MASON GRAPHITE INC.

CORPORATE PRESENTATION

July, 2021

TSX.V: LLG OTCQX: MGPHF

LEGAL DISCLAIMERS:

Forward Looking Information: This presentation contains "forward-looking information" within the meaning of Canadian securities legislation. All information contained herein that is not clearly historical in nature may constitute forward-looking information. Forward-looking information includes, without limitation, statements regarding the results of the Feasibility Study including statements about the projected IRR, NPV, payback period and future capital and operating costs, the availability and access to hydroelectric power, projected annual rate of graphite production, the estimation of mineral reserve and mineral resources, the market and future price of graphite, the potential advantages of the concentrator being located in Baie-Comeau, permitting and the ability to finance the project. Generally, such forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, graphite and other metals prices, the estimation of initial and sustaining capital requirements, the estimation of labour and operating costs, the estimation of mineral reserves and resources, the assumption with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the project, the completion of the environment assessment process, permitting and such other assumptions and factors as set out herein. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: volatile stock price; risks related to changes in graphite prices; sources and cost of power facilities; the estimation of initial and sustaining capital requirements; the estimation of labour and operating costs; the general global markets and economic conditions; the risk associated with exploration, development and operations of mineral deposits; the estimation of mineral reserves and resources; the risks associated with uninsurable risks arising during the course of exploration, development and production; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support mining, processing, development and exploration activities; the risks associated with changes in the mining regulatory regime governing the Company; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalization and liquidity risks including the risk that the financing necessary to fund continued exploration and development activities at Lac Guéret may not be available on satisfactory terms, or at all; the risk of potential dilution through the issue of common shares; the risk of litigation. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this presentation, and the Company does not undertake to update such forward-looking information except in accordance with applicable securities laws.

Currency Presentation: Unless indicated otherwise, all dollar figures are in Canadian dollars.

Cautionary Statements Regarding Mineral Reserves and Resource Estimates: The Mineral Reserves and the "In-Pit" Mineral Resources are included in the total Measured and Indicated Mineral Resources of 65.5 Mt grading 17.2% Cg (19 Mt of Measured Resources grading 17.9% Cg and 46.5 Mt of Indicated Resources grading 16.9% Cg) that were reported in the Company's press release dated December 5th, 2018. The Mineral Reserves are the basis of the 25-year Mine Life of the Feasibility Study published on September 25th, 2015 (updated on December 5th, 2018) and are not included in the "In-Pit" Measured and Indicated Mineral Resources of 58 Mt grading 16.3% Cg (which have an equivalent drilling definition). The reference point for the Mineral Reserves estimate is the mill feed. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability and were not included in the mine life or the economics of the Feasibility Study. Environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues may materially affect the estimate of Mineral Resources. In addition, there can be no assurance that Mineral Resources in a lower category may be converted to a higher category, or that Mineral Resources may be converted to Mineral Reserves.

Quality Control and Assurance: The scientific and technical content of this presentation was reviewed and approved by Mason Graphite's Chief Operating Officer Jean L'Heureux, Eng. M. Eng., who is a Qualified Person within the meaning of National Instrument 43-101.

Sources of Information: Information and data such as market prices, volumes and information on comparable development company's projects were obtained from public sources such as press releases, technical reports and different industry publications.

THE MASON GRAPHITE DIFFERENCE

WHAT SETS US APART?

Our Team	◆ Several decades of experience in the graphite industry.
Our Deposit (Lac Guéret)	◆ One of the highest grades (purity) in the world = very low production costs. ◆ Potential: 11 million tons of graphite in the deposit (mineral resources) = long-term stable supply for users and possibility to support significant production capacity.
Our Financial Position	◆ $21M in treasury as of March 31,2021. ◆ Several renowned institutions invested in Mason Graphite. ◆ We strive for equality, sustainability, and durability; we want our investors to share these values.
Strong Social Acceptability	◆ IBA signed with the Conseil des Innus de Pessamit. ◆ No public hearing requested by the population. ◆ Environmentally conscious and carefully planned mining operations
An Integrated Project	◆ First and second transformation in the same company = full product spectrum available in one place. ◆ Vertical integration = costs optimization and consistency of products properties. ◆ Successful 1st and 2nd transformation processes proven at the pilot scale.

MANAGEMENT:
Proven track record

Jean L'Heureux, Eng., M. Eng. Chief Operating Officer
27 years of experience.
Metallurgy, production, sales and marketing.
Timcal/Imerys Graphite & Carbon

Pascale Choquet, CPA, CA, Interim Chief Financial Officer, Director, Finance & Administration
25 years pf experience Operations management, finance and human resources.
Groupe Forget and Ultramar

Julie Gravel, Eng., Director Environment and Sustainable Development
Geological engineer, 25 years of experience.
Met-Chem, SNC-Lavalin, Troilus and ArcelorMittal

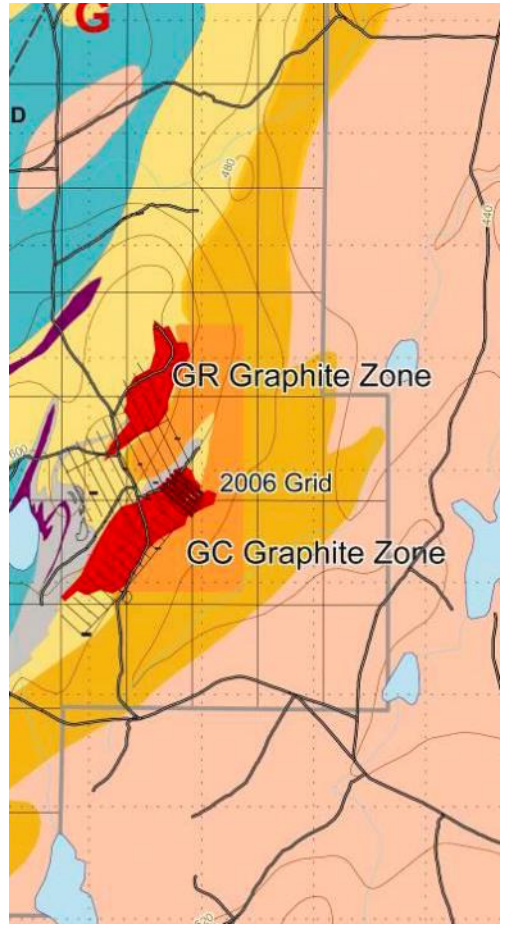
Geneviève Gauthier, P. Eng., Director Metallurgy and Processes
15 years of experience. Process engineering.
Soutex

Henri Wilhelm, Ph.D. Advanced Applications and Product Specialist
15 years of experience R&D, graphite product development.
Imerys Graphite and Carbon, and SGL Carbon

THE LAC GUÉRET DEPOSIT

The benefits of owning the primary/mineral resource:

- Security of supply for the customers:
  - Ore grade at 27,8% Cg on average over the first 25 years of operations = very low costs;
  - More than 200 years of resources (at 50,000 tons per year) = possibility to sustain a much larger operation;
  - Homogeneous deposit = consistency in products quality and properties and therefore, stability of customer's processes.
- Partnership with clients possible to jointly develop products for their long-term needs;
- Cost optimization via the vertical integration of the 1st and 2nd transformations;
- No intermediary, directly from the source to the client.



