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Kahatagaha Graphite Lanka Limited

Performance Analysis Report

Kahatagaha Graphite Lanka Limited (KGLL)

Graphite mining in Sri Lanka has occurred since the Dutch occupation of the country. It is the only country in the world to produce the purest form of graphite, vein graphite (also known as lump graphite), in commercial quantities, currently accounts for less than 1% of the world graphite production. Graphite (locally known as plumbago) mines were mostly located in north western and south western parts of the island.

Kahatagaha Mines are located in North western Province of Sri Lanka at Maduragoda, Rideegama Divisional Secretariat Division, Dodangaslanda in Kurunegala District, and managed by Kahatagaha Graphite Lanka Limited (KGLL). It is a fully state own company, established under the Companies Act No. 07 of 2007, purviewed by the Ministry of Industries.

Extend of the land of the Kahatagaha Mine is approximately 102 acres.

Uniqueness of Kahatagaha Product

Sri Lanka is the only commercial source of high-carbon natural crystalline vein graphite, and the Kahatagaha mine is capable of mining high-purity natural vein graphite with over 99% carbon, in a fully crystallised form. It is found as needles, lumps, rossets and flakes, enjoying a monopoly of high-carbon crystalline vein graphite, with low ash content, having a proven reputation of world market acceptance as a unique product.

Graphite Exports

KGLL is an export-oriented Company and in 2023/25, its major export countries were Japan, China and Australia.

Graphite is at the forefront, with market analysts estimating that more than 300 new graphite mines will need to be built by 2030 to meet the demand for electric vehicles and energy storage batteries.

Natural Graphite outlook for the next five years from 2025.

Over the next five years, the natural graphite market is poised for significant growth, driven primarily by the expanding electric vehicle (EV) industry and the increasing demand for energy storage solutions. However, this growth is accompanied by challenges related to supply dynamics, geopolitical factors, and market dependencies.

Demand Projections

The global graphite market is projected to grow at a compound annual growth rate (CAGR) of 6.7% from 2025 to 2030, reaching an estimated value of approximately \$38 billion by 2028. This surge is largely attributed to the rising adoption of EVs, which utilize lithium-ion batteries containing graphite anodes. Notably (y, the demand for graphite in battery production is expected to nearly triple over the next five years (statista.combatterymaterials.org)

Supply Considerations

China currently dominates the global graphite supply chain, accounting for a substantial portion of both natural and synthetic graphite production. In December 2024, China implemented export restrictions on certain graphite products, leading to concerns about potential supply shortages and prompting other nations to seek alternative sources. This has accelerated efforts, particularly in North America and Europe, to develop domestic graphite production and processing capabilities.

Market Challenges

Despite the optimistic demand outlook, the graphite market faces several challenges (<u>nasdaq.com</u>):

- Price Volatility: Increased production capacity, especially from China, has led to price fluctuations. For example, Syrah Resources experienced profitability issues due to a significant drop in graphite prices caused by an influx of inexpensive Chinese graphite.
- Geopolitical Tensions: Export restrictions and trade policies can disrupt global supply chains, affecting the availability and pricing of graphite. China's recent export controls have heightened the urgency for other countries to secure stable graphite supplies.
- Environmental and Social Concerns: Mining operations, particularly in regions with inadequate regulatory frameworks, can lead to environmental degradation and social conflicts. For instance, local protests in Mozambique over resettlement issues have halted mining activities, impacting global supply. (The Wall Street Journal)

Technological Innovations

Advancements in recycling technologies are emerging as viable solutions to mitigate supply constraints. European start-ups have made notable progress in recycling EV battery materials, including graphite. Companies are developing processes to recover graphite from used batteries, aiming to produce 2,000 tonnes of recycled graphite annually by 2027, sufficient for 50,000 EVs.

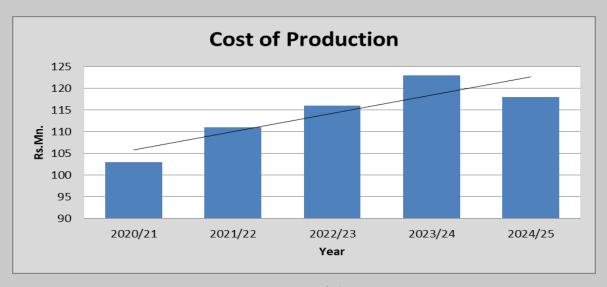
Performance Analysis:

The company performance analysis is done based on data given by the company related to the years 2020 to 2025.



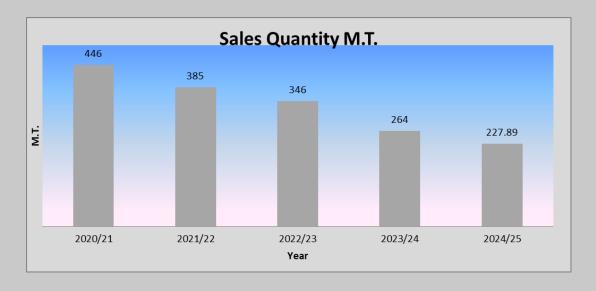
Graph 1

Graph 1 shows that Kahatagaha Graphite Lanka Limited (KGLL) has fluctuated in production within the period from 2020/21 to 2024/25.



