

# From Mine to Battery

Through Scalable Production from  
the World's Highest-Grade Vein  
Graphite Deposits



**TSX-V: CYL**  
**OTCQB: CYLYF**  
**FSE: CCY**  
February 2023



# FORWARD LOOKING STATEMENTS

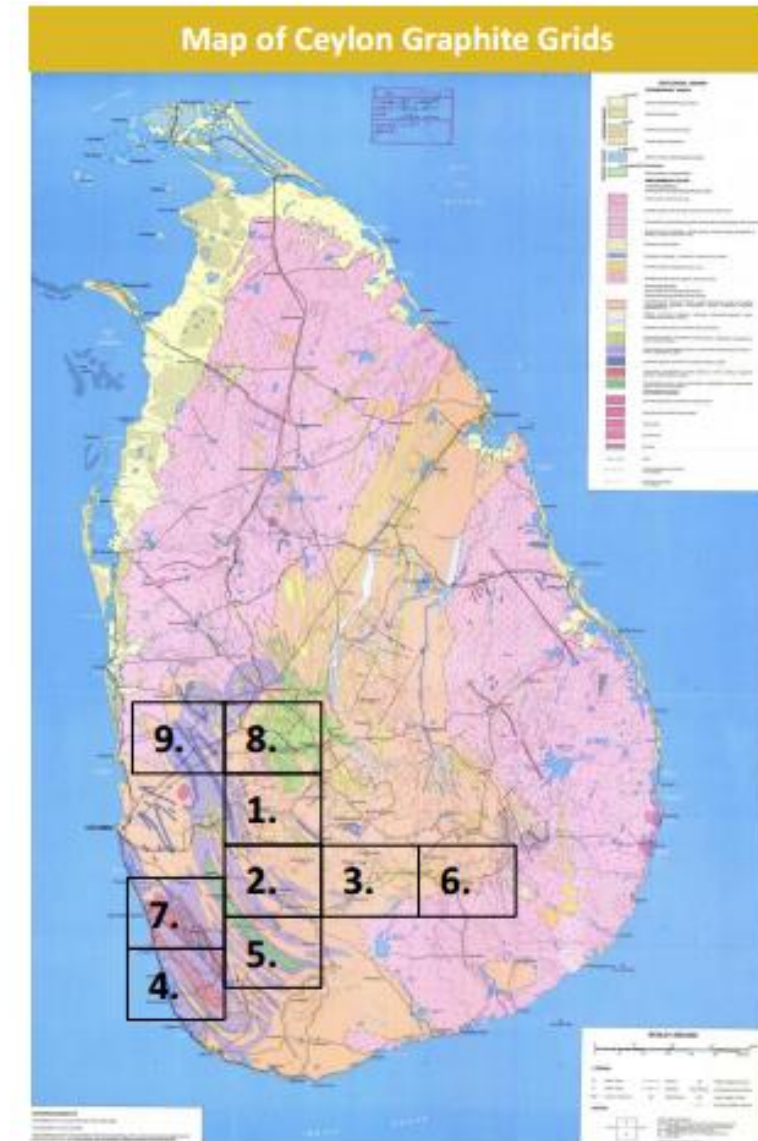
This presentation includes certain statements that may be deemed forward looking statements. All statements in this discussion, other than statements of historical facts, which address future production, reserve potential, exploration activities and events or developments that the Company expects, are forward looking statements. Such forward-looking statements include, without limitation: (i) estimates of future graphite prices, supply, demand and/or production; (ii) estimates of future cash costs; (iii) estimates of future capital expenditures; (iv) estimates regarding timing of future development, construction, production or closure activities; (v) statements regarding future exploration results; (vi) statements regarding cost structure, project economics, or competitive position, and; (vii) statements comparing the Company's properties to other mines, projects or metals. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward looking statements include market prices, exploitation and exploration successes, continued availability of capital and financing, and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, that the Company expressly disclaims any responsibility for revising or expanding the forward-looking statements to reflect actual results or developments, and that actual results or developments may differ materially from those projected, in the forward- looking statements. The information received is for personal use. Investing involves a great deal of risk, including the loss of all or a portion of your investment, as well as emotional distress. Nothing contained herein should be construed as a warranty of investment results or advice. All risks, losses and costs associated with investing, including loss of principal, are your responsibility

## QUALIFIED PERSON

Chrisitan Derosier P. Geo, M.Sc., D.Sc. is the Qualified Person for Ceylon Graphite as defined in NI43-101 and has reviewed and approved the technical content of this presentation.

