

A Unique Vision of “Integration”

Benchmark Week 2020

Day 1 – Graphite & Anodes | Natural Graphite Session

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Chief Operating Officer



**MASON
GRAPHITE**

TSX.V: LLG
OTCQX: MGPHF



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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 COO, 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 companies' projects were obtained from public sources such as press releases, technical reports and different industry publications.

What's this presentation all about?

Objective: An overview of Mason Graphite and its projects

1. Introduction
2. Mine and Concentrator (T1)
3. Value-Added Products (T2)
4. Tailings Valorization (T3)
5. Conclusion



INTEGRATION



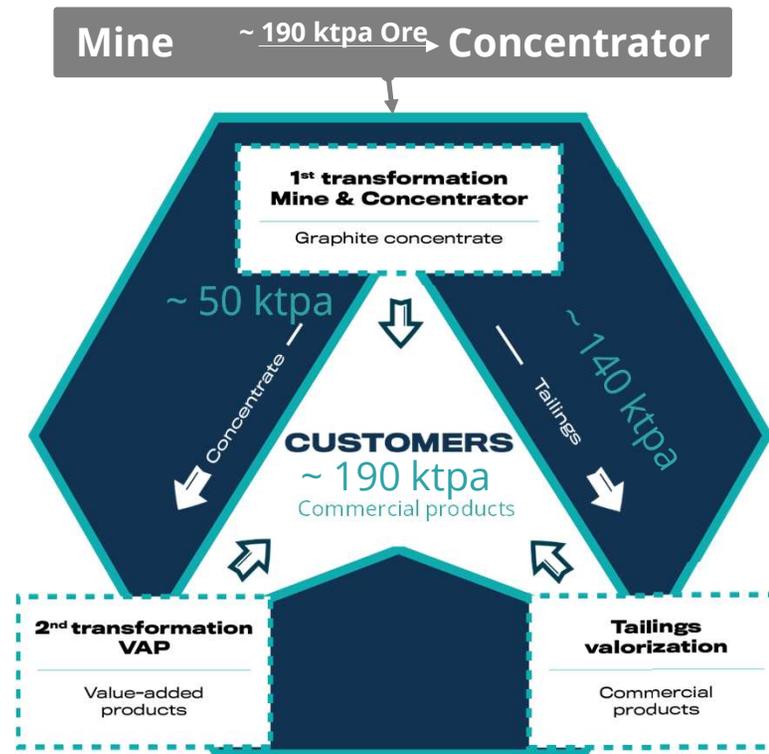
First Things
First
Introduction

For starters, who is Mason Graphite

Dedicated to the production of graphite-based solutions

- Created in 2012, listed on the TSX.V
- Strong graphite experience
- Excellent cash position (*see financial statements as of September 30th, 2020*)
- **An industrial approach to everything we do**
- Our values: Leadership, Performance, Cooperation and Prevention
- **Our vision: a fully integrated project, with minimal environmental footprint**

A fully integrated project? Really.





**A Deposit,
a Mine, and a
Concentrator**
1st Transformation | T1

The Lac Guéret Project, where it all starts...

- Small open pit mine in Lac Guéret
- Concentrator in Baie-Comeau → flexible and proven process
- 190 ktpa of ore (25 tph) | 52 ktpa concentrate
- **Detail engineering done at 75%**
- **Main process equipment on site**
- **Permits required to start construction in hand**
- < USD 200M CAPEX & < USD 375 /t OPEX (2018)



The Lac Guéret Project, where it all starts...



Plenty, plenty of graphite in Lac Guéret

Mineral Resources (GC Zone)

Type	Resources	Grade	Graphite
Measured	19.0 Mt	17.9 %Cg	3.4 Mt
Indicated	46.5 Mt	16.9 %Cg	7.8 Mt
TOTAL M+I	65.5 Mt	17.2 %Cg	11.2 Mt
<i>Inferred</i>	<i>17.6 Mt</i>	<i>17.3 %Cg</i>	<i>3.0 Mt</i>

Mineral Reserves (25 years)

