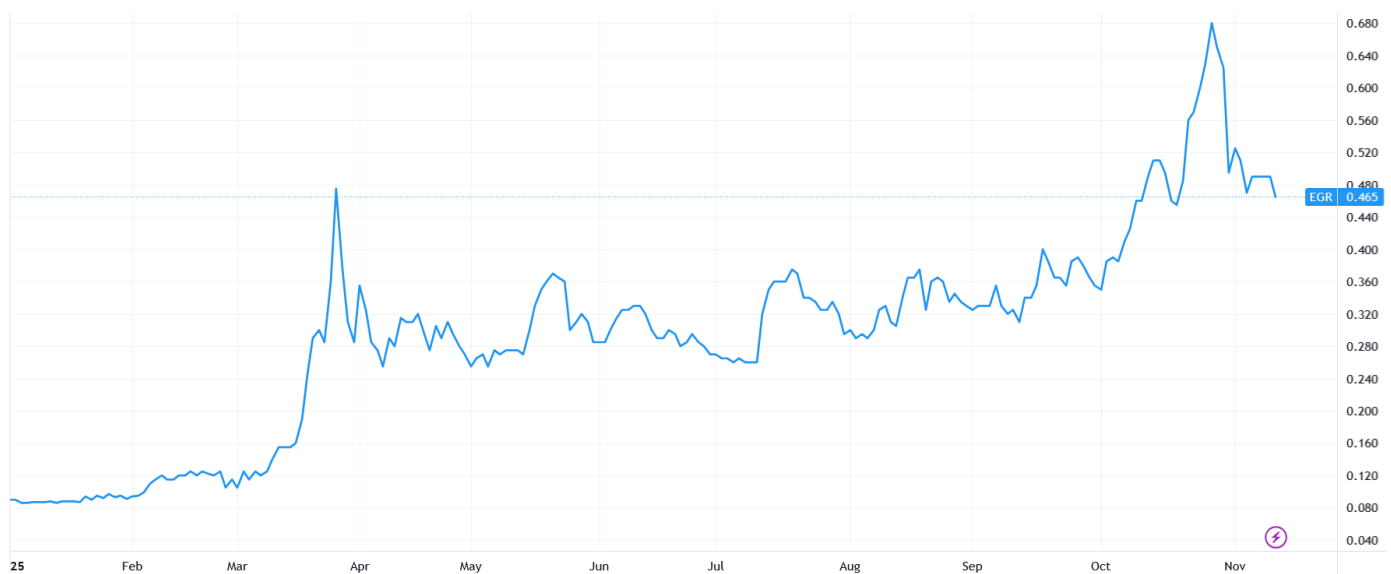


Wednesday 12th November, 2025

Portfolio Stock Update

EcoGraf Limited (ASX: EGR) - Share Price: \$0.465 | Market Cap: \$213M | Initiated @ \$0.22 (Sep 2015) |



TradingView

Key Catalyst

Epanko Graphite Project Expansion Study results have been released, confirming the potential for a staged ramp-up to 390,000 tpa within 10 years, driven by rising global battery anode demand from new global supply chains.

Why We Covered It

EGR is developing a vertically integrated battery anode materials business that will produce high-purity graphite products for the lithium-ion battery and advanced manufacturing markets. EGR has so far invested tens of millions of dollars to demonstrate the credentials of its proposed graphite mining and mineral processing business.

In Tanzania, EGR is developing the TanzGraphite natural flake graphite business, led by its Epanko Graphite Project, to provide long-term, scalable feedstock for its in-house EcoGraf™ battery anode material processing facilities. It will supply battery, anode and electric vehicle (EV) makers globally.

EGR is also targeting battery recycling, via its EcoGraf™ purification process to recycle battery anode material.

Epanko Expansion Project Update

EGR has provided an important update with respect to its Epanko graphite project in Tanzania.

The Study has confirmed the potential for a staged expansion of production – which will follow initial stage 1 production of 73,000 tpa - via three stages to 130,000 tpa, 260,000 tpa and 390,000 tpa of natural flake graphite.