Resources: Zone GC only

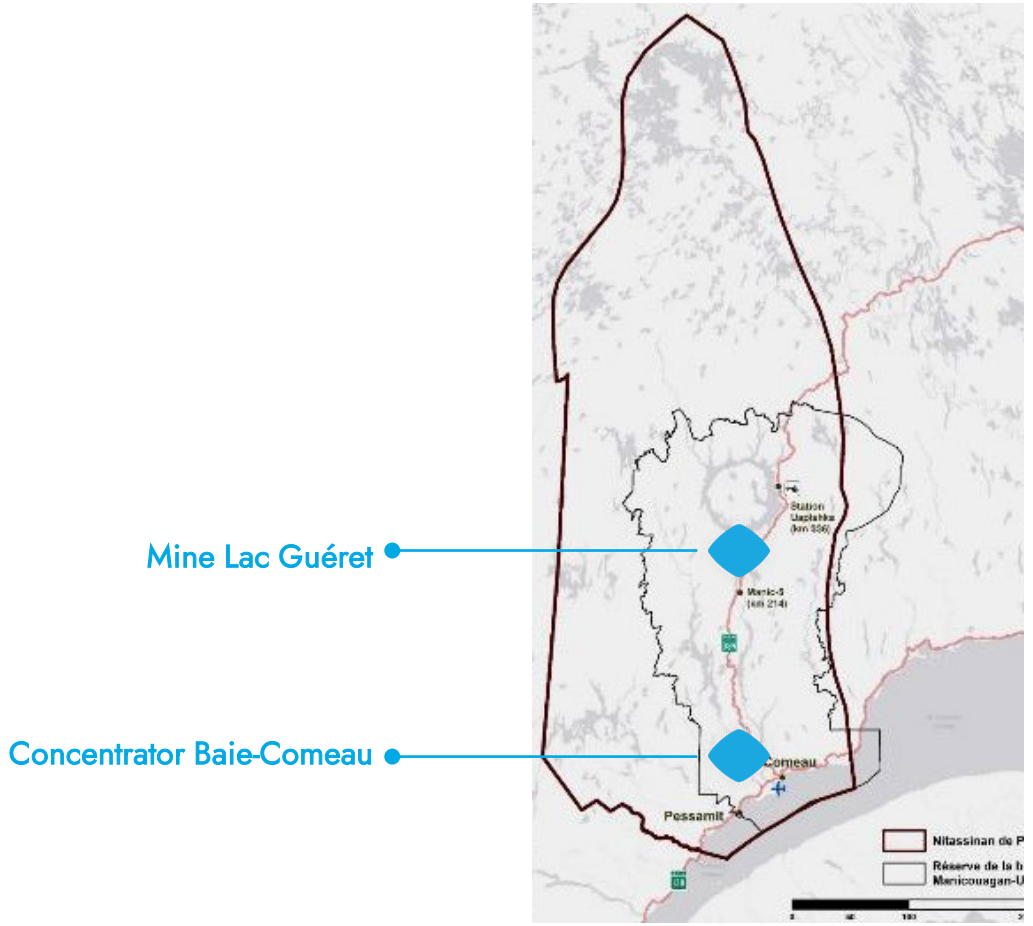
Based on +/- 43,324 m metres of drilling

FIRST NATION OF PESSAMIT

The Pessamit community is located 60 km west of Baie-Comeau.

- No permanent residents in the vicinity of the proposed mining activities;
- Constructive dialogue since 2012;
- Valuable and proactive partner;
- Protocol for cooperation (July 2014);
- Mushalakan Impact and Benefit Agreement (IBA) (June 2017).

Conseil des Innus de Pessamit



SOCIAL ACCEPTABILITY

Partnership with Réserve Mondiale de la Biosphère Manicouagan-Uapiska, for sustainability and social acceptability

- Objective: the implementation of a project meeting the recognized standards of social acceptability and sustainable mining development;
- Build on RMBMU expertise in all aspects of community relations;
- Ensure the harmonious integration of the project into the environment and community;
- Original agreement in 2015 and maintained since then;
- Exemplary mention from the Canadian Commission for UNESCO for Mason Graphite's sustainable development approach.

In 2017, Mason Graphite was a finalist for the QMEA "Excellence in Sustainable Development" Award.

United Nations Educational, Scientific and Cultural Organization

Manicouagan-Uapishka Biosphere Reserve

CORPORATE STRUCTURE

Ticker Symbol:

TSX.V: LLG (Since October 30, 2012)
OTCQX: MGPHF (Since November 12, 2013)

Capital structure:

Shares Issued and Outstanding	136,292,585
Options (weighted average exercise price: $0.63)	8,160,000
Fully Diluted	144,452,858

Treasury

On March 31, 2021	$21.0 M

Raised Capital

Private Placement (underwritten)* ◆ December 2017; $2.40/share ◆ Lead Underwriter: National Bank	$45.0 M
Private Placement (underwritten)* ◆ September 2016; $1.10/share ◆ Lead Underwriter: National Bank	$28.8 M
Private Placement ◆ April 2014; $0.65/unit ◆ Underwriter: Macquarie Capital Markets	$11.5 M
Caisse de Dépôt; Fonds de solidarité FTQ; Fonds régional de solidarité FTQ Côte-Nord *(June 2014)*	$4.15 M

Mason Graphite is recognized as one of the top ten performing mining companies on the TSX Venture in 2013

TSX.V: LLG OTCQX: MGPHF

BEST 50 OTCQX 2018 BEST 50 OTCQX 2017

Underwriting of the private placement of common shares: Syndicate of underwriters: National Bank, Paradigm Capital, Canaccord, BMO, TD Bank, Eight Capital. Underwriters' commission of 5%.

NATURAL GRAPHITE 101

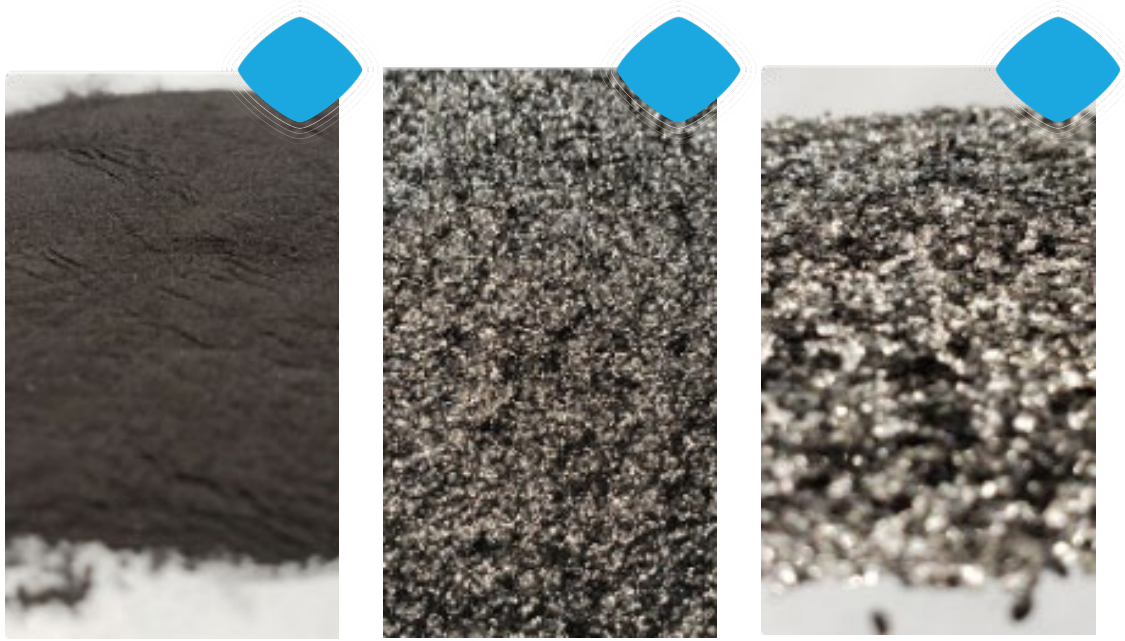
TSX.V: LLG OTCQX: MGPHF

PROPERTIES OF GRAPHITE

Graphite;