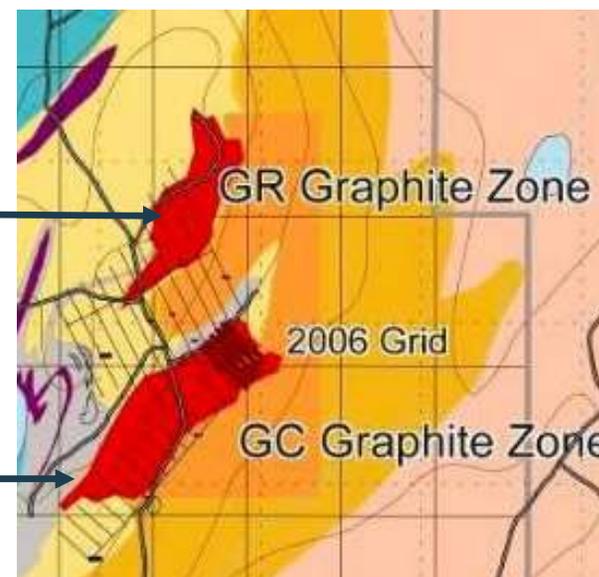
Type	Reserves	Grade	Graphite
Proven	2.0 Mt	25.1 %Cg	0.5 Mt
Probable	2.7 Mt	29.8 %Cg	0.8 Mt
TOTAL	4.7 Mt	27.8 %Cg	1.3 Mt

See the cautionary statements and legal disclaimers on slide 2.

Did you know?

11 Mt of graphite = ~**16 years** of world production

Graphite found in GR Zone as well (not estimated)



A project respecting people and the environment

- **Proactive approach with local communities** → no public hearings requested by the population, a first for a mining project in Quebec
- R&D programs on waste and tailings management, testing of other industries' by-products as neutralizing agents (**circular economy**)
- High social acceptability / Baie-Comeau
- **IBA with Pessamit First Nation**
- **Partnership with RMBMU**



United Nations
Educational,
Scientific and Cultural
Organization



Manicouagan-
Uapishka
Biosphere
Reserve

A big graphite project with a small footprint

High grade and low strip ratio:

- Less than 350 kt total moved per year (on average)
 - **Less than 7 tons moved per ton of finished product!**
- Very small mining fleet | Only 2 x 25-ton trucks
- **Small pit** | After 25 years: about 13 ha | 650 m long, 65 m deep
- Small waste dump | After 25 years: about 10 ha
- Plant in Baie-Comeau instead of the mine site (many advantages)
- Small tailings pile (*if not processed...*) | after 25 years: less than 20 ha
- Progressive rehabilitation possible (and planned)



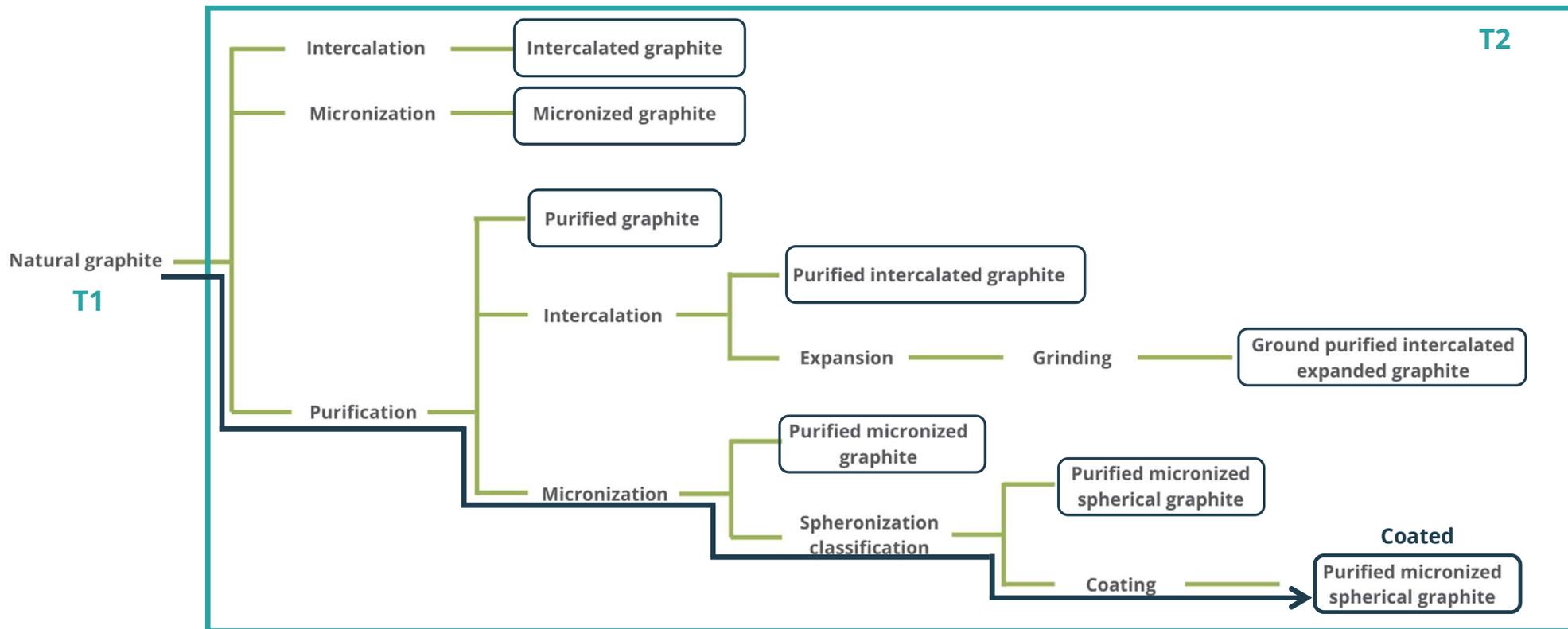
Products with Value!