This would make EGR Africa's largest planned graphite producer.

Overview

- The Epanko Expansion Study has evaluated a staged production expansion based on the existing Mineral Resource, following initial stage 1 production of 73,000 tpa - via three stages to 130,000 tpa, 260,000 tpa and 390,000 tpa of natural flake graphite.
- The expansion stages are fully covered under the current single Special Mining Licence (SML) and continuous Epanko orebody.
- Epanko is positioned to become Africa's largest planned graphite producer, with future expansions tied to downstream HFfree® purification facilities in the US, Germany and Europe to meet growing EV and lithium-ion battery demand.
- Fine graphite concentrate from the staged expansion will be shaped at EGR's Tanzanian value-addition Midstream Facility, then purified at global HFfree® sites, supporting its multi-hub growth strategy.
- Financial metrics appear robust for a single and initial 25,000 tpa Purification Facility, based on capital and operating costs for a US location:
 - – Initial capital investment (including contingency) of US\$95M
 - – Pre-tax NPV₁₀ of US\$282M and IRR of 42%
 - – Annual EBITDA of US\$42M
 - – Process Operating Cost of US\$478/t
- A comparable purification facility is planned for Europe, with Germany as the primary focus.
- Preliminary engineering indicates lower capital costs and a slight increase in operating costs compared to the US facility, resulting in similar financial metrics.
- Positive government grant funding discussions in the EU and US, including a US Department of Defence white paper submission for US\$76.3M in award funding.
- EGR's HFfree® integrated, end-to-end operation will deliver one of the lowest-cost, high-quality, and sustainable solutions, leveraging off its high-quality graphite feedstock.

Why It Matters

- The Epanko Graphite Project Expansion Study has examined the potential to expand production to support the company's strategy of developing its commercial-scale EGR HFfree® purification facilities in the global lithium-ion battery manufacturing hubs in Europe, North America and Asia.
- The Expansion Study follows the recent breakthrough in cost efficiency of EcoGraf's HFfree® purification technology to produce battery anode material (BAM).

- The Epanko Expansion Study aligns with the company's strategy to establish its HFfree purification facilities in Europe, North America and Asia to meet growing battery anode demand outside China.
- Natural graphite for these facilities will come from the Epanko Project in Tanzania, where KfW IPEX-Bank is arranging up to US\$105M in senior debt under Germany's Untied Loan Guarantee program for Stage 1 construction, targeting 73,000 tpa of flake graphite.
- Completion of the Independent Engineer's Report, a key milestone in the financing process, is expected shortly.
- The Epanko Expansion Study undertaken by independent consultants, IMO Metallurgy and Metallurgist Services, assesses growth beyond the initial 73,000 tpa Stage 1 plan, based on, and leveraging of, the existing Mineral Resources and shared infrastructure to optimise costs.
- Three additional stages are proposed, each starting with three years of oxide-only processing for higher throughput, followed by blended oxide and fresh material in later years.

Technical Analysis

The processing plant expansion pathway can be undertaken via three additional expansion phases following completion of the initial 73,000 tpa Stage 1 Project, giving a total production of 390,000 tonnes of concentrate p.a.

- Stage 2 - Duplication of the Stage 1 plant at the current location
- Stage 3 - A 130,000 tpa plant at a location at the southern end of the Western Ore Body
- Stage 4 - A duplication of the Stage 3 plant in the same location

Duplication of the Stage 1 plant allows for common units, spare parts redundancy, and provides for simplified training processes.

The staged expansion will be developed over the initial 10 years of the mine, based on the current Measured and Indicated Mineral Resource (M&I) tonnes. Beyond this, the project has significant Resource exploration potential, which comes in the form of the conversion of existing Inferred Mineral Resources and along-strike Resource extension.

Engineering studies have shown that the Epanko valley has the capacity to store a tailings volume of up to eight times the capacity required for the project's development.

Bagged graphite product will be transported on flatbed trucks from site to Ifakara ~70 km away. Trucks will haul directly to the port of Dar es Salaam for Stage 1, and Stages 2 onwards would require railing of the concentrate from Ifakara to the port.