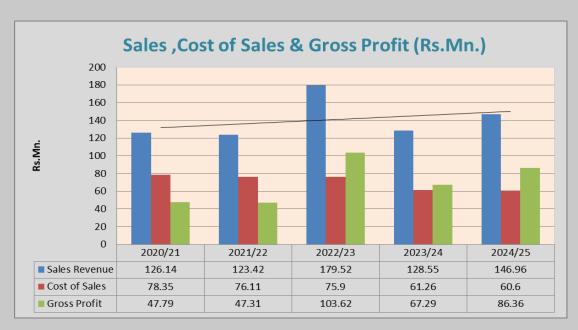
Graph 2

According to graph 2, from 2020/21 to 2023/24 total cost of production of the company has increased. However, the 2024/25 total cost of production has decreased when compared to the previous year. The highest cost of production occurred in the year 2023/24.



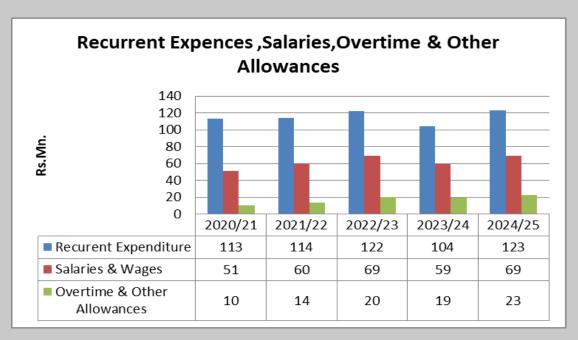
Graph 3

Sales quantity of Kahatagaha Graphite Lanka Limited (KGLL) has decreased gradually from the year 2020/21 to 2024/25 as per Graph 3.



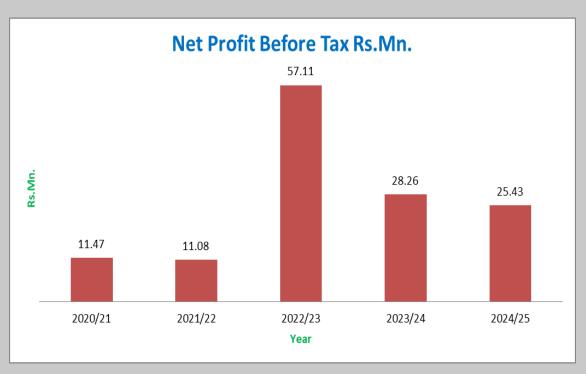
Graph 4

KGLL sales revenue has fluctuated within the period from 2020/21 to 2024/25 as per graph 4. Within the same period cost of sales has also fluctuated. Highest sales revenue and highest gross profit achieved in the year 2022/23.



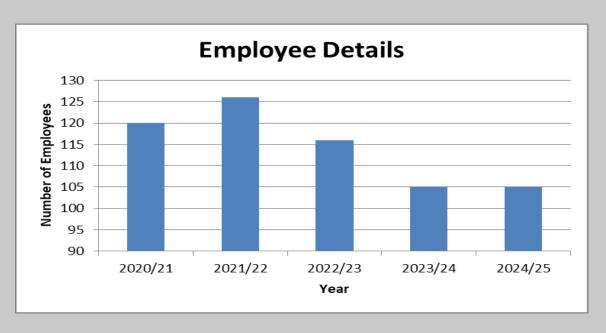
Graph 5

According to graph 5, recurrent expenditure has fluctuated from the year 2020/21 to 2024/25. The salaries, overtime and other allowances have also fluctuated within the considered period from 2020/21 to 2024/25. The salaries and wages represent 45% - 56% of recurrent expenditure.



Graph 6

Graph 6 shows that KGLL has fluctuating profits in the years 2020/21 to 2024/25. In the year 2022/23 the company has increased its profits to Rs. 57.11 Mn. However, the profits continuously decreased within next two years. The highest profit of Rs. 57 Mn. in the year 2022/23 is approximately a 5-fold increase, compared to the year 2021/22.



Graph 7

As per graph 7, the total number of employees in the KGLL has decreased from 120 employees to 105 employees from the year 2020 to 2025. At present, the company has 105 total of employees. However, these employees have been reduced due to retirements, and new employees have to be recruited to uplift the production as well as to maintain the development activities of the mine.

Observation and Recommendations

- Sri Lanka is the only commercial source of supply of high-carbon natural Crystalline Vein Graphite, and particularly, Kahatagaha Mine is capable of mining high-purity Natural Vein Graphite over 99% carbon, in fully crystallized form.
- With a proven reputation of world market acceptance as a unique product provider, Kahatagaha Graphite Lanka Limited have a huge opportunity to cater and establish in the world market.
- Taking advantage of the global recognition of Ceylon Graphite it can improve production and sales, which will lead to better profits.
- Company performance over the years 2017 to 2022 shows that decrease in both production and sales.
- Preparing an overall strategic plan along with annual production and sales forecast will positively affect towards overall performance of the company, and that will help to get a good understanding of activity planning in day-to-day business processes.