# Highest Grade Graphite in the World

- **Natural Vein Graphite:** Above **90%** High Grade in the Ground
- **121 Square Km-Exclusive exploration mining** licenses with the GSMB.
- **Diverse Application:** Li-Ion Batteries, Energy storage, Coatings, etc.
- Initial Battery tests out perform synthetic graphite and flake graphite





# Strong Board and Management Team



**Rita Theil, B.Soc.Sci; LLB, MBA,  
C.DIR**

Non-Executive Chair

Rita has over 30 years' experience advising public and private power, water and energy companies (with Citibank and Dresdner Kleinwort Benson in NYC and London). She has advised governments, companies and investors on privatizations, cross border mergers, acquisitions, and financing strategies in power, water and energy around the world. She has both advised on – and lead from the board or senior management level – on IPOs in the UK, in Canada (TSX and TSX-V) and the USA (NASDAQ).

**Sasha Jacob, MBA, LL.M**

Chief Executive Officer,  
Director & Founder

Sasha Jacob has over 20 years of finance experience and has participated in transactions in renewables, infrastructure and mining valued at over \$8B. He is the current Chair of Maritime Launch (NEO:MAXQ), Chair of Nature United and previously Vice-Chair of WWF Canada, Chair YPO Maple Leaf and Director, Plan International Canada.

**Dr. Mallika Bohm**

Technical Director

Dr. Mallika Bohm has a PhD in Physics, focused on the use of graphene in coating, composite, construction materials and energy.

**Abbey Abide, CPA**

Chief Financial Officer

Abbey Abdiye Abbey is a CPA charterholder with extensive experience with publicly traded companies

**Kevin Aylward**

Director

Kevin Aylward is an Indigenous senior executive with both Public and Private sector experience. Kevin is a former Provincial Cabinet Minister with the Government of Newfoundland and Labrador, Canada, having served ten years in Cabinet.

**Dr. Siva Bohm**

Chief Scientific Executive

Dr Siva Bohm is a renowned nano materials scientist with decades of multi-industry experience.

**Jody Lenihan, P.E., P.Eng**

Director, Founder

Mr. Lenihan has had tremendous success doing business in Sri Lanka. He is one of the founding shareholders of Ceylon Graphite,

**Brett James**

Director

Brett James is currently the Vice President of Sussex Strategy Group (“Sussex”). Prior to joining Sussex, Brett operated his own consulting practice servicing clients in government as well as in the health care, finance and energy sectors.

# Environmentally Friendly Mining Process: CEYLON GRAPHITE

- Vein Graphite, very high grade with 92-97% Cg purity out of the Mine.
- No conventional primary processing required, therefore no tailings ponds, no Acid Mine Drainage issues, no waste rock dumps, small surface footprint
- **Underground mining** : minimizes ecological impact.

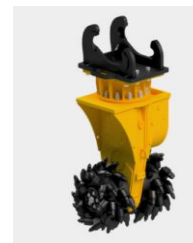
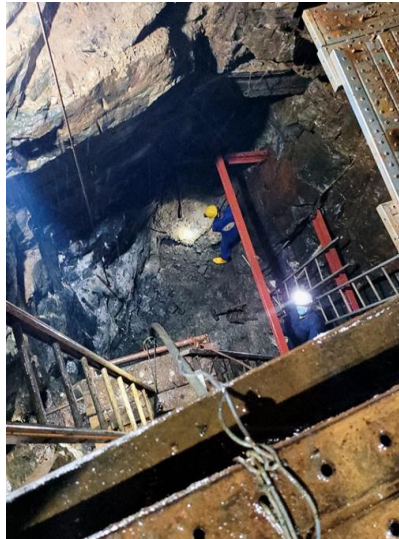