One of the most important Epanko deposit attributes is its high concentrate grade (96-98 %C) that will provide long-term competitive advantages, primarily due to less effort and cost required to remove the remaining impurities and in turn delivering ESG advantages.

The hierarchy of the graphite market is that higher concentrate carbon grades will displace and replace lower carbon grade in the market. Supply chain pressures will also push producers toward premium grades for cost efficiency, ESG compliance and sustainability.

Expansion of the Epanko Graphite Project to 390,000 tpa will help meet rising natural graphite demand for battery anodes, as well as other markets given graphite is deemed the major raw material in the transition to clean energy. The Expansion Study is positioned to provide confidence to EV and Battery OEM's of a long-term alternative supply and support its multi-hub downstream development strategy.

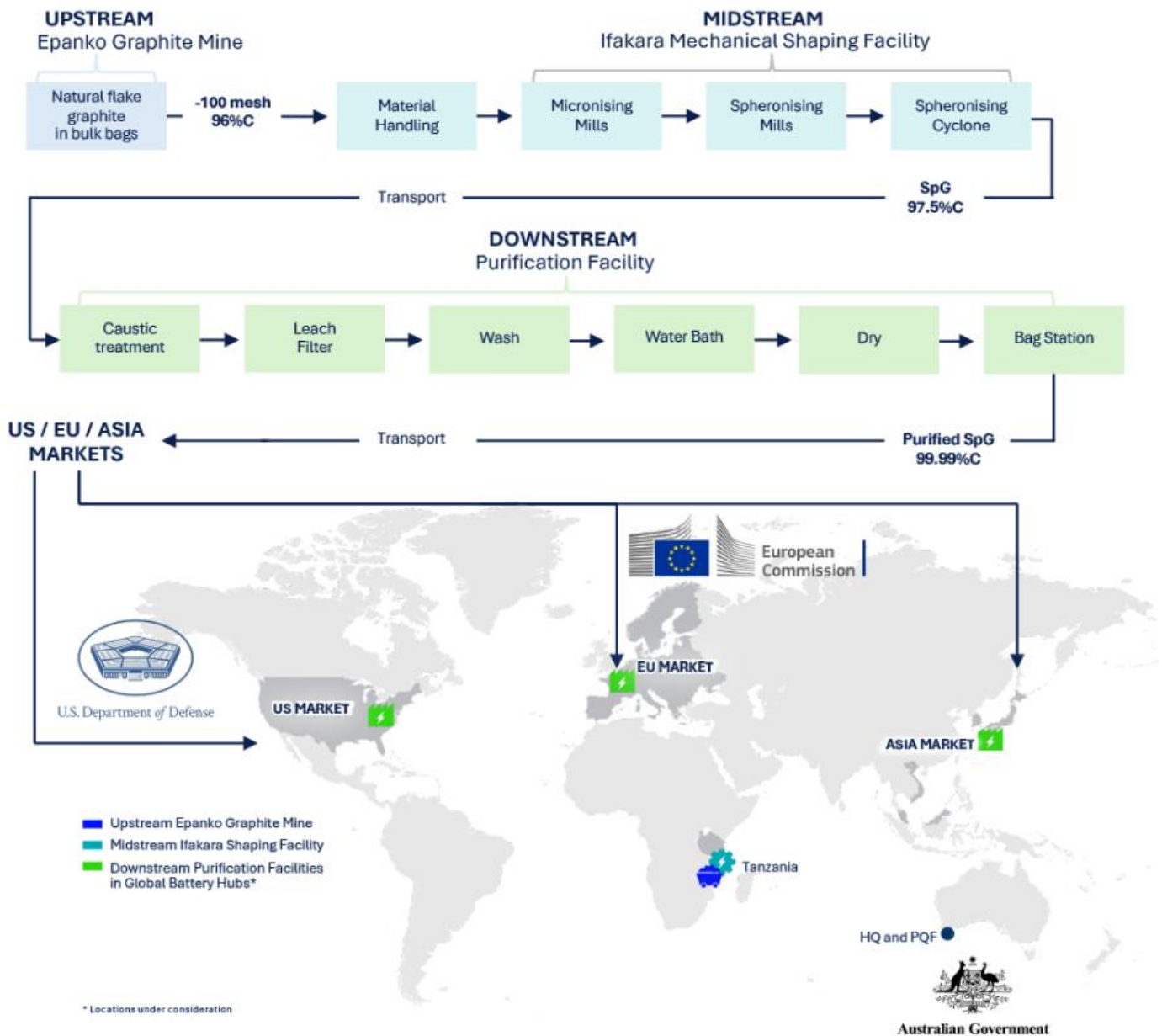


Figure 1: Product Flowsheet and Downstream Development.

Graphite Market Outlook

Global graphite demand is expected to outpace supply from 2026, driven by:

- Graphite use in lithium-ion batteries for e-mobility and energy storage
- Higher proportion of natural graphite in battery anodes
- Supply chain security concerns (geopolitical tensions, Chinese export controls, tariffs)
- Additionally, global graphite demand is anticipated to expand in the second half of the decade across Europe, the US, and Asia (excluding China).

President Trump in March 2025 announced an Executive Order to increase domestic production of critical raw materials to bolster sovereign capability. This order focuses on boosting investment to enhance the domestic supply of critical minerals.

EcoGraf Business Overview

