

From Mine to Battery

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



TSX-V: CYL
OTCQB: CYLYF
FSE: CCY
July 2025



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.

The Investment Case For Ceylon Graphite

➤ Reduction of Critical Mineral Dependence on China

- Graphite is listed by the **EU and USA** as a critical mineral
- **Canadian-registered company** with operations Sri-Lanka

➤ Superior Graphite Quality for Energy Solutions

- **Out-performance** of other graphite materials for batteries
- **Significant land resources** for mining of 90%+ graphite

➤ Upcoming Production and Processing

- Mining & shipments scheduled for **2026**
- Processing to **99% C-grade material** anticipated for **2026/2027**

➤ Strongly Increasing Global Demand

- Graphite is the **largest component in lithium batteries** for e-vehicles
- **Energy storage solutions** for the global energy transformation

➤ Attractive Financials due to Low-cost Production

- Very low mining and processing costs due to high-purity material and Sri-Lanka location

➤ ESG-Orientation

- **Low environmental footprint**
- Sustainable development of low-income area

➤ Strong Board with Sri-Lankan Expertise

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Reduction of Critical Mineral Dependence

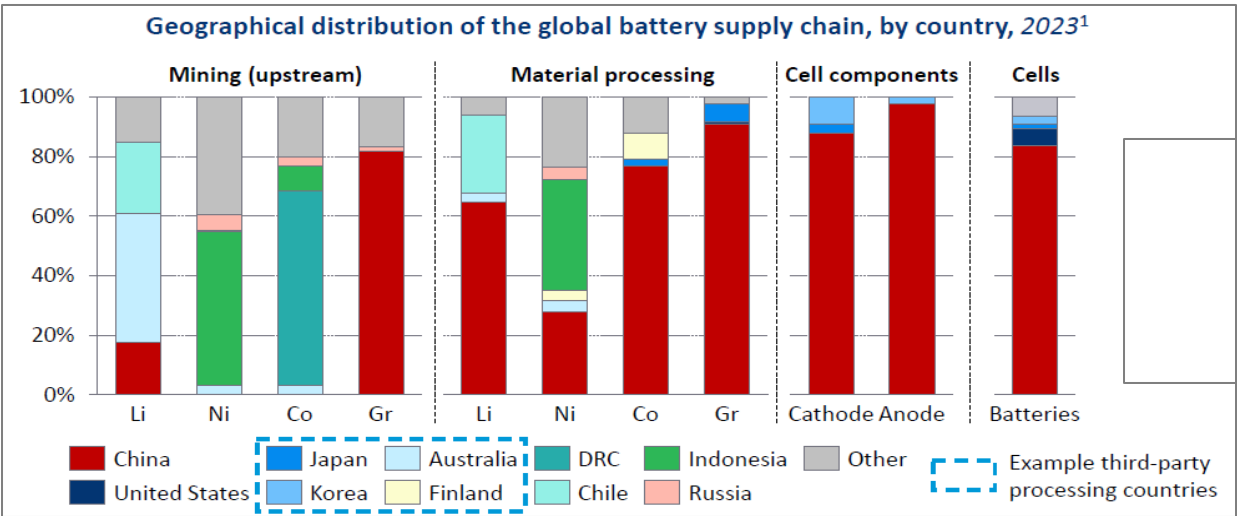
➤ The world depends on China for Graphite

- China is increasingly leveraging and limiting minerals supply as an economic and political tool
- Graphite is listed as a critical mineral by both the EU and the USA
- The US and the EU are fully dependent on imported natural graphite