- One of two natural minerals made up of only carbon;
- High thermal conductivity;
- Only non-matalic mineral that is electrically conductive;
- Greasy texture;
- Features:
  - Highest natural strength and stiffness (vs. other minerals);
  - High resistance to corrosion;
  - Very high melting point;
- Lighter than the majority of other minerals;
- Nontoxic and chemically inert.

Properties vary according to the purity and size of the graphite crystals



THREE FORMS OF NATURAL GRAPHITE:

Flake

- High purity: 85% to 99%+
- Highest price
- Lower availability

Amorphous

Microcrystalline

- Lowest purity: 60% to 90%
- Highest availability

Vein

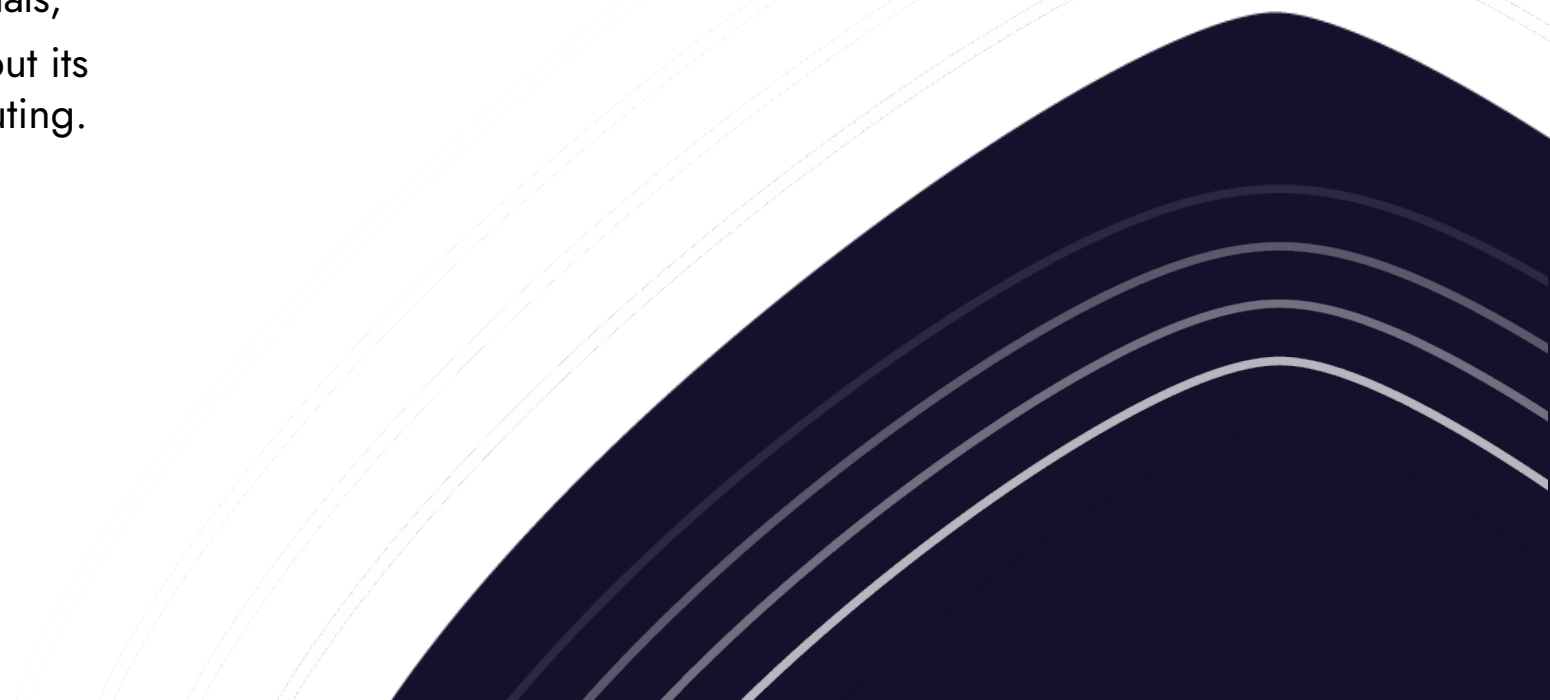
Solid

- Uncommon and highly localized
- <1% of global production

SYNTHETIC GRAPHITE

It is possible to create graphite from materials rich in carbon

- Until recently, synthetic graphite supplied the markets (regarding new technologies) that are very demanding in terms of purity and crystalline form;
- Synthetic graphite is made through pyrolysis (heating) of a carbon-rich material (e.g., petroleum coke), followed by graphitization between 2,500 °C and 3,000 °C to create almost perfectly shaped graphite crystals;
- Synthetic Graphite has a very high purity, but its production is very expensive and very polluting.



GRAPHITE FORMS & APPLICATIONS

Groups and Uses	Flakes		Amorphous	Vein	Synthetic
	1st transf.	2nd transf			
Metallurgy					
Refractory bricks	●		●	●	
Crucibles	●	●	●	●	
Carbon additives	●	●	●	●	
Molded molds and parts	●	●	●		
Molten metal	●	●			●
High-temperature lubricants		●			●
Metallic powder, alloys		●			●
Electronic Uses					
Alkaline and lithium batteries		●			●
Li-ion batteries		●			●
Flow batteries		●			●
Fuel cells	●	●			●
Electronic brushes (carbon)		●		●	●
Technical Uses					
Expanded graphite & graphite sheets	●	●			
Thermal diffusers	●	●			
Flame retardants		●			
Brake pads and shoes	●	●	●	●	●
Insulation	●	●			●
Nuclear reactors		●			
Plastic, resin, rubber	●	●			●
Catalysts		●			●
Fabrics & fibers	●	●			●
Other					
Pencils	●	●	●	●	●
Lubricants	●	●	●	●	●
Petroleum drilling additives	●		●		
Paint	●	●	●		

