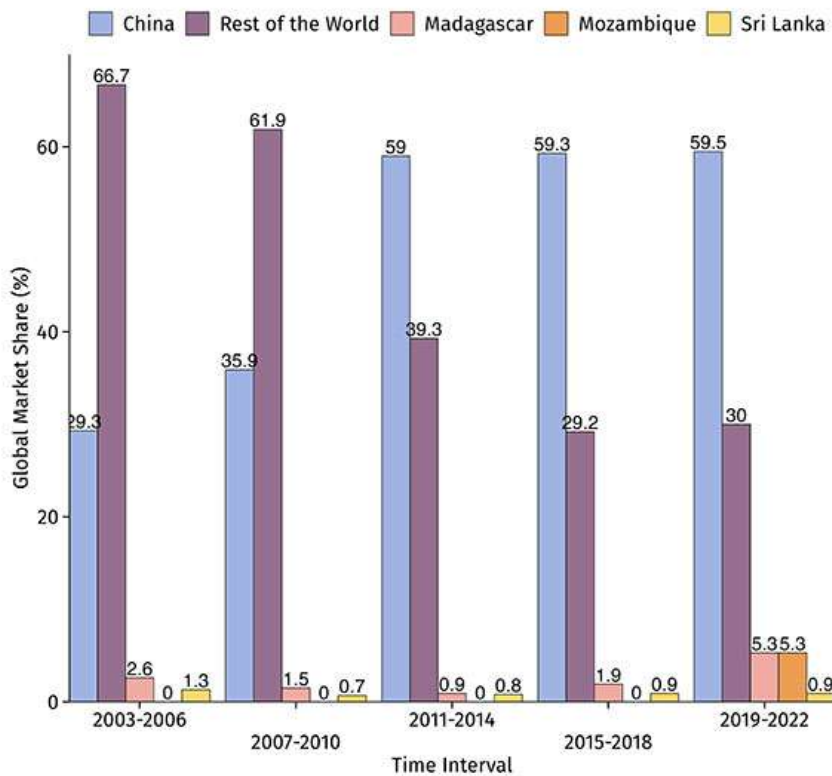




BUSINESS

# Sri Lanka's graphite: A potential player in the global electric vehicle revolution

Published 3 months ago on 2023/08/29



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**MS in Agribusiness and Applied Economics from North Dakota State University, and an MS and PhD in Agricultural, Environmental and Development Economics from The Ohio State University. ([Talk with Asanka – asanka@ips.lk](mailto:asanka@ips.lk))**

**By Malisha Weerasinghe and Dr Asanka Wijesinghe**

Sri Lanka has a rich history of mining and exporting graphite, which thrived during the World Wars, hitting 35,000 metric tons in annual exports. The vein graphite produced by Sri Lanka stands out for its remarkable purity, flawless crystal structure, and strong electrical conductivity, making it suitable for various commercial uses. However, in 2023, only 2,792 metric tons were exported, yielding approximately USD 6 million in revenue. The emerging trend towards electromobility on a global scale presents fresh opportunities to revive Sri Lanka's graphite industry. The newly established Chamber for Mineral Exporters has also emphasised the importance of well-defined policies to harness the untapped potential of the mineral sector.

### **Graphite in EV Batteries: Opportunities for Sri Lanka**

Graphite forms the core anode material in lithium-ion EV batteries, with quantities varying from 10 kg in hybrids to 70 kg in all-electric vehicles. Consequently, the US Department of Energy classifies graphite as a critical mineral. Projections indicate global demand for electric vehicles (EVs) will surge to 40 million units by 2030. Consequently, the demand for lithium-ion batteries for EVs has increased and securing sustainable and reliable critical raw materials (CRMs) has become a policy priority. Purity, extraction sustainability, cost, and geopolitical tensions are vital factors impacting the graphite supply chain. The US industrial and national security policies aim to diversify the sources of CRM for EV batteries- cobalt, nickel, lithium, and graphite- away from China, designated as a “foreign entity of concern” (FEOC).

As the primary graphite producer (Figure 1), China possesses 80% of battery-grade graphite resources and controls more than 50% of the processing capacity. More than 65% of the anode material supplied globally was sourced from six companies in China. Crucially, China holds a notable edge in productivity and cost (Table 1), when exporting natural graphite to major economies. Yet, China's prominent role as the primary graphite exporter has raised concerns about “supply chain resilience” among key Western importers, especially given their geopolitical aspirations.

The Biden Administration's ambitious Inflation Reduction Act (IRA) has excluded EV batteries that contain graphite of Chinese origin from lucrative federal subsidies. While this may lead to a relative price increase for EV batteries using Chinese graphite, it also drives up demand for alternatives. Sri Lanka, known for exceptionally high-quality graphite production, could benefit from this shift. With the IRA-induced increase in demand and trade restrictions on China, Sri Lanka's graphite exports to the US could potentially surge by 65.7% .

## **Positioning Sri Lanka's Graphite in Global EV Battery Manufacturing**

Sri Lanka's current graphite production stands at 5,000 metric tons. Yet, according to the Board of Investment, the potential production capacity reaches 450,000 metric tons per year. Given that Sri Lanka is a rare producer of the finest form of natural graphite in an environmentally less harmful manner, the country has an opportunity to tap into the growing global demand for “non-China origin” graphite.