# Resources and Mining Methods

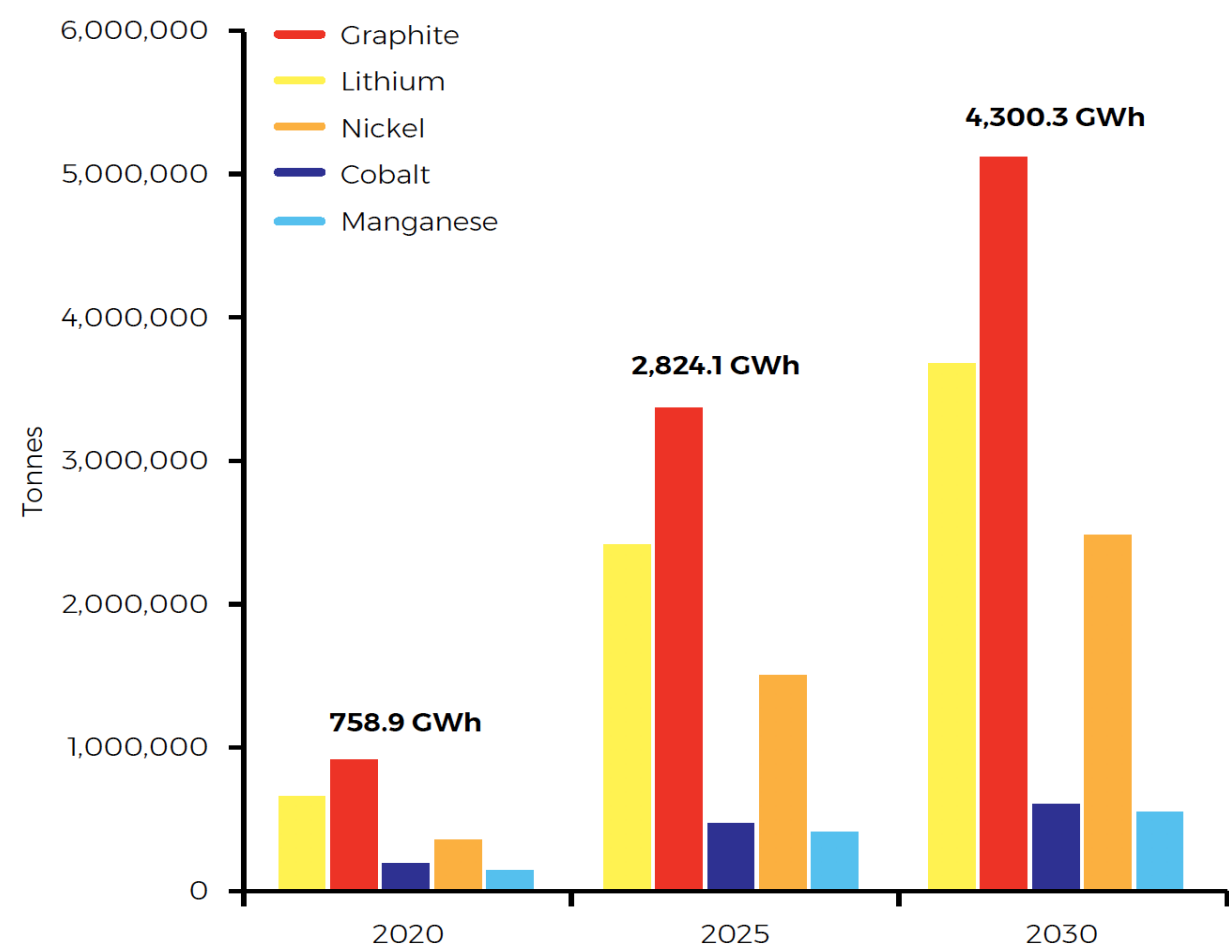
- K1 Mine NI 43-101 Resource:
  - **Measured : 1,399 tonnes @ 73.86%C**
  - **Inferred: 3,104 tonnes @ 93.02%C**
  - Deepening of K1 shaft currently underway to reach larger vein structures identified by geologists
  - Adit to be driven at lower level for more efficient access
  - Brokk Mining machines provide more efficient mining and development – Electric and multi tool-drum cutter, drills, excavator
- M1 Mine NI 43-101 Resource (lower cut-off grade):
  - **Measured: 37,234 tonnes @ 9.79%C\***
  - **Inferred: 122,309 tonnes @ 2.76%C\***
  - M1 Shaft deepening another 25' to intersect larger vein structure, Adit access at deeper level

\* *Note: The relatively low grade from both Indicated and Inferred Mineral Resources at M1 was calculated from assays obtained from drill core and from mineralization mostly composed of flake graphite, with little vein graphite.*



# Graphite Demand for EV- Benchmark

Raw material demand vs global lithium ion cell/Megafactory capacity



The data in this chart does not constitute a forecast, and assumes 100% utilisation rates  
Benchmark's forecast numbers are available via a separate subscription, please contact [info@benchmarkminerals.com](mailto:info@benchmarkminerals.com) for further information

