

EQS-News: Updated Epanko Bankable Feasibility Study

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Completion of Updated BFS Provides Robust Financials for Project Financing

EcoGraf Limited ("EcoGraf" or "the Company") (ASX: EGR; FSE: FMK) is pleased to announce the completion of its updated Bankable Feasibility Study (BFS).

HIGHLIGHTS

- The BFS is based on a production rate of 73,000 tonnes per annum (tpa) for the first 15 years, supporting increased production and revenue.
- Key BFS results:
 - Pre-tax NPV_{10%}: US\$516M
 - Internal rate of return IRR: 31.1 %
 - Capital comprises construction and establishment costs (real 2025)¹ of US\$181.2M and Resettlement Action Plan (RAP) costs of US\$10.8M
 - Annual EBITDA (real 2025): US\$85.7M
 - Finance results based on LOM basket price of US\$1,746/t (real 2025)
- Study confirms 21.7 % increase in plant throughput to 73,000 tpa
- Independent Engineers Review ("IER") confirmed all technical areas have been significantly advanced to conform with the requirements of the Tanzanian Government and the World Bank.
- Follows the completion of the Project's Environmental & Social Management Planning, ensuring the supporting infrastructure is in place.
- Debt financing program in advanced stage under the leadership of KfW IPEX-Bank (KfW)
- Executed marketing strategy with binding offtake and in-principle sales agreements in place covering production and binding sales and offtake agreement once in production and supporting future expansion
- Epanko competitive technical advantage to be tier-1 lowest cost new supply for the growing ex-China graphite market
- Project benefits from grid power and proximity to established transport corridor for market access that has been secured
- Epanko development fully covered under the current single Special Mining Licence ("SML")
- Epanko Expansion Study potential for three further stages to take production to 390,000 tpa within 10 years⁴, driven by the global graphite demand forecast
- Positions Epanko to become Africa's largest planned graphite producer, with future expansions tied to downstream processing
- Global graphite demand forecast to overtake projected supply from 2026 compounded by increased use of natural graphite in EVs and 5G
- China announced last month further restriction on exports of a wide range of dual-use goods to Japan, citing national security
- Epanko Stage 2 130,000 tpa expansion planning underway with demand supported by own downstream development

The BFS has demonstrated a highly robust business case for a 73,000 tpa operation at Epanko having been completed.

EcoGraf Managing Director Andrew Spinks commented: "The combination of the market leading quality of the Epanko

The Company is now positioned well to take advantage of the forecasted huge growth in graphite demand, on the back of significant growth and substantial cash flow generation.

This is the result of tremendous teamwork from our board, management team and consultants and I wish to take the opportunity to thank them for their hard work and dedication.

This will create significant value for stakeholders which includes the Tanzanian Government, communities in the Ulangu District and the wider region.

BANKABLE FEASIBILITY STUDY SUMMARY

During the past 24 months, the Company has embarked on an intensive program of technical work designed to optimise the storage of tailings, following the creation of GISTM in 2020, which the Company is now pleased to be fully compliant with the requirements of the Tanzanian Government and the World Bank in all relevant jurisdictions.

The IER concluded that:

- All additional pre-signing work required by the IER has been completed, delivering a full update of the 2017 BFS⁵
- Designs are now compliant with all required international standards, as set out by KfW, including GISTM.

Achieving this positive outcome is the catalyst for moving forward to the completion of the KfW debt financing for Epanko.

Epanko development will support EcoGraf's HFfree® integrated business and will deliver one of the lowest-cost, high-quality

- Epanko's fine graphite concentrate (-100 mesh) will be shaped at the Company's Tanzanian value-addition Midst
- Strong financial metrics for a single and initial 25,000 tpa purification facility based on capital and operating costs
- 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 in

TECHNICAL

With the support of over 13,000 m of drilling, together with a holistic approach including geophysics, structural geology on 11 March 2024, refer Table 3). This Mineral Resource formed the basis for the declaration of the updated Ore Rese

The large size of the Mineral Resource allows mining to be exclusively focused on Oxide ore for the first 15 years (as s

Figure 1 - Epanko Stage 1 LOM Processing plant Feed

Historical drilling, together with new data from the 2023 and 2024 drilling programs testwork, provided samples and data including the most recent Western Zone Oxide sample which has run through a pilot plant in South Africa, generating d

As part of the Epanko Front-End Engineering Design ("FEED")⁹, METC-PaulSam JV utilised this mining and processing studies for all required infrastructure, associated access roads and mine site facilities.

UPDATED ORE RESERVE

In support of the BFS, an updated Ore Reserve has been declared, totalling 16.7 Mt at 8.2 % TGC for 1.37MT of contain Resource as well as considering relevant modifying factors and material assumptions.

The updated Ore Reserve confirms a 10% increase in contained graphite from the previous Ore Reserve¹⁰ (previous O

The Ore Reserve is based on Measured and Indicated Resources only. No Inferred Mineral Resources have been inclu

Table 1 - 2026 Ore Reserve Statement for the Epanko Deposit

JORC Classification	PROVED			PROBABLE			TOTAL		
	Tonnes (Mt)	Grade (% TGC)	Cont. (Kt)	Tonnes (Mt)	Grade (% TGC)	Cont. (Kt)	Tonnes (Mt)	Grade (% TGC)	Cont. (Kt)
Oxide	4.9	8.8	437	8.3	7.9	659	13.3	8.2	1,095
Transitional	1.0	7.9	76	0.6	7.9	46	1.5	7.9	121
Fresh	1.2	8.3	103	0.7	8.4	56	1.9	8.3	159
Total	7.1	8.6	615	9.6	7.9	761	16.7	8.2	1,376

Notes for Table 1: Cut-off grade applied Eastern Zone is 5% TGC; Cut-off grade applied Western Zone is 6.25% TGC.

TGC grades are rounded to 1 decimal figure. Abbreviations used: Mt = 1,000,000 tonnes, Kt = 1,000 tonnes. Rounding

Crucially for project financing and debt repayment, the first 10 years of production are covered by Ore Reserves that a high proportion of Proved material in an Industrial Mineral's Ore Reserve, is essential to derisk a project. The high stan

SOCIAL, ENVIRONMENTAL AND SAFETY

Delivering a socially and environmentally responsible project is fundamental for the Company and financing partners. In social and environmental work was subjected to an equally robust program of due diligence by KfW appointed E&S Ind

During the past three years, extensive field work was completed, to build on and update the environmental and social s

In addition to the RAP, an environmental and social management system was developed in-line with IFC Performance contractors on their obligations when operating within the Project.

Figure 2 - History of Community and Social Support

KEY OUTCOMES

The BFS took the 2017 - 60,000 tpa case and developed it into a 73,000 tpa Stage 1 development, without the need for operation, allowing greater throughput and both mining and processing cost advantages.

