ASX: EGR

ASX Release / 11 March 2024

127% Increase in the Epanko Mineral Resource

Epanko is the Largest Development ready Graphite Mineral Resource in Africa, now totalling 290.8Mt at 7.2% TGC

EcoGraf Limited (**EcoGraf** or the **Company**) (ASX: **EGR**; FSE: **FMK**; OTCQB: **ECGFF**) is pleased to report an increase in the Mineral Resource estimate (MRE) for its Epanko Graphite Project (**Epanko** or the **Project**) in Tanzania.

The Mineral Resource estimate incorporates the results of the 2023 drilling and trenching program, which includes record high assay results for Epanko, including 43m at 20.8% Total Graphitic Carbon ('TGC') which demonstrates the continuous high-grade nature.

Key Highlights:

- Epanko MRE increased to 290.8Mt at 7.2% TGC for 21.0Mt of contained graphite (refer Table 1), a 127% increase from the previous MRE announced on 2 March 2023 ('March 2023 MRE').
- 39% increase in Measured + Indicated tonnes from the March 2023 MRE
- Drilling assay highlights continue the high-grade nature, with recent assays including:
  - MHRC122 37m at 11.5% TGC from 0m
  - MHWB008 33m at 12.5% TGC from 0m
  - MHRC116 45m at 13.0% TGC from 3m [1]
  - MHRC115 47m at 11.0% TGC from 6m [1]
- Mineral Resource paves the way for project expansion up to 300,000tpa
- High grade trenching results over Mount Grafit show the high-grade potential along strike that is outcropping at surface and will assist the expansion studies beyond the existing mining schedule, with trenching assay including:
  - MHT26 43m at 20.8% TGC from 0m
  - MHT24 33m at 19.7% TGC from 30m
- Drilling and trenching confirms the massive electromagnetic high is the contiguous graphitic unit, with the deposit width up to 210m, providing the potential for long-term low strip ratios
- Geological interpretation now shows a single continuous unit of graphite mineralisation that will be contained in the new Special Mining Licence (SML) which is expected to be granted
- The new Epanko Mineral Resource occurs over 3.5km strike length, and remains open along strike and down dip, with significant further growth potential
- Epanko development recognised in the Joint Statement of the Minerals Security Partnership (MSP) in Press Release by US Department of State for the noticeable milestone in securing German-based KfW IPEX-Bank to arrange a senior debt facility of up to US$105 million
- Demand for natural graphite, led by the global lithium-ion battery market, is forecast by Benchmark Mineral Intelligence[2] to increase at 31.5%pa in the current decade
- Customers requiring new sources of supply as China introduced new legislation[3] to restrict natural flake graphite and its products (including battery anode graphite)

Epanko MRE Summary

The MRE was carried out by ERM Sustainable Mining Services team (previously CSA Global) ("ERM"), EcoGraf's long-term Resource Consultant. The Mineral Resource has been classified in accordance with the JORC (2012) Code and is shown in Table 1.

Table 1 – March 2024 Mineral Resource Estimate for the Epanko Deposit >5.5% TGC

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 1: 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 update was focused on the conversion of the previously Inferred northern and southern parts of the Epanko Western Zone to Indicated and Measured, as well as the down-strike expansion of the Mineral Resource into the southern extension of the Western Zone.

The extensional Mineral Resource drilling and trenching has added a further 1,350m strike to the south of the Western Zone mineralisation of Epanko, in an area dubbed "Mount Grafit" (Figure 9), the towering peak of the Western Zone, which sits at 1,400mRL. Both the expansion drilling and trenching show that the mineralisation remains open along-strike and down-dip.

The southern-most three trenches have intercepted Epanko-record high TGC% graphitic schist, dominated by the Project's unique "Cheetah" ore (Figure 6), which characterises the high-grade units of Epanko. This high-grade zone includes a peak assay result of 29.5% TGC, and remains open down strike and dip, presenting exciting potential for the plans for a phased expansion of production from the initial 73,000tpa up to 300,000tpa (ASX announcement on 28th April 2023).