# Supply Chain

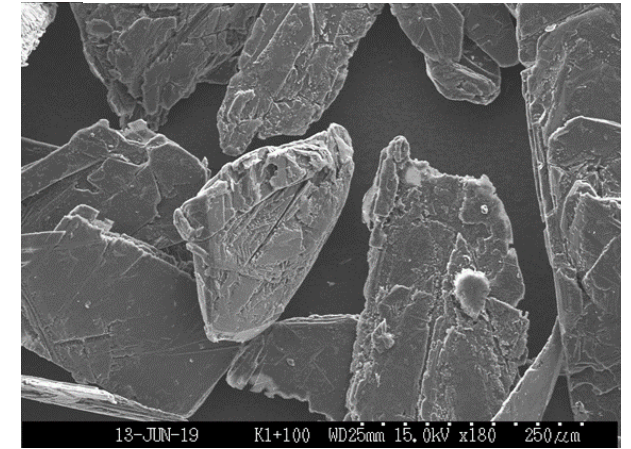
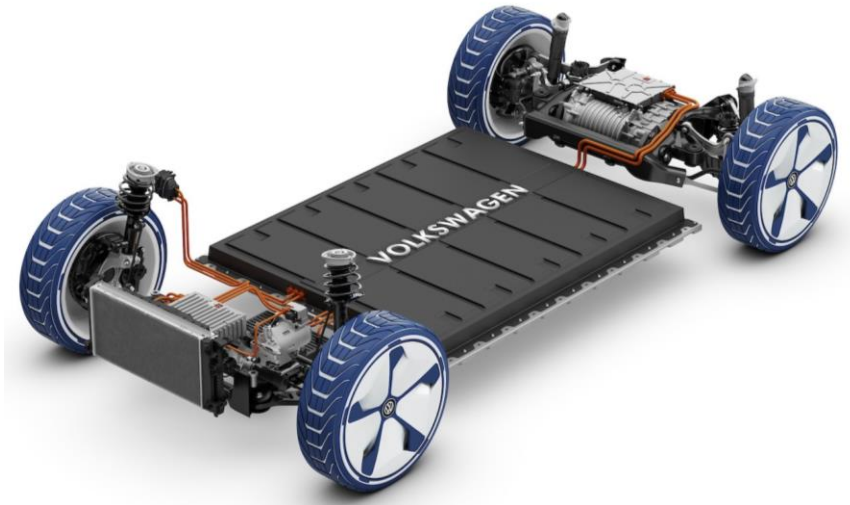
Context: US and EU supply chain capacity limited from mine to cell – significant opportunity for mid-stream companies

Market Share of First Four Stages			
Stage One: Extraction			
	EU	US	China
Nickel	8%	0%	31%
Cobalt	0%	0%	1%
Graphite <sup>1</sup>	1%	0%	65%
Lithium	0%	1%	9%
Manganese	0%	0%	6%
Stage Two: Chemical Processing/Refining			
	EU	US	China
Nickel	13%	1%	65%
Cobalt	17%	0%	82%
Graphite <sup>1</sup>	0%	0%	100%
Lithium	0%	4%	59%
Manganese	7%	0%	93%
Stage Three: Cathode or Anode Production			
	EU	US	China
Cathode	0%	0%	61%
Anode <sup>1</sup>	0%	0%	83%
Stage Four: Lithium ion battery cell manufacturing			
	EU	US	China
Cells	8%	7%	77%

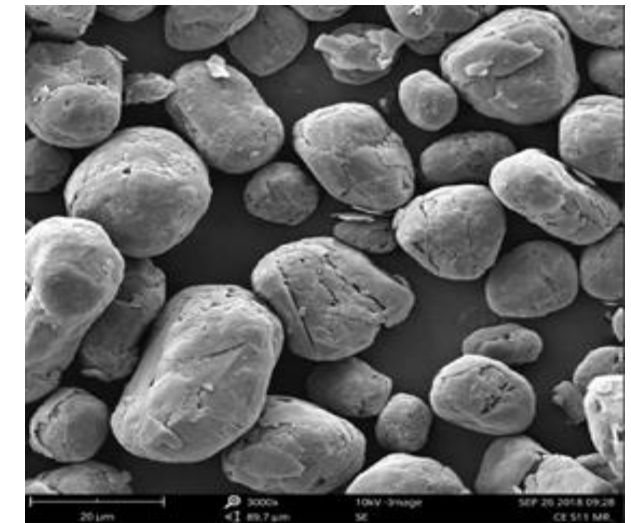


# High Purity Vein Ceylon Graphite for Energy

- **Value added Purified Ceylon Graphite** is ideal for Energy storage: thermal purification , not acid.
- High Purity suitable for **Anode coating** in Li Ion Batteries **with high energy density**.
- Environment friendly, fewer step-Process for 99.995% and better renewable energy products. Low temperature thermal purification
- Technology driven and IP development for “real world” applications