Pre-production capital costs are estimated to be US\$181.2M and RAP costs of US\$18.1M (including contingencies). C

The first 10 years of processing shows a C1 Free-On-Board ("FOB") operating cost of US\$544/t and an All In Sustainin

Table 2 - Summary of BFS Outcomes

Parameter ¹	Unit	Value
Graphite Production	Kt	1,389.1
Pre-tax NPV ₁₀	US\$M	516.0
Pre-tax IRR	%	31.1

PROJECT FINANCING

The Company continues to progress a structured project financing strategy for the Epanko Graphite Project, with the ob mineral development projects and to meet the requirements of lenders, regulators and prospective equity investors.

The debt financing program is at an advanced stage under the leadership of KfW IPEX?Bank ("KfW"), which is arrangin mandate with the Company. Completion of the IER Report and the extensive environmental and social due?diligence p and Safety Guidelines.

As part of ongoing engagement with the KfW Group, the Company has also been invited to assess a range of develop environmental or infrastructure initiatives associated with the Project.

In parallel with the debt financing activities, the Company is advancing a structured equity strategy intended to compler

- Existing and prospective offtake partners, who seek long-term access to high-purity graphite feedstock;
- Industry participants across the graphite value chain, including Midstream and Downstream processors;
- Government agencies regarding grant/funding programs relevant to critical mineral supply chains;
- Global graphite and battery supply chain groups evaluating potential strategic involvement; and
- Institutional investors with a focus on energy transition and critical minerals.

Figure 3 - EcoGraf & KfW Meeting in Sydney & KfW Epanko Site Inspection, Tanzania

BANKABLE FEASIBILITY STUDY PROGRAM AND RESULTS

SCOPE OF WORK

METC-PaulSam JV completed the BFS based on the upgraded Mineral Resource Estimate undertaken by ERM, updated Ore Reserves by Interline Engineers and the excellent results from the extensive metallurgical testwork. Conservative pricing estimates for flake graphite fractions were adopted by EcoGraf using both current pricing and forecast demand via a composite model based on pricing by Benchmark Mineral Intelligent ("BMI") and Fastmarkets. The BFS capital and operating cost estimates are to a level of accuracy of ±10-15%.

The Environmental and Social Planning aspects of the BFS were completed to conform with IFC Performance Standards and World Bank Group Environmental Health and Safety Guidelines, a condition for accessing project financing for projects in emerging market jurisdictions like the Epanko debt financing from KfW.

The significant work program over the last 24 months is summarised below:

- Geotechnical drilling, test pitting, sampling and testwork for key infrastructure;
- Update of the tailings storage facility design to align with GISTM;
- Update of Mineral Resource and mining Ore Reserves, with 40% increase in drilled Mineral Resources;
- New pit designs and optimisations for expanded production;
- Further metallurgical studies to provide better definition on the variability in weathering and mineralogical differences;
- Engineering design for tailings storage, roads, power and infrastructure;
- Revised processing plant layout and flowsheet optimisation;
- A FEED study that included retendering of capital equipment for the 73,000 tpa design;
- Additional social and environmental baseline studies;
- Update Social, Environmental and Safety management plans;
- Continued Stakeholder Engagement;
- Completion of 2025 RAP Report and RAP implementation early-works;
- New capital and operating cost estimates for scope change to 73,000 tpa of product;
- Update of road survey and safety study;
- Independent pricing from BMI and Fastmarkets; and
- Project development and marketing program securing further sales support.

Epanko Current Mineral Resource estimate

Table 3 - Mineral Resource Estimate for the Epanko Deposit >5.5 %TGC⁸.

JORC Classification	Tonnage (Mt)	Grade (%TGC)	Contained Graphite (Kt)
Measured	32.3	7.8	2,500
Indicated	55.7	7.5	4,200
Measured + Indicated	88.0	7.6	6,710

Inferred	202.8	7.2	14,310
Total	290.8	7.2	21,010

Notes for Table: Tonnage figures contained within Table 3 have been rounded to nearest 100,000. % TGC grades are rounded to 1 decimal figure. Abbreviations used: Mt = 1,000,000 tonnes, Kt = 1,000 tonnes. Rounding errors may occur in tables.

Figure 4 - Epanko Project Location Map

STUDY TEAM

The BFS was managed by METC-PaulSam JV utilising industry leading experts in relevant disciplines including:

METC-PaulSam Study Manager and Engineering Design

ERM (CSA Global) Mineral Resource and Geology

Knight Piésold Hydrology and Infrastructure

ECG Engineering HV Power Transmission and Electrical Engineering

Independent Metallurgical Operations Metallurgy

Intermine Engineers Mining and Ore Reserves

George Orr & Associates Geotechnical Mine Design

Royal Freight Transportation planning and road safety assessment

Dhamana Consulting Resettlement planning, stakeholder engagement program, E&S risk assessment and development of ESMPs

PML (Tanzania) Registered land surveys and valuers

Bowmans (Tanzania) Legal advisors for land access and resettlement programs

City Engineering EIA consultants

Mine Earth Consulting Mine closure planning

All consultants have previously worked on African based projects, including Tanzania.

MINING

Mining operations will commence at the East Pit, extracting higher grade Oxide Ore for the first two years of production. Mining then moves to the West Pit for Years 3 to 15, to conclude the Oxide phase of the operation. Years 16 to 20 are focused on the Transitional and Fresh Ore, initially from the higher-grade East Pit for Years 15 to 17, followed by the West Pit. The Ore Reserve will be exhausted by the end of Year 20 and then low grade Oxide stockpiles will be available for processing beyond this point. Epanko benefits greatly from the terrain of the Project site, where the ridge-like nature of the Western Zone mineralisation, results in the need to mine minimal quantities of waste; delivering a LOM strip ratio of 0.86:1 (waste to ore).

Epanko will be mined using conventional open pit methods, with minimal drill and blast required for the Oxide mining, due to its soft, free-dig nature. A conservative 20 % requirement for drill and blast in the Oxide has been budgeted in the BFS, presenting a cost saving opportunity if less is required. The mining fleet will comprise of a 50 t backhoe excavator and 35 t off-highway haul trucks operated by a mining contractor.

The majority of the LOM tonnes come from the West Pit, where mining initially involves the removal of the Oxide material from the top of the ridgeline, along a strike length of almost 2,700 m. The widest point is approximately 300 m wide and has a maximum pit depth of 85 m below original surface. The East Pit goes to a maximum depth below original surface of 60 m, has a north-south strike extent of 370 m and an east-west width of 280 m.

Figure 5 - Epanko Field Exploration Activities

Figure 6 - Epanko BFS Site Layout

PROCESSING AND METALLURGY

The processing plant design is based on an 850,000 tpa crushing, grinding and flotation processing plant treating Oxide ore which will be the predominant feed for at least the first 15 years, to produce 73,000 tpa of graphite concentrate product. Following depletion of the Oxide ore, Transitional and Fresh ore will be processed at a lower rate of 720,000 tpa producing 60,000 tpa of graphite concentrate product. Low grade West Oxide ore (approximately 5.1 % TGC) will be stockpiled and processing deferred till the end of the mining schedule.