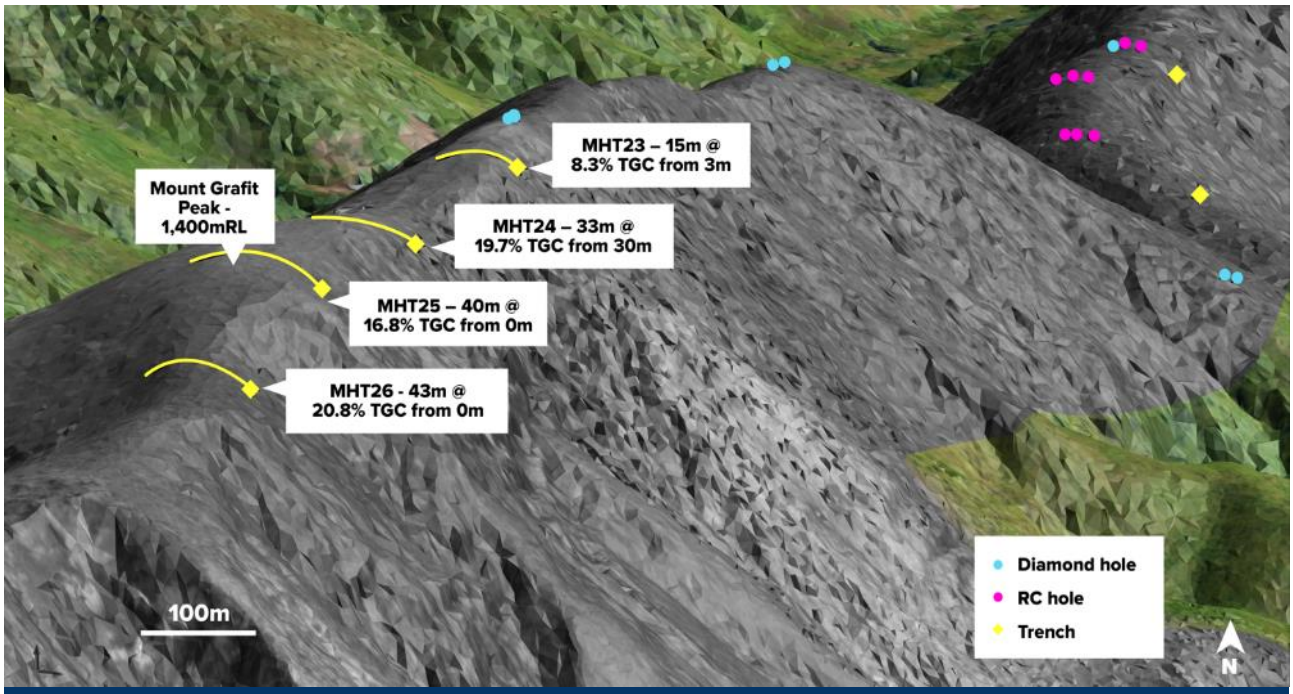

Figure 1 – Terrain Model of Mount Grafit Southern Part of the Western Zone with Trench Significant Intercepts

Epanko Development

The results support Epanko's position as a long-life, high quality natural flake graphite project located in south-west of Tanzania, with extensive work already undertaken by EcoGraf to establish a development-ready new graphite mine, including:

- Financing program underway with KfW IPEX-Bank Mandated for UFK Loan of up to US$105m for 73,000tpa Development of Epanko;
- The completion of a Bankable Feasibility Study (BFS) and pre-development program has demonstrated highly attractive metrics[4] to support the funding program (refer announcement dated 28 April 2023, dated *Epanko Pre-Development Program Delivers Outstanding Results*):
  - Pre-tax ungeared NPV_{10} of US$348m
  - Ungeared internal rate of return (IRR) 36%
  - Average annual EBITDA over the initial 10 years[5] of US$79m
  - Rigorous process completed to update capital and operating costs with pre-production capital costs of US$134m
  - High grade near surface mineralisation supporting oxide first mine scheduling for higher throughput, higher grade and early revenue
  - Metallurgical test work supports simpler, single line flotation circuit, reducing capital cost and de-risking the flowsheet
  - Stripping ratio for waste reduced from to 0.27 delivering lower mining costs;
- Granted mining licence and environmental approvals;
- New Special Mining Licence (SML) nearing approval to support 300,000tpa expansion study;
- Independent Engineer's Review by SRK Consulting on behalf of lenders, confirming technical aspects of the proposed development and that the Equator Principles social and environmental planning satisfies International Finance Corporation Performance Standards and World Bank Group Environmental, Health and Safety Guidelines;
- Completion of a tailings storage facility (TSF) expansion study shows that the TSF capacity can be progressively expanded to 80 million tonnes, which is 8 times the initial capacity, supporting significant expansion potential;
- Higher value large flake distribution for higher revenue with flake graphite sales for key markets in Europe and Asia;
- Superior product for use in Lithium-ion batteries with testwork demonstrating high performance, and lower emission anode material: and
- Recruitment of an experienced project development team and advanced project execution planning to support a Final Investment Decision.

