD/CAD: 1.275*

# FULL INTEGRATION PROVIDES OPERATIONAL FLEXIBILITY

Production diversification within three pillars to leverage flake size distribution:

- Lithium-ion battery anode material
- Specialty graphite
- Refractory technologies and traditional market segments

## PHASE 2: PRODUCTION FLOW



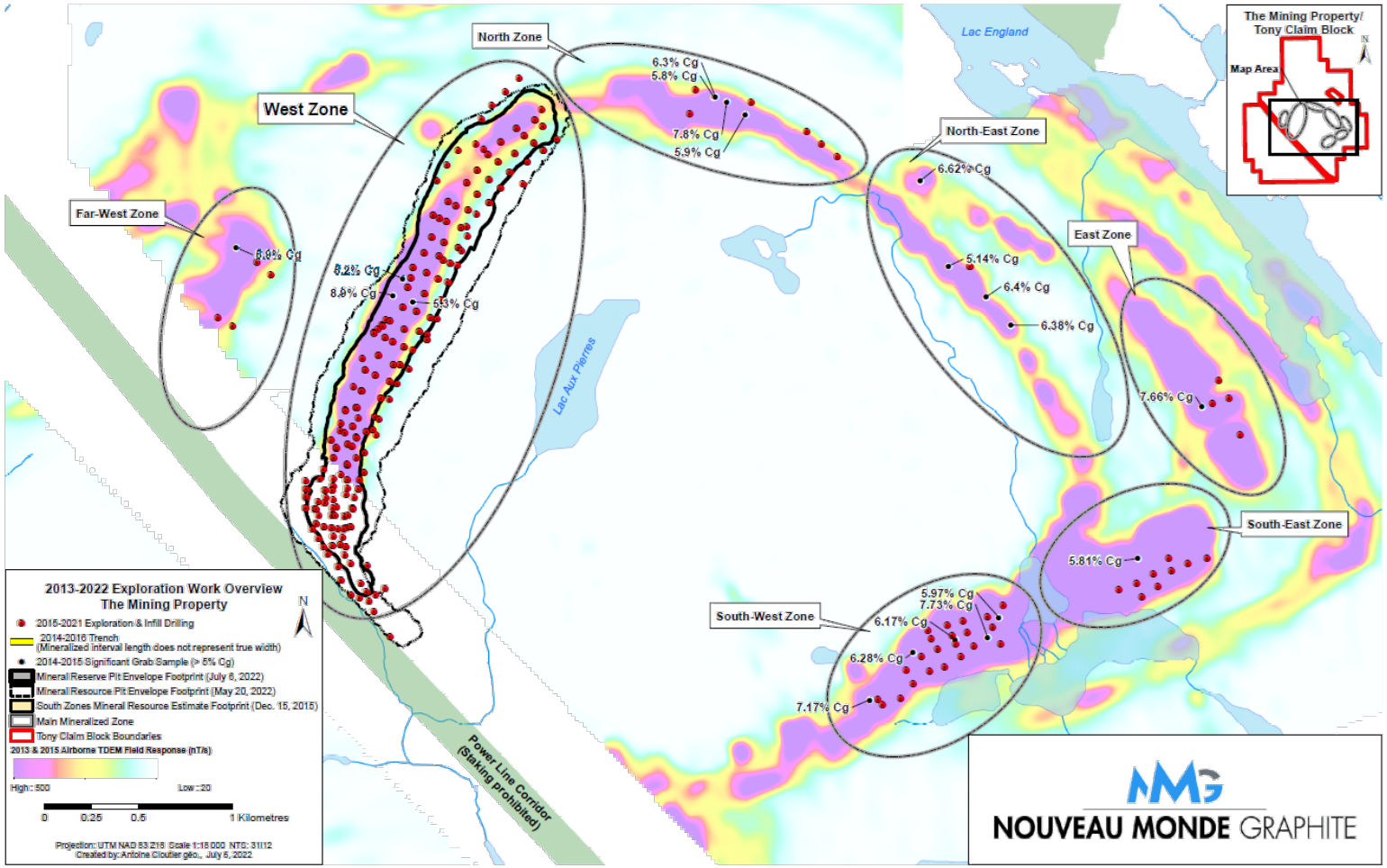

** Exchange Rate USD/CAD: 1.275*

# + PHASE 2
# MATAWINIE MINE

## A world-class mine and concentrator, within only 120 km of Montréal

- Responsible mining operations with all-electric fleet, innovative tailings management, extensive water and biodiversity protection program, plus progressive reclamation
- Situated within the community of Saint-Michel-des-Saints with which a progressive collaboration and benefits agreement has been signed
- All key permits (including the key Environmental Decree) necessary to start construction are in place
- Access to key infrastructure including hydropower and local highway – reduced operational and transport costs
- Local workforce and specific training programs support recruitment efforts for Phase 2
- Due to the size of the deposit, potential to expand the operations to meet market demand