Ore will be processed at the processing plant, as shown in Figure 7 and consisting of:

- A conventional two stage crushing circuit with a jaw crusher as the primary crusher and a cone crusher as the secondary crusher;
- A single stage rod mill (grinding to 710 microns) in closed circuit with a screen;
- A rougher flotation stage;
- Regrinding of the rougher tailings;
- Scavenger flotation;
- Primary cleaning and polishing of rougher/scavenger concentrate;
- Four stage cleaning flotation;
- Dewatering of the graphite;
- Concentrating the graphite in a pressure filter;
- Drying of the concentrate in a rotary dryer; and
- Dry screening of graphite product into saleable size fractions.

Following the transition to Fresh ore, the process plant tailings will have the option to pass through a sulphide flotation circuit, based on the classification of feed material being processed. The flotation circuit is allowed for in the circuit design, but installation will be deferred until later in the Project life. Subsequently, feed material with non-sulphide containing tailings will bypass the sulphide flotation circuit. Feed material with sulphide-containing tailings will be directed to the sulphide flotation circuit where sulphide containing tailings will be separated and deposited in a dedicated lined cell.

Figure 7 - Epanko Process Plant Route

The Epanko flowsheet is based on the results of extensive metallurgical testwork including comminution, variability and locked cycle testing. Results from the testwork completed for the 2017 BFS have been reinforced by additional metallurgical programs undertaken over the past two years. The 2024 variability work demonstrated the ability for the proposed flowsheet to deliver relatively consistent concentrate grades and recovery across all ore types, including low and high grade material, Oxide, Transitional and Fresh ore, as well as higher clay zones, low sulphide zones and other mineralogical variations. These results and extensive testwork significantly de-risk the Project by providing confidence that orebody variability will not impede expected production performance. Metallurgical results from the various Ore types have been incorporated into the production schedule to define expected product throughput over the LOM.

Table 4 - Epanko life of mine flake size distribution (weighted)

Name	Micron	Mesh	Mass (%)	Carbon Grade (%)
Jumbo	>300	>50	19	97.5
Large	>180	>80	31	96.5
Medium	>150	>100	13	96.0
Small	<150	<100	37	95.5

Notes for Table 4. 1mm=1000 micron and fixed carbon content determined by Loss on Ignition method (LOI)

The Project delivers a significant proportion of total concentrate production at the >100 mesh size fractions, which carries with it elevated product pricing. Across the LOM, 63% of concentrate production is > 100 mesh or 150 microns. One of Epanko's standout attributes is the high carbon grade of the product, with LOM carbon grades of 97.5% achieved largest size fraction of >50 mesh. This higher purity product carries a price premium above the standard 94 % carbon benchmark, with material below this grade suffering from a significant drop-off in value. This is due to the higher purity material delivering performance advantages when used in lithium-ion batteries, as well as being lower in impurities that can be detrimental to the graphite's performance.

Figure 8 - Flake graphite price premium for higher carbon grade and flake size

The higher carbon grades also reflect the lower level of impurities, and Epanko's product grades are marked by lower Iron (Fe), Silica (Si) and Sulphur (S), providing a further sales marketing advantage.

The Company's testwork programs with customer qualification has demonstrated the very favourable particles size distribution of < 100 mesh product size material with its very low silica (Si) content, making it an ideal feedstock for the battery anode market.

INFRASTRUCTURE

Tailings Storage Facility

The waste output (tailings) from the flotation process will be pumped from the processing plant to a tailings storage facility ("TSF"), consisting of two cells, the Sulphide Tailings Cell and the Main Tailings Cell. Tailings will be delivered through a high-density polyethylene ("HDPE") pipe running between the process plant and the TSF. The pipe alignment will drain to a catch pond to reduce the risk of uncontrolled discharge if the pipeline were to fail. Tailings will be discharged into the TSF Main Tailings Cell by sub-aerial deposition methods and deposition to the Sulphide Tailings Cell will be sub-aqueous with the cell flooded at all times to reduce the risk of oxidation.

The TSF design will support the life of the development and there is significant scope to support both an extension and further expansion of the Project.

Power

The Project is estimated to have a maximum demand of 2.8 MW, with an average load of 2.4 MW and an energy consumption of 20.8 GWhr/year, most of which is needed to supply the graphite processing plant.

A new 220 kV transmission line is planned from Ifakara to Mahenge and a power supply agreement ("PSA") is planned to be signed with TANESCO to connect the Project to the TANESCO power grid via a new 33 kV powerline that will run from Epanko to the new Mahenge substation.

The power will be 100% sourced from low-cost hydropower.

Water

Process water supply for the main process will be sourced from the TSF supernatant pond and the water diversion dam and stored in the process water ponds located at the process plant.

Potable water supply will be sourced from groundwater treated by Multi-Media Filtration ("MMF"). An 80m³ per day MMF plant will be installed at the processing plant and a 20 m³ per day MMF plant will be installed in the water services area of the accommodation village.

Accommodation

A 600-man camp will be established for all site-based personnel during construction and operations. The accommodation village will be constructed using modular prefabricated panel units transported to site in a flat-pack configuration and installed onto a concrete slab on the ground. All buildings will be single storey. Modular flat-pack units reduce the transport costs to site and allow for the bulk of fabrication to take place off site. The village will be a self-contained facility independent from the main plant and managed by an independent camp management company.

Logistics

The Epanko site can be accessed from the existing national road network to the chosen export port of Dar es Salaam. The BFS assumes road haulage to the port of Dar es Salaam in bulk bags, however, as production increases, via potential future expansion phases³, a combined road-rail link may be utilised. Epanko is located approximately 75 km from the Ifakara rail siding which links to Dar es Salaam.

Figure 9 - Epanko Site Location

Graphite product will be shipped from the port of Dar es Salaam. The port of Dar es Salaam has a total quay length of about 2,000 m, with eleven deep-water berths. The port has an estimated capacity of 3.1 Mt general cargo, 1 Mt container cargo and 6.0 Mt of liquid bulk cargo with 7 deep water berths. The port serves the landlocked countries of Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda, and is an established minerals export facility.

In October 2023, DP World signed a 30-year concession agreement with the Tanzania Ports Authority ("TPA") to operate and modernise the multi-purpose Dar es Salaam Port, Terminal 1, berths 1 to 7¹³. Since taking control, DP World have implemented several programs to improve the efficiency of the port, which

have had a significant positive impact on reducing container ship waiting times.

REGULATORY, SOCIAL AND ENVIRONMENTAL

The entire mine site for the BFS is contained within a single SML (SML 733/2025), which covers a total area of 18.48 km². The SML was granted in 2025 with an initial mine life of 18 years, with the right to extend to 25 years or beyond subject to the potential future mine life of the Ore Reserves². The SML covers the previous mining licence plus the two former prospecting licences to the south. This larger SML will support potential future expansion and extension of the Project life. Within the SML is an area defined as the RAP Area, which total 6.9 km and will be the subject of the Epanko RAP and host all mine site infrastructure.