2nd Transformation | T2

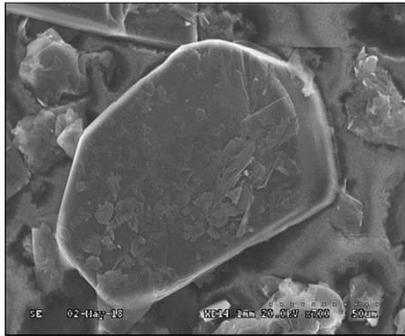
Value-added products – The story

- Envisioned already in 2012
- Since 2016, work on coated spherical graphite for LIB:
 - Purification, shaping and coating...
 - ...all demonstrated at **pilot scale**...
 - ...on Lac Guéret concentrate.
- Our strategy:
 - Build a diversified VAP plant, using graphite purchased on the market...*
 - ...until we build and start the mine and concentrator.*
 - **Conceptual study underway**

Value-added products: so many possibilities...



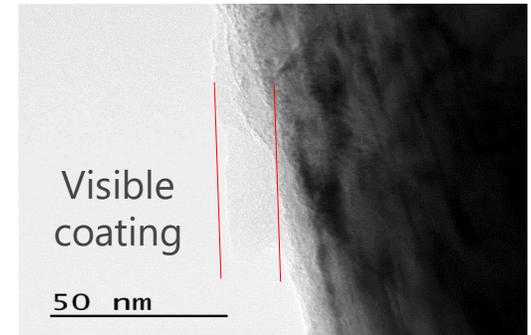
And our spherical graphite?



Purification

Shaping (MSC)