EcoGraf is building a vertically integrated battery anode materials business to produce high-purity graphite products for the lithium-ion battery and advanced manufacturing markets, with components as follows:

- Epanko Graphite Mine in Tanzania
- Mechanical Shaping Facility in Tanzania
- EcoGraf HFfree® Purification Facilities located in close proximity to the electric vehicle, battery and anode manufacturers
- EcoGraf HFfree® Purification technology to support battery anode recycling

In Tanzania, the EGR is developing the TanzGraphite natural flake graphite business, commencing with the Epanko Graphite Project, to provide a long-term, scalable supply of feedstock for EcoGraf® battery anode material processing facilities, together with high quality large flake graphite products for specialised industrial applications.

In addition, the company is undertaking planning for its Mechanical Shaping Facility in Tanzania, which will process natural flake graphite into spherical graphite (SpG). This mechanical micronising and spheronising is the first step in the conversion of high-quality flake graphite concentrate into battery grade anode material used in the production of lithium-ion batteries.

Using its environmentally superior EcoGraf HFfree® purification technology, the company will upgrade the SPG to produce 99.95%C high-performance battery anode material to supply electric vehicle, battery and anode manufacturers in Asia, Europe and North America.

Battery recycling is critical to improving supply chain sustainability and EGR's successful application of the EcoGraf HFfree® purification process to recycle battery anode material provides it with a unique ability to support customers to reduce CO2 emissions and lower battery costs.