The IFC Performance Standards and World Bank Equator Principles are recognised as the global standard for assessing and managing environmental and social risks for projects domiciled in emerging markets. These guidelines have been adopted by leading financial institutions worldwide, including KfW and compliance is a pre-requisite by all development banks and other leading international financial institutions for project financing. In 2022, EcoGraf completed a gap analysis on the work done for the 2017 BFS, to identify areas relating to environmental and social compliance that required further work. Over the past three years, the Company has conducted a complete update of the RAP as well as various additional baseline environmental and social field surveys. Results from all of these have contributed to updates of impact assessments, management plans and on-going baseline monitoring programs.

Consistent with the Project's social management framework and Tanzanian local content regulations, EcoGraf expects operations to create up to approximately 200 local Tanzanian jobs, with more than 95% of permanent operational roles planned to be filled by Tanzanian nationals. EcoGraf places a strong emphasis on compliance with local content requirements and the development of local workforce capability.

Further enhancement of the pre-existing Environmental and Social documentation including completion of ESIA, RPF, Stakeholder Engagement Plan and the comprehensive suite of Environmental and Social Management Plans has been a critical element of the BFS, as shown below.

Environmental Management Plans

EMP01 Air Quality and GHG Management Plan

EMP02 Noise and Vibration Management Plan

EMP03 Water Resources and Erosion Control Management Plan

EMP04 Biodiversity Ecosystems and Land Use

EMP05 Waste Management Plan

EMP06 Materials Management Plan

EMP07 Tailings Storage Facility Operating Manual

EMP08 Soils, Erosion and Land Use Management Plan

EMP09 Acid and Metalliferous Drainage Management Plan

EMP10 Pest and Weed Management Plan

EMP11 Climate Change/GHG Management Plan

EMP12 Emergency Preparedness and Response Plan

Social Management Plans

RPF Resettlement Policy Framework

SMP01 Stakeholder Engagement Plan

SMP02 Community Health, Safety & Security (CHSS) Management Plan

SMP03 Artisanal and Small-Scale Mining Interface Management Plan

SMP04 Traffic and Road Safety Management Plan

SMP05 Cultural Heritage Management Plan

SMP06 Labour and Working Conditions Management Plan

SMP07 Social Development Plan

SMP08 Gender Based Violence and Harassment Management Plan

SMP09 Gender Management Plan

SMP10 Human Rights Management Plan

SMP11 Supply Chain Management Plan

The mine area impacts the Epanko hamlets of Epanko A, Kazimoto, Itatila, Mbera, Epanko B and Luli. Resettlement planning activities have been significantly progressed during the last 24 months, culminating in the recent completion of the 2025 RAP Report¹¹. Following the completion of the RAP planning stage, the Company has now moved into the early stages of RAP implementation.

A Mine Closure Plan ("MCP") was developed by Mine Earth Consulting in 2024 in accordance with the requirements of the Tanzanian Ministry of Minerals 'Mine Closure Guidelines' (2019). The main aim of the rehabilitation will be to re-establish a long-term stable landform which can be handed back to the local population. Reestablishing a surface cover of verdant vegetation will reduce the potential for adverse environmental impact such as dust generation and rainfall erosion, as well as improving aesthetics. Rehabilitation trials will be undertaken during operation to determine the most effective method to cap and rehabilitate the surface of the TSF as well as how to best rehabilitate the waste rock dumps and other areas of disturbance. The final closure and rehabilitation plan will be developed in consultation and with input of the local population and government during the mining operations.

PROJECT IMPLEMENTATION SCHEDULE

A Project execution schedule has been developed as part of the BFS. The schedule presented outlines the planned construction and commissioning activities following site access and assumes EcoGraf Board approval of development, which is dependent on finalisation of the Project financial arrangements. As commencement of construction activities is linked to that approval, the start date and corresponding milestone dates may vary; however, the underlying construction durations and sequencing remain as

currently planned.

The schedule provides for a 22-month construction period from the date of site access to the commencement of ramp up. The timeline is based on specific design requirements, preliminary vendor-nominated manufacturing and delivery periods, and the Company's in-house experience with similar projects.

Figure 10 - Project Timeline

PRODUCT SPECIFICATION, SALES AND MARKETING

The high proportion of > 100 mesh flake size product and high carbon grade of the Epanko products allows EcoGraf to sell product into established markets, often at a price premium due to the superior quality compared to the established industry benchmark. EcoGraf has secured pre-production offtake agreements and in-principle sales - which are expected to be converted into binding sales and offtake agreements - with ThyssenKrupp, a European trading group, POSCO and others, covering 82.2 % of Epanko production once nameplate capacity has been reached. Extensive product analysis has been completed by these parties as well as several others which are in active discussions with the Company to sign additional sales agreements.

Product specifications including carbon content and sizing have been developed in discussions with our offtake partners and discussions with established graphite users and traders across both industrial and battery markets. The average carbon content of Epanko product envisaged by the BFS is > 96 % carbon grade across 4 size fractions to meet market demand which is currently dominated by traditional industries and is expected to maintain the majority of market share during the initial years of production.

Epanko competitive technical advantage supports it to become a tier-1 lowest cost new supply for the growing ex-China graphite market with global leading ESG credentials.

EPANKO PRICING

The Company engaged two leading industrial minerals forecasters; BMI and Fastmarkets. To ensure representativity, a composite model was developed based on these two forecasts, together with relevant adjustments to price to reflect higher carbon contents for each size fraction and blended European and Chinese pricing to reflect to the destination of each offtake. All prices are based on a CIF basis.

The assumed LOM basket price for Epanko, on a CIF basis, is US\$ 1,746/t (real 2025) in the BFS and represents a 48% increase vs. 2017 BFS basket price of US\$ 1,181 /t.

GRAPHITE DEMAND

Demand for natural battery graphite is increasing strongly, driven by the rapid expansion of lithium-ion batteries used in EVs and energy storage systems in North America, Europe and Asia.

As electrification accelerates across the transport and energy sectors, lithium batteries are becoming central to this transition, placing increasing strategic importance on developing new technologies and sustainable supply channels.

Global graphite demand is forecast to overtake projected supply from 2026 due to:

- graphite required for lithium battery e-mobility and clean energy storage applications;
- an increased proportion of natural graphite used in lithium battery anodes; and
- growing supply chain security issues (geopolitical tensions, Chinese export controls, trade tariffs).

As a result, a shortfall in the natural flake graphite market is expected in the second half of this decade.

Figure 11 - Flake graphite supply and demand

Source: Benchmark Mineral Intelligence, 2024

CAPITAL AND OPERATING COSTS

Pre-production capital costs are estimated to be US\$181.2M and RAP costs of US\$18.1M (including contingencies).

The pre-production capital cost estimates were re-quoted to reflect current market prices and show the increase in costs seen globally by not only the mining sector, but most industrial sectors. Compared to the 2017 BFS, the execution model has reverted to an EPCM approach. The estimate includes all the necessary costs associated with process engineering, design engineering and drafting, procurement, construction and construction management, commissioning of the process facility and associated infrastructure, mining establishment, first fills of plant reagents and consumables, spare parts and working capital required to design, procure, construct and commission all the facilities required to establish the Project.