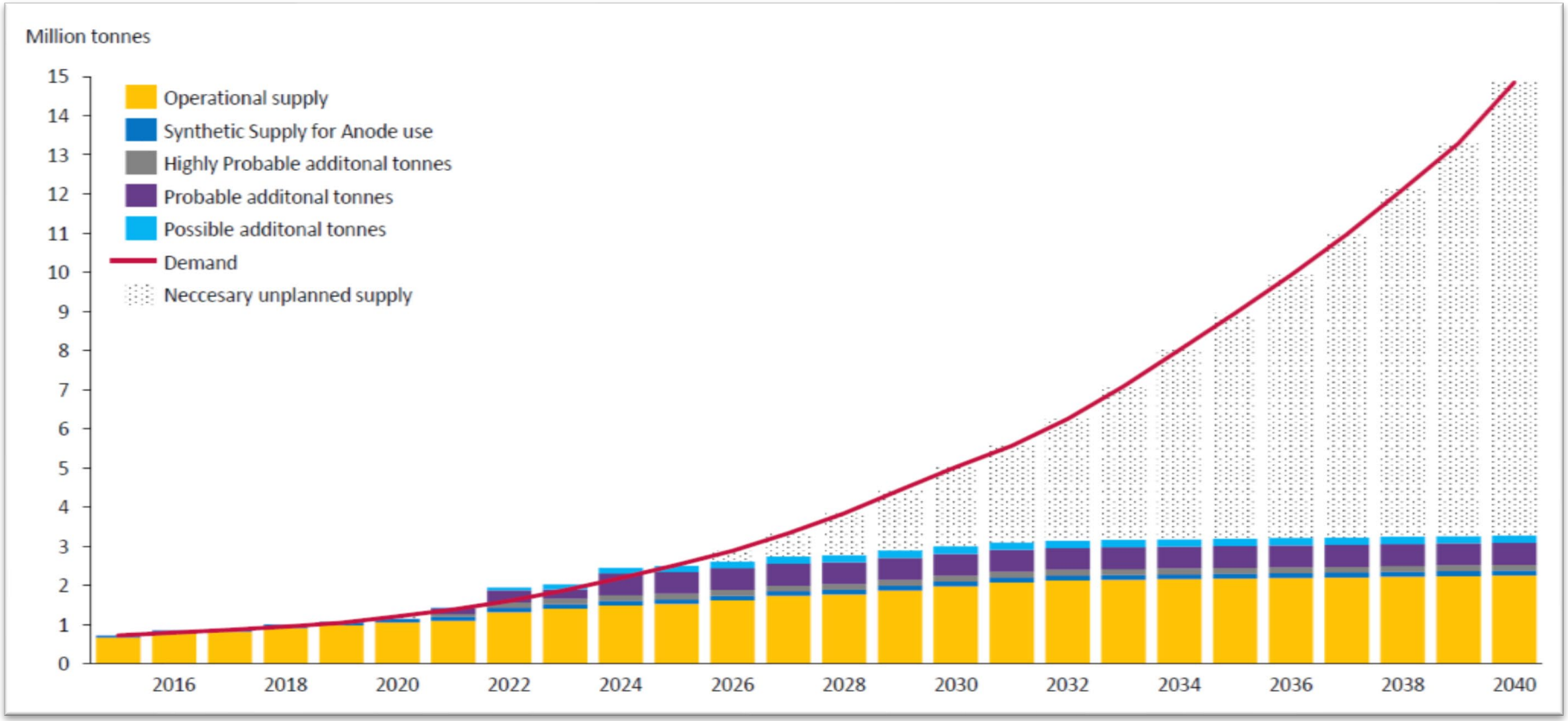
FLAKE GRAPHITE

- Widest range of applications;
- Increasing demand for high-purity flakes;
- No substitute | Only form of natural graphite that can be used with new technologies

GROWTH AND SHORTAGE ON THE HORIZON

Forecast for natural flake graphite demand up to 2040

Anticipated shortage of flake graphite

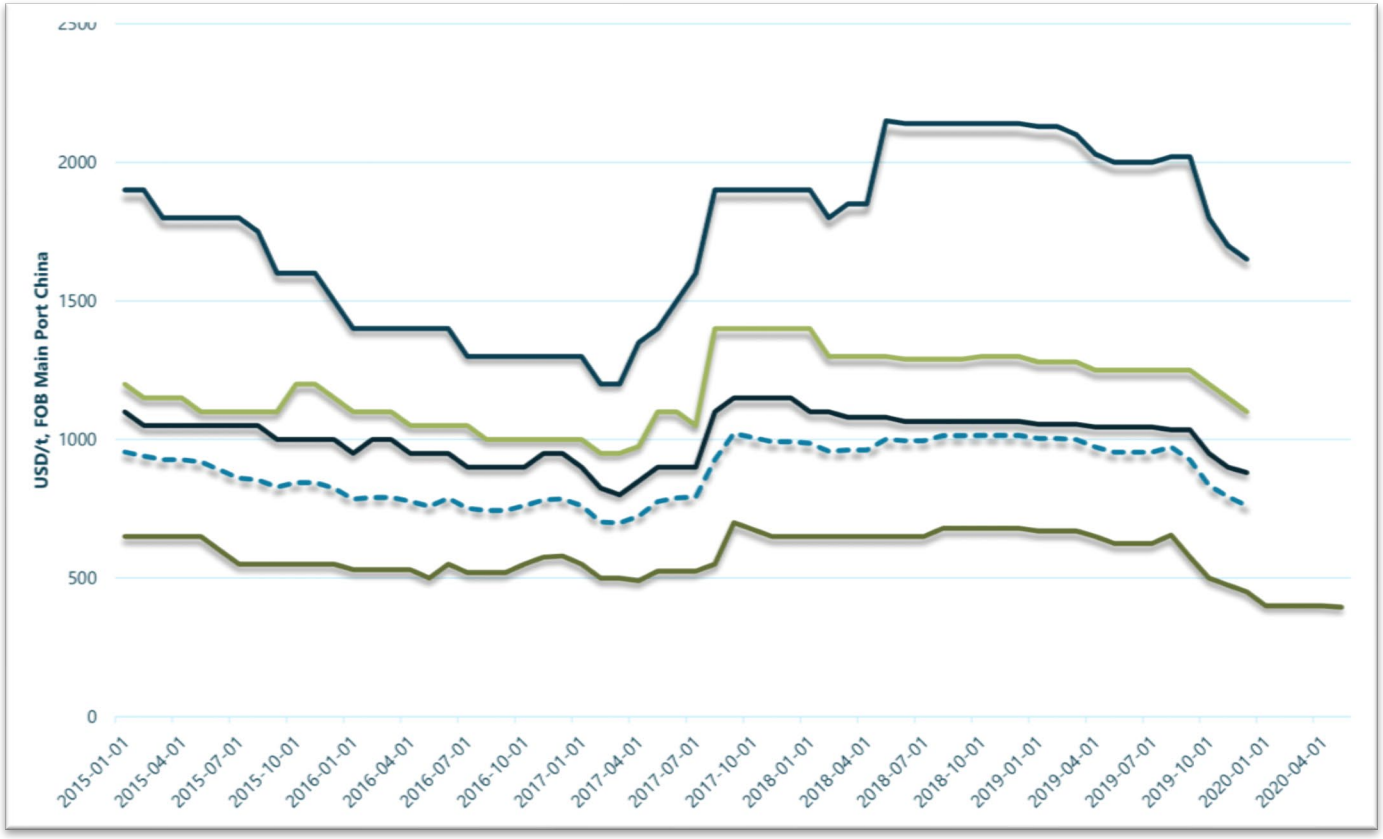


Source: Benchmark Mineral Intelligence Forecast Report 2019

THE MARKET PRICE OF NATURAL FLAKE GRAPHITE

Natural graphite prices evolution

Price History | 2015 to 2020



Note:
Data not available for coarse grades from January 2020.