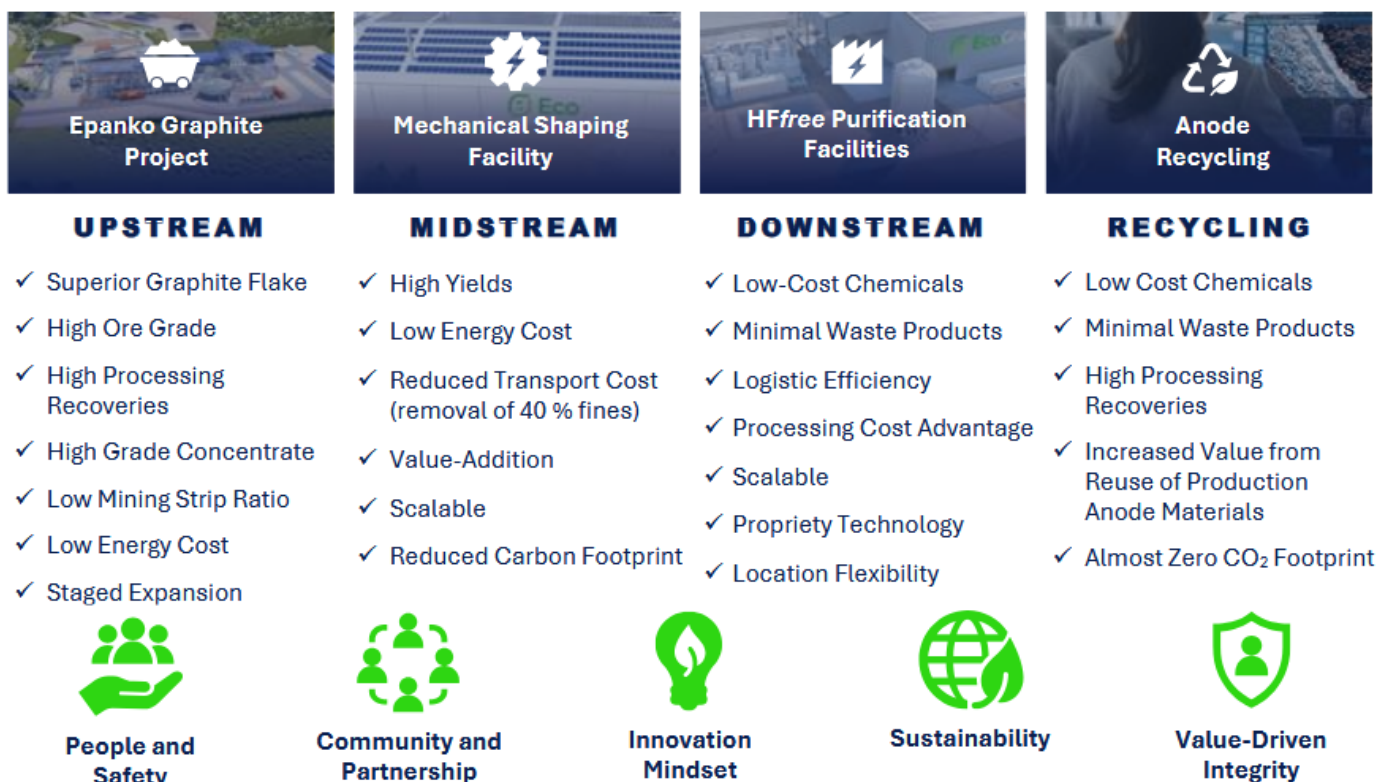


Figure 2: The four components of EGR's overall business plan.

Cash Reserves

EGR held cash reserves of \$8.532M as of 30 September 2025. Based on its expenditure during the quarter, EGR has 3.07 quarters of funding available.

Summary

- EGR is making significant progress with respect to its ambitions of constructing a vertically-integrated business that will produce high-purity graphite for the lithium-ion battery and advanced manufacturing markets. This is reflected in EGR's share price performance, which has quadrupled so far this year.
- EGR's patented HFfree® processing technology and vertically-integrated battery anode materials business is positioned to provide significant cost and environmental benefits for EV OEMs and battery manufacturers, utilising high-quality Tanzanian natural graphite sourced from its long-life Epanko Graphite Project.
- Epanko represents the largest "development-ready" graphite mineral resource in Africa and a life-of-mine Special Mining Licence (SML) was granted for Epanko in March 2025 by the Government of Tanzania.
- The Epanko Expansion Study has evaluated a staged production expansion based on the existing Mineral Resource, following initial stage 1 production of 73,000 tpa - via three stages to 130,000 tpa, 260,000 tpa and 390,000 tpa of natural flake graphite.
- The Epanko Expansion Study aligns with the company's strategy to establish its HFfree® purification facilities in Europe, North America and Asia to meet growing battery anode demand outside China.
- EGR's HFfree® integrated, end-to-end operation will deliver one of the lowest-cost, high-quality, and sustainable solutions, leveraging off its high-quality graphite feedstock.
- Whilst EGR has long been a story for the patient investor, we have always remained upbeat about the company's development prospects and their achievability. It is great to see this recognition now being realised in the marketplace.
- Accordingly, EGR remains firmly within our coverage Portfolio.

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