Table 5 - Capital cost estimate summary (real 2025)

Section Description	Total US\$M
Construction Management and Operation Camp	10.6
Construction and Mining Camp	3.0
EPCM Cost	15.4
Mining Early Works	1.7
Mobile Equipment	1.9
Off-Site Services	8.9
Operational Readiness	6.3
Owner's Team Cost	12.3
Processing Plant	71.3
Site Services	2.0
TSF Stage 1	14.4
Contingency	22.8
TOTAL	181.2

The Total RAP costs, including contingency, is estimated to be US\$18.1M which will form the basis of the implementation of all environmental and social work programs throughout construction and operation, as well as informing contractors on their obligations when operating within the Project.

There is a requirement for capital expenditure over the life of the Project that is not covered by the general maintenance provisions within the operating cost estimate. These sustaining and deferred capital, including closure costs, are US\$54.2M and US\$22.8M, respectively (real 2025).

Processing operating costs have been determined based on treatment rates of 850,000 tpa for Oxide ore and 720,000 tpa for Transitional and Fresh ore. The estimates have been based on a P80 grind size of 710 µm, operation 24 hours per day and 365 days per year with a milling circuit direct operating hours of 8,000 per annum. The throughput rates have been used as the basis for developing comparative operating costs.

The operating costs have been compiled from a variety of sources, including:

- Budget quotations received from suppliers;
- METC database of prices for consumables;
- Manning levels, wages and salaries provided by EcoGraf;
- Administration costs derived from information provided by EcoGraf;
- Reagent consumptions derived from testwork results;
- Modelling and calculation of crushing and grinding energy and consumables, using ore characteristics measured
- First principle estimates based on typical operating data.

The LOM operating cost summary below is based on parameters outlined in the Process Design Criteria, LOM production schedule including grid power supply and all processing costs associated with producing graphite concentrate.

Table 6 - Operating cost estimate summary (US\$/t Concentrate Sold FOB Dar es Salaam, real 2025)

	LOM First 10-Years of Processing	
Mining	122	136
Processing	240	222
Transport & Port Charges	125	125
General & Administration	66	62
C1 Cost FOB Dar es Salaam	553	544
Royalties & Levies	58	59
Sustaining Capital	39	36
All In Sustaining Cost	651	639

Notes for table - rounding errors may occur.

Key operating outcomes of the Epanko Project are reported in the table below.

Table 7 - Key operating metric summary

Input	Unit	2025 BFS
Development period	weeks	72
Mine life	years	22*
Average annual throughput (Oxide)	t	850,000
Strip ratio	waste to ore	0.86:1
Average feed grade	% TGC	8.3
Graphite recovery	%	97.2
Average product carbon grade	%	96
Graphite production (Oxide)	t	73,000

*The SML (SML 733/2025) is granted for an initial 18 years with a right to extend to 25 years (subject to regulatory approvals). The 22-year LOM in this BFS assumes the SML term is extended/renewed in accordance with applicable regulatory processes.

FINANCIAL OUTCOMES

Key financial return outcomes of the Epanko Project are reported in the table below.

Table 8 - Key financial parameters

Input	Unit	2025 BFS
Average product price	US\$/t CIF, real 2025	1,746

Pre-tax geared NPV ₁₀	US\$M	516
Pre-tax geared IRR	%	31.1
Post tax geared NPV ₁₀	US\$M	350
Post tax geared IRR	%	27.0

Notes for table - Corporate taxation rate 30% and Financing assumption 39% debt.

PROJECT OPPORTUNITIES

This BFS covered the Stage 1 development of Epanko, with initial production of 73,000 tpa of graphite concentrate. Opportunities exist beyond this to increase and extend production. Further savings exist on implementation due to the conservative approach taken to design and costings. Additionally, Project economics do not include product sales into the high growth lithium-ion battery markets through downstream processing.

Opportunities that exist include, but not limited to:

- Improved Transitional Ore definition to reduce the conservative assumption that it is all handled as Fresh Ore and
- Pit geotechnical review to assess opportunity to steepen pit walls from the current conservative approach, improv
- Expansion of mining capacity via additional stages of development up to 390,000 tpa⁴;
- Extension of the Mineral Resource for an additional 2 km of strike length further south;
- Further exploration of potential high grade geophysical anomalies identified.

Figure 12 - Epanko West Pit - Isometric Pit Design & Geology

3D render of the Epanko West Pit with geological model, including the grey graphitic schist unit of the Western Zone

Figure 13 - East Pit high grade opportunities

Notes for Figure 13 - Mineral Resource block model coloured; Red = Measured, Green = Indicated and Blue = Inferred.

The table below outlines the proposed additional three stages for combined production of 390,000 tpa⁴.

Table 9 - Potential future expansion scenarios³

	Production Scenario	
Phase	Staged	Cumulative
Stage 1	73 ktpa	73 ktpa
Stage 2	73 ktpa	130 ktpa
Stage 3	130 ktpa	260 ktpa
Stage 4	130 ktpa	390 ktpa

The staged expansion cases (including the potential to reach 390,000 tpa) are conceptual and illustrative only, do not constitute production targets for the purposes of ASX Listing Rule 5.16 and are not the basis for the forecast financial information disclosed in this announcement.

Figure 14 - Potential future expansion - first 10-years ramp-up⁴

Summary of Ore Reserves and Reporting Criteria

(Summary of Information Required by ASX Listing Rule 5.9.1)

In accordance with ASX Listing Rule 5.9.1, and in addition to further information included in this announcement, including Appendix 1- JORC Table 1, the Company provides the following information:

Material Assumptions: The Ore Reserves are based on key modifying factors that include analysis, designs, schedules and cost estimates of the Epanko BFS that describes the development of the Epanko Graphite Project over a 22-year Project life. Material assumptions of the Study include:

- Estimation of Mineral Resources reported in accordance with the JORC Code including: geological interpretation of 5.5% TGC was used to report the Mineral Resource Estimate; and mine designs and mining schedules based on
- The Mineral Ore Reserve estimate has been reported in accordance with the JORC Code including: a cut-off grade applied in these profiles; geotechnical parameters applied to the mine designs based on investigations by George Orr and Associates
- The processing plant design has been developed by experienced design engineers to support the flowsheet and there is any variability of recovery to concentrate in the differing weathering and mineralogical zones of each deposit
- Environmental and social impact assessment and management plans have been developed.
- Designs for valley fill dams and waste dumps based on a mine life of 25 years and incorporated strategies for both
- The infrastructure requirements have been defined by specialist engineers. Grid power cost assumptions have been based on the network at Mahenge and then to Dar Es Salaam port for export.
- The detailed designs discussed above have been used as the basis for capital and operating cost estimates derived

Classification criteria: The Ore Reserves comprises Measured and Indicated Mineral Resources only. The Study includes some Inferred Resources which are mined incidentally with the Measured and Indicated Resources and treated as waste for scheduling purposes.

Mining Method: Mining Method: Graphite ore will be mined from two open cut pits which will be developed at the Western Zone and Eastern Zone. These are approximately one kilometre apart and lie near the northern boundary of the Mining License area. The Western Zone consists of mining a strike length of 2,700m along the top of the ridge to a depth of 85m in the south, and the Eastern Zone sits partially over a hill within a small valley and will be mined to a depth of 60m and the pit will have a strike extent of 370 m.