Reference Notes :

1: Previously reported and refer ASX announcement 21 December 2023
2. Refer website **www.benchmarkminerals.com**
3. Refer https://www.reuters.com/world/china/china-require-export-permits-some-graphite-products-dec-1-2023-10-20/
4 Financial metrics are in nominal terms and refer ASX announcement on 28th April 2023
5.. Post commissioning and ramp up phase.

Epanko Mineral Resource and Geology

Extensive evaluation conducted with prospective graphite customers demonstrates that the unique geology of Tanzanian graphite delivers a superior battery anode material product, which outperforms other global reference materials in mechanical shaping, purification and electrochemical benchmarking analysis. This positions Epanko to become a globally significant supplier of high-quality graphite for the Company's planned battery anode material facilities in key international markets.

The MRE is wholly contained within a favourable graphitic schist unit, with barren gneissic and schist rock units in the hanging wall and footwall to the graphitic schist unit. Two zones of graphitic schist have been identified, named the Eastern Zone and the Western Zone. 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. The graphitic schists contain between 3% and 29% TGC. The majority of the Resource of the Project are contained within the Western Zone, a sub-vertical, approximately 200m wide unit of graphitic schist, steeply dipping to the east, which strikes approximately north-south for the 5.5km length of the Company's SML application. 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 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 ERM.

The grade-tonnage curve for the March 2024 MRE (Measured, Indicated and Inferred) is provided in Figure 2.