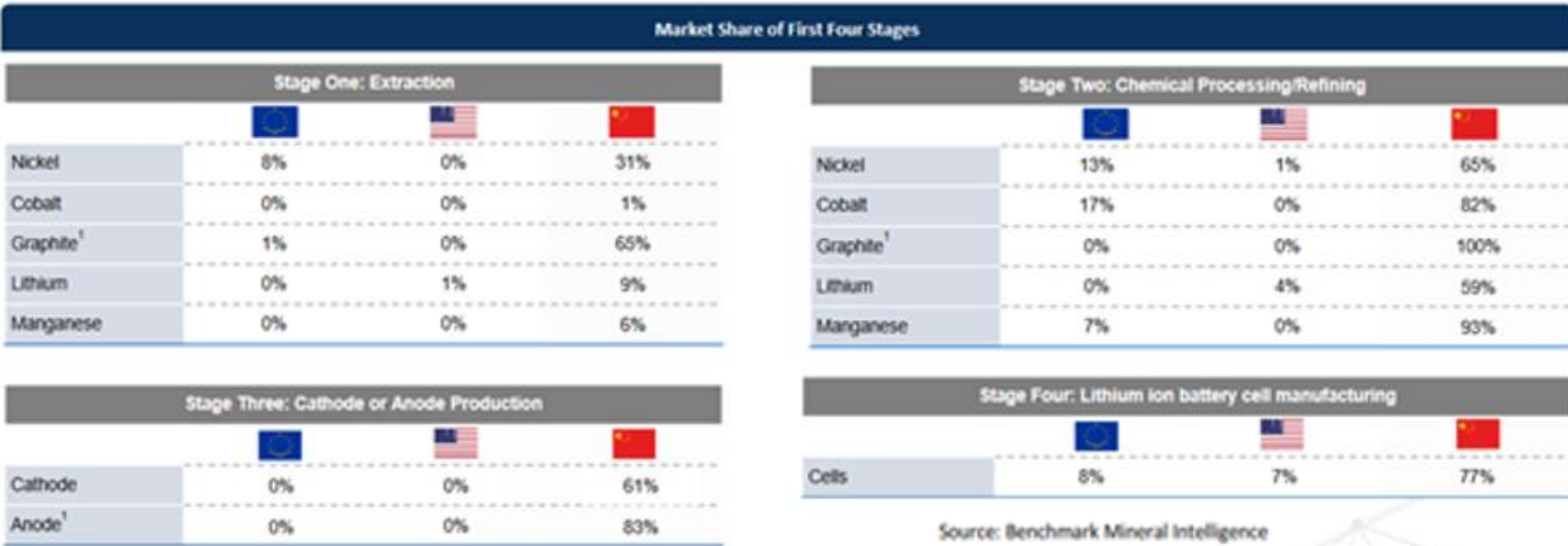
➤ CYL as an Alternative to Graphite

Dependence on China

- Canadian-registered company
- Public listing ensures transparency and control
- Operations in Sri-Lanka are outside of Chinese influence
- Critical mineral imports may get preferential US tariff treatment



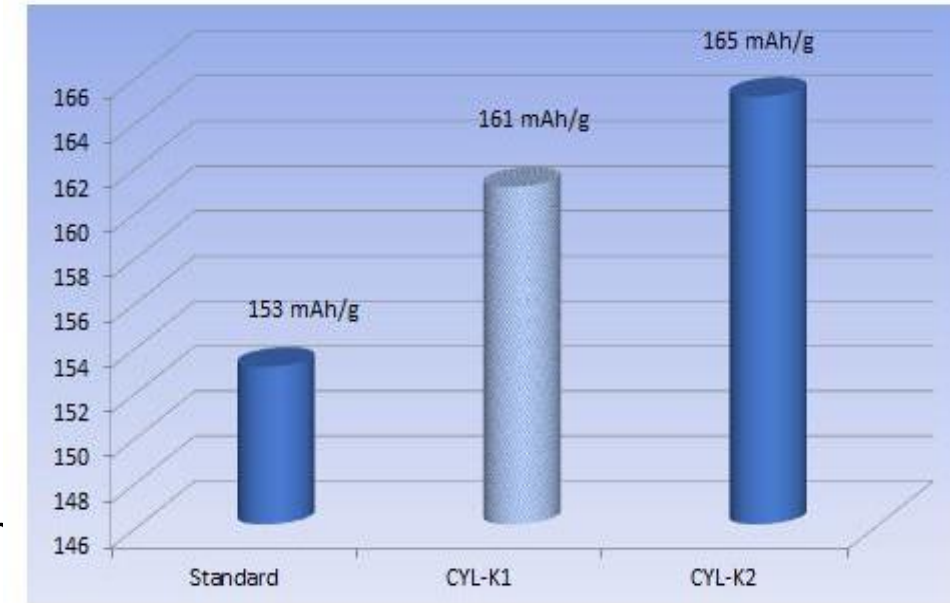
¹ International Energy Agency Critical Minerals Outlook 2024; International Energy Agency Critical Minerals Outlook 2023