**Vein Graphite purified 99.995%**

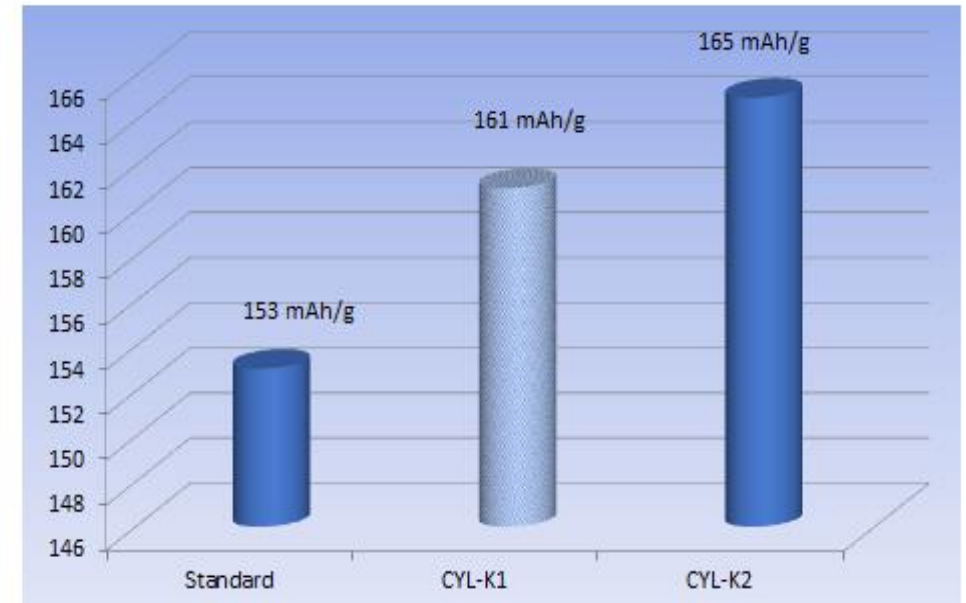


**Spheronized Vein for Li- ion anode**

# CYL VEIN GRAPHITE OUTPERFORMS LEADING SYNTHETIC GRAPHITE IN FULL CELL LITHIUM ION BATTERIES

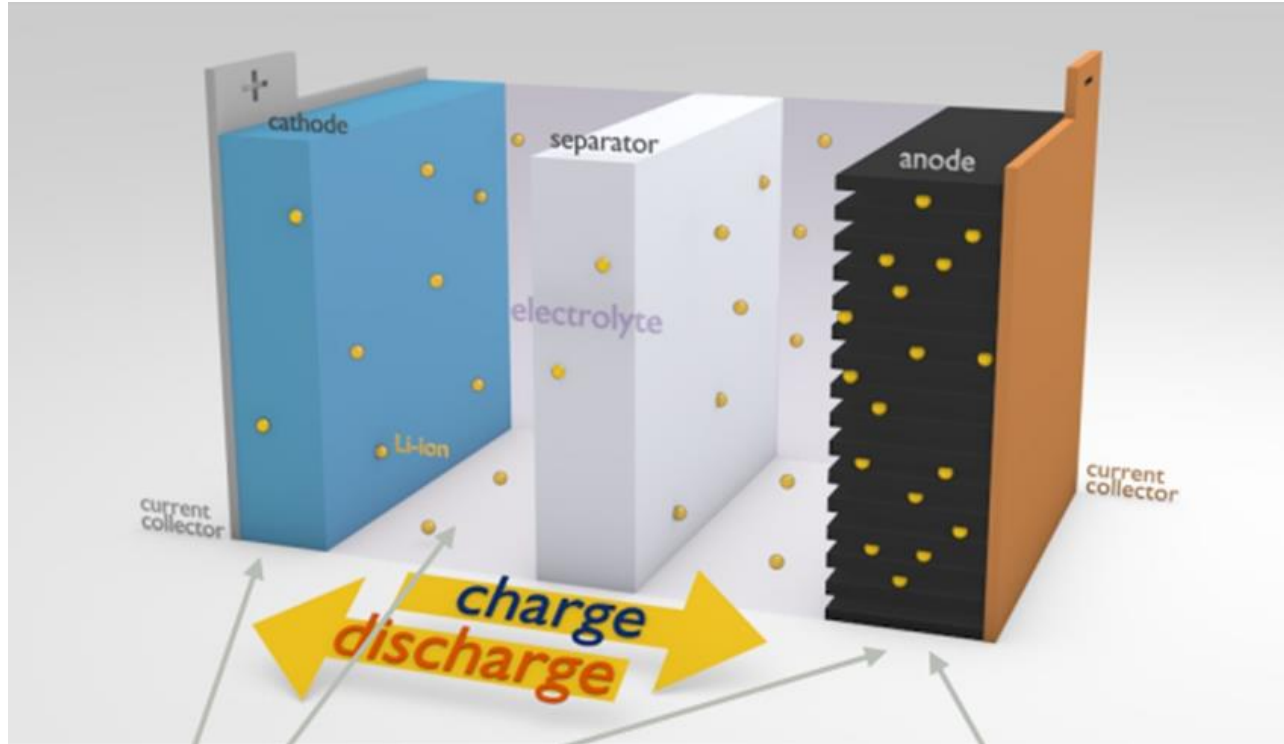
*“In tests at a leading global, independent facility, University College London (UCL), Ceylon’s vein graphite anode material far exceeded comparable anodes made with industry standard commercial synthetic graphite.*