- Mining will be by a conventional drill and blast, truck and shovel operation, using a mining contractor. Blasting will be transported by trucks to the waste rock storage facility.
- The height of the mining benches is determined according to physical characteristics of the mineralisation. It is as high as possible to ensure maximum recovery.
- To accommodate the 73,000tpa of graphite product, the mine schedule will target a Run-Of-Mine ("ROM") feed of 73,000tpa.
- The cut-off grade applied is based on the profitability of the Resource block after modifying factors and the metallurgical performance. A 5% TGC for the Western zone and 5 % TGC for the Eastern zone has been applied to ensure that the concentrate produced is profitable.
- Mining dilution and ore loss factors were applied based on weathering and the expected influence of blasting in the mine.
- Geotechnical parameters applied to the designs are based on investigations by George Orr and Associates. The

Processing Method: The design is based on an 850,000 tpa flotation processing plant treating Oxide ore which will be the predominate feed for the first 15 years, to produce 73,000 tpa of graphite product and Transitional and Fresh ore will be processed at a rate of 720,000 tpa, producing 60,000 tpa of graphite product for the remainder of the Project life. Low-grade West Oxide ore (~ 1.5 Mt at 5.1% TGC) will be stockpiled and processing deferred till the end of the mining schedule.

Ore will be processed through the processing plant which will consist of:

- A conventional two stage crushing circuit with a jaw crusher as the primary crusher and a cone crusher as the secondary
- A single stage rod mill (grinding to 710 microns) in closed circuit with a screen;
- A rougher flotation stage;

- Regrinding of the rougher tailings;
- Scavenger flotation;
- Primary cleaning and polishing of rougher/scavenger concentrate;
- Four stage cleaning flotation;
- Dewatering of the graphite;
- Concentrating the graphite in a pressure filter;
- Drying of the concentrate in a rotary dryer;
- Dry screening of graphite product into saleable size fractions.
- Final product bagging.

Testwork carried out on composite samples and ore variability samples demonstrate outstanding grade and recovery of graphite in final concentrate with no deleterious elements.

Road transport of the mine concentrate from the Epanko mine site to Dar es Salaam will be through Ifakara, to Morogoro and then onto the logistic supplier's yard in Dar es Salaam. The concentrate bulk bags are then packed into containers for export.

The transport route between the Project Site and the port of Dar es Salaam is a major part of the operations for the Project. EGR undertook an independent study that assessed the route suitable for the transportation of concentrate from site to the Dar Es Salaam Port.

Estimation Methodology: Revenue is calculated as the concentrate price less royalties, less fixed and variable costs to produce and transport the product to the point of sale. Process plant feed from the mining schedule provided a head grade that was modelled through the processing plant and used to model costs and revenue over the life of the Project.

The forecast 2025 Graphite baseline price used in the financial model was based on a composite model of forecasts from BMI and Fastmarkets, together with relevant adjustments to price to reflect higher carbon contents for each size fraction and blended European and Chinese pricing to reflect to the destination of each offtake. The NPV is derived from post royalty, debt and equity funded nominal cash flows using a 10% discount rate.

Mining licence: The Epanko Graphite Project is located within the special mining license granted by the Government of Tanzania.

Figure 15 - Epanko Mineral Processing Plant and Video

Figure 16 - Epanko Geology, Ulanga Tanzania

Notes and References

¹ All BFS financials are reported as nominal, unless flagged as Real.

² Refer ASX announcement dated 17 March 2025 titled "Completion of Major Epanko Environmental and Social Program"

³ Refer ASX announcement dated 25 August 2015 titled "Off-take Agreement with ThyssenKrupp"

⁴ Refer ASX announcement dated 12 November 2025 titled "Epanko Expansion Supports HFfree"

Downstream Facilities"

⁵ Refer ASX announcement dated 21 June 2017 titled "Updated Bankable Feasibility Study"

⁶ Refer ASX announcement dated 28 April 2023 titled "Epanko Pre-Development Program Delivers Outstanding Results"

⁷ Refer ASX announcement dated 13 August 2025 titled "HFfree Delivers Industry-Leading Low Cost and NPV of US\$282M"

⁸ Refer ASX announcement dated 11 March 2024 titled "127% increase in Epanko Mineral Resource"

⁹ Refer ASX announcement dated 21 October 2024 titled "Epanko Front-End Engineering Design Completed"

¹⁰ Refer ASX announcement dated 25 July 2024 titled "Updated Epanko Ore Reserve"

¹¹ Refer ASX announcement dated 22 October 2025 titled "Completion of Epanko Resettlement Action Plan"

¹² Refer ASX announcement dated 8 December 2025 titled "KfW IPEX-Bank Debt Financing Program & Due Diligence Update"

¹³ Refer

<https://www.dpworld.com/en/news/dp-world-signs-30-year-concession-to-operate-multi-purpose-dar-es-salaam-port-in->

¹⁴ Refer ASX announcement dated 4 March 2025 titled "Epanko 'Life of Mine' Special Mining Licence Granted"

This announcement is authorised for release by Andrew Spinks, Managing Director.

For further information, please contact:

INVESTORS

Andrew Spinks

Managing Director

T: +61 8 6424 9002

Forward looking statements

Statements relating to the estimated or expected future production, operating results, cash flows and costs

and financial condition of the Company's planned work at the projects and the expected results of such work are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by words such as the following: expects, plans, anticipates, forecasts, believes, intends, estimates, projects, assumes, potential and similar expressions. Forward-looking statements also include reference to events or conditions that will, would, may, could or should occur. Information concerning exploration results and mineral reserve and resource estimates may also be deemed to be forward-looking statements, as it constitutes a prediction of what might be found to be present when and if a project is actually developed.

These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable at the time they are made, are inherently subject to a variety of risks and uncertainties which could cause actual events or results to differ materially from those reflected in the forward-looking statements, including, without limitation: uncertainties related to raising sufficient financing to fund the planned work in a timely manner and on acceptable terms; changes in planned work resulting from logistical, technical or other factors; the possibility that results of work will not fulfil projections/expectations and realise the perceived potential of the Company's projects; uncertainties involved in the interpretation of drilling results and other tests and the estimation of minerals and resources; risk of accidents, equipment breakdowns and labour disputes or other unanticipated difficulties or interruptions; the possibility of environmental issues at the Company's projects; the possibility of cost overruns or unanticipated expenses in work programs; the need to obtain permits and comply with environmental laws and regulations and other government requirements; fluctuations in the price of minerals and other risks and uncertainties.

Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. Actual results, performance or achievements may differ materially from those expressed or implied in such statements and any projections and assumptions on which these statements are based. The forward-looking statements are based on information available to the Company as at the date of this announcement. Except as required by law or regulation (including the ASX Listing Rules), none of the Company, its representatives or advisers undertakes any obligation to provide any additional or updated information whether as a result of a change in expectations or assumptions, new information, future events or results or otherwise.