Source: Benchmark Mineral Intelligence

Superior Graphite Quality for Energy Solutions CEYLON GRAPHITE

- **Highest-grade natural graphite in the world**
 - **Natural Vein Graphite: 90%+ C in the ground**
- **Enrichment to 99% Battery Grade Material Planned**
 - **Only Few Processing Steps** are required
 - Battery-grade Material offers large **Margin Improvement**
- **Superior Battery Performance** versus other graphite
 - Tests with lithium-ion cells at a leading global, independent facility, the **University College London (UCL)**, demonstrated Ceylon's vein graphite anode material **far exceeded comparable anodes** made with industry standard commercial synthetic graphite
 - CYL discharge capacity of 165 mAh/g, as compared to the Industry Standard of 153 mAg/g
 - Very small loss in capacity over 50 cycles
 - CYL believes that this superior performance of its vein graphite is due to its high crystallinity, the high purity, and the CYL proprietary coating and spherodizing technology



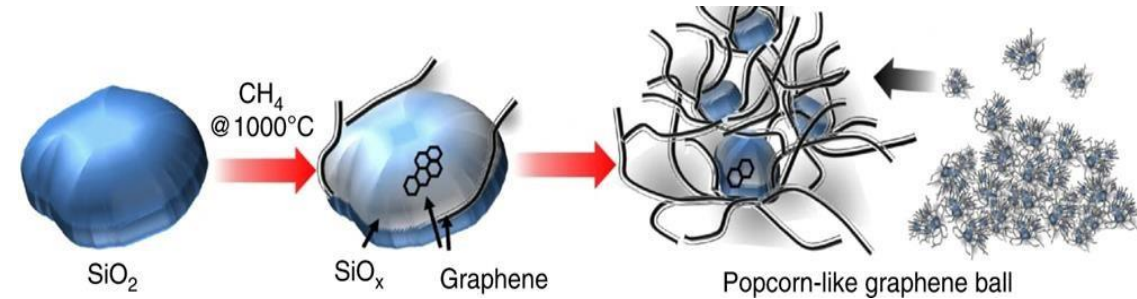
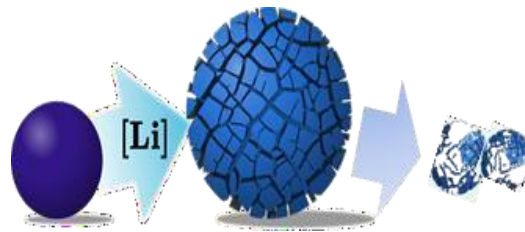
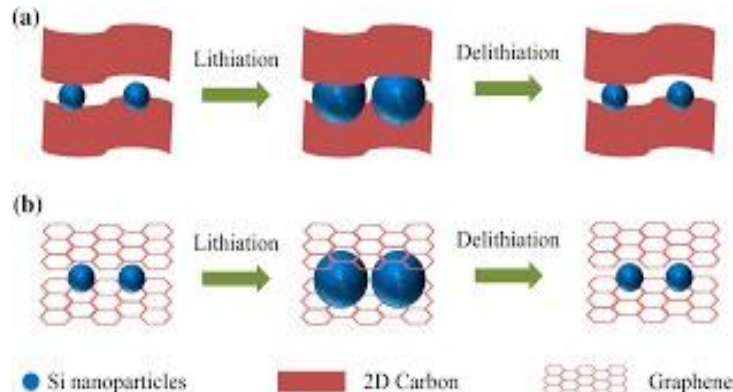
Superior Graphite Quality for Energy Solutions CEYLON GRAPHITE

➤ CYL's Proprietary Few Layer Graphene (FLG) Process enhances battery performance