- Ceylon’s unique natural vein graphite material has outperformed an Industry Standard synthetic graphite- CYL discharge capacity of 165 mAh/g, as compared to the Industry Standard of 153mAh/g
- Very small loss in capacity on 50 cycles
- We believe that the impressive performance of our vein graphite material is due to
  - High crystallinity of vein graphite
  - High purity and further purification technology
  - CYL proprietary coating and spherodizing technology



# High Purity Ceylon Graphite/Graphene in Li-Ion

## Few Layer Graphene (FLG) application on Li-Ion Battery



**Graphene applications**

**Graphene wrapped silicon in  
spherodised Ceylon Graphite**

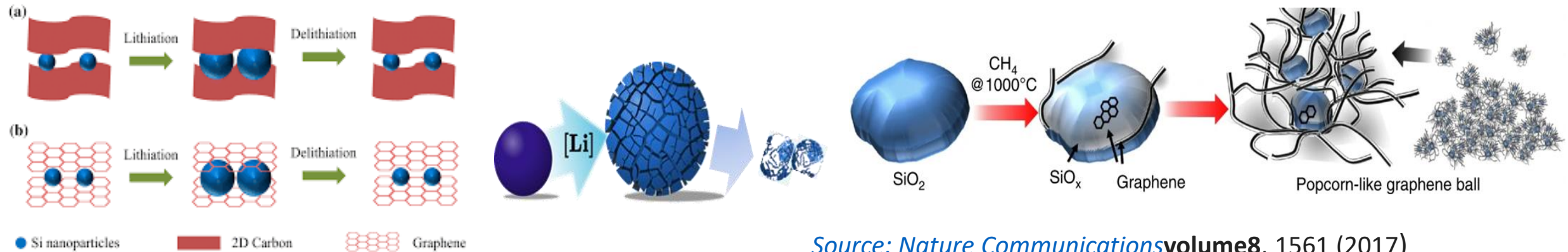
- Silicon wrapped additives with Ceylon Graphite electrodes
- Graphene tends to be used in more next generation batteries
- Applicable to multiple battery chemistries

**CYL has Graphene FLG production IP exclusive licensed. Graphene Potential Applications: Li-Ion battery anode materials: Cathode, electrolyte and Si-FLG/GNP composite high energy density anode.**



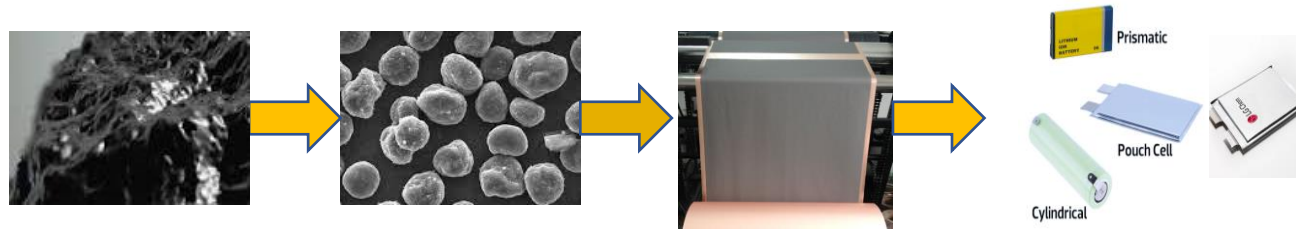
# Few Layer Graphene additives to Vein Graphite @ 99.995%

- **Graphene/silicon** composite anodes **can increase the capacity of Li-Ion batteries** while reducing the battery's size and weight.
- By **wrapping Few Layer Graphene (FLG)** around **silicon nanoparticles**, the main drawbacks of silicon (volume expansion and low conductivity) could be significantly improved.
- FLG around silicon nanoparticles, the volume expansion/contraction of the Silicon during the battery's charge/discharge cycle can be **suppressed by the flexibility and mechanical strength of the graphene**.