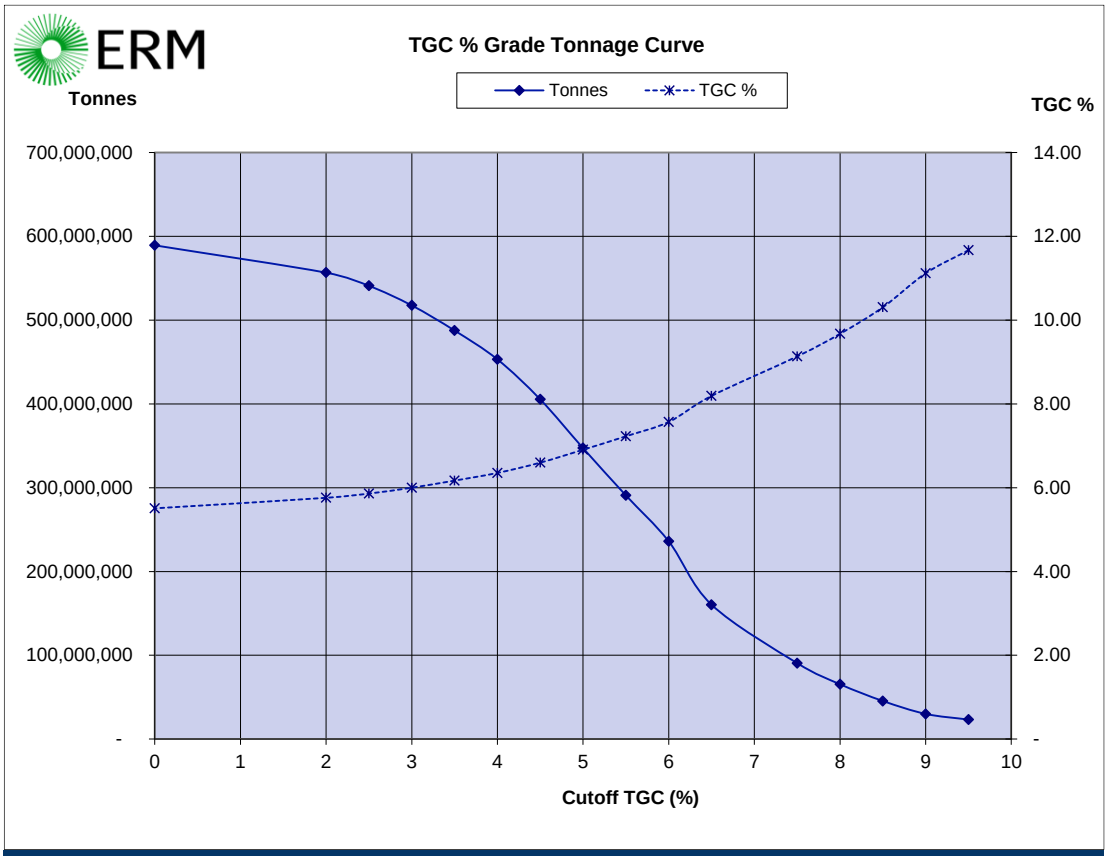

Figure 2 - Grade Tonnage Curve – Measured, Indicated and Inferred

Table 2 – Key Parameters of the March 2024 Epanko Mineral Resource

	EcoGraf - Epanko March 2024
Total MRE (Mt)	290.8
MRE Grade (TGC)	7.2%
Cut-off Grade (TGC)	5.5%
CP Sign-off	ERM and EcoGraf
Density Factor (t/m^3)	Oxide-1.92/Transitional-2.34/Fresh-2.83
Average Thickness (m)	200
Resource Strike Length (m)	3,500
Tonnes per Linear Metre (t)	83,000
Undrilled Strike Length within Tenure (m)	2,000

The Mineral Resource shows a significant increase in tonnes for the Inferred, Indicated and Measured categories of the block model, compared to the previously reported Mineral Resource in 2023.

The Inferred tonnage increase is predominantly attributed to the continuation of the Western Zone mineralisation further south, down-strike. This previously untested 1,350m southern extension, which was identified via the Company's Versatile Time Domain Electromagnetic (VTEM) geophysical survey, was drill tested for the first 950m and trench tested for the final 400m. Results confirmed the interpretation of the geophysics, with the approximately 200m wide sub-vertical unit continuing along strike. Additional drilling and sampling is recommended within the Inferred volumes to support future mining studies.

The northern and southern areas of the 2023 MRE for the Western Zone, were previously classified as Inferred and only trench tested. 100m spaced drill lines targeted this area and displayed continued strong consistency in the mineralisation. Additionally, the results from this drilling provided significant validation and confidence in the results from surface trenching.

The increase in the Measured volumes result from infill drilling of gaps within the Indicated Resource of the Western Zone. These results provided sufficient confidence in the geological interpretation and grade distribution to justify Measured classification.

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, delivering a positive economic outcome.

Only minor changes occurred with the Eastern Zone Mineral Resource with the addition of recent drilling.

The 2023 technical field program has continued to demonstrate the excellent correlation between the VTEM and the mineralised graphitic unit. This has provided EcoGraf with the geological confidence to continue the Western Zone interpretation further south to the southern extent of the SML. The result is an interpreted, total continuous strike length of 5.5km of graphitic schist, stretching the entire length of the SML. The northern 3.5km, is now represented by the new MRE, leaving a further 2km to the south untested.