# + A UNIQUE AND SCALABLE GRAPHITE SOURCE UNDERPINS OUR INTEGRATED, FULLY-TRACEABLE OPERATIONS




A huge graphite resource at Matawinie, provides NMG with expansion potential

### MINERAL RESOURCES & RESERVES

| WEST ZONE | Mt | Cg |
|---|---|---|
| Measured | 28.5 | 4.28% |
| Indicated | 101.8 | 4.26% |
| **Total Resources** | **130.3** | **4.26%** |
| **Reserves (Proven & Probable)** | **61.7** | **4.23%** |

*Source: Updated Resources and Reserves as of July 6, 2022. Additional information available in the appendix and press release dated July 6, 2022.*

### GRAPHITE CONCENTRATE FLAKE DISTRIBUTION

| FLAKE SIZE | PURITY | DISTRIBUTION |
|---|---|---|
| **Jumbo** (+50 mesh) | 97% Cg | 15% |
| **Coarse** (-50+80 mesh) | | 33% |
| **Intermediate** (-80+150 mesh) | | 28% |
| **Fine** (-150 mesh) | | 24% |

# MATAWINIE

**PHASE-2 CONCENTRATOR**

**~103 ktpa of high-purity natural flake**

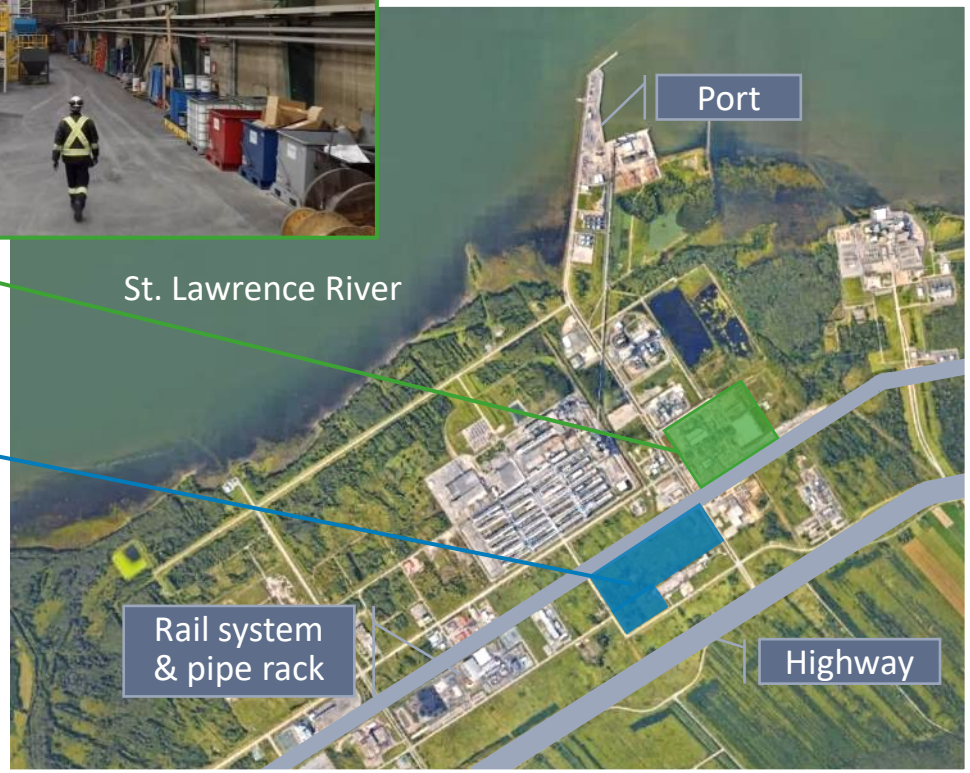
# + ADVANCED MANUFACTURING UNDERPINNED BY STRATEGIC LOCATION AND PROPRIETARY TECHNOLOGIES

**We believe Bécancour is an ideal location, with exceptional infrastructure, for NMG's operations**

- Phase-1 purification plant operating within Olin's facility
- Proprietary green thermochemical purification technology that avoids acid leaching
- Heavy industry area providing NMG with
  - robust industrial infrastructure
  - direct supply of required chemicals from Olin
  - skilled labor
  - abundant low-cost, clean electricity
  - multi-modal logistical base