- Flake, +50 mesh, 96-97%C (High)
- Flake, +80 mesh, 96-97 %C (High)
- Flake, +100 mesh, 96-97%C (High)
- Flake, M100 mesh, 90-93%C (High)
- Weighed Average for LG Size Distribution

Source: Benchmark Minerals Intelligence database

THE COST OF NATURAL FLAKE GRAPHITE

Price fluctuates according to:

- Size:
  - Large flakes = higher price;
  - ± $930/ton more for +0.300mm vs. -0.150mm*;
- Purity:
  - Higher grade = higher price;
  - ± $270/ton for 96 to 97% Cg vs. 90 to 93%**;

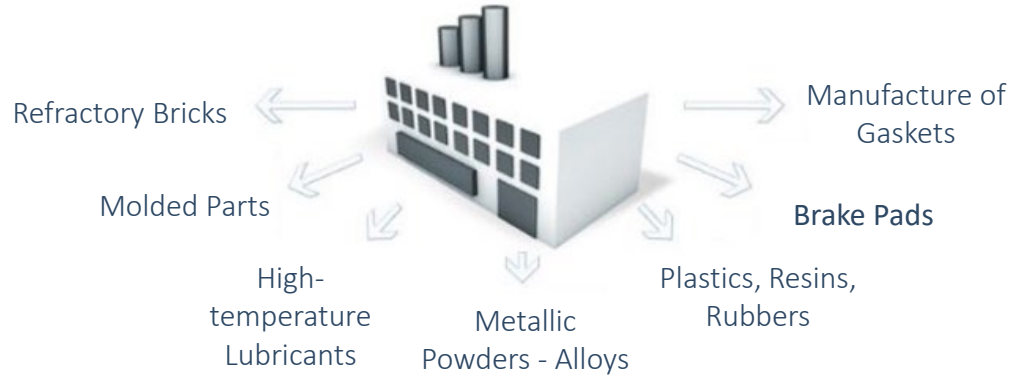
Additional second transformation processing, such as **purification** or **micronization**, adds value to the graphite and significantly increases its price.

** For 96%-97% Cg.*
*** For M100 mesh (-0.150mm)*
Source: Benchmark Mineral Intelligence

SALE OF GRAPHITE

Graphite Producer

Variety of grain sizes and purities for different applications and clients



Users

Typically, an annual supply contract sets the prices, specifications, volume, schedule and delivery

- Graphite is not traded in organized markets;
- Markets are highly fragmented;
- Graphite is an additive and therefore a small part of the client's costs.

There is a market of ALL types of graphite products (all grain sizes and purities).

MARKET BEHAVIOUR

Highlights:

- Very sensitive prices;
- "Published" prices are often underestimated as they are based on contracts in the refractory industry – a cyclical industry with high volumes and lower margins
- Prices in electrical and technical applications are much more stable and offer better margins;
- The price of natural graphite could triple/quadruple and it would remain lower than the price of synthetic graphite
- The decrease in North American production has forced several customers to turn to China.

Benefits of adopting a source of supply in North America

- Reliability, Consistency;
- Geographical proximity;
- Just-in-time delivery is an important factor

GLOBAL PRODUCTION OF NATURAL GRAPHITE

Flake graphite is produced around the world:


China


Mozambique


Brazil


Canada


India


Ukraine


Madagascar


Norway


Zimbabwe


Germany

- Urbanization in China and India is increasing the demand for graphite for traditional applications
- Mark Natural graphite is on the European Union's Critical Raw Materials list (2017) and on the Critical Minerals list of the United States Department of the Interior
- "The market doubles every 10 years.*"

Source: Benchmark Mineral Intelligence

FIRST TRANSFORMATION
(Mine and Concentrator)

AN ECONOMICALLY SOUND PROJECT

Feasibility study results (updated December 2018)

Capital expenditures, direct	$141.9 M
Capital expenditures, indirect	$61.5 M
Contingency	$34.7 M
Internal expenditures	$20.1 M
TOTAL	$258.2 M
Average production costs of the concentrate (FCA Baie-Comeau***)	$484/ton
Weighted average selling price ($1476)	$1,933/ton
Net present value (NPV) at a rate of 8%	$484 M (before taxes) $278 M (after taxes)

Internal rate of return (IRR)	27.7% (before taxes)
Payback period	3.7 years (before taxes) 4.4 years (after taxes)
Project lifespan (Using only 7% of the measured and indicated resources*)	25 years
Waste to ore ratio	0.8:1
Grade	27.8% Cg

** See slide 29 entitled: "Mineral Reserves and Resources" for more details.*
*** See slide 2 entitled "Legal disclaimers" .*
**** "Free Carrier Incoterms" – The seller is responsible for delivery until the buyer's freight forwarder takes custody of the goods; conversion rate used: US$0.76 : CAN$1.*

COST BREAKDOWN

Production costs (per ton of final product)		
Mine and mining site	$54	11%
Ore transport	$144	30%
Processing	$238	49%
General and administrative	$48	10%
Total	$484	100%

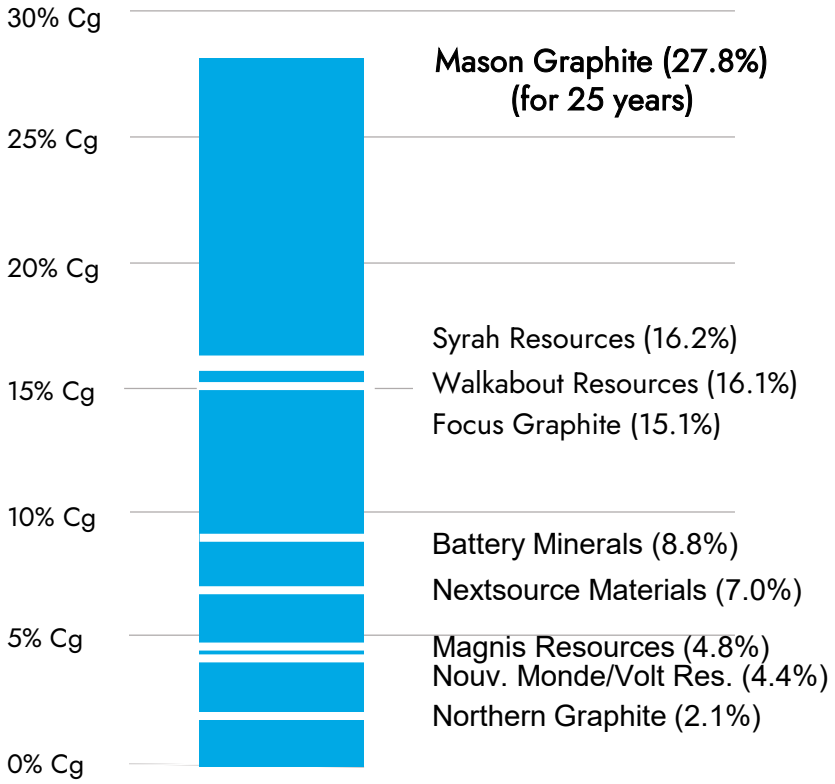
Capital expenditures (Direct)		
Mine and mining site	$13.3M	9%
Ore transport	$107.7M	76%
Processing	$11.9M	8%
General and administrative	$9.0M	6%
Total Direct Cost	$141.9M	100%

Capital expenditures (Indirect)		
Engineering, supply	$21.8M	35%
Freight, handling, duties	$5.5M	9%
Mine – Construction indirect	$6M	10%
Plant – Construction Indirect	$23.7M	39%
Pre-Operational checks and start-up	$2.4M	4%
Initial fillings, spare parts	$2.1M	3%
Total	$61.5M	100%

- Construction Duration: 12 to 18 months;
- Production of 51,900 tons per year (tpy) of graphite concentrate;
- Coarse final products reached 98% purity.

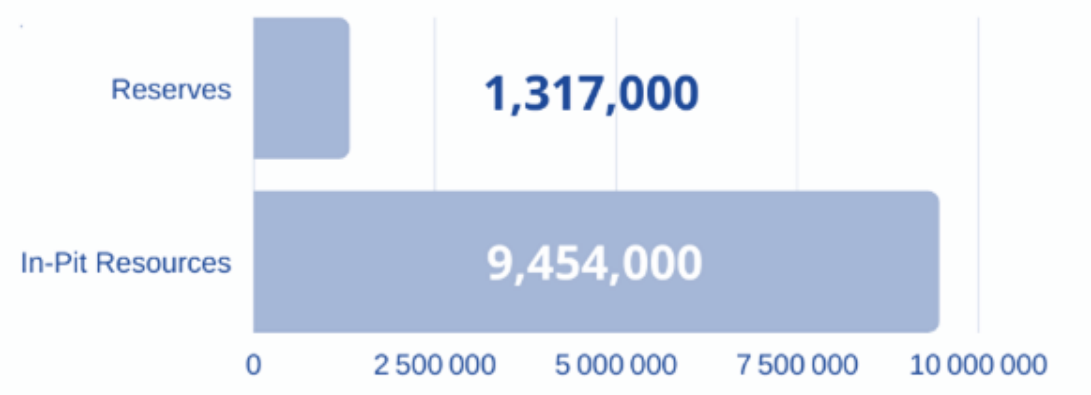
OUR DEPOSIT'S VALUE

Feasibility study:



Mason Graphite:

Tons of graphite in situ



Total: ± 11M tons of graphite *in situ*

> *"No additional drilling will be necessary for the economic evaluation required to eventually classify "In-Pit" Mineral Resources as Mineral Reserves"**

See the "Cautionary Statements Regarding Mineral Reserves and Resource" on slide 2 and the slide entitled "Mineral Resources and Reserves".
Sources: publicly available information (websites and reports)

MINERAL RESOURCES AND RESERVES

Total Mineral Resources

Resources type	Resources (tons)	%Cg	Graphite (tons)
Measured	19,021,000	17.9	3,404,000
Indicated	46,519,000	16.9	7,862,000
Measured + indicated	65,540,000	17,2	11,266,000
Inferred	17,613,000	17,3	3,404,000

Cut-off grade of 5.75% Cg

Mineral Reserves

Resources type	Resources (tons)	%Cg	Graphite (tons)
Proven	2,003,000	25.1	502,000
Probable	2,738,000	29.8	815,000
Proven + Probable	4,741,000	27,8	1,317,000

Cut-off grade of 6.00% Cg

For the first 25 years of operations:

- Only 7 tons of ore + waste mined to produce 1 ton of concentrate;
- Only 7% of the mineral resources used.

See NI 43-101 Technical Report for more details

See the cautionary statements and legal disclaimers on slide 2.

THE BENEFITS PF OUR DEPOSITS

A high-grade deposit represents economies of scale in production costs (CAD):

Company	Project	Country	Reserves (% Cg)	Resources (%Cg)	TPA (000's)	Production Cost (C$/t OPEX)	Stage of development
Mason Graphite	Lac Guéret	Canada	27.8%	17.2%	50	$484	Ready for construction
Talga Resources	Jalkunen	Sweden	n.a.	14.9%	n.a.	n.a.	Pre-Feasibility (Permitting)
Walkabout Resources	Lindi Jumbo	Tanzania	16.1%	11.6%	40	$457	Feasibility 2019
Syrah Ressources	Balama	Mozambique	16.2%	11%	313	$371	Production 2019
Focus Graphite	Lac Knife	Canada	15.1%	14.8%	44	$441	Feasibility 2014
Battery Minerals	Balama Central	Mozambique	11.1%	10.2%	58	$471	Feasibility Study 2018
Battery Minerals	Montepuez	Mozambique	**9.3%**	8.1%	50	$468	Site Construction
NextSource Materials	Molo	Madagascar	7.0%	6.3%	22	$734	Production 2020
Magnis Ressources	Nachu	Tanzania	4.8%	5.4%	240	$725	Feasibility 2016
Volt Resources	Bunyu	Tanzania	4.4%	4.9%	24	$861	Stage 1 Feasibility 2018
Nouveau Monde	Matawinie	Canada	4.4%	4.3%	100	$499	Feasibility Study 2018
Northern Graphite	Bissett Creek	Canada	2.1%	1.7%	20	$710	PEA 2013 (2018 Update)
Talga Resources	Jalkunen	Sweden	n.a.	14.9%	n.a.	n.a.	Pre-Feasibility (Permitting)
EpoGraf	Epanko	Tanzania	n.a.	9.9%	60	$649	Ready to Construct
Talga Resources	Raitajarvi	Sweden	n.a.	7.1%	n.a.	n.a.	Pre-Feasibility (Permitting)
SRG Graphite	Lola	Guinea	n.a.	4.1%	58	$610	Feasibility 2019
South Star Mining	Santa Cruz	Brazil	n.a.	2.3%	16	$536	Feasibility Study 2017

Mason Graphite: Average grade after 25 years: 16.3% Cg

**See cautionary statements on slide 26.*
*** See slide titled "Mineral Resources and Reserves" in the appendix for complete details and disclosures.*
Sources: publicly available information (websites and reports)

LOCATIONS

Lac Guéret (mine):

- 285 km north of Baie-Comeau;
- Accessible year round via a main road (200 km) and a network of well-maintained forest roads (85 km);

Trucking (ore):

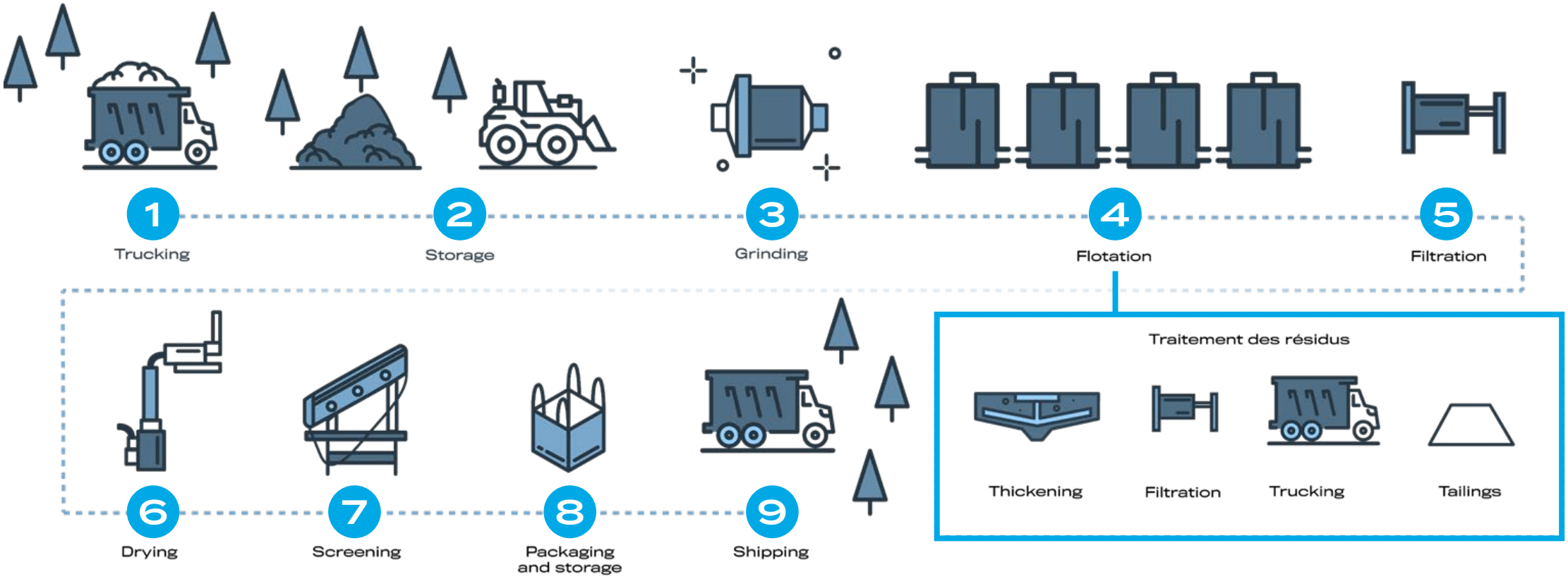
- Average of 190,000 tons per year;
- 14-16 trucks (40 tons) per day, 7/7, 10 month/year;

Baie-Comeau (plant):

- Access to skilled labour (22,000 inhabitants);
- Better quality of life for workers (no fly-in/fly out);
- Reduction in greenhouse gas emissions (hydropower);
- Direct access to emergency services and supplier;
- Deep-water port, rail ferry, airport, hospitals, heavy industries

PROCESS FOR CONCENTRATING GRAPHITE

Simple process, with known and proven technologies



CONCENTRATOR PRODUCTS

Typical products:

Category	Pop. (%)	Prod (tpy)	Granulometric distribution	Purity (% Cg)
+50 mesh (+300 µm)	13	6,900	80% min + 50 mesh (+300 µm)	94–97
50 to 80 mesh (180 to 300 µm)	16	8,400	80% min + 80 mesh (+180 µm)	94–97
80 to 150 mesh (105 to 180 µm)	14	7,200	80% min + 80 mesh (+105 µm)	94–97
M 150 mesh (< 105µm)	57	29,400	20% max + 150 mesh (+105 µm)	91–93
	100	51,900		

A plant designed to be flexible and to meet client needs in terms of production.

OUR PATH

What is completed:

- Engineering (all disciplines): 75% completed | 65,300 hours completed;
- Main process equipment delivered on site;
- Ownership of the land to build the concentrator;
- Permits required to start construction in hand.

What remains to be done:

- Financing;
- Constuctions (duration: 12 to 18 months*);
- Start-up (± 4month);
- Operation and commercial production.

** According to the feasibility study.*

A PROJECT WITH A SOLID FOUNDATION!

IBA with the Conseil des Innus de Pessamit

+

Land purchased (acquired in April 2019)

+

Main process equipment on site

+

Permits received to begin construction

+

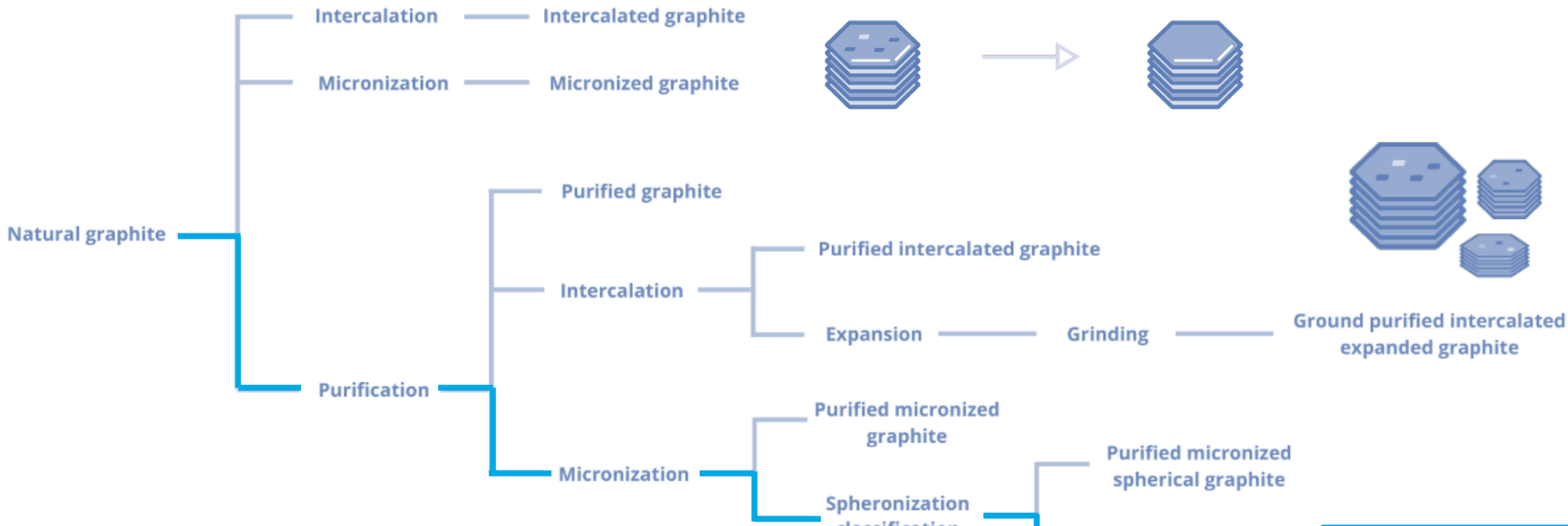
Detailed engineering 75% completed

PERMITS RECEIVED

Description	By
MRN Lease for Lac Galette camp site	Québec RCM
Ministerial Decree	Government of Québec
Advanced exploration restoration plan – Baie- Comeau site	MERN
Authorization – Wood clearing work at the Lac Guéret mining site	MELCC
Authorization under Section 241 – Location of the waste rock pile	MERN
Exclusive operating lease- Mining pit	MERN
Set up of a mining pit at the Lac Guéret site	MELCC
Preparatory work at the concentrator site – Phase 1	MELCC
Audit of the non-taxable status of the VAP project in Baie-Comeau	MELCC - DEE
Treatment equipment – Drinking water and waste water – Industrial Camp – Lac Galette	MELC
Authorization certificate – Site preparation work	City of Baie-Comeau
License - Contractor - Owner - Modification	Régie du bâtiment
Construction of the raw water reserve ad the raw ore storage area	MELCC
Water treatment unit at concentrator	MELCC

SECOND TRANSFORMATION
(Value-Added Products)

VALUE-ADDED PRODUCTS (VAP)



The second transformation offers a multitude of possibilities

TYPICAL APPLICATIONS FOR VALUE-ADDED PRODUCTS

The second transformation offers a multitude of possibilities

- Metallic powders and alloys
- Alkaline batteries
- Li-ion batteries
- Fuel cells
- Flow batteries
- Carbon brushes
- Flame retardants
- Brake pads and clutch facings
- Insulation
- Plastics, resins, and rubbers
- Catalysts
- Fabrics and fibres
- Pencils
- Lubricants
- Paints

SPHERICAL GRAPHITE FOR Li-iON BATTERIES

A Brief History:

- Corporate vision combining 1st and 2nd transformation already in 2012.
- Project started in 2015.
- Products and processes developed with expert partners:
  - NRC | COREM | Centre de technologie minérale et de plasturgie (CTMP) | CTTÉI | Dundee Sustainable Technologies | LiBTec.
- Acquisition and installation of pilot equipment + first pilot campaign in 2019.
- Completion of cycling tests in three independent laboratories on the pilot product.

Highlight:

- Proven performance in commercial-grade Li-ion batteries.
- Industrial approach: 4 years of development | +$5 M investment | A pilot plant.

COATED SPHERICAL GRAPHITE FOR Li-iON

Lac Guéret project to feed the required concentrate for Value Added Products (VAP)

The VAP plant will be directly fed from Mason Graphite's own concentrate; this concentrate will be transformed into a multitude of products*.

Mason Graphite's ambition is to become a fully integrated graphite producer.

Technical and economic study (2020)

- High-level | Accuracy of -20%/+30.
- Excellent results.
- Feasibility study to follow.

**See slide 35 for possibilities.*

DEVELOPMENT PROCESS

An industrial approach

1 Comparative Analysis

- Validation protocols
- Identification of market needs

2 Transformation

- Product design
- Product characterization
- Pilot program
- Production and testing of battery materials on a kg scale

3 Final Testing Period

- Performance tests
- Lifespan tests

Product piloting operation for Li-ion battery products launched in May 2019.

4 Industrialization

- Detail engineering
- Construction
- Production
- Development in phases

The design of a generic grade for traditional Li-ion batteries as well as a grade for electric vehicles is based on information (customer specifications) collected by Mason Graphite and **National Resources Council of Canada**. The design of a graphite-silicon anode material is done in partnership with **LiBTec.**

HIGH-PERFORMANCE SPHERICAL GRAPHITE

Battery test results from a pilot batch of spherical graphite for Li-ion (VAP) batteries are positive.

- The product proposed by Mason Graphite has physicochemical and electrochemical values similar to the commercial products currently available on the market.

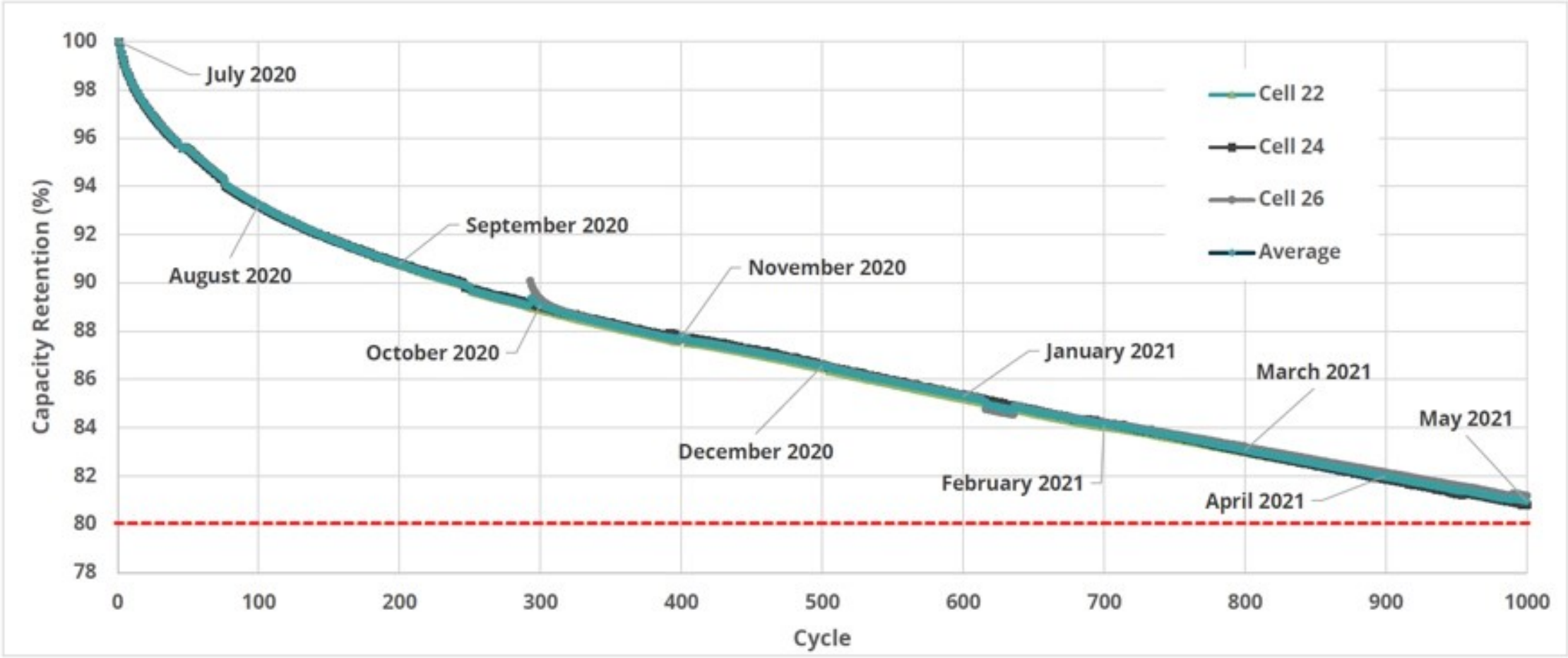
Typical physiochemical properties

	PSD (d_{50} µm)	Purity (%C)	BET Surface (m^2/g)	Tapped Density (g/cm^3)
Mason Graphite Product	18-20	>99.95	~3.0	>1.1

Electrochemical Testing

- Spherical graphite produced at pilot scale from Lac Guéret successfully tested, reaching 1,000 cycles while retaining 80.6% of the initial capacity (see press release dated June 7, 2021).*
- The cycling tests were performed under the following conditions:
  - Complete prototype pouch cells, assembled and tested at NRC;
  - Cathode: NMC532 type;
  - Cycling rate: C/3, meaning 3 hours to charge and 3 hours to discharge (hence about 4 full cycles per day);
  - Capacity retention calculated on the discharge capacity, with respect to the first cycle.

*See the next slide.


Capacity Retention (%)
100
98
96
94
92
90
88
86
84
82
80
78
0
100
200
300
400
500
600
700
800
900
1000
Cycle
July 2020
August 2020
September 2020
October 2020
November 2020
December 2020
January 2021
February 2021
March 2021
April 2021
May 2021
Cell 22
Cell 24
Cell 26
Average

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