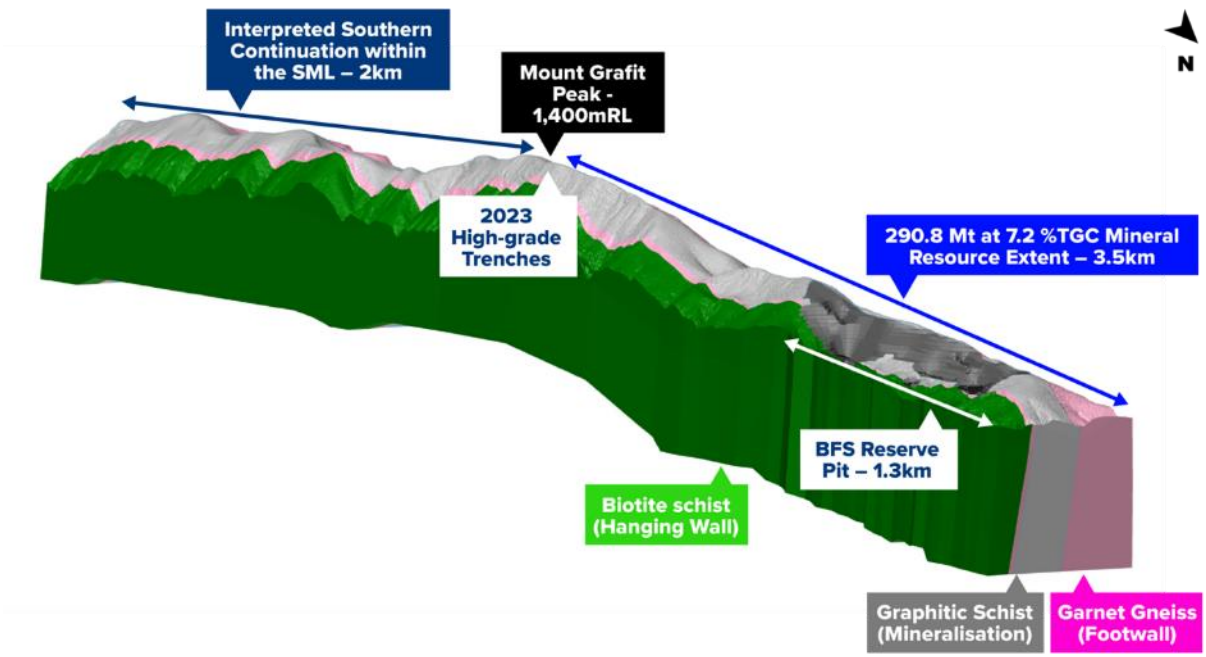

Figure 3 - 3D Geology Model of the Western Zone

Drilling and Trenching

During 2023, a total of 1,835m of diamond drilling (DD), 3,009m of reverse circulation (RC) drilling and 191m of trenching was completed for Resource infill and extension, infrastructure sterilisation and geotechnical, metallurgy and environmental monitoring purposes. All potentially mineralised samples were submitted to SGS Mwanza for sample preparation and analysis for total graphitic carbon, and all graphite results for these samples, totalling 4,379, have now been received.

Table 3 lists all significant intercepts for the drill program, with significant intercepts focused on the high-grade intervals; greater than or equal to 7% TGC and 10m or more in length.

Included in these results are record high results for the Epanko project, which further confirm the high-grade nature of the mineralisation targeted by the Epanko 73,000tpa operation, as well as extending this into the southern extension of the Western Zone, which will support the Project's phased expansion up to 300,000tpa. The record, from MHT26; 43m at 20.8% TGC from 0m includes a peak assay result of 29.5% TGC.

It is important to observe that a significant number of these intercepts start at or near surface. This demonstrates the presence of the high-grade mineralisation close to surface, within the oxide zone; which, as the recent bulk sample program helped to demonstrate, can be free-dug without blasting.

The Mineral Resource infill drilling targeted the Inferred northern and southern parts of the Epanko Western Zone, with a combination of RC and DD drilling. Whereas the Resource expansion drilling and trenching focused on the southern extension of the Western Zone.

Mineral Resource Estimation

A block model constrained by the interpreted geological envelopes was constructed with a parent cell size of 10m (E) by 25m (N) by 20m (RL) adopted, with sub-celling used to maintain the resolution of the mineralised domains. Samples composited to 1m length were used to interpolate TGC grades into the block model using ordinary kriging interpolation techniques. A search ellipse of 170m (X) by 50m (Y) by 10m (Z) was used to select samples for grade interpolation within Epanko West, supported by the variogram model, which exhibits a 20° southerly plunge. A search ellipse of 80m (X) by 60m (Y) by 20m (Z) was used to select samples for grade interpolation within Epanko East, with the search ellipse orientation adjusted for each block based upon the geometry of the local graphitic schist wireframe model.

A minimum of 4 and maximum of 12 samples were used per block estimate for both Mineral Resource estimates. Block grades were validated both visually and statistically. All modelling was completed using Datamine software.