*"We have chosen Bécancour as our hub, our battery valley."*

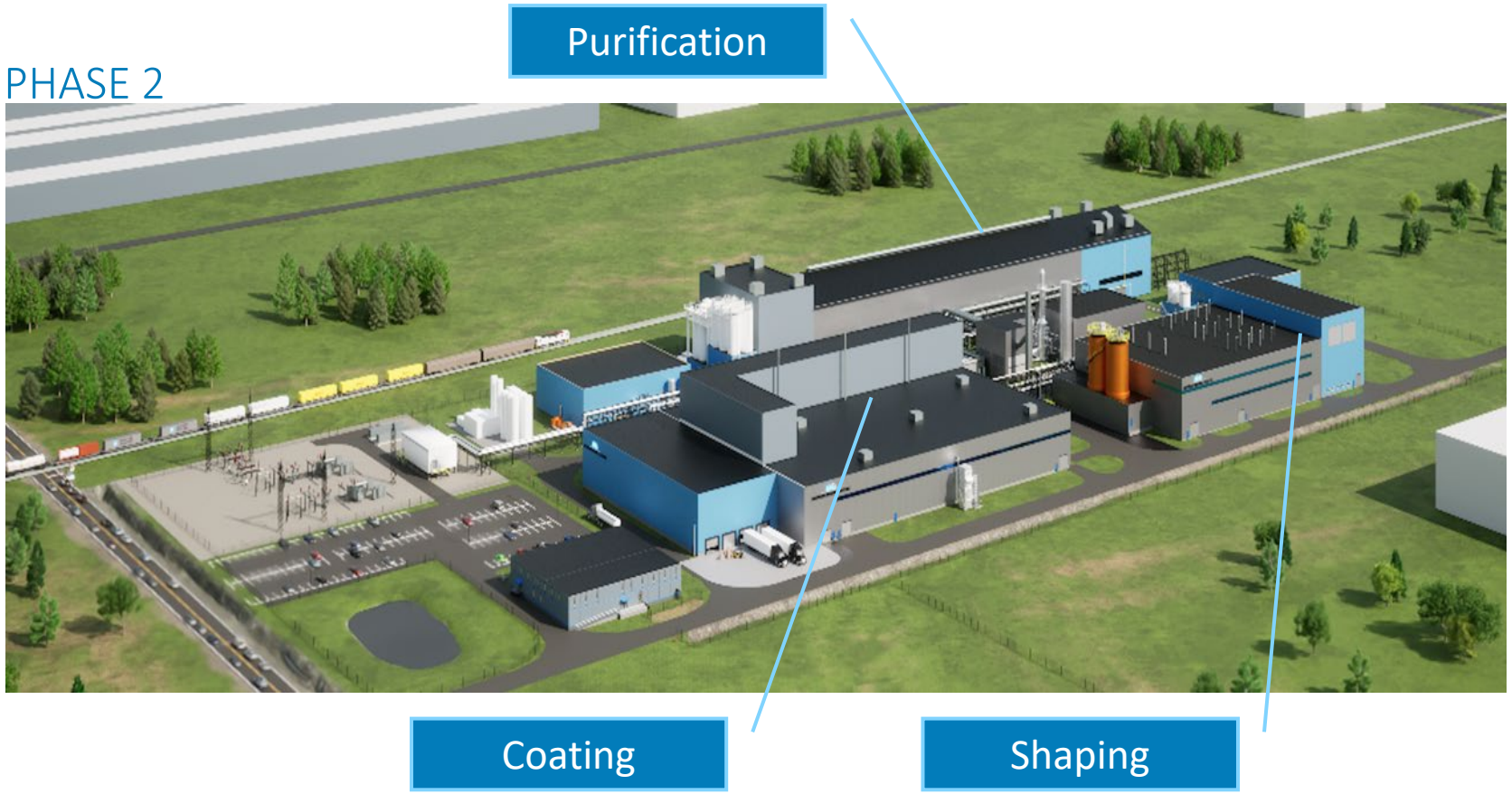
– Pierre Fitzgibbon, Québec Ministry of Economy