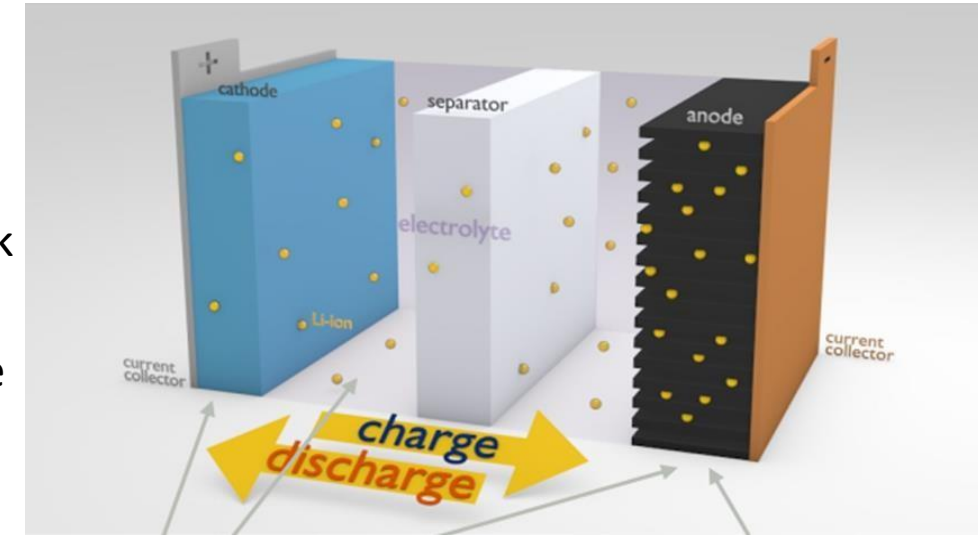
➤ FLG Additives with Vein Graphite for 99.995% Purity

- Graphene/silicon composite anodes can increase the capacity and reduce the weight and size of Li-Ion batteries
- By wrapping FLG around silicon nanoparticles, the main drawback of silicon - **volume expansion and lower conductivity** – can be **significantly improved** due to the physical properties of the Graphene
- Applicable for **multiple battery chemistries**

➤ Schematic Display of FLG Technology



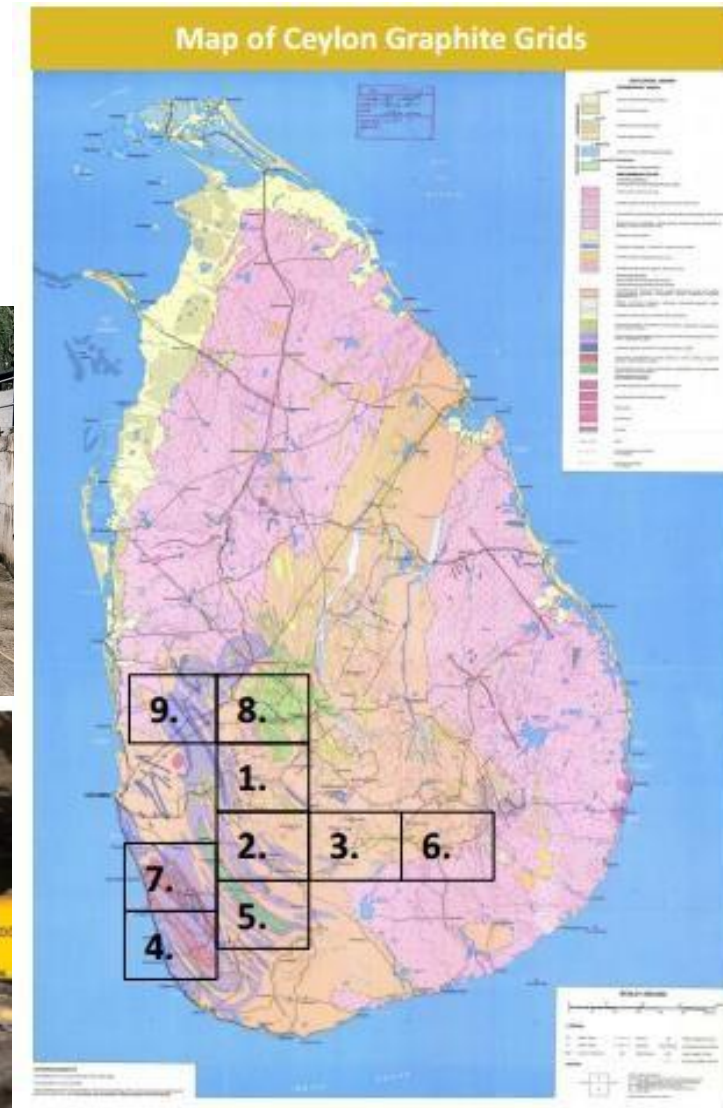
Source: [Nature Communications](#) volume 8, 1561 (2017)