Density data was derived from Archimedes method test work using diamond core billets, wax coated to prevent water incursion into cavities. The Epanko density database is based upon 1,171 diamond core samples, with density values of 1.92 t/m^3, 2.34 t/m^3 and 2.83 t/m^3 applied to the oxide, transitional and fresh weathering domains respectively for Epanko West, and 1.76 t/m^3, 2.57 t/m^3 and 2.83 t/m^3 for Epanko East.

The Epanko Mineral Resource is classified as a combination of Measured, Indicated and Inferred, and is reported in accordance with the JORC Code (2012), with geological and sampling evidence sufficient to confirm geological and grade continuity within the volumes classified as Measured, and to assume the continuities within the Indicated volumes. The classification levels are based upon an assessment of geological understanding of the deposit, geological and grade continuity, drillhole spacing, quality control results, search and interpolation parameters, and an analysis of available density information. The graphite concentrate is amenable to standard metallurgical recovery processes and metallurgical characteristics are considered to provide Epanko with significant competitive and commercial advantages (refer ASX announcement Updated Bankable Feasibility Study 21 June 2017). Testwork reported has confirmed the graphite mineralisation is suitable for the 'expanded' and ‘spherical or anode’ lithium-ion battery markets.

Figure 4 shows a long section through the Epanko West deposit, showing the updated Mineral Resource classification categories applied to the block model. Some Mineral Resource volumes previously classified as Inferred have been transferred to Indicated, and Indicated to Measured. A significant volume of previously unclassified material is now classified as Inferred.

Within the Inferred classification volumes, the maximum distance from a drill sample to an Inferred block is approximately 250 m. Geophysical studies demonstrate the occurrence of graphite along strike and to depth, beyond the southernmost lines of drilling. The Competent Person considers the geological continuity of the host graphitic schist, and the grade (TGC) continuity within the schist, satisfy the requirements for reporting of an Inferred Mineral Resource.