# PHASE 2 **BÉCANCOUR BATTERY MATERIAL PLANT**

Scalable commercial production with significant expansion potential onsite

PHASE 2

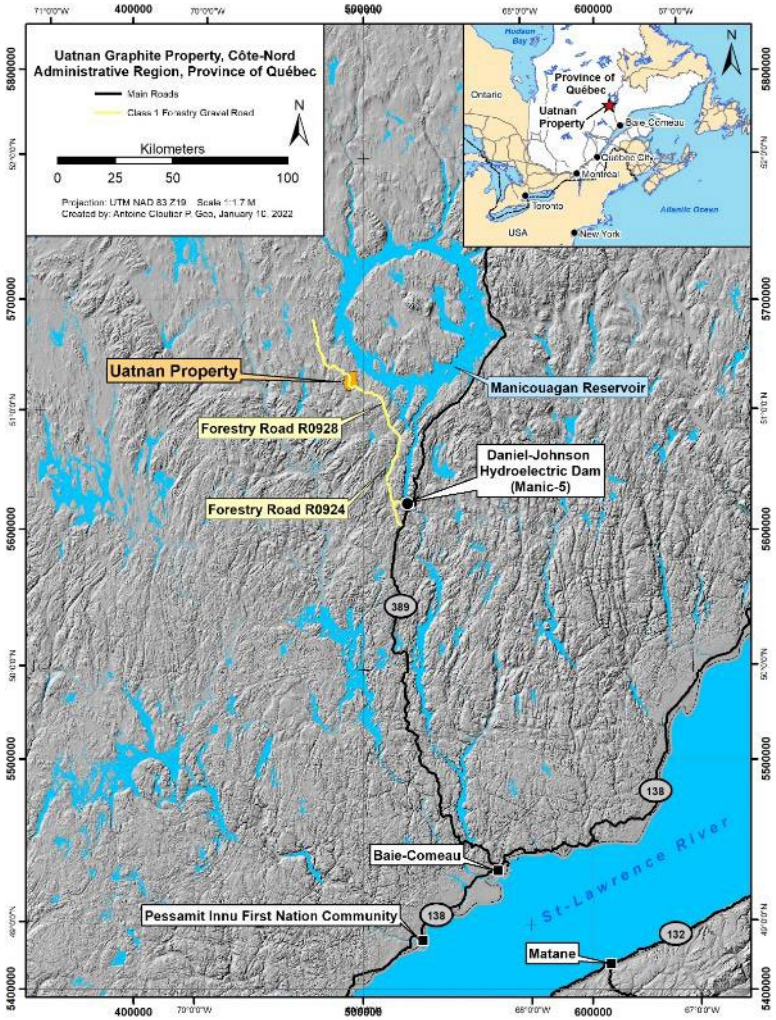



**Phase 2 plant with production capacity for ~43 ktpa of anode material and ~3 ktpa of purified jumbo flake**

- Advanced manufacturing facility regrouping all beneficiation units – shaping, purification and coating
- 200,000-m² land near highway, railway and port
- Located within developing industrial battery hub; BASF, GM-Posco, Vale and Nemaska Lithium have already announced their plans

# + PHASE 3
# UATNAN MINING PROJECT: AMONG THE WORLD'S LARGEST GRAPHITE PROJECTS IN DEVELOPMENT

- Located in Northern Québec, in a region renowned for its resources and associated industry
  - Accessible year-round by highway 389 and logging roads
- Property wholly owned (100%) by Mason Graphite
- Open-pit operation with on-site concentrator for targeted production of 500,000 tpa of graphite concentrate destined to the battery market
  - Life of mine of 24 years
  - Stripping ratio of 1.3 : 1
- Responsible mining practices including transition plans for all-electric operations, advanced environmental management, in-pit backfilling and proactive First Nation and community engagement
- Preliminary economic assessment indicates strong economics
- Project supporting NMG's commercial discussions with OEMs and lithium-ion battery cell makers



# + LOCATED IN A PREMIER OPERATING JURISDICTION IN NORTH AMERICA

Strategically located to supply high-growth North American and European markets

Established, sustainable ecosystem and ongoing government-funded research

Business-friendly policies and government, including significant investment (nearing C$3 billion in 2020 [1])

Abundant, affordable and clean energy (36% energy cost savings vs other G7 countries)

Government institutes comprised of over 500 specialists working on EV projects

Rich in critical and strategic minerals and the Government of Québec has a coordinated plan to develop them[2]

Low-cost operation location

Attractive and stable fiscal and political environment

**QUÉBEC'S COMBINATION OF STRATEGIC ADVANTAGES**

The Québec Government is fully committed to develop a local battery materials supply chain

(1) *Institut de la statistique du Québec, Recensement annuel sur l'investissement minier 2020.*
(2) *Québec Plan for the Development of Critical and Strategic Minerals 2020-2025*

# INDUSTRY AND TECHNOLOGY PARTNERS SUPPORT OUR STRONG INTERNAL TEAM

Active R&D ecosystem and battery supply chain industry participation

- Our strong internal technical team consisting of **100+ professionals** support our growth and continued innovation:
  - 7 PhD, 3 MSc, 35 engineers
  - Decades of expertise in graphite production acquired at leading operators including Imerys, SGL Group and BTR New Material
- **Extended technological platform** including a battery lab to provide quality assurance and customization of products per customer's specs
- **In-house R&D team and collaboration** with renowned research institutes and universities to advance battery technology

**Technological expertise and R&D ecosystem puts the Company at the forefront of industry developments**

ABB
Canada CNRC·NRC
corem Innovation en traitement de minerais Innovation in mineral processing
FORGE NANO
Hydro Québec
McGill UNIVERSITY
POLYTECHNIQUE MONTRÉAL LE GÉNIE EN PREMIÈRE CLASSE
SGS
SNC·LAVALIN
UNIVERSITÉ DE SHERBROOKE

# + COMMERCIAL AGREEMENT: PANASONIC ENERGY

- MoU based on **multi-year offtake for active anode material**
- MoU/Offtake agreement to provide pathway for finalizing product qualification
- NMG's **lowest $CO_2$ material footprint** in its category supports Panasonic's decarbonization commitment
- Mitsui & Co. rallies behind NMG as a strategic investor and marketer for specific markets
- Natural graphite local supply chain ideally aligned with US **Inflation Reduction Act** requirements
- Technical marketing team in place with presence on each side of the ocean

# + SHAREHOLDER VALUE DRIVERS: NEXT 12 MONTHS

Disciplined execution of growth plan to establish a traceable, local supply of a critical battery material, with easy access to the growing US and European markets.

- Piloting of fully-integrated Phase-1 operations to finalize engineering parameters of Phase 2, **OPTIMIZE FEASIBILITY STUDY** based on Panasonic's specs and support qualification of products
- Conversion of MoU offtake with Panasonic into **DEFINITIVE OFFTAKE**
- Closing of **PROJECT FINANCING AND FINAL INVESTMENT DECISION** (FID) for Phase 2 operations – Government / export credit agency financing underway
- Intensification of **COMMERCIAL DISCUSSIONS** and qualification process of battery anode material with additional customers
- **CONTINUE EARLY WORKS** of the Phase-2 Matawinie Mine, advance detailed engineering and selection/procurement of long-lead equipment of Phase 2 operations
- Launch of a **FEASIBILITY STUDY** for the potential development of the Uatnan Mining Project[1] for a production of 500,000 tpa