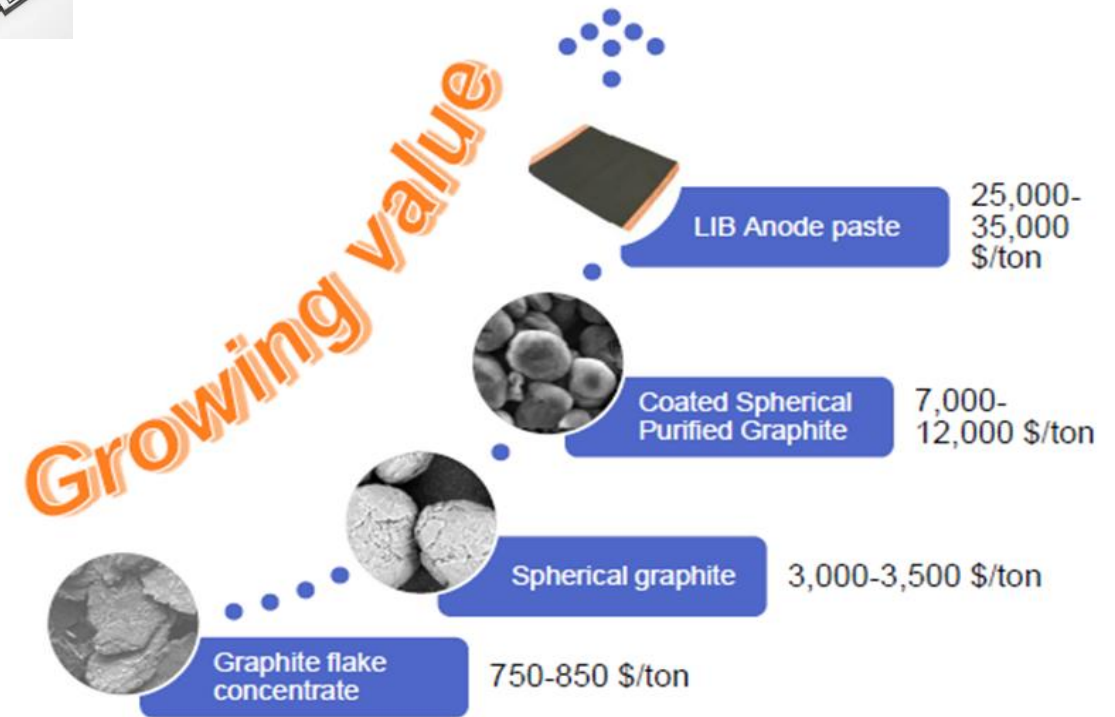


**Graphene Potential Applications: Li-Ion battery anode materials and Si-GNP composite high energy density anode coated materials.**

# Ceylon Graphite vertically integrated Battery Anode slurry formulator



- Ceylon Graphite is a public company listed on the TSX Venture Exchange (CYL:TSX-V)
- Sri Lanka Vein Graphite is known to be some of the highest grade in the world. It holds a land constituting 121 km<sup>2</sup> grids containing historic vein graphite deposits.
- Focus on Renewable Energy Storage with minimal carbon footprint.