Competent Person Statement - Ore Reserves

The information in this report that relates to the Ore Reserve has been compiled by Mr Steve O'Grady. Mr O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy (#201545), is a fulltime employee of Intermine Engineering and produced the Mining Reserve estimate based on data and geological information supplied by Mr Williams. Mr O'Grady has sufficient experience that is relevant to the estimation, assessment, evaluation and economic extraction of Ore Reserve that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves (JORC Code 2012). Mr O'Grady consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.

Competent Person Statement - Mineral Resources

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr. David Williams and Mr. David Drabble. Mr. David Williams is a full-time employee of ERM and is a Member of the Australian Institute of Geoscientists (#4176) (RPGeo). Mr. David Drabble is a full-time employee of [EcoGraf Ltd.](#) and is a Member of the Australasian Institute of Mining and Metallurgy (#307348). Mr David Williams and Mr David Drabble have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code 2012. The Mineral Resource estimates underpinning the Ore Reserve was first announced in the Company ASX announcement on 11 March 2024 titled "127% Increase in the Epanko Mineral Resource". The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Production targets and financial information

Information in this announcement relating to production targets and forecast financial information derived

from the production targets is based on the updated Bankable Feasibility Study. The production targets disclosed in this announcement is based off Ore Reserves derived from Mineral Resources comprised of 43% Measured Resources and 57% Indicated Resources for a 22-year life of mine. No Inferred Resources have been included in the Ore Reserve and the production targets. Inferred Resources have only been mined incidentally with the Measured and Indicated Resources and treated as waste for scheduling purposes. The Ore Reserve and Mineral Resource estimates underpinning the production targets have been prepared by a Competent Person in accordance with the requirements in Appendix 5A of the JORC Code 2012.

Cautionary statement

The BFS outcomes are based on the range of material assumptions regarding modifying factors outlined in this announcement. Among these material assumptions are the Company's prospects of securing further debt and equity funding. Investors should note that there is no certainty the Company will be able to raise the required amount of funding when needed and that access to such funding may be subject to conditions that may or may not be within the Company's control. It is also possible that such funding may only be available on terms that may be dilutive to, restrictive of, or otherwise adversely affect the value of the Company's shares. It is also possible that the Company could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project. This could materially reduce the Company's proportionate ownership of the Project. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the BFS will be achieved.

About EcoGraf

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. Over US\$30 million has been invested to date to create a highly attractive graphite business which includes:

- 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; and

- EcoGraf HFfree[®] Purification technology to support battery anode recycling.

In Tanzania, the Company 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 the Company'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.

Follow EcoGraf on LinkedIn, X, Facebook and YouTube or sign up to the Company's mailing list for the latest announcements, media releases and market news.

APPENDIX 1 JORC TABLE 1

JORC Table 1 Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation
Sampling techniques	<p>Nature and quality of sampling (e.g. cut channels, random chips, or measurement tools appropriate to the minerals under investigation or handheld XRF instruments, etc.). These examples should not be taken as a guide to sampling.</p> <p>Include reference to measures taken to ensure sample representativeness and measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the understanding of the JORC Code. In cases where 'industry standard' work has been done this would include (e.g. 'circulation drilling was used to obtain 1 m samples from which 3 kg was taken for fire assay'). In other cases, more explanation may be required, particularly where the property has inherent sampling problems. Unusual commodities or mineralisation types warrant disclosure of detailed information.</p>
Drilling techniques	<p>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air-leg, etc.) and details (e.g. core diameter, triple or standard tube, depth of diameter, etc.). Whether core is oriented and if so, by what method, etc.).</p>
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoverability and measures taken to maximise sample recovery and ensure representativeness. Whether a relationship exists between sample recovery and grade of the material and, if so, the nature of the relationship. Occurrence of preferential loss/gain of fine/coarse material.</p>
Logging	<p>Whether core and chip samples have been geologically and geotechnically logged to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or chip) length, grade and orientation. The total length and percentage of the relevant intersections logged.</p>

Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether split. For all sample types, the nature, quality and appropriateness of the sampling technique. Quality control procedures adopted for all subsampling stages to minimise bias and error. Measures taken to ensure that the sampling is representative of the material. Whether sample sizes are appropriate to the grain size of the material.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory testing technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the analysis including instrument make and model, reading times, detection limits, and data reduction procedures, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, etc.) and whether acceptable levels of accuracy (i.e. lack of bias) and precision are achieved.
Verification of sampling and assaying	The verification of significant intersections by either independent or duplicate drilling. The use of twinned holes. Documentation of primary data, data entry procedures, data verification (including electronic) protocols. Discuss any adjustment to assay data.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole) and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the continuity appropriate for the Mineral Resource and Ore Reserve estimation method(s) applied. Whether sample compositing has been applied.

Orientation of data in relation to geological structure Whether the orientation of sampling achieves unbiased sampling which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation considered to have introduced a sampling bias, this should be assessed.

Sample security The measures taken to ensure sample security.

Audits or reviews The results of any audits or reviews of sampling techniques and data.

JORC 2012 Table 1 Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation
Mineral tenement and land tenure status	Type, reference name/number, location and ownership parties such as joint ventures, partnerships, overriding wilderness or national park and environmental setting. The security of the tenure held at the time of reporting licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.
Geology	Deposit type, geological setting and style of mineralisation.

Drillhole Information A summary of all information material to the understanding of the following information for all Material drillholes:

- easting and northing of the drillhole collar
- elevation or RL (Reduced Level - elevation above sea level)
- dip and azimuth of the hole
- downhole length and interception depth
- hole length.

If the exclusion of this information is justified on the basis of the nature of the deposit, the exclusion does not detract from the understanding of the deposit and the reasons for the exclusion should be explained in detail.

Data aggregation methods In reporting Exploration Results, weighting averaging truncations (e.g. cutting of high grades) and cut-off grades should be avoided. Where aggregate intercepts incorporate short lengths of high grade results, the procedure used for such aggregation should be explained. Aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent should be explained.

Relationship between mineralisation widths and intercept lengths These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the reporting is not known, the relationship should be reported. If it is not known and only the downhole lengths are reported, the relationship should be reported (e.g. 'downhole length, true width not known').

Diagrams Appropriate maps and sections (with scales) and tabular data should be provided for any significant discovery being reported. These should include the location of the discovery and appropriate sectional views.

Balanced reporting Where comprehensive reporting of all Exploration Results is not possible, low and high grades and/or widths should be practiced.

Other substantive exploration data

Other exploration data, if meaningful and material, shall include: geological observations; geophysical survey results; method of treatment; metallurgical test results; bulk characteristics; potential deleterious or contaminating

Further work

The nature and scale of planned further work (e.g. test large-scale step-out drilling).
Diagrams clearly highlighting the areas of possible exploration and future drilling areas, provided this information is

JORC 2012 Table 1 Section 3 - Estimation and Reporting of Mineral Resources

Criteria

JORC Code explanation

Database integrity

Measures taken to ensure that data has not been corrupted by, for example, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.

Site visits

Comment on any site visits undertaken by the Competent Person and the. If no site visits have been undertaken indicate why this is the case.