*1 Based on announced option and joint venture agreement with Mason Graphite that could be exercised if conditions are met (joint press release, May 16, 2022)*

# + EXPECTED SHAREHOLDER VALUE DRIVERS: NEXT 5 YEARS

- Commission **FULLY-INTEGRATED PRODUCTION AT PHASE 2**: Matawinie Mine and Bécancour Battery Material Plant
- Execute a long-term cornerstone supply agreement with a future major customer
- **MAP PHASE 3 EXPANSION** for natural graphite and anode material as the market demand increases
- Develop a European / U.S. Anode Material facility, as the EV market demand grows
- Explore the potential conversion of third-party flake graphite into anode material to capture additional cash flow

NMG is positioning itself to become a leading supplier of "green" anode material for the growing lithium-ion battery industry

# FINANCIAL PARAMETERS

# + SUMMARY OF PHASE-2 ECONOMIC HIGHLIGHTS

| ECONOMIC HIGHLIGHTS (in CAD*) | MATAWINIE | BÉCANCOUR | INTEGRATED | Unit |
|---|---|---|---|---|
| **Feasibility Metrics** | | | | |
| Pre-tax Net Present Value (NPV) (8 % discount rate) | 986 | 1,374 | 2,360 | C$ million |
| After-tax Net Present Value (NPV) (8 % discount rate) | 571 | 1,010 | 1,581 | C$ million |
| Pre-tax Internal Rate of Return (IRR) | 28.2% | 22.8% | 24.6% | % |
| After-tax IRR | 22.2% | 20.4% | 21.0% | % |
| Payback (pre-tax) | 3.2 | 4.3 | 3.9 | years |
| Payback (after-tax) | 3.7 | 4.5 | 4.2 | years |
| **Financials Summary** | | | | |
| Revenues (Sales) | 93 | 503 | 596 | C$ million per year |
| Operating Expenses (OPEX) per tonne | 565 | 2,249 | | graphite concentrate at Matawinie<br>CSPG throughput at Bécancour |
| Total Operating Expenses (OPEX) | 58 | 137 | 195 | C$ million per year |
| Initial Capital Expenditures (CAPEX) | 481 | 923 | 1,404 | C$ million |
| LOM average sales price for graphite concentrate basket | - | - | 2,135 | per tonne (C$) |
| LOM average sales price for CSPG basket | - | - | 11,540 | per tonne (C$) |
| **Production Summary** | | | | |
| Life of Mine (“LOM”) | - | - | 25 | years |
| Annual average production of graphite concentrate | 103,328 | - | - | tonnes/year |
| Targeted annual CSPG throughput | - | 60,700 | - | tonnes/year |

# PHASE 3
# OVERVIEW OF PRELIMINARY ECONOMIC HIGHLIGHTS


| ECONOMIC HIGHLIGHTS | Uatnan Mining Project |
|---|---|
| Pre-tax NPV (8% discount rate) | C$ 3,613 M |
| After-tax NPV (8 % discount rate) | C$ 2,173 M |
| Pre-tax IRR | 32.6% |
| After-tax IRR | 25.9% |
| Pre-tax payback | 2.8 years |
| After-tax payback | 3.2 years |
| Concentrate selling price | US$ 1,100/tonne |
| OPEX per tonne of graphite concentrate | C$268/tonne |
| Initial CAPEX | C$ 1,417 M |
| Sustaining CAPEX | C$ 147 M |
| LOM OPEX | C$ 3,236 M |
| Annual OPEX | C$ 135 M |

# SOUND CAPITAL STRUCTURE

Well capitalized with strong institutional support

**MAJOR INVESTORS**

THE PALLINGHURST GROUP

IQ Investissement Québec

MITSUI & CO.[3]

(1) Source: IHS Markitr
(2) Cash as at March 31, 2023
(3) Funded value of US $50 M debenture @ 1.3544 = CA$67.7 M (exchange rate of December 31, 2022)
(4) Financing closed on April 17, 2023

## MARKET INFORMATION (as at May 19, 2023)[1]

| | CAD | USD |
|---|---|---|
| Share price ($) | 4.50 | 3,31 |
| **Market capitalization ($M)** | **273** | **201** |
| Cash ($M)[2] | 48.8 CAD at year end + 22 USD financing[4] | |
| Convertible debenture ($M) – *funded*[3] | 67.7* | 50 |
| **Basic shares (M)** | **60.7** | |
| Options (M) | 3.8 | |
| Convertible debenture (M) – *forced conversion at FID* | 10.0 | |
| Warrants (M) – *accessible upon conversion of debenture* | 10.0 | |
| Shares to be issued | 395k | |
| **Fully diluted shares outstanding** | **84.9** | |
| Management & insider ownership | ~34.5% basic, ~49.0% fully diluted | |

**RESEARCH COVERAGE**

| Firm | Analyst |
|---|---|
| B. Riley Financial | Matthew Key |
| Evercore ISI | Stephen Richardson |
| Roth Capital Partners | Joseph Reagor |
| H.C. Wainwright & Co. | Heiko F. Ihle |
| Cormark Securities | MacMurray Whale |
| PI Financial | Ben Jecik |