Graphene wrapped silicon in spherodised Ceylon Graphite

Upcoming Production and Processing

- Due to its high-quality vein graphite **Sri-Lanka** has historically been one of the largest suppliers of natural graphite
- **CYL Holds Property Rights** in the historical graphite mining areas in South-West Sri-Lanka
- **Required Mining Licenses** awarded before, extensions are scheduled with the GSMB for Q3/Q4 2025
- **Commercial Mining Operations** and Shipment are Scheduled to **Start in 2026**
- Mining in Sri-Lanka is still **relatively low-cost labor-intensive**
- Production is headed by a **German operations manager who has extensive mining & processing-experience in Sri-Lanka**



Upcoming Production and Processing

➤ Proprietary Expertise

- CYL has special process IP
- The samples with superior electrical properties tested by the University College London were prepared by this process
- Due to the high C-content of the mining material, only few process steps are required to achieve purified graphite



➤ Proprietary Purification Processes

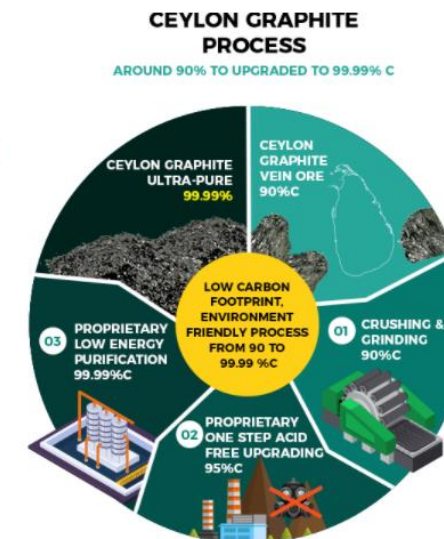
- Thermal purification with vacuum/inert gas is preferred if there are **volatile impurities**
- Thermal purification with chlorine gas is preferred if there are **silica or metallic impurities**
- Electro-Thermal purification with a Fluidized Bed Furnace is preferred if there are **non-metallic impurities**

➤ Purification up to 99% with CYL process

- Only 4 steps are required to battery-grade material
- No strong acids are required

➤ Renewable energy generation

- Photovoltaic and hydro power are intended to cover all energy demands at a later stage