Coating

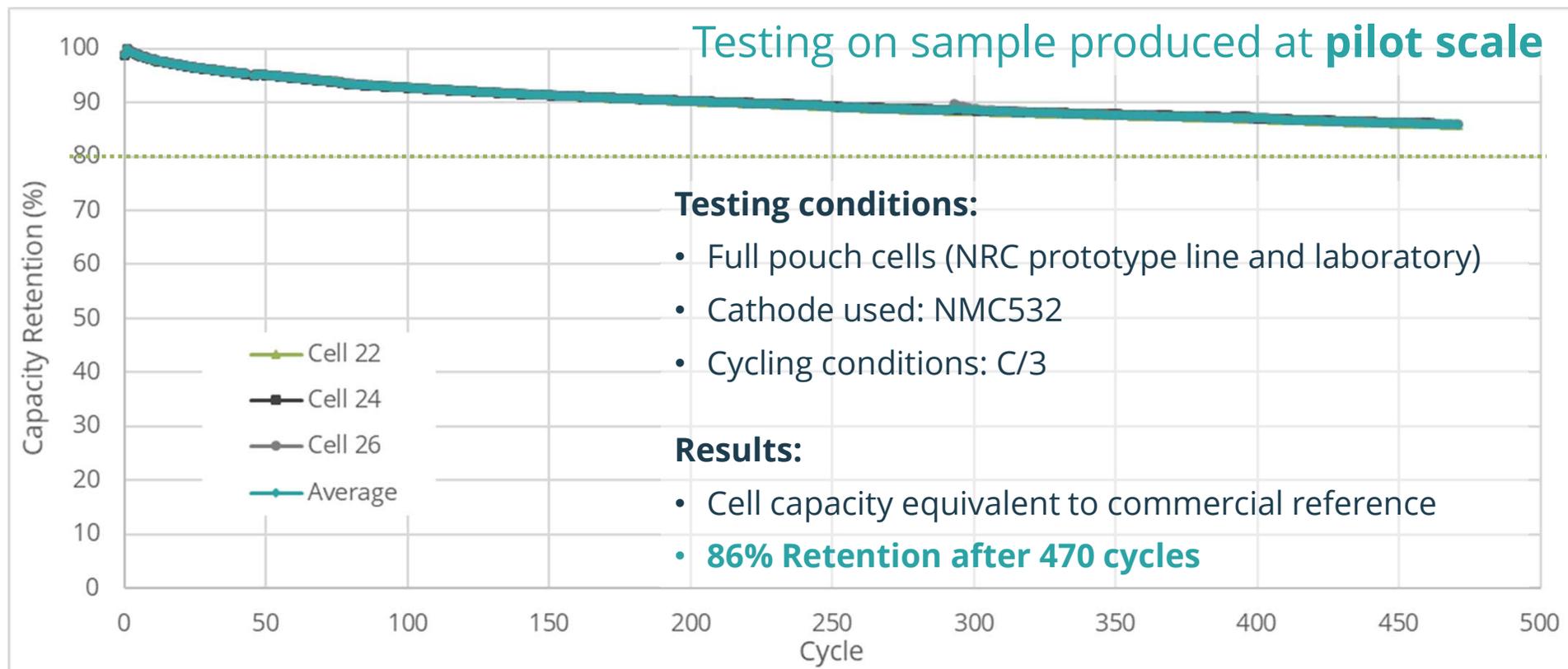


Parameter	Result
Purity	> 99.95 %
Size	D_{50} @ $\sim 20 \mu\text{m}$ $D_{90} / D_{10} < 3$
Specific Surface	$\sim 3 \text{ m}^2/\text{g}$
Tap Density	> $1.1 \text{ g}/\text{cm}^3$

Processes at the pilot scale, undergoing optimization



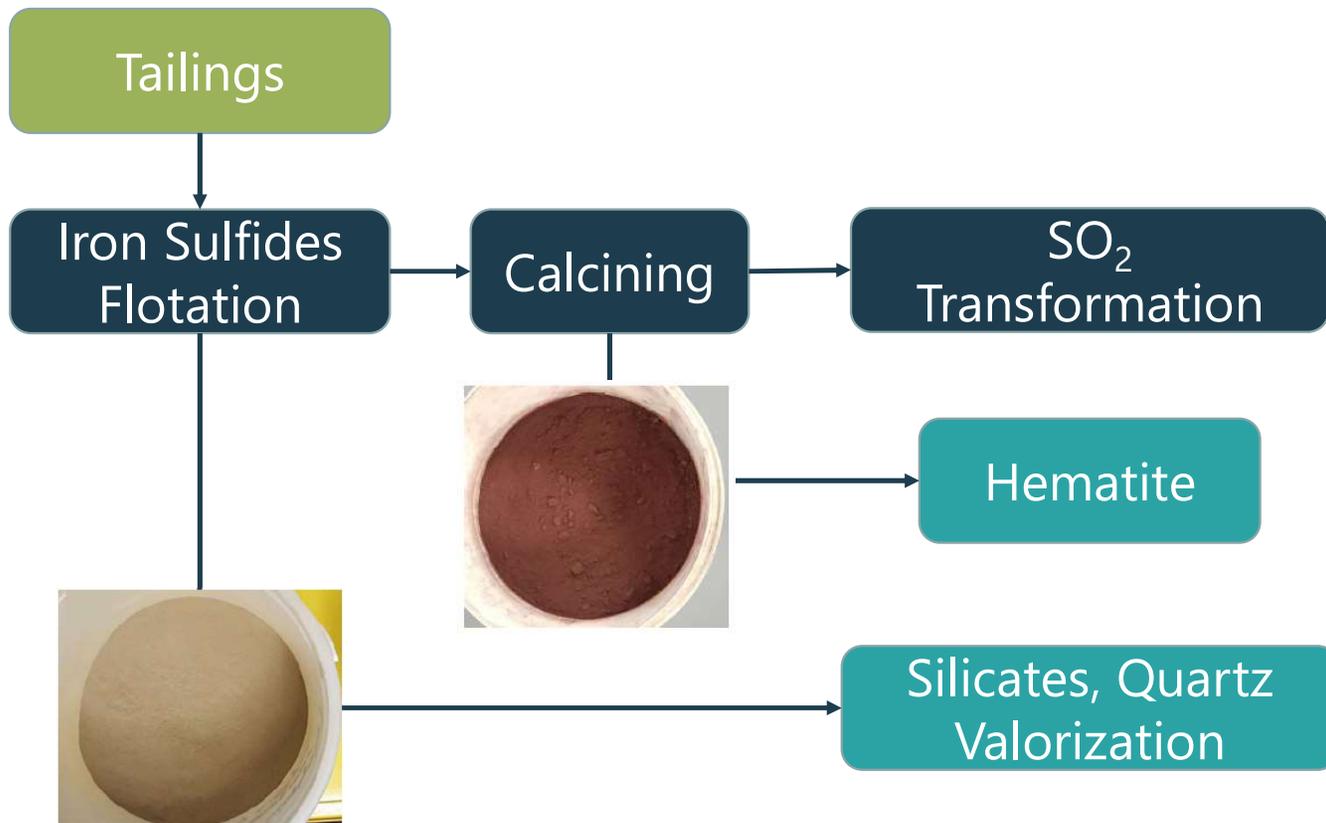
Cycling underway: results very promising!