Source: Alabama Graphite Company / Benchmark Minerals

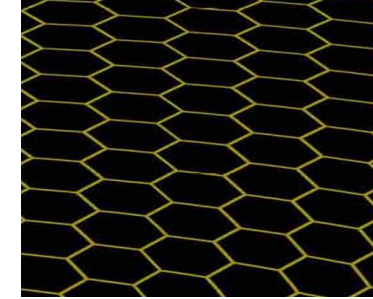
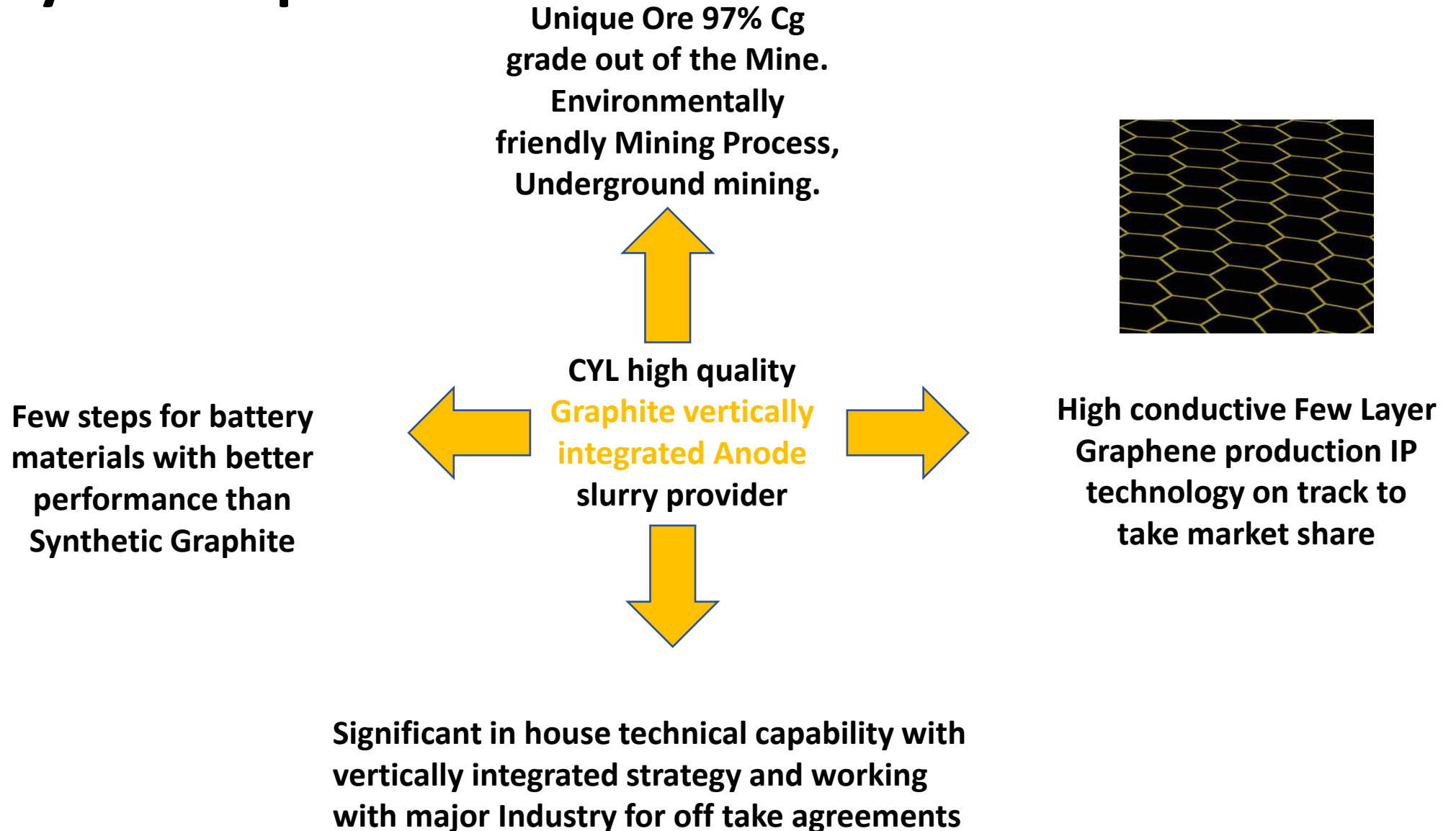
# Share Structure

Share Structure			
Shares Outstanding	153,821,475		
Options			
	1,300,000	\$0.30	15-Feb-23
	507,870	\$0.20	31-Aug-23
	50,000	\$0.20	15-May-24
	4,000,000	\$0.22	19-Nov-25
	1,000,000	\$0.36	20-Jan-26
	100,000	\$0.22	1-Mar-26
	85,714	\$0.14	2-Sep-26
	4,000,000	\$0.20	26-Jan-27
	11,043,584		
Warrants			
	30,163,566	\$0.15	22-Oct-23
	2,111,450	\$0.15	22-Oct-23
	1,488,550	\$0.15	28-Oct-23
	21,265,000	\$0.15	28-Oct-23
	3,700,000	\$0.25	23-Nov-23
	21,875,000	\$0.25	10-May-25
	80,603,566		
Fully Diluted	245,468,625		





# Why Ceylon Graphite?



# Contact

## Sasha Jacob

Chief Executive Officer

ceo@ceylongraphite.com

[info@ceylongraphite.com](mailto:info@ceylongraphite.com)

## Mailing Address

1100-1110 Melville Street Vancouver,  
BC V6E 4A6 Canada



 [www.ceylongraphite.com](http://www.ceylongraphite.com)

 @ceylongraphite

 @ceylongraphite