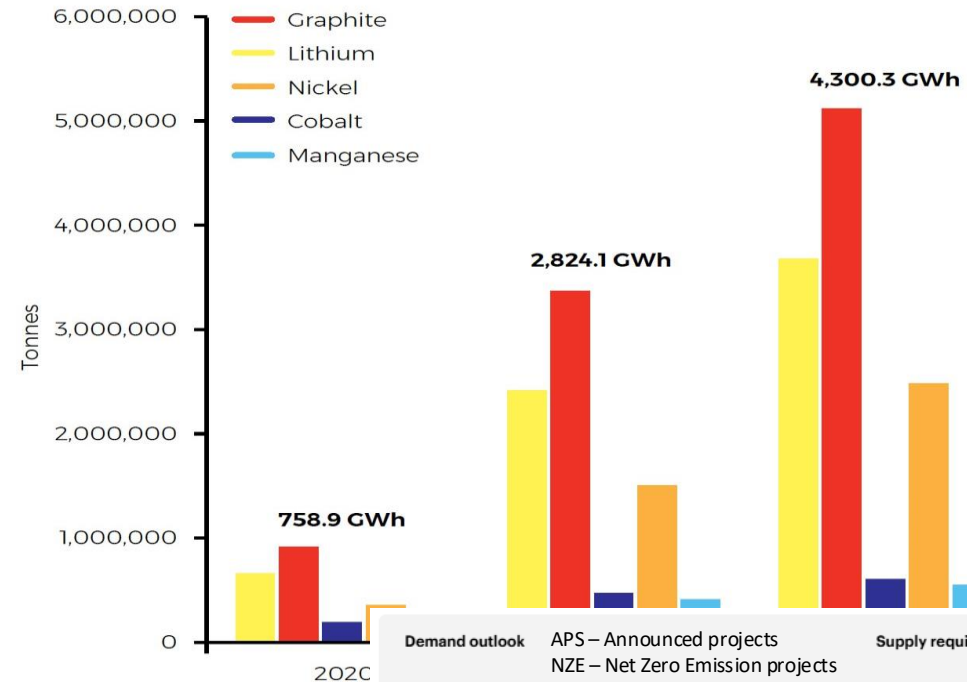
➤ Strongly Increasing Global Demand

➤ Rapidly growing demand outlook

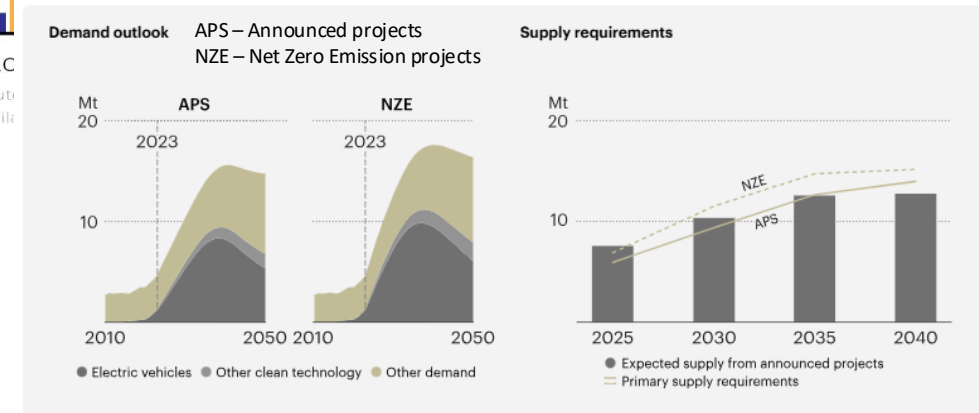
- Graphite is by far the **largest component in lithium batteries**; ~60kg in a 70 kWh Li-battery
- **Demand for e-vehicles** (cars, trucks, others) is growing significantly; reducing e-vehicle prices, improving charging infrastructures, and increasing environmental laws and regulations are expected to push future demand
- **Energy storage** demand is rapidly increasing to support the global renewable energy transformation
- Other industrial graphite applications are expected to increase at a slower pace

➤ **Due to the high purity, CYL can sell its graphite without further processing directly to enrichment companies or for lower-requirement industrial applications**

Raw material demand vs global lithium ion cell/Megafactory capacity



The data in this chart does not constitute Benchmark's forecast numbers are available



Upcoming Production And Processing

➤ See <https://mining.com.au/graphite-shortage-sparks-global-supply-fight/>

- Article is dated as of April 1st, 2025
- It forecasts a **‘perfect storm’** for the graphite market
- Prices of natural graphite have been low and this has suppressed the supply of graphite
- “In addition to EV batteries, or even more importantly, the defence industry stops without graphite”. In light of the huge US defence budget and the increasing defence spendings announced by NATO countries, rapid measures have to taken to ensure the supply for these activities.
- China controls nearly 80% of all graphite supplies and has even a 95% market share for battery grade graphite
- Benchmark Mineral Intelligence forecasts an increase 140% or 1.7 million tonnes natural graphite demand by 2030. This would supposedly correspond to 30 new natural graphite mines.

01 APRIL, 2025 | GRAPHITE

<https://mining.com.au>

WRITTEN BY **Angela East**

Graphite shortage sparks global supply fight

For a long time graphite has barely rated a mention as a critical material of electric vehicle (EV) batteries, but a significant anticipated shortfall coupled with strong demand growth from three different markets has culminated in the “perfect storm”.

“The perfect storm has been brewing and the wind is blowing. Cross, CEO of Canadian graphite hunter E-Power Resources, says.”

“Prices of natural graphite are about 15% above the market price.”

“All-in sustaining costs are actually still slightly above the market price. This is unsustainable.”

“In addition to EV batteries, or even more importantly, the defence industry stops without graphite. Artillery, tanks, ships, and ammunition all require graphite.”

“Without graphite, the manufacturing base grinds to a halt.”

In 2024, natural graphite production was about 1.3 million tonnes, and China controls nearly 80% of the supply of battery grade graphite specifically.

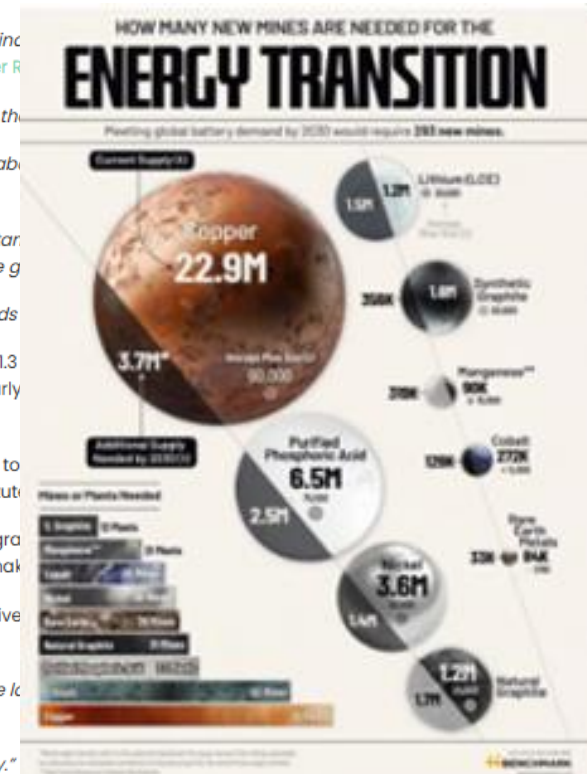
Demand the same year was in the vicinity of 3.7 million tonnes to battery industries, according to The Oxford Institute for Energy Studies.

A 50 kilowatt-hour EV battery requires 100kg of graphite, cobalt and nickel combined that is needed to make the cathode.

Graphite serves to make the anode – the negative electrode – which provides increased electrical conductivity and stability.

“Graphite was often ignored in spite of being the most abundant element on earth.”

“Without graphite, there is no lithium-ion battery.”



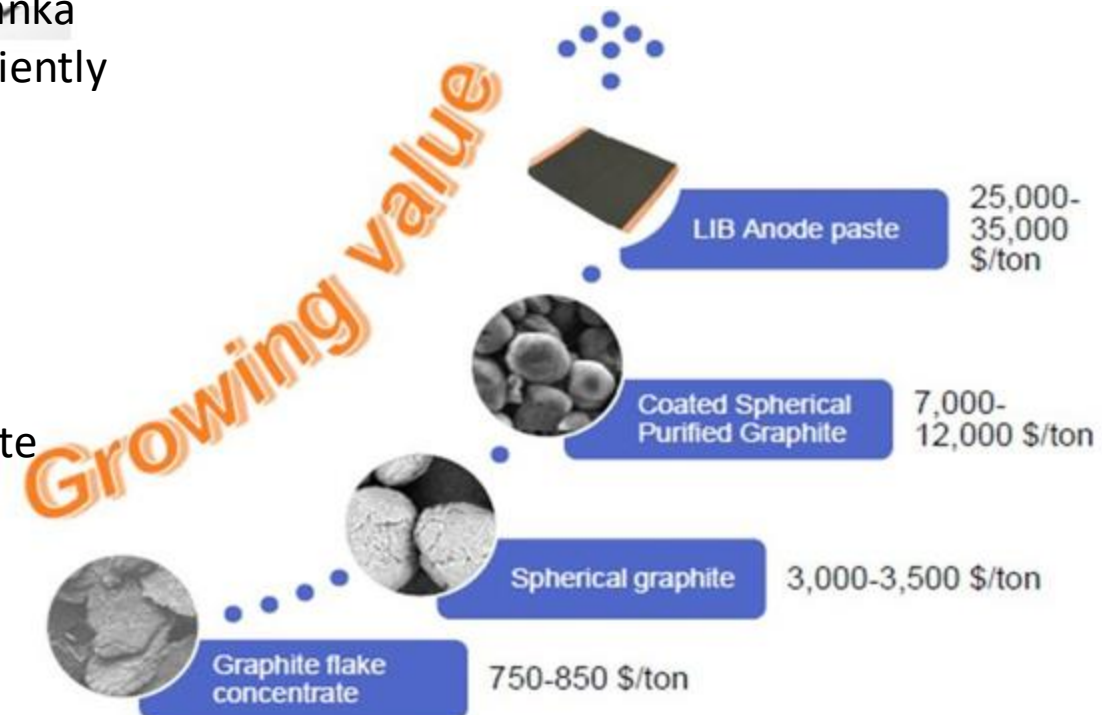
➤ Attractive Financials Due To Low-Costs

➤ One of the lowest-cost producers globally ...

- CYL's vein graphite is located close to the surface and does not require costly drilling and mine infrastructures
- CYL's vein graphite has high purities and requires only few purification processes
- Due to the high purities, only little waste material needs to be disposed of
- CYL benefits from the relatively low wages in Sri-Lanka
- Intended further processing to 99%+ graphite content in Sri-Lanka
- CYL has own production IP that can be implemented cost efficiently

➤ ... Enable attractive Margins, even at current depressed Market Prices

- Mined vein **graphite without further processing can be sold for around 1,200 US\$/ton**
- Mid-term opportunity to **upgrade to 99% at minimal cost** on site enables sale at higher prices (current market price are around **\$3000/ton**) and much higher margins



Source: Alabama Graphite Company / Benchmark Minerals

➤ ESG-Orientation

➤ Aim for Lowest Environmental Footprint in this Industry

- **Underground mining with minimal surface impact**
- **Environmentally-friendly mining process:**
No conventional primary processing required, no tailings ponds or mine drainage issues, no acids, no waste rock dumps
- Plan to use in future **only solar and hydro power** for processing plant
- **Low purification impact** due to only few processing steps to 99%+ C

➤ Path to **Low CO2-Footprint** for Anode Production

- **Synthetic graphite** is produced out of petroleum coke or coking coal
- It is graphitized in an **energy-intensive thermal process** over several week
- **Vein graphite does not need these inputs and processes and therefore has a much lower CO2-footprint**

➤ Sustainable **development of low-income area**

- Providing **income opportunity to families in a poor developing country**
- Providing **superior working conditions** to workers versus other mining activities in Sri-Lanka, e.g. safety precautions and working conditions
- **Supporting local communities** through taxes, licenses and fees
- **Good relations to government authorities** and local communities

Strong Board and Management Team



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

CEO, 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.



David Costantini
CFO

David Costantini is an accomplished executive with a robust track record and has served as CFO at multiple companies, with His experience spanning both start-up and growth organizations.

He also served as the right hand to the CEO of AlarmForce Industries, a former publicly traded home security company, playing a key role in corporate strategy, financial planning, and capital management.



Klaus Leiders
Chief Mining
Officer

Klaus Leiders is a seasoned Mining & Mineral Processing Engineer with 35+ years of global experience. A proven leader, he has successfully managed underground and open-pit operations across multiple continents, driving operational excellence and innovation. Klaus is a hands-on strategist, respected by industry authorities and stakeholders alike.



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.



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.

Benefits & Risks of Sri-Lanka

➤ Extensive Management Expertise in Sri-Lanka

- S. Jacob cofounded in 2004 South Asia Energy Management Systems Inc Which became one of the largest hydro-power company in the country
- K. Leiders has substantial experience in Sri-Lankan mining, building a producing graphite mine, and processing

➤ Ceylon Graphite is regarded politically very favourable

- Strong source to earn hard currencies from exports
- CYL received Board of Investment approval
- Provides tax and other benefits

➤ Low Cost of Operation

- Low costs are favourable
- Other costs of doing business are competitive



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