Geological interpretation

Confidence in (or conversely, the uncertainty of) the geological interpretation.
Nature of the data used and of any assumptions made.
The effect, if any, of alternative interpretations on Mineral Resource estimation.
The use of geology in guiding and controlling Mineral Resource estimation.
The factors affecting continuity both of grade and geology.

Dimensions

The extent and variability of the Mineral Resource expressed as length (also width, and depth below surface to the upper and lower limits of the Mineral Resource).

Estimation and modelling techniques

The nature and appropriateness of the estimation technique(s) applied and the treatment of extreme grade values, domaining, interpolation parameters and extrapolation from data points. If a computer assisted estimation method was used, the computer software and parameters used.
The availability of check estimates, previous estimates and/or mine production data. The Mineral Resource estimate takes appropriate account of such data.
The assumptions made regarding recovery of by-products.
Estimation of deleterious elements or other non-grade variables of economic significance (e.g. acid mine drainage characterisation).
In the case of block model interpolation, the block size in relation to the average grain size of the search employed.
Any assumptions behind modelling of selective mining units.
Any assumptions about correlation between variables.
Description of how the geological interpretation was used to control the resource estimation.
Discussion of basis for using or not using grade cutting or capping.
The process of validation, the checking process used, the comparison of mineral resource estimates with use of reconciliation data if available.

Moisture

Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.

Cut-off parameters

The basis of the adopted cut-off grade(s) or quality parameters applied.

Mining factors or assumptions

Assumptions made regarding possible mining methods, minimum mining cost (applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods and parameters when estimating Mineral Resources. Where this is the case, this should be reported with an explanation of the basis of the assumptions made.

Metallurgical factors or assumptions

The basis for assumptions or predictions regarding metallurgical amenability of the process of determining reasonable prospects for eventual economic extraction, but the assumptions regarding metallurgical treatment made when reporting Mineral Resources may not always be rigorous. Where these aspects have not been considered this should be reported with an explanation of the basis of the metallurgical assumptions made.

Environmental factors or assumptions

Assumptions made regarding possible waste and process residue disposal as part of the process of determining reasonable prospects for eventual economic extraction, potential environmental impacts of the mining and processing operation. Where the determination of potential environmental impacts, particularly for a greenfield project, is well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.

Bulk density

Whether assumed or determined. If assumed, the basis for the assumption should be reported, used, whether wet or dry, the frequency of the measurements, the nature, and location of the samples. The bulk density for bulk material must have been measured by methods that account for void spaces (vugs, porosity, etc.), moisture and differences between rock and mineral. Discuss assumptions for bulk density estimates used in the evaluation process.

Classification The basis for the classification of the Mineral Resources into varying confidence levels. Whether appropriate account has been taken of all relevant factors (i.e. reliability of estimations, reliability of input data, confidence in continuity of geology and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the Mineral Resources.

Audits or reviews The results of any audits or reviews of Mineral Resource estimates.

Discussion of relative accuracy/ confidence Where appropriate a statement of the relative accuracy and confidence level of the estimate using an approach or procedure deemed appropriate by the Competent Person. The application of statistical or geostatistical procedures to quantify the relative accuracy and confidence, stated confidence limits, or, if such an approach is not deemed appropriate, a statement of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, the units of the tonnages, which should be relevant to technical and economic evaluation, the assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be supported by data, where available.

JORC 2012 Table 1 Section 4 - Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for conversion to Ore Reserves. Clear statement as to whether the Mineral Resources are reported as Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person. If no site visits have been undertaken indicate why this is the case.
Study status	The type and level of study undertaken to enable Mineral Resources to be reported as Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level be undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been conducted and found to be technically achievable and economically viable, and considered.

Cut-off parameters

The basis of the cut-off grade(s) or quality parameters applied

Mining factors or assumptions

The method and assumptions used as reported in the Pre-Feasibility Study to convert a Mineral Resource to an Ore Reserve (i.e. either by application of a preliminary or detailed design).
The choice, nature and appropriateness of the selected mining method, including associated design issues such as pre-strip, access, etc.
The assumptions made regarding geotechnical parameters and pre-production drilling.
The major assumptions made and Mineral Resource model (where appropriate).
The mining dilution factors used.
The mining recovery factors used.
Any minimum mining widths used.
The manner in which Inferred Mineral Resources are utilised and the outcome to their inclusion.
The infrastructure requirements of the selected mining method.

Metallurgical factors or assumptions

The metallurgical process proposed and the appropriateness of the process.
Whether the metallurgical process is well-tested technology.
The nature, amount and representativeness of metallurgical test work.
The metallurgical domaining applied and the corresponding metallurgical test work.
Any assumptions or allowances made for deleterious elements.
The existence of any bulk sample or pilot scale test work and whether it is
considered representative of the orebody as a whole.
For minerals that are defined by a specification, has the orebody the
appropriate mineralogy to meet the specifications?

Environmental

The status of studies of potential environmental impacts of the project.
The status of waste rock characterisation and the consideration of potential
impacts where applicable, the status of approvals for process residues.

Infrastructure

The existence of appropriate infrastructure: availability of land, water, power,
transportation (particularly for bulk commodities), labour, and other
infrastructure can be provided or accessed.

Costs

The derivation of, or assumptions made, regarding project costs.
The methodology used to estimate operating costs.
Allowances made for the content of deleterious elements.
The source of exchange rates used in the study.
Derivation of transportation charges.
The basis for forecasting or source of treatment and refining costs.
specification, etc.
The allowances made for royalties payable, both Government and

Revenue factors	<p>The derivation of, or assumptions made regarding revenue price(s) exchange rates, transportation and treatment charges. The derivation of assumptions made of metal or commodity co-products.</p>
Market assessment	<p>The demand, supply and stock situation for the particular commodity to affect supply and demand into the future. A customer and competitor analysis along with the identification of Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and contract.</p>
Economic	<p>The inputs to the economic analysis to produce the net present value and confidence of these economic inputs including estimated inflation rates, NPV ranges and sensitivity to variations in the significant assumptions.</p>
Social	<p>The status of agreements with key stakeholders and matters of social license to operate.</p>
Other	<p>To the extent relevant, the impact of the following on the present value of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the project, tenement status, and government and statutory approvals. Whether all necessary Government approvals will be received within the time frame of the Pre-feasibility or Feasibility study. Highlight and discuss the materiality of any third party on which extraction of the reserve is contingent.</p>
Classification	<p>The basis for the classification of the Ore Reserves into various categories. Whether the result appropriately reflects the Competent Person's opinion. The proportion of Probable Ore Reserves that have been converted to Proven Ore Reserves.</p>
Audits or reviews	<p>The results of any audits or reviews of Ore Reserve estimates.</p>
Discussion of relative accuracy/ confidence	<p>Where appropriate a statement of the relative accuracy and confidence using an approach or procedure deemed appropriate by the Competent Person of statistical or geostatistical procedures to quantify the relative accuracy and confidence limits, or, if such an approach is not deemed appropriate, which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local tonnages, which should be relevant to technical and economic assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific risks that may have a material impact on Ore Reserve viability, or uncertainty at the current study stage.</p>

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