There are several stages of EV battery manufacturing that Sri Lanka may consider joining: exporting natural graphite, exporting processed graphite in the form of electrodes or anodes, exporting lithium-ion cells, and exporting the entire battery pack. For a few reasons, the last two might not be within Sri Lanka's feasible options.

First, the general organisation of EV manufacturing is that vehicle production plants and battery pack production are located in geographical proximity due to logistic reasons. Second, the US' renewed tendency to re-shore manufacturing through active industrial policy limits attracting investors to Sri Lanka for producing an entire battery pack or battery cells. Thus, Sri Lanka's most viable options might be exporting natural graphite or processed electrodes and graphene to the US, Japan, South Korea, and the EU-centred EV manufacturing production network.

### **Policy Recommendations**

Sri Lanka should take proactive measures to leverage global policy shifts and identify potential roles within the EV battery value chain. Thoughtfully crafted industrial and trade strategies will play a significant part in maximising the benefits from Sri Lanka's graphite resources in the emerging landscape. Sri Lanka's industrial policy should strive to identify graphite-based products with an existing comparative advantage, link the producers with the end-users, facilitate the acquisition of required technology for value addition, and remove the hurdles for possible mining expansion.

Engaging private sector stakeholders in thorough consultations can help Sri Lanka strategically position itself in the competitive EV manufacturing ecosystem. Concurrently, industrial policy must prioritise environmentally sustainable graphite extraction and processing, leveraging Sri Lanka's potential as a “non-China origin sustainable graphite” source.

A pivotal trade strategy involves forging critical minerals agreements with the US and EU. A pact with the US enables Sri Lanka to process and export value-added graphite, aligned with IRA subsidy rules. Moreover, a formal accord with major graphite-consuming EV battery manufacturers fosters mining and processing sector investment by eliminating uncertainty.

A burgeoning hub for EV battery production is forming in Thailand and Indonesia, with China, Japan, and South Korea investing in regional EV manufacturing. Agreements among countries possessing critical mineral deposits are increasingly common, motivating Sri Lanka to broaden its proposed trade deals with Thailand, Indonesia, and other East Asian nations into the EV battery value chain. Trade agreements should facilitate investments in graphite mining and the subsequent processing into electrodes and graphene.

Link to original blog: <https://www.ips.lk/talkingeconomics/2023/08/22/sri-lankas-graphite-a-potential-player-in-the-global-electric-vehicle-revolution/>

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*BUSINESS*

# ILO ignites spirit of youth entrepreneurship across Sri Lanka

Published 11 hours ago on 2023/12/4

School Entrepreneurship Day was recently conducted across Sri Lanka with over 2000 school students from the nine provinces participating at the event organised by The Ceylon Chamber of Commerce, in collaboration with the International Labour Organization, endorsed by the Ministry of Education.

Speaking at the event in Colombo, Minister of Education Dr. Susil Premajayantha, stated 'Today, in Sri Lanka, we commemorate Entrepreneurship Day, a momentous occasion. I extend my gratitude to the Ceylon Chamber, the ILO and all other partners and sponsors for their instrumental roles in facilitating this event. The significance of entrepreneurship has garnered substantial attention in contemporary discussions. It's imperative that we prioritize fostering

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## **IASL focuses on 'Life Insurance in Recovering Economy'**

*Panel Discussion (from left): R Rajnikanth, Managing Director/Chief Executive Officer – Life Insurance Corporation (Lanka) Ltd, Thushara Ranasinghe, Managing Director/Chief Executive Officer - Ceylinco Life Insurance Limited, Moderator - Dr. Nishan de Mel, Executive Director - Verité Research, Chandana L Aluthgama, Chief Executive Officer – Sri Lanka Insurance Corporation, Lasitha Wimalaratne, Chief Executive Officer - HNB Assurance PLC, Iftikar Ahamed, Managing Director - Softlogic Life PLC*

The Marketing and Sales Forum (MSF) of the Insurance Association of Sri Lanka (IASL) hosted the 14th National Forum for Life Insurance Advisors (NAFLIA) Conference on 27th November 2023, at the Monarch Imperial, Sri Jayawardenepura Kotte. The theme of this year's NAFLIA conference was 'Life Insurance in a Recovering Economy – Focus on Fortitude'.

NAFLIA attracts leading Sales and Marketing professionals and Life Insurance advisors from the Life Insurance industry. Chief Guest Zarook, Chairman and Guest of Honour Damayanthi Fernando, Director General and other officials of the Insurance Regulatory Commission of Sri Lanka (IRCSL), Udeni Kiridena, Chief Executive Officer of Sri Lanka Insurance institute (SLII), Charith Mahendraraja, President of Sri Lanka Insurance Broker Association (SLIBA) and CEOs

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# IDB's Gold award in medium category clinched by Three Sinha Group

Published 11 hours ago on 2023/12/4

*Managing Director of Three Sinha Group of Companies Manjula Ariyakumara accepts the award*

Three Sinha Group of Companies was awarded the Gold Award under the Medium Category at the National Industrial Excellence Awards – 2023 organized by the Industrial Development Board (IDB). The Award Ceremony was recently held at the Nelum Pokuna Mahinda Rajapaksa Theatre in Colombo under the patronage of President Ranil Wickremesinghe, and the Company's Managing Director Manjula Ariyakumara accepted the Award.

Established as a small-scale business venture, Three Sinha Group of Companies has now grown as a leader in the highly competitive Construction Industry through utmost dedication and hard work. The Company has been consistently recognized with numerous local and International Awards, including Gold and Silver Awards at the Golden National Chamber of

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