# APPENDIX

# + MATAWINIE
# UPDATED RESOURCE AND RESERVE SUMMARY

## Current Pit-Constrained Mineral Resource Estimate for the West Zone[1]

| Mineral Resource Category[2] | Current Resource (May 20, 2022)[7] | | |
|---|---|---|---|
| | Tonnage (Mt)[5,6] | Grade (% Cg)[3] | Contained Graphite (Mt) |
| **Measured** | 28.5 | 4.28 | 1.22 |
| **Indicated** | 101.8 | 4.26 | 4.33 |
| **Measured + Indicated** | **130.3** | **4.26** | **5.55** |
| **Inferred[4]** | 23.0 | 4.28 | 0.98 |

1. *The Mineral Resources provided in this table were estimated using current Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves, Definitions and Guidelines.*
2. *Mineral Resources that are not Mineral Reserves have not demonstrated economic viability. Additional trenching and/or drilling will be required to convert Inferred and Indicated Mineral Resources to Measured Mineral Resources. There is no certainty that any part of a Mineral Resource will ever be converted into Reserves.*
3. *All analyses used for the Resource Estimates were performed by ALS Minerals Laboratories and delivered as % Cg, internal analytical code C-IR18.*
4. *Inferred Mineral Resources represent material that is considered too speculative to be included in economic evaluations. Additional trenching and/or drilling will be required to convert Inferred Mineral Resources to Indicated or Measured Mineral Resources. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher resource category.*
5. *Current Resource effective May 20, 2022.*
6. *Mineral Resources are stated at a cut-off grade of 1.78 % Cg.*
7. *Standards used for this resource update are the same standards produced over the course of the Feasibility Study (results published December 10, 2018) and the Resource Update (results published March 19, 2020). The difference comes mainly from a newly accessible land package along the Hydro-Québec power line.*

## Open-Pit Mineral Reserves Estimate for the West Zone

| Category | Tonnage (Mt) | Grade (% Cg) | Contained Graphite (Mt) |
|---|---|---|---|
| **Proven** | 17.3 | 4.16 | 0.7 |
| **Probable** | 44.3 | 4.26 | 1.9 |
| **Proven & Probable** | **61.7** | **4.23** | **2.6** |

*The Qualified Person for the Mineral Reserve Estimate is Jeffrey Cassoff, P. Eng., of BBA Inc. The effective date of the estimate is July 6, 2022.*

*Mineral reserves were estimated using a graphite concentrate selling price of C$2,137/tonne, and consider a 2% royalty, and selling costs of C$47.92/tonne. An average grade of 97% was considered for the graphite concentrate. A metallurgical recovery of 93% was used. A cut-off grade of 2.20% Cg was used. The strip ratio for the open pit is 1.16 to 1.*

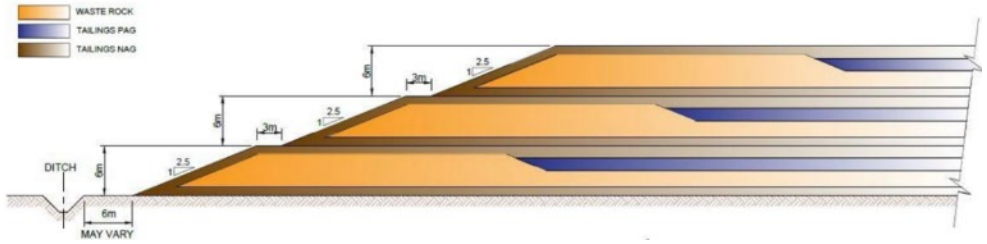
*The Mineral Reserves are inclusive of mining dilution and ore loss. The reference point for the mineral reserves is the primary crusher.*

*Totals may not add due to rounding.*

# + INNOVATIVE MODEL FOR CO-DISPOSAL OF TAILINGS

This innovative management solution is indicative of NMG's unwavering focus on sustainable development and:

- » helps to avoid acid mine drainage
- » provides greater environmental and community safety over the long term
- » reduces the mine site's footprint
- » enables progressive reclamation of the site




YEAR 1

YEAR 15

# + UATNAN – A WORLD-CLASS DEPOSIT
# CURRENT MINERAL RESOURCE ESTIMATE

| IN-PIT CONSTRAINED MINERAL RESOURCES | Tonnes (Mt) | Grade (% Cg) | Cg (Mt) |
|---|---|---|---|
| Measured 5.75% < Cg < 25% | 15.65 | 15.2 | 2.38 |
| Measured Cg > 25% | 3.35 | 30.6 | 1.02 |
| **Total Measured** | **19.02** | **17.9** | **3.40** |
| Indicated 5.75% < Cg < 25% | 40.29 | 14.6 | 5.89 |
| Indicated Cg > 25% | 6.33 | 31.6 | 2.00 |
| **Total Indicated** | **46.62** | **16.9** | **7.89** |
| Indicated + Measured 5.75% < Cg < 25% | 55.94 | 14.8 | 8.27 |
| Indicated + Measured Cg > 25% | 9.70 | 31.2 | 3.03 |
| **Total Measured + Indicated** | **65.64** | **17.2** | **11.30** |
| *Inferred 5.75% < Cg < 25%* | *15.35* | *14.9* | *2.28* |
| *Inferred Cg > 25%* | *2.47* | *31.8* | *0.79* |
| ***Total Inferred*** | ***17.82*** | ***17.2*** | ***3.07*** |