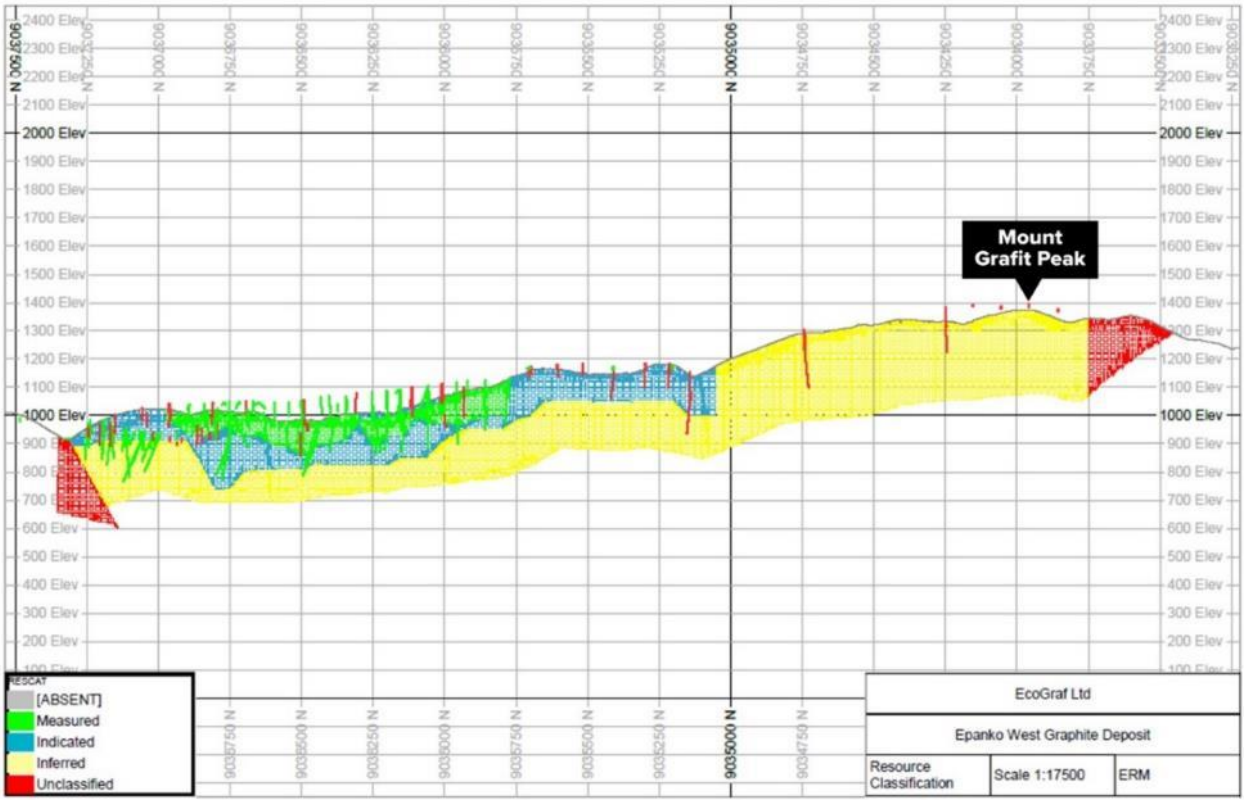

Figure 4 - Long section of Mineral Resource classification schema, Epanko Western Zone. Block model coloured by classification category; drill hole and trench intercepts within graphitic schist (red = 2023 holes, green = pre-2023). View to east.

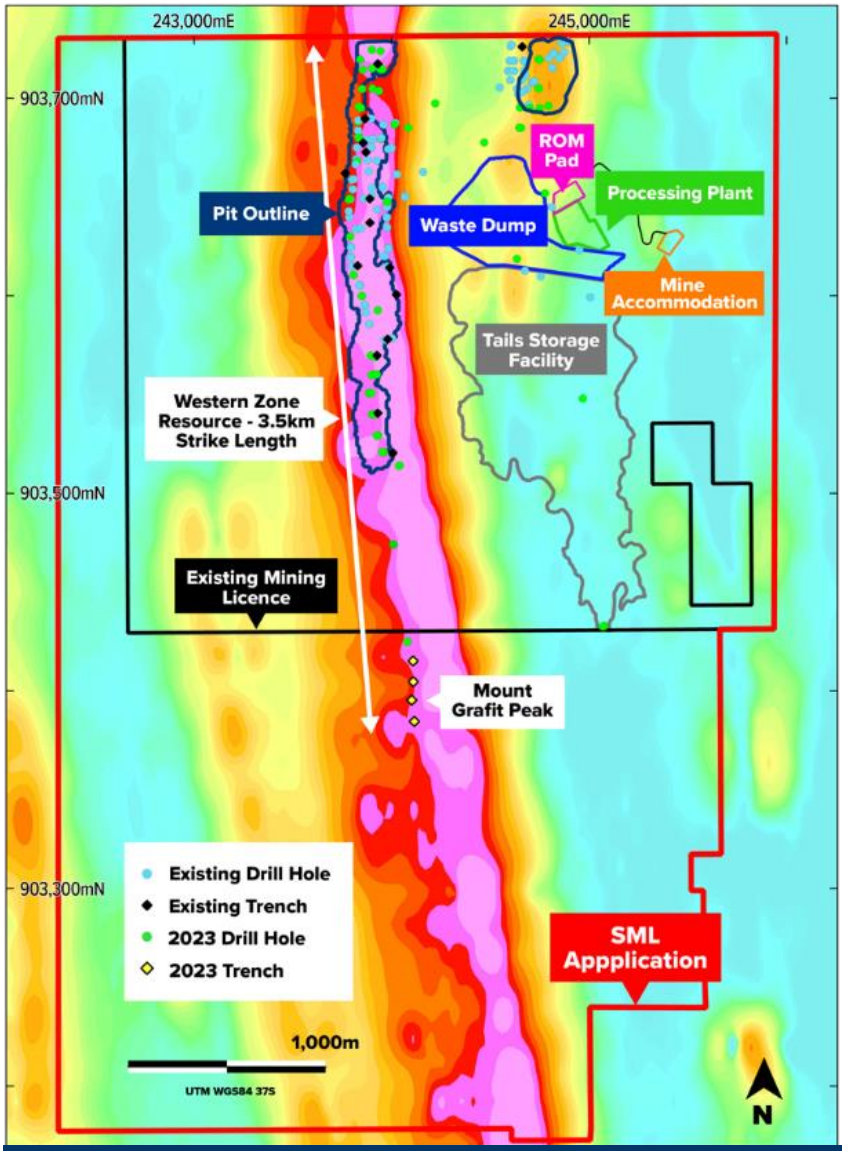