Tailings?
No, Products!
Tailings Valorization | T3

Anything we can do with the T1 tailings?



Markets

- Sulfuric Acid
- Gypsum

- Cement

- Geopolymers



Tailings Valorization – Why?

No tailings left on concentrator site:

- 140,000 tpa feed
- 100% of commercial products
- No acid water generated from tailings pile → no treatment

In essence:

- **190,000 tpa of ore from the mine**
- **190,000 tpa of commercial products**
- **0 tpa of tailings**



Almost Done

Conclusion

What to take away from all this?

Mine and Concentrator | The source

- Significant mineral reserves, very low environmental footprint; low production costs, high social acceptability
- Ready to build

Value Added Products | The future

- Spherical graphite produced at pilot scale, cycling and nearing 500 cycles

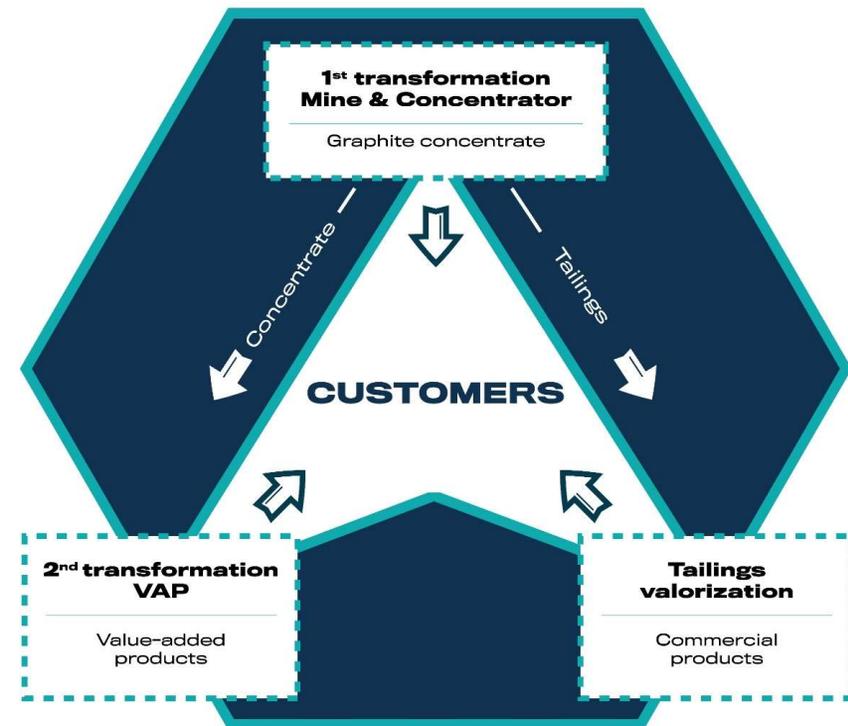
Tailings Valorization | Closing the loop

- Process developed and tested at pilot scale

Closing the Loop

- A company with a **solid financial situation**
- An **industrial** approach
- A fully integrated project, **including tailings valorization**

→ The perfect partner, for investors and graphite users alike.



The End

Many thanks for your attention.

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