*Notes :*

1. *The Mineral Resources provided in this table were estimated by M. Rachidi P.Geo., and C. Duplessis, Eng., (QPs) of GoldMinds Geoservices Inc., using current Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves, Definitions and Guidelines.*
2. *Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues. The quantity and grade of reported Inferred Mineral Resources are uncertain in nature and there has not been sufficient work to define these Inferred Mineral Resources as indicated or Measured Mineral Resources. There is no certainty that any part of a Mineral Resource will ever be converted into Mineral Reserves.*
3. *The Mineral Resources presented here were estimated with a block size of 3mE x 3mN x 3mZ. The blocks were interpolated from equal-length composites (3 m) calculated from the mineralized intervals.*
4. *The Mineral Resource estimate was completed using the inverse distance to the square methodology utilizing three runs. For run 1, the number of composites was limited to ten with a maximum of two composites from the same drillhole. For runs two and three the number of composites was limited to ten with a maximum of one composite from the same drillhole.*
5. *The Measured Mineral Resources classified using a minimum of four drillholes. Indicated resources classified using a minimum of two drillholes. The Inferred Mineral Resources were classified by a minimum of one drillholes.*
6. *Tonnage estimates are based on a fixed density of 2.9 t/m3.*
7. *A pit shell to constrain the Mineral Resources was developed using the parameters presented in Table 4. The effective date of the current Mineral Resources is January 10, 2023.*
8. *Mineral Resources are stated at a cut-off grade of 5.75% C(g).*

# + PHASE 2: CAPEX COSTS

| CAPEX Breakdown (in CAD*) | | Initial Costs |
|---|---|---|
| **Matawinie Mine CAPEX** | | |
| **Direct Costs** | | **373,383,967** |
| Mine Development | | 52,487,610 |
| Mining Facilities | | 49,470,357 |
| Processing Facilities | | 234,273,297 |
| Tailings & Water Management | | 37,152,703 |
| **Indirect Costs** | | **107,366,146** |
| Owners Costs and other indirect | | 40,043,672 |
| EPCM | | 27,752,679 |
| Contingency | | 39,569,796 |
| **Matawinie Mine Total CAPEX** | **(34%)** | **480,750,114** |

| CAPEX Breakdown (in CAD*) | | Initial Costs |
|---|---|---|
| **Bécancour Plant CAPEX** | | |
| **Direct Costs** | | **631,071,605** |
| Shaping | | 176,658,085 |
| Purification | | 261,442,517 |
| Coating | | 192,971,003 |
| | | |
| **Indirect Costs** | | **292,328,149** |
| Owners Costs and other indirect | | 100,269,149 |
| EPCM | | 85,688,000 |
| Contingency | | 106,371,000 |
| **Bécancour Plant Total CAPEX** | **(66%)** | **923,399,755** |

| | | |
|---|---|---|
| **NMG Total project CAPEX** | **(100%)** | **1,404,149,868** |

# + PHASE 2: OPEX COSTS

| **OPEX Breakdown** (in CAD*) | **Cost per year** (LOM average) | **Cost per tonne** [1] [2] | **% of total costs** |
|---|---|---|---|
| **Matawinie Mine OPEX** | | | |
| Mining | 17,330,983 | 168 | 30% |
| Ore Processing | 26,083,095 | 252 | 45% |
| Tailings | 5,655,610 | 55 | 10% |
| General and Administration | 3,750,866 | 36 | 6% |
| Transport Cost to Bécancour | 2,769,863 | 27 | 5% |
| Sales and Marketing | 2,831,631 | 27 | 5% |
| **Matawinie Mine Total OPEX** | **58,422,047** | **565** | **100%** |
| | | | |
| **Bécancour Plant OPEX** | | | |
| Shaping | 26,868,414 | 443 | 20% |
| Purification | 47,330,852 | 780 | 35% |
| Coating | 35,865,428 | 591 | 26% |
| General and Administration | 11,126,505 | 183 | 8% |
| Sales and Marketing | 15,298,832 | 252 | 11% |
| **Bécancour Plant Total OPEX** | **136,490,031** | **2,249** | **100%** |

*(1) Matawinie Mine = Per tonnes of graphite concentrate*
*(2) Bécancour Plant = Per tonne of CSPG throughput*

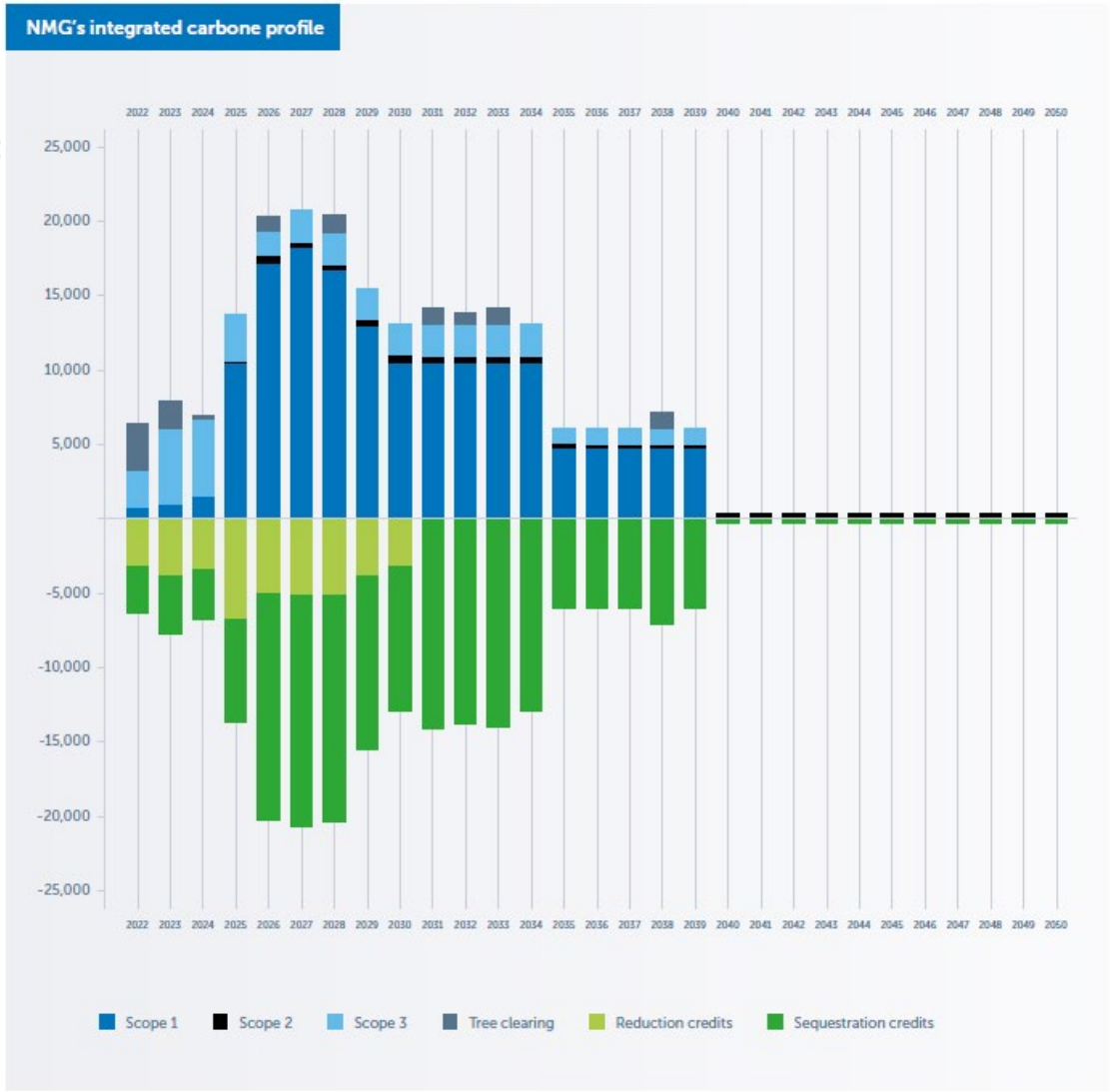


PROPRIETARY & CONFIDENTIAL

# + CLIMATE TARGETS

- » Maintain carbon neutrality status
- » Reduce as much as possible
  - – Full electrification
  - – Continuous improvement
  - – Substitution of carbon-based materials
  - – R&D
  - – Industrial synergies and circular economy
- » Reach Net Zero by 2030
- » Transparent disclosure

Environmental footprint, commitments and progressive offset strategy available via the **Climate Action Plan 2022-2030+**.






PROPRIETARY & CONFIDENTIAL

# GREEN BATTERY MATERIALS

## TO POWER THE ENERGY REVOLUTION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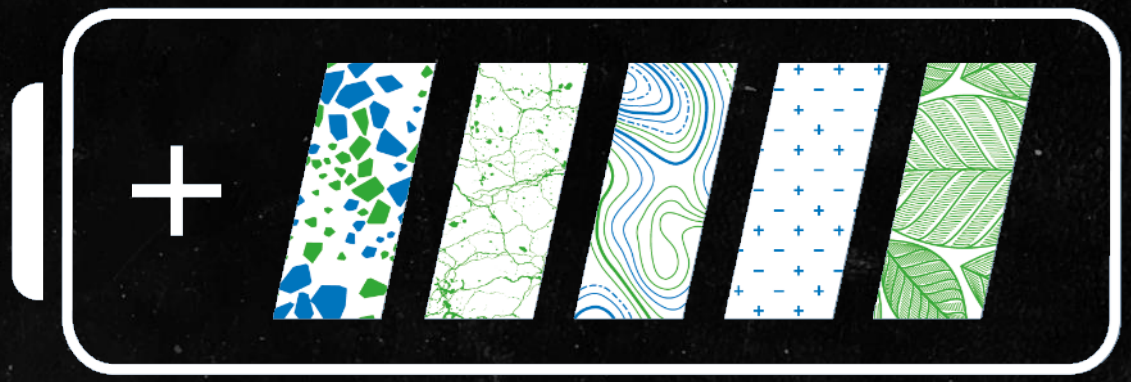




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