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28 APRIL 2023 ASX ANNOUNCEMENT ASX: EGR

Epanko Pre-Development Program Delivers Outstanding Results

Results Position Epanko to Advance towards Final Investment Decision

EcoGraf Limited (**EcoGraf** or the **Company**) (ASX: **EGR**; FSE: **FMK**; OTCQX: **ECGFF**) is pleased to report the results of its Epanko Graphite Project ('Epanko' or the 'Project') pre-development program and includes updated capital cost, operating cost, graphite pricing with all the material assumptions as detailed in the Bankable Feasibility Study (refer announcement dated 21 June 2017).

Epanko is positioned to become a world class graphite project located in Tanzania with the recent signing of the Epanko Framework Agreement which positions the Company to secure financing for a Final Investment Decision for the Project.

HIGHLIGHTS

- **Framework Agreement signed with the Government of Tanzania (Government) on 17 April 2023 in a ceremony attended by Tanzanian President, Her Excellency Samia Suluhu Hassan**
- **Epanko development coincides with a strong business environment in Tanzania under the new Government with over US$45 billion[5] of new infrastructure and investments planned**
- **Attractive Stage 1 financial metrics[1] to support funding program:**
  - **Pre-tax ungeared NPV_{10} of US$348m (versus US$211m)**
  - **Ungeared internal rate of return (IRR) 36%**
  - **Average annual EBITDA over the initial 10 years[2] of US$79m**
- **Rigorous process completed to update capital and operating costs, led by GR Engineering and supported by independent peer review:**
  - **Pre-production capital costs US$134m[3]**
- **Stage 1 Value Engineering results:**
  - **'Oxide First' strategy aims to deliver a 22% increase in production capacity to 73,000tpa for minimal incremental capital cost**
  - **Operating costs optimised through reduced drill and blast, less rehandle and lower consumption of reagents**
  - **Stage 1 mine life extended to 18 years, with significant scope for additional staged extension**
  - **Metallurgical test work supports simpler, single line flotation circuit, reducing capital cost and de-risking the flowsheet**
  - **Stripping ratio for waste reduced from 0.44 to 0.27 delivering lower mining costs**
  - **Deferral of US$6m capital for the Fresh Ore sulphide circuit and tailings pond**
- **Proposed grid power connection from nearby town of Mahenge through MoU signed with Tanzanian power authority TANESCO**
- **Evaluation of multi-stage expansion of Epanko in progress, targeting 300,000tpa of production**

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- **Programs commenced to finalise location for in-country mechanical shaping facility to manufacture spherical graphite for customers and EcoGraf's battery anode material purification facilities**
- **Following conclusion of the Framework Agreement and pre-development program EcoGraf is focused on the funding and pre-construction activities to support the Company's Final Investment Decision**

The Company is pleased to report the outstanding results from a pre-development program it has undertaken to build on the extensive Bankable Feasibility Study (**BFS**), completed in 2017 and which was subjected to rigorous due diligence by bank appointed Independent Engineers, SRK Consulting (UK) Limited (**SRK Consulting**).

In completing its Independent Engineer's Report, SRK confirmed that:

- all technical areas of the proposed Epanko development have been significantly advanced to conform with the requirements of international project financing standards; and
- the Environmental and Social Management Planning and supporting impact assessments conform to relevant Tanzanian legislation, International Finance Corporation ('IFC') Performance Standards and World Bank Group Environmental Health and Safety Guidelines.

The results of the Epanko program position the Project to be a potential world class new graphite development, commencing with Stage 1 with the intention to expand and match the rapid growth forecast for battery graphite to support the global transition to clean energy.

Summary

Input	Unit	2017	2023
Graphite Production	(Kt)	60,000	73,000#
Operating Cost (C1-FOB)*	(US$/t sold)	509	508
All in Sustaining Cost (AISC)**	(US$/t sold)	572	585
Pre-Production Capital	(US$m)	88.9	134
NPV_{10}	(US$m)	211	348
IRR	%	38.9	36

** Includes corporate functions ** Includes royalties, sustaining capital, and rehabilitation # First 11 years*

Epanko Framework Agreement

On 18 April 2023, the Company announced that it had signed the Epanko Framework Agreement with the Government of Tanzania for the development and operation of the Project.

The signing of a Framework Agreement at the newly built State House in Dodoma occurred on 17 April 2023 and was attended by President Samia Suluhu Hassan, Minister of Minerals Dotto Biteko, Regional and District Commissioners, Epanko community leaders and representatives from the German and US Embassies.

Signing of the Framework Agreement is a major milestone in the Company's plans to develop a new world class natural graphite operation in Tanzania.

Key terms include:

- A new joint venture entity Duma TanzGraphite to develop and operate Epanko, with an 84% interest held by EcoGraf and a 16% free-carried interest held by the Government (refer announcement dated 18 April 2023).
- A new Epanko life-of-mine Special Mining Licence will be issued to Duma TanzGraphite, a key requirement for project financiers.
- Government and EcoGraf will cooperate to secure financing for the development of Epanko.
- Government will facilitate consents and approvals for the development and operation of Epanko.

[1] Financial metrics are in nominal terms.
[2] Post commissioning and ramp up phase.
[3] Un-escalated 2023 dollars
[4] Nominal, includes port wharfage charges levied at 1% of the FOB price. Excludes royalties.
[5] Refer Reuters, Shell website and Tanzania Government Investment Website (www.tic.gov.tz)

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Top left photo: *Signing of the Framework Agreement, Minister of Minerals Hon. Doto Biteko (right), Treasury Registrar Nehemiah Mchechu (left), Her Excellency Samia Suluhu Hassan (centre), Managing Director Andrew Spinks and Director Christer Mhingo.*

During the signing ceremony, the Company delivered a speech outlining plans for the development of the Epanko Graphite Project and the opportunity for Tanzania to benefit from the positive long-term economic and social contribution that will arise from its successful development and operation.



PLAY VIDEO: *Managing Director Andrew Spinks' speech at the signing Framework Agreement signing ceremony:*
https://www.youtube.com/watch?v=-LKlr0kuOfQ&t=1454s

Epanko Stage 1 Value Engineering Outcomes

As part of the pre-development program, EcoGraf completed various metallurgical evaluation studies to optimise the mine schedule and process flowsheet.

This program identified a number of value adding opportunities for the Stage 1 development:

Oxide first strategy

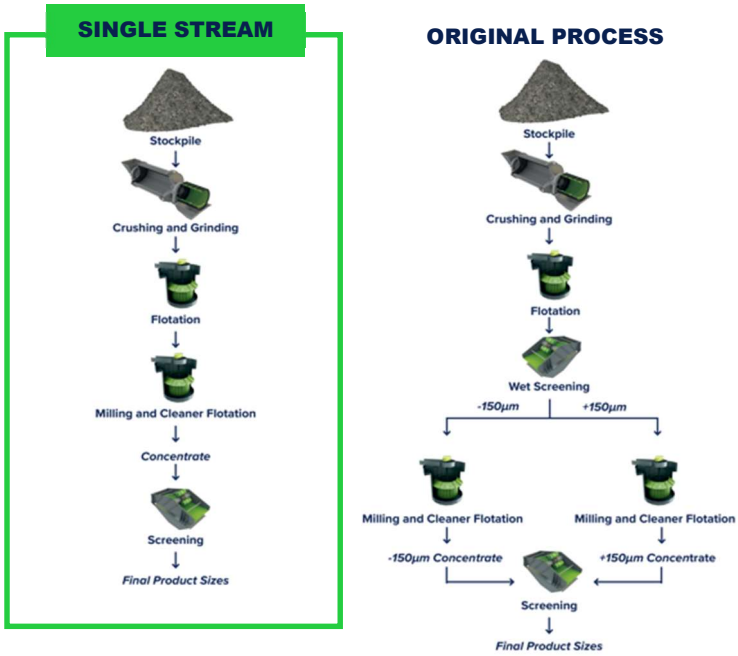
Oxide ore requires minimal drill and blasting, minimal crushing/primary milling and uses less reagents compared to Fresh ore. Prioritising the Oxide ore also defers the sulphide circuit and dedicated lined tailings cell that is proposed for processing of the Fresh ore. The Oxide first strategy will see Oxide ore treated for the first eleven (11) years of operations and will result in:

- Concentrate production at 73,000tpa once ramp up is complete. This will be achieved for very modest incremental capital expenditure of US$4m. Following depletion of Oxide ore, operations will revert to processing of Fresh ore at a production rate of 60,000tpa from the Stage 1 plant. Subject to completion of planned drilling and resource evaluation which will target Oxide ore there is the strong opportunity to continue processing oxide ore at a 73,000tpa production rate.
- Deferral of approximately US$6m in capital costs that have been provisionally provided for the Fresh ore sulphide flotation circuit and lined sulphide tailings pond. This expenditure is now deferred for approximately 10 years, with scope for further deferral subject to the delineating additional oxide ore.
- Lower operating costs associated with reduced drill and blast costs, reduced crushing and milling costs and reduced reagent costs. The Oxide only ore feed does not require the use of sulphide flotation reagents.

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Single cleaner flotation stage

The 2017 BFS included an intermediate wet screen followed by two separate cleaner flotation circuits. Test work completed by the Company has confirmed that a single stream cleaner flotation circuit delivers similar performance to the dual stream circuit, but eliminates the need for intermediate wet screening and provides economies of scale with a larger single circuit when compared to a dual circuit.



Reduced reagent consumption

The review of previous metallurgical testwork and additional recent optimisation programs have resulted in reduced estimates for consumption of reagents.

Investment in New Infrastructure

Ongoing investments in infrastructure in Tanzania are beneficial to the Project. Connection to the TANESCO grid from day 1 will be enabled with completion of TANESCO's sub-station at Ifakara is due to complete in 2023 and its plans to extend the 220kV grid to Mahenge. A non-binding MOU has been signed with TANESCO based on a 33kv transmission line from Mahenge to Epanko to service the Project.

The line will be approximately 10km in length and will be operated by TANESCO. Grid connection will result in significantly lower power costs compared to an on-site diesel power station and significantly lower emissions due to TANESCO's high proportion of renewable energy sources (currently 45% hydroelectric with further expansion in progress)



Ifakara Rail Siding, Dar es Salaam Port, Ifakara 220kV substation construction, Major bridge upgrade project in progress.

Major investment in road and rail infrastructure in Tanzania is improving logistics support to the Project. This includes a major upgrade to the road between Kidatu and Ifakara, including the construction of new bridges.

When completed, this section of road will be a four-lane paved highway whereas previously it was an unpaved dirt road. Work will progress to assess options to improve the logistics costs for the Project as it progresses.

38% Increase in Mineral Resource Estimate

On 2 March 2023, the Company announced to the ASX a 38% increase in the Epanko Mineral Resource Estimate (MRE). The MRE was carried out by CSA Global Pty Ltd ('CSA Global'), a member of the ERM Group of Companies, and has been classified in accordance with the JORC (2012) Code and is shown in the table below.

Table 1 - Mineral Resource Estimate for the Epanko Deposit >5.5% TGC

JORC Classification	Tonnage (Mt)	Grade (%TGC)	Contained Graphite (Kt)
Measured	21.5	7.7	1,650
Indicated	41.7	7.6	3,165
Measured + Indicated	63.1	7.6	4,820
Inferred	65.1	7.2	4,690
Total	**128.2**	**7.4**	**9,510**

Notes for Table 1:
1. Refer to EGR ASX Announcement 2 March 2023.
2. Tonnage figures contained within Table 1 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.

The MRE is wholly contained within a favourable graphitic schist unit, with barren gneissic rock units in the hanging wall and footwall to the graphitic schist unit. The quality of Epanko graphite is the result of two key geological advantages, a calc silicate dominant host gangue mineral with very little deleterious elements and very high crystallinity caused by extremely high metamorphic pressure and temperature. Flake graphite crystallinity provides its physical and industrial properties, with the favourable Epanko mineralogy resulting in improved recoveries, product quality and economic efficiency.

As a result of these geological features, Epanko flake graphite is easily liberated using a low-cost, efficient flotation process to produce high quality graphite products, supported by the Company's large scale 200 tonne bulk sample program that has outperformed the Ore Reserve block model grades, confirming the integrity of the model and demonstrating the robust nature and significant upside of the Epanko MRE undertaken by CSA Global.

Following mining and resource optimisation, a 5.5% TGC reporting grade was selected for the MRE, as it provides an optimal economic position for future mine scheduling scenarios. At this same cut-off grade, the 2017 Mineral Resource totalled 93.1Mt @ 7.65% TGC (including Measured – 21.5Mt at 7.7% TGC, Indicated - 38.6Mt at 7.7% TGC and Inferred - 33.1Mt at 7.6% TGC).

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Table 2 - Key Parameters of the February 2023 Epanko Mineral Resource

	EcoGraf - Epanko Feb' 2023
Total MRE (Mt)	128.2
MRE Grade (TGC)	7.4%
Cut-off Grade (TGC)	5.5%
CP Sign-off	CSA Global
Density Factor (t/m^3)	Oxide-1.86/Transitional-2.23/Fresh-2.8
Average Thickness (m)	200
Resource Strike Length (m)	2,150
Tonnes per Linear (m)	60,000
Undrilled Strike Length within Tenure (m)	3,400

The Mineral Resource shows a significant increase in tonnes for the Inferred category, compared to the previously reported Mineral Resource in 2017. The tonnage increase is attributed to conversion of previously unclassified blocks in the Epanko West Mineral Resource block model to Inferred, located at the southern and northern end of the geological model, and at depth below Measured and Indicated Mineral Resources. The additional Inferred volumes are supported by a review, completed by the Competent Person, of the geophysical models prepared in 2017, which support the depth and strike extensions of graphitic mineralisation, and surface mapping, which support the strike continuity and the steep dip of the host geological unit. Additional drilling and sampling is recommended within the Inferred volumes to support future mining studies.

A minor increase in Indicated tonnes is also noted, with the Indicated tonnages transferred from Inferred volumes. There has been a significant change in the graphite market in the 6 years since the previous Mineral Resource was reported, with the finer flake size (-100 mesh) attracting much greater demand for the manufacture of lithium-ion batteries for electric vehicles. The finer flake size is more evenly distributed throughout the Epanko deposits than the large to jumbo flake sizes, consideration for which previously contributed significantly to the Indicated (and Measured) Mineral Resource classification. This has allowed for a relaxation on the tighter constraints previously applied to the classification of the graphitic schist volumes.

Ore Reserve Statement

The Proven and Probable Ore Reserves remain unchanged to the 2017 BFS study and summarised below.

Table 3 – Ore Reserves Statement >5 % TGC

JORC Classification	Proven			Probable			Total		
	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Kt)	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Kt)	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Kt)
Oxide	4.2	8.48	356	3	7.54	227	7.2	8.09	583
Transitional	0.5	7.99	43	0.6	8.96	55	1.1	8.51	97
Fresh	1	8.36	85	2.3	8.95	206	3.3	8.77	291
Total	**5.7**	**8.41**	**483**	**5.9**	**8.23**	**488**	**11.7**	**8.32**	**971**

Notes: Tonnage figures contained 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.

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Environment and Community

Epanko's social and environmental planning programs were independently assessed in 2017 by bank appointed SRK (UK) to comply with the Equator Principles, a globally recognised risk management framework adopted by leading financial institutions for assessing and managing social and environmental risks in new developments.

Achieving this standard and satisfying International Finance Corporation Performance Standards and World Bank Group Environmental, Health and Safety Guidelines is critical to securing international financing support for the new development and reflects EcoGraf's commitment to ensuring the highest level of Environmental, Social and Governance operating standards.

Epanko will provide inter-generational economic and social benefits for the regional community near Mahenge in Tanzania and will support Tanzania's positive industrialisation progress. Epanko is expected to operate for 40+ years and in that time is forecast to deliver direct economic benefits of over US$3 billion to Tanzania via employment, procurement, royalties, taxes and dividends. Over 95% of the 300 permanent staff will be Tanzanian, with an estimated 4,500 indirect jobs to be supported by the Epanko operation.

An independent review has been undertaken of the Epanko Environmental and Social Impact Assessment (ESIA) and Relocation Action Plan (RAP) completed for the BFS, to ensure Epanko continues to satisfy leading Equator Principles environmental and social development standards. EcoGraf has commenced implementation of the recommendations of the review through a number of work streams to update the ESIA and RAP.



Ecology survey team – April 2023

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Evaluation of Epanko Expansion Options

The Epanko project has the potential to be expanded to 300,000tpa of production based on an assessment of the current Mineral Resource.

This is a conceptual assessment based on measured, indicated and inferred resource maintaining grade > 8.2%. There is a low level of confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the expansion target itself will be realised. The economic feasibility of expansion is subject to further evaluation and engineering studies.

A drilling program is planned to evaluate mineralisation that extends South of the existing defined resource in the Western Zone. Several other targets will also be tested. This program will support the potential to extend the Oxide first strategy and also the ongoing evaluation of a multi-stage expansion of Epanko graphite production to support forecast demand.

The drilling program will also provide additional data to support detailed design works for the expansion options by providing additional data on geotechnical, geochemical and metallurgical parameters.

An outline of the planned drilling program is shown below.

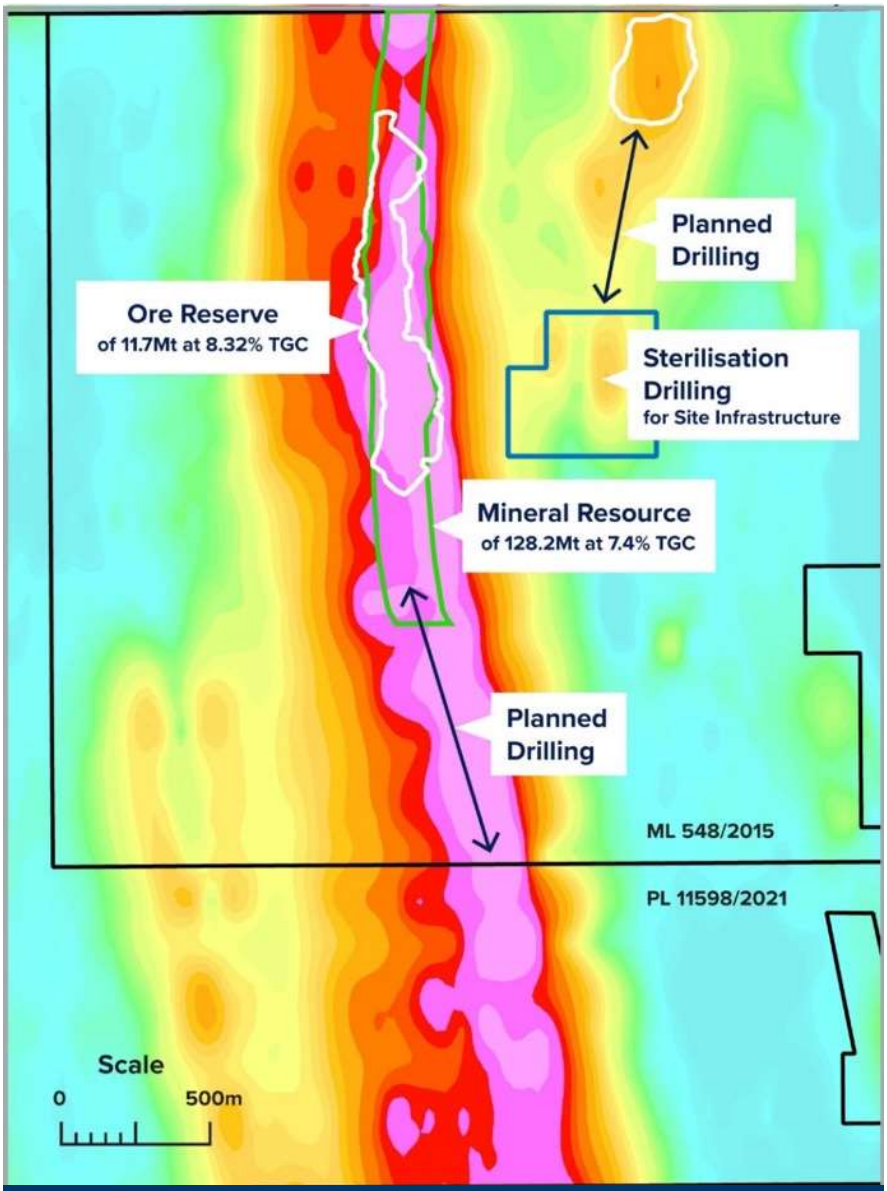


Figure 2 – Epanko Electromagnetic (Vtem) Image with Planned Drilling

Refer to EGR ASX Announcement, 2 March 2023.

Expansion potential of Epanko identified that tailings capacity was a critical consideration. Engineering studies have been completed which demonstrate that the Epanko valley has the capacity to store up to 8 times the capacity of the 2017 BFS development, underpinning the potential large-scale multi-stage expansion of the Epanko project.

Global consultants Knight Piésold were engaged to assess the capacity for tailings storage in the Epanko valley and the study identified multiple options to significantly increase the capacity of the existing tailings dam from 10mt to 80mt as production ramps-up, delivering flexibility and reduced expansion costs.

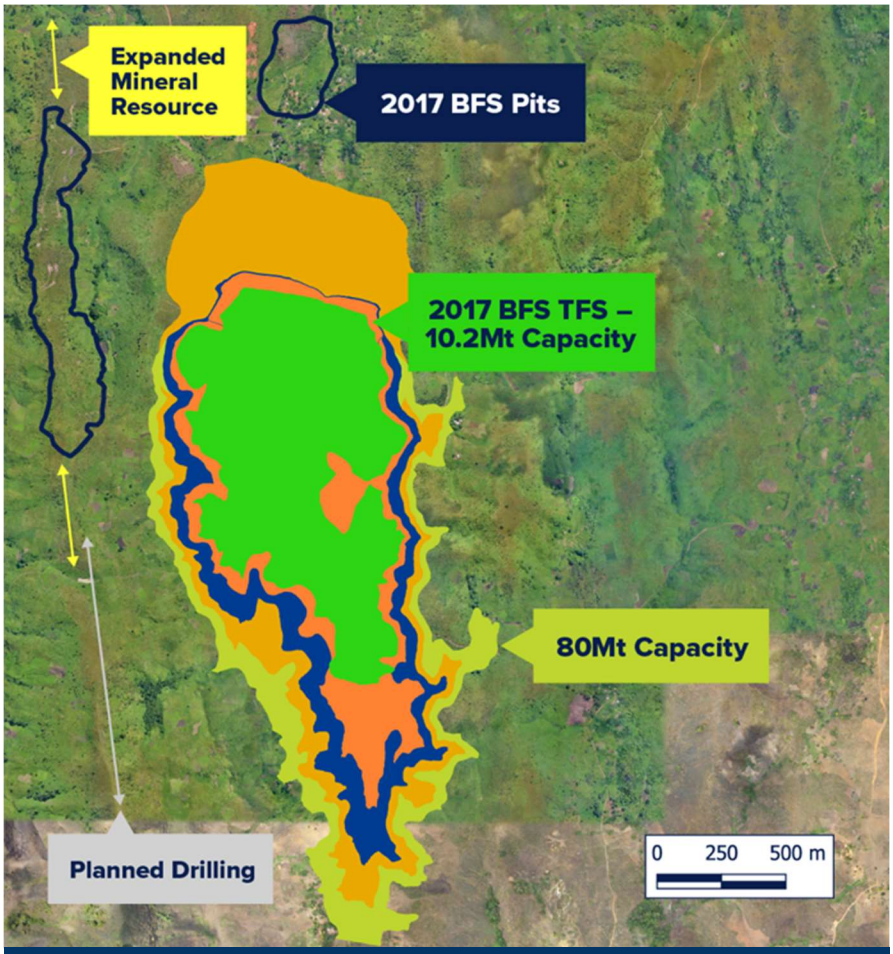


Figure 3 – Tailing Management Facility Expansion Options

Mechanical Shaping of Battery Graphite

The Company's extensive testing programs with prospective battery market customers have repeatedly demonstrated the superior performance of Epanko graphite in mechanical shaping, purification and electrochemical testing.

To optimise supply chain logistics efficiencies and to leverage Tanzania's competitive advantage in low cost hydro-power, EcoGraf is completing an initial assessment of the potential for locating mechanical shaping (micronizing and spheronizing) activities in Tanzania to produce battery graphite feedstock for its customers and planned purification facilities.

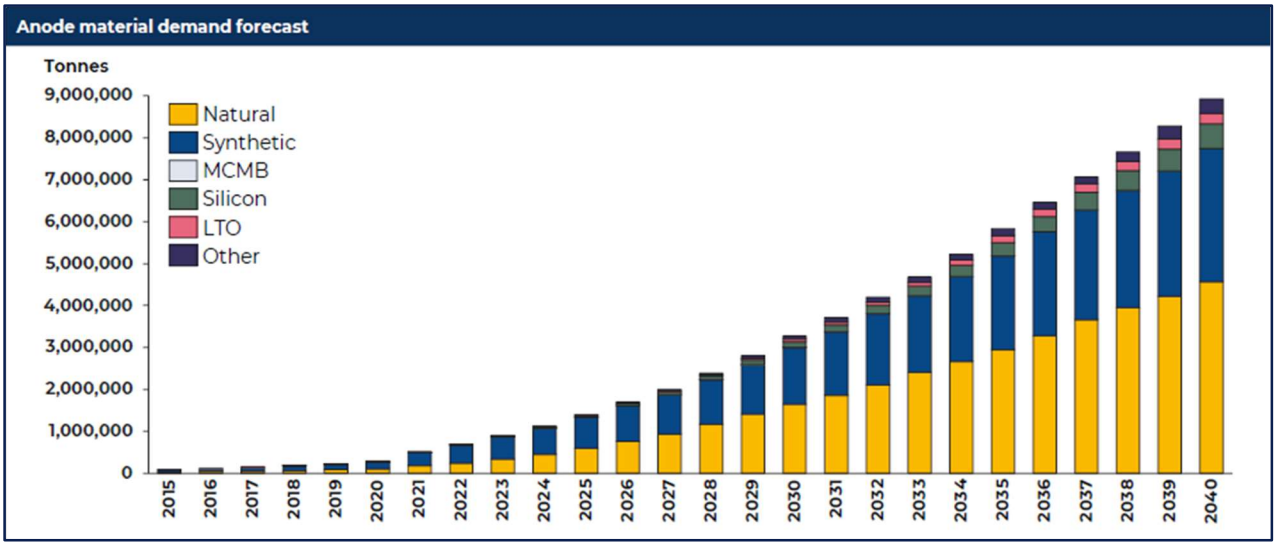
Discussions are ongoing with the Tanzanian Government and its key agencies, to finalise potential locations. The assessment incorporates the mechanical shaping testwork, engineering and design work programs completed by EcoGraf's battery anode materials team.

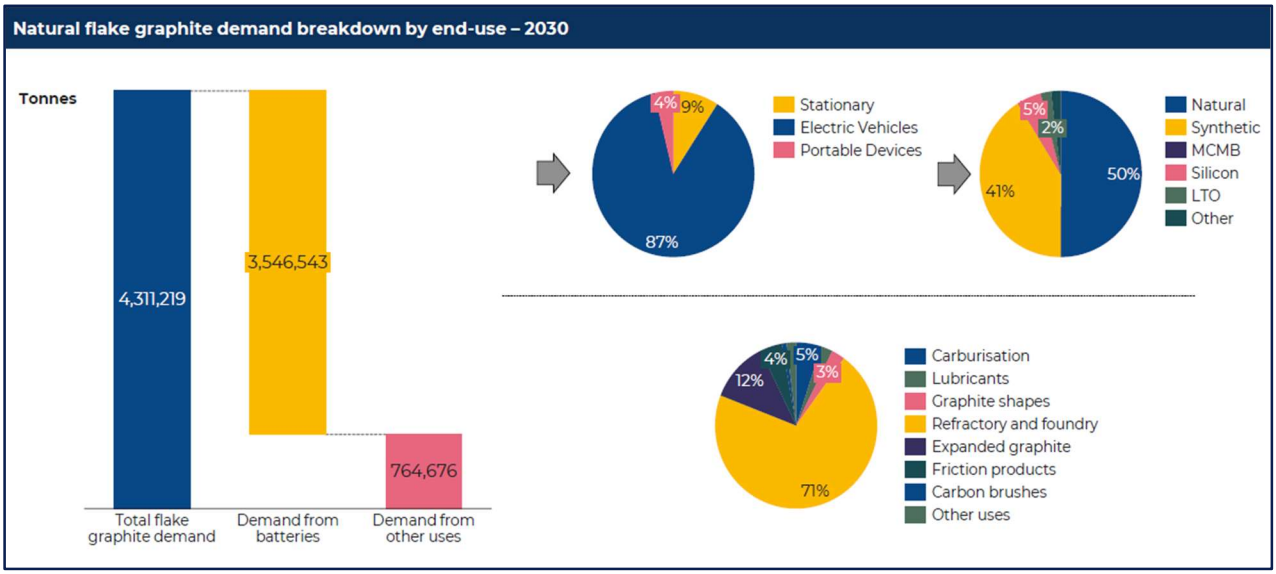
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Graphite Market Outlook

Lithium-ion batteries have become the dominant battery technology for use in electric vehicles (EV). This dominance is expected to continue given the significant investment and expanding capacity of lithium-ion gigafactories in Asia, North America and Europe. Increased demand for alternative natural battery anode supply chains and greater recycling has resulted from continued government policies, regulations and EV manufacturers environmental and social governance. Battery and EV manufacturers are also recognising the environmental benefits of natural graphite over synthetic graphite, which is resulting in increased forecast use of natural graphite in the battery anode, increasing from 35% currently, to over 50% by 2030.



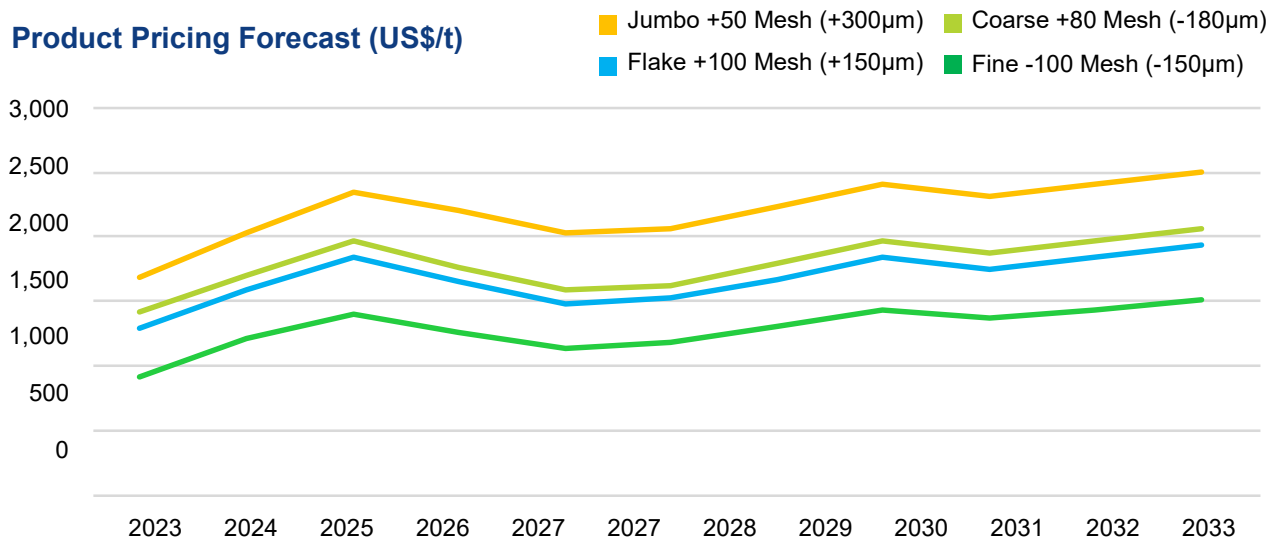


Source: Benchmark Mineral Intelligence 2023





EcoGraf has engaged independent experts to provide graphite price forecasts specific to the product mix and markets that will be supplied from the Epanko project. EcoGraf price forecast for its various products to 2033 is shown in the chart below.



Fast Markets, EcoGraf Analysis, Nominal Terms 2023

Supporting the pricing outlook is recent announcements by EU Commission and US Government on new policies and legislation for the development of new supply chains, that include:

- US Treasury IRA guidance on new clean vehicle credit criteria to strengthen critical mineral supply chains[1].
- Vice President Kamala Harris' visit to Tanzania to deepen the strategic relationship with the Tanzanian Government and highlight its importance as a key emerging supplier of critical EV battery minerals[2].
- EU announcement of further policies to support EU supply chains[3].
- Korean Government announcement of legislation requiring 50% of critical and battery minerals to be sourced outside of China[4].
- Japan - US trade deal to strengthen Japan's battery supply chains with member countries of the Mineral Security Partnership (which includes Australia) and also to grant Japanese automakers wider access to the new $7,500 US EV tax credit[5].

Notes

1. https://home.treasury.gov/news/press-releases/jy1379
2. https://www.miragenews.com/vp-harris-unveils-plans-to-strengthen-us-977965/
3. https://www.dw.com/en/eu-unveils-green-industrial-plan-to-counter-us-spending-spree/a-64582222
4. https://en.yna.co.kr/view/AEN20230227003300320
5. https://www.cnbc.com/2023/03/28/us-japan-strike-trade-deal-on-electric-vehicle-battery-minerals.html

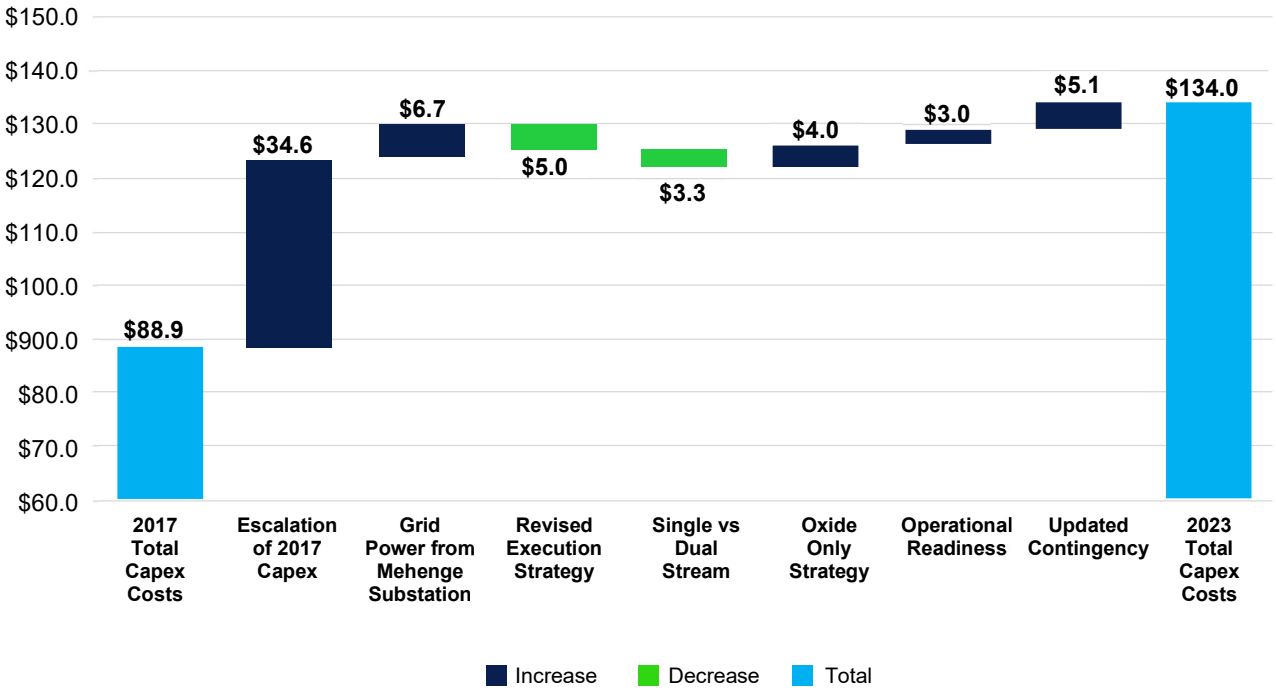
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Capital Cost Comparison

The following chart displays the capital cost difference from the 2017 Total Capital Cost (CAPEX) of US$88.9m

2017 BFS Capex to 2023 Scenario



Operating Cost Comparison 2017 BFS

The following table displays the Operating cost estimate to the 2017 Life of Mine estimate.

Life of Mine Cost Comparison[1]

	2017 US$/t concentrate	2023 US$/t concentrate
Mining Cost	96	112
Process Plant Cost	239	211
G&A Cost	58	56
Total Site Cash Cost to Mine Gate	**392**	**379**
Transport Mine to Port (FOB)[2]	107	122
Dar es Salaam G&A	9	7
C1 Cost FOB Dar es Salaam	**509**	**508**
Royalties	39	50
Other Sustaining Cost	24	27
All in Sustaining Cash Cost (AISC)[1]	**572**	**585**

Notes 1 - Real 2017 & 2023 dollars respectively 2- Includes 1% FOB wharfage charge at Dar Es Salaam

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APPENDIX 3 JORC TABLE 1

JORC Table 1 Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	The Epanko deposit was sampled by reverse circulation (RC) holes, diamond core drilling and trenching. Sampling is guided by EcoGraf's protocols and quality assurance procedures. RC samples are collected by a riffle splitter using a face sampling hammer diameter approximately 140 mm. Diamond core (if competent) is cut using a core saw. Where the material is too soft it is left in the tray and a knife is used to quarter the core for sampling. ¼ core was collected over nominal 1 m intervals, but with +/- variation to fit to lithological boundaries. Trenches were sampled at 1 m intervals. These intervals were speared and submitted for analyses. All samples were sent to Bureau Veritas laboratory in Rustenburg for preparation and LECO analyses. All samples are crushed using LM2 mill to –4 mm and pulverised to nominal 80% passing –75 µm.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	RC drilling holes were complete at a diameter of 5¼" using a face sampling hammer. All RC samples were collected dry and riffle split after passing through the cyclone. Diamond holes were drilled at PQ3 diameter for the broken, weathered zones, before reducing to HQ3 for the fresh, more competent. Where possible diamond core was orientated using a Ezi-Ori tool allowing orientated structural measurements to be taken Where terrain allowed, holes were designed to hit mineralisation orthogonally.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	The RC rig sampling systems are routinely cleaned to minimise the potential for contamination. Drilling methods are focused on sample quality. Diamond drilling (triple tubed HQ diameter core) was used to maximise sample recovery when used. The selection of RC drilling company, having a water drilling background enables far greater control on any water present in the system; ensuring wet samples were kept to a minimum. RC and diamond holes were all assessed for the quality of samples. This data was recorded for each interval in the logging template. Sample techniques were chosen to ensure the all remained highly representative of the parent interval (e.g. by using a three-tier riffle splitter). Sample quality and recovery was recorded for all intervals. No relationship exists between sample recovery and grade.

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Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	All RC holes were geologically logged using the detailed company template, based on industry standards. All diamond holes were geological and structurally logged using the same template in addition to geotechnical logging using a separate industry standard template. Logged data is both qualitative and quantitative depending on field being logged. Core photography was also captured for every tray of diamond core.
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 sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	All RC holes were geologically logged using the detail company template, based on industry standards. All diamond holes were geological and structurally logged using the same template in addition to geotechnical logging using a separate industry standard template. Logged data is both qualitative and quantitative depending on field being logged. Core photography was also captured for every tray of diamond core. Trench samples were representatively collected across each 1 m interval by three-tier riffle splitter in a dry environment where ground conditions allowed. Diamond samples were cut to ¼ core using a core saw. The same ¼ for each interval was samples throughout the length of all holes. All samples were submitted for assay. Sample preparation at the Bureau Veritas laboratory involves the original sample being dried at 80° for up to 24 hours and weighed on submission to laboratory. Crushing to nominal –4 mm. Sample is split to less than 2 kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing –75 µm. Quality assurance/quality control (QAQC) protocols were followed, including the use of field duplicate samples to test the primary sampling step for the RC drilling along with certified reference material and blanks. Sample sizes are considered appropriate with regard to the grain size of the sampled material.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times,*	Drill samples were sent to Bureau Veritas Rustenburg (South Africa) for preparation and assaying. The following methodology is used by Bureau Veritas for total graphitic carbon (TGC) analyses. Total carbon is measured using LECO technique. The sample is combusted in the oxygen atmosphere and the IR used to measure the amount of CO_2 produced. The calibration of the LECO instrument is done by using certified reference materials.

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Criteria	JORC Code explanation	Commentary
	calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	For the analysis of graphitic carbon, a 0.3 g sample is weighed and roasted at 550°C to remove any organic carbon. The sample is then heated with diluted hydrochloric acid to remove carbonates. After cooling the sample is filtered and the residue rinsed and dried at 75°C prior to analysis by the LECO instrument. The analyses by LECO are done by total combustion of sample in the oxygen atmosphere and using IR absorption from the resulting CO_2 produced. Laboratory certificates were sent via email from the assay laboratory to Ecograf. The assay data was provided to CSA Global in the form of Microsoft Excel files and assay laboratory certificates. The files were imported into Datamine. QAQC samples are inserted at 10% frequency with standards, blanks and field duplicates evenly comprising that 10%.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Senior Ecograf geological personnel supervised the sampling, and alternative personnel verified the sampling locations. Five RC holes were twinned with diamond drillholes. Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the company's database. All digital logging templates contain in-built data QAQC functionality to prevent incorrect data entry. No adjustments are made to any assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drillhole collar locations surveyed using a licensed surveyor with Differential GPS equipment. UTM Zone 37 South was the grid system used. No coordinate transformation was applied to the data. Downhole surveys were completed using Reflex Ezi-Shot tool. Data was collected via multi-shot for diamond holes and single-shot for RC. Topographic DTM was from a LIDAR survey flown in 2015.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	Spacings are sufficient for estimation and reporting of a Mineral Resource. Drillhole locations are at a nominal 50 m (Y) by 25 m (X) spacings. Drill lines were completed on an east-west basis. Data spacing and distribution are sufficient to establish the degree of geological and grade continuity. No compositing has been applied to exploration data.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Most holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation in a perpendicular manner. Drill pad accessibility has required an adjustment to drillhole orientation to a few holes.

Criteria	JORC Code explanation	Commentary
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Holes were drilled at dips ranging from -50° to -90°, to best intercept the targeted geology given constraints of topography and access. Varying orientation of drillholes was taken into consideration when interpreting the results.
Sample security	• *The measures taken to ensure sample security.*	Samples were stored at the company's secure field camp prior to dispatch to Bureau Veritas Dar es Salaam by a privately contracted transport company, who maintained security of the samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Sampling procedures were independently reviewed by CSA Global as part of the preparation of the Mineral Resource estimate. Ecograf senior geological personnel reviewed sampling procedures on a regular basis. All drillhole results were collated and stored within a Microsoft Access database. A random selection of assays from the database was cross referenced against the laboratory certificates.

JORC 2012 Table 1 Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The tenement is 100% owned by Ecograf's wholly owned subsidiary TanzGraphite (TZ) Limited. The Epanko deposit lies within granted mining license ML548/2015.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical reports exist for the project area as the region was first recognised for graphite potential in 1914 and 1959. No more recent information exists.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Mahenge Project is hosted within a quartz–feldspar graphitic schist, part of a Neoproterozoic metasediment package, including marble and gneissic units. Two zones of graphitic schist have been mapped, named the Eastern Zone and the Western Zone. Mineralisation is believed to be the product of pre-existing carbonaceous sediments subjected to regional metamorphism induced by a north-south regional thrusting event. The graphitic schists contain between 3% and 25% TGC.

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Criteria	JORC Code explanation	Commentary

Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:*
	  ◦ *easting and northing of the drillhole collar*
	  ◦ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar*
	  ◦ *dip and azimuth of the hole*
	  ◦ *downhole length and interception depth*
	  ◦ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		Sample and drillhole coordinates are provided in market announcement dated 1 February in addition to this announcement.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No high-grade cuts were considered necessary. Aggregating was made for intervals that reported over 1% TGC. The purpose of this is to report intervals that may be significant to future metallurgical work. There is no implication about economic significance. Intervals reporting above 8% TGC are intended to highlight a significant higher grade component of graphite; there is no implication of economic significance. No equivalents were used because they are not relevant to graphite Mineral Resource estimates.
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 drillhole angle is known, its nature should be reported.* • *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	All drillholes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation orthogonally, where possible. Terrain constraint restricted this on occasion. All interpretation considers the orientation of the drillhole and the intercepted units. Given dip variations are mapped downhole length are reported, true width not known from the exploration results.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of*	Not applicable to this announcement

Criteria	JORC Code explanation	Commentary
	drillhole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Not applicable to this announcement.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Field mapping was conducted early in the geological assessment of the license area to define the geological boundaries of the graphitic schist with other geological formations. Geological mapping of trenches cut across the strike of the host geological units provided important information used to compile the Mineral Resource estimate. The additional Inferred Mineral Resource is supported by a Versatile Time Domain Electromagnetic (VTEM) survey, which highlights the potential for the delineation of additional Mineral Resources along strike and at depth in the Western Zone. Further support was derived from surface mapping and structural geology interpretations, indicating a continuation of strike of the graphitic schist package. Details of metallurgical testwork are detailed in the body of this report, and in Section 3 of this table.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	A drilling program is planned for 2023, with objectives being to define further graphitic mineralisation within the oxide zone, and to test for strike and depth extensions to the graphitic schist, particularly within Epanko West. Results will feed into a Mineral Resource update for H2, 2023 which will in turn support a revision of the BFS using current costs and product prices.

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Data used in the Mineral Resource estimate is sourced from an MS Access database, maintained by EcoGraf. The data has been normalised and referential integrity between tables has been set through table relationships and key fields to ensure unique identifiers, which are consistent throughout. Relevant tables from the data base were exported to MS Excel format and converted to csv format for import into Datamine Studio RM software for use in the Mineral Resource estimate. The EcoGraf database was validated by CSA Global and the database was found to be fit for purpose to support the Mineral Resource estimate. Validation of the data import include checks for

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Criteria	JORC Code explanation	Commentary
		overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars. The Total Graphitic Carbon (TGC) grade was cross checked against the Total Carbon (C) grade to ensure TGC<=C.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The Competent Person (Mineral Resources) visited site in March 2014. The RC drilling rig was in operation and the Competent Person was able to review drilling and sampling procedures. Outcrop showing mineralisation was examined and geologically assessed. Planned drill sites were examined and assessed with respect to strike and dip of the interpreted geological model. Trenches were examined and a re-enactment of sampling procedures was presented by the EcoGraf geological staff. Sample storage facilities were inspected. There were no negative outcomes from any of the above items, and all samples and geological data were deemed fit for use in the preparation of the Mineral Resource estimate.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *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.*	There is a high level of confidence in the geological interpretation, based upon lithological and structural logging of diamond drill core, and lithological logging of RC chips. Trenches cut orthogonal to the strike of the geology demonstrated the geometry of the deposit, and clearly showed graphitic mineralisation. Deposit scale geological mapping provide a geological framework for the interpretation. Geophysical models (VTEM) support the geological interpretation. Drillhole intercept logging and assay results (RC and diamond core), structural interpretations from drill core and geological logs of trenches have formed the basis for the geological interpretation. Assumptions were made on depth and strike extension of the graphitic schists, using drillhole and trench sample assays as anchor points at depth and at intervals along strike. Geological mapping also support the geological interpretation which supports the Mineral Resource estimate. No alternative interpretations were considered because the exposed geology in outcrop supports the current interpretation. Graphitic mineralisation is hosted within graphitic schist, which is mapped along its strike within the licence area. Total graphitic carbon is assumed to be likewise continuous with the host rock unit. Metallurgical characteristics, principally flake size, has been observed to be of a consistent nature when observed in outcrop, trench exposure and diamond drill core at numerous locations within the licence area. The graphitic schist is open along strike and down dip in Epanko West. The Epanko East deposit is interpreted to be a recumbent fold, open along strike to the north and south. A sub-vertical shear zone offsets the stratigraphy down dip along the lower fold limb. The TGC mineralisation domains are contained within the graphitic schist lithological domain. Weathering domains representing oxide, transitional and fresh were modelled and were used during grade interpolation to constrain grade interpolation, and were allocated different density values.

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Criteria	JORC Code explanation	Commentary
		Lithological domains representing schists, gneisses and marble were interpreted and modelled. Major structural features, mainly sub-vertical shears and faults, were modelled and used to assess drill data during preparation of the Mineral Resource estimate.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Epanko West Mineral Resource estimate is approximately 2,150 m in strike, 250 m in plan width and reaches 450 m depth below surface. The Epanko East Mineral Resource is approximately 320 m in strike, 400 m in plan width and reaches 160 m depth below surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether 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. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and 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 estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used,*	The geological models were interpreted and prepared by EcoGraf using Surpac software. Datamine Studio RM software was used for block modelling, grade interpolation, mineral resource classification and reporting. GeoAccess Professional and Snowden Supervisor were used for geostatistical analyses of data. The TGC domain is coincident with the graphitic schist lithological domain, and is based upon a nominal 3% lower TGC cut-off grade. The graphitic schist interpretations were based upon geological interpretations of mineralised outcrop and trenches and logging of diamond drill core and RC chips. The Mineral Resource model consists of three domains of TGC mineralisation, with one domain in the Western Zone and two zones in the Eastern Zone. Mineralisation domains were encapsulated by means of 3D wireframed envelopes. Domains were extrapolated along strike or down plunge to half section spacing or if a barren hole cut the plunge extension before this limit. Top cuts were not used to constrain extreme grade values because the TGC grade distribution did not warrant their use. All samples were composited to 1 m intervals, following a review of sample length distribution that most sample lengths were 1 m. All drillhole data (RC and Diamond) and trench assays were utilised in the grade interpolation. A twin drilling program confirmed the RC drillholes could be used with the diamond core samples as part of the grade interpolation. A statistical study of the trench assay data demonstrated a slightly higher grade TGC population to the conventional drilling sample assay results, and a decision was made to limit the influence of the trench sample data to the Oxide weathering zone. Two block models were prepared, for the Epanko West and Epanko East zones, with parent cell sizes 10 mE x 25 mN x 20 mRL for each, compared to typical drill spacing of 25 m x 50 m in the well drilled areas. Grade estimation was by Ordinary Kriging (OK), and Inverse Distance Squared (IDS) estimation was concurrently run as a check estimate. The composited drill sample data were statistically analysed, examining the relationship between TGC and weathering profiles, hole types, and structural domains. A variography study was also

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	the comparison of model data to drillhole data, and use of reconciliation data if available.	carried out examining the influence of structural domains (principally the impact of the D2 faults in the Western Zone). Within the oxide domain there was a population difference noted, but no discernible population differences were noted in the fresh rock domain. Variogram models present a very low relative nugget effect (<15%) for the Western and Eastern zones, with ranges typically between 90 m and 170 m. Short ranges at the first sill were also modelled. Due to the low nugget effect, a low number of samples were required for grade interpolation, with a minimum of four and maximum of 12 composited samples were used in any one block estimate for the Western and Eastern Zones. A maximum of five composited samples per drillhole were used in any one block estimate. Cell Discretisation of 5 x 5 x 5 was used. Grade interpolation was run within the individual mineralisation domains (Epanko East), acting as hard boundaries. The Base of Complete Oxidation acted as a hard boundary for both Western and Eastern deposits. The current Mineral Resource was checked against the previously reported Mineral Resource (June 2015) and showed an increase in global tonnage, with a 41% increase in Measured and Indicated tonnes, but with negligible change in TGC % grade. The stability of the TGC grade following more drilling demonstrates the low variability of TGC within the host units. No depletion of the Mineral Resource due to mining activity was required due to no mining having occurred historically. The Mineral Resource was truncated at Northing 9,037,320 mN (UTM37S), this being the northern boundary of the license area. No by products were modelled. No selective mining units were assumed in this model. The grade model was validated by: (1) creating slices of the model and comparing to drillholes on the same slice; (2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; and (3) mean grades per domain for estimated blocks and flagged drillhole samples. Each validation step complemented the others. The Mineral Resource estimation process was peer reviewed within CSA Global. EcoGraf reported (13 April 2016) the results from 200 tonne bulk samples from the Western and Eastern Zones, with both samples reconciling favourably with the local estimated block grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A reporting cut-off grade of 5.5% TGC is used to report the Mineral Resource and was selected following a review of the 2017 BFS mine optimisation and scheduling, which includes +5% TGC ore being scheduled into the operation, which delivered a positive economic outcome. A series of grade tonnage reports were prepared for EcoGraf and an example presented in the body of this announcement.

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Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if 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, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	It is assumed the deposit, if mined, will be developed using open pit mining methods. Geotechnical drilling, logging and rock strength and shear strength analyses have completed. Detailed mine planning was carried out as part of the BFS. The key results from the BFS include a 60 ktpa production profile with pre-tax NPV of US$211M and an IRR of 38.9%.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	During 2016-2017 a series of comminution and flotation tests have been conducted on composite samples selected from the oxide, transition and primary zones of both deposits. These have been done at a range of grades between 5%TGC and 8.9%TGC to determine whether there is any variability of recovery to concentrate in the weathering zones of each deposit. In addition, two locked cycle tests are in progress to determine ultimate recoveries from the East and West fresh material. Batch variability flotation testwork shows recoveries of 83-95% in the various ore types and grades tested producing a 96%TGC concentrate. The recovered flake graphite is clean, with no visible natural mineral impurities. The graphite concentrate is amenable to standard metallurgical recovery processes. The recovered product is considered marketable, with a binding offtake and partnership agreements with several European and Japanese graphite trader. There has been a significant change in the graphite market in the 6 years since the previous Mineral Resource was reported, with the finer flake size (-100 flake) attracting much greater demand for the manufacture of Li-ion batteries for the Electric Vehicle (EV) markets. The finer flake size is more evenly distributed through the Epanko deposits than the large to jumbo flake sizes, consideration for which previously contributed significantly to the Indicated (and Measured) Mineral Resource classification.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.*	Preliminary designs for a valley fill tails dam and waste dumps with a life of up to 25 years have been produced. The deposit is located within and surrounding the area of the Epanko village farming area, and EcoGraf are holding ongoing discussions with local landholders and community groups to keep them well informed of the status and future planned directions of the project. Relocation discussions for the families directly impacted by the project are well advanced.

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	While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be 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.	Epanko is located in a sub-equatorial region of Tanzania and is subject to heavy seasonal rainfall, with rapid growth of vegetation in season. A strategy for both subsurface, surface water and decant water management has been prepared for the Bankable Feasibility Study.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Density was calculated using wet immersion techniques, conducted both by analytical laboratories and by EcoGraf field staff. Significant additional testwork has been conducted since the previous Mineral Resource estimate was announced. Particularly in the Eastern Zone fresh material which was previously not identified. The Epanko West density database is based upon 267 diamond core samples, and Epanko East based upon 25 diamond core samples, with samples wax coated prior to immersion in a water bath. Density samples were loaded into Datamine drillhole files and flagged against lithological, mineralisation, weathering and structural domains. A statistical study resulted in assignment of mean density values according to lithology and weathering. Density values of 1.92 t/m^3, 2.33 t/m^3 and 2.84 t/m^3 were applied to the oxide, transitional and fresh weathering domains respectively for the Mineral Resource located in the Western Zone. Density values of 1.76 t/m^3, 2.43 t/m^{3}and 2.79 t/m^3 were applied to the oxide, transitional and fresh weathering domains respectively for the graphitic schist domain in the Eastern Zone.

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Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Classification of the Mineral Resource estimates was carried out taking into account the geological understanding of the deposit, quality of the sample data, quality of the local block estimates, quality of density data, and drillhole spacing. Metallurgical results related to flake size and sample purity, as well as marketing agreements in place supported the classification, as per Clause 49 (JORC 2012). The Mineral Resource is classified as Measured, Indicated and Inferred, with geological evidence sufficient to confirm geological and grade (and quality) continuity within the Measured volumes, between points of observation where data and samples are gathered. The Indicated classification level was applied to the volumes where geological evidence is sufficient to assume geological, grade and quality continuity. The Inferred classification level was applied to the volumes where geological evidence is sufficient to imply but not verify geological, grade and quality continuity. Geophysical models (VTEM) and surface mapping support the Inferred classification in block model volumes where no drill sampling has occurred. Mineral Resource classification was carried out by stepping through both the West and East models, and creating 3D wireframe surfaces constraining the resource classification levels (Western Zone) or by applying northing and easting limits (Eastern Zone). Weathering profiles also controlled the classification, with the oxide weathering zone generally classified at the same or higher level to the adjacent blocks in transitional and fresh zones, due to high confidence in the geological continuity of graphitic schist as observed in outcrop and from trench data. All available data was assessed and the competent person's relative confidence in the data was used to assist in the classification of the Mineral Resource. The current classification assignment appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	An independent due diligence review of the current Mineral Resource is being undertaken at the time of preparation of this announcement.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative*	An inverse distance estimation algorithm was used in parallel with the ordinary kriging interpolation. Results were very similar between the methods. No other estimation method or geostatistical analysis has been performed. The Mineral Resource is a local estimate, whereby the drillhole data was geologically domained, resulting in fewer drillhole samples to interpolate the block model than the complete drillhole dataset, which would comprise a global estimate. Relevant tonnages and grade above nominated cut-off grades for TGC are provided in the body of this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting

Criteria	JORC Code explanation	Commentary
	accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. The graphite metal values (g) for each block were calculated by multiplying the TGC grades (%) by the block tonnage. The total sum of all metal for the deposit for the filtered blocks was divided by 100 to derive the reportable tonnages of graphite metal. No production data is available to reconcile results with, apart from bulk sample results discussed earlier.

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Forward looking statements

Various statements in this announcement constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. The Company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forward-looking statements will be achieved.

Production targets and financial information

Information in this announcement relating to the Bankable Feasibility Study conducted on the Epanko Graphite Project, including production targets and forecast financial information derived from the production targets, included in this announcement is extracted from an ASX announcement dated 21 June 2017 "Updated Bankable Feasibility Study" available at www.ecograf.com.au and www.asx.com.au. The Company confirms that all material assumptions underpinning the production targets and forecast financial information derived from the production targets set out in the announcement released on 21 June 2017 continue to apply and have not materially changed.

The production targets referred to in this announcement are based on 45% Measured Resources, 38% Indicated Resources and 17% Inferred Resources for the 18 year life of mine. The Measured Resources, Indicated Resources and Inferred Resources underpinning the production target have been prepared by a competent person in accordance with the requirements in Appendix 5A (JORC Code). The Company has used Inferred Mineral Resources as part of the production target. There is a low level of confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. The economic feasibility of the Project has been assessed excluding the Inferred material, confirming the use of Inferred mineralisation is not a determining factor in the viability of the Project.

Mineral resources - Competent Person Statement

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Company's ASX announcement "38% Increase in the Epanko Mineral Resource" on 2 March 2023, and, that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Ore reserves

The Company confirms that it is not aware of any new information or data that materially affects the information included in announcement dated 21 April 2017 and, that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

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

For further information, please contact:

INVESTORS

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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 mining and mineral processing business.

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.

Using its environmentally superior EcoGraf HF*free*™ purification technology, the Company will upgrade the flake graphite to produce 99.95%C high performance battery anode material to supply electric vehicle, battery and anode manufacturers in Asia, Europe and North America as the world transitions to clean, renewable energy.

Battery recycling is critical to improving supply chain sustainability and the Company's successful application of the EcoGraf™ purification process to recycle battery anode material provides it with a unique ability to support customers to reduce CO_2 emissions and lower battery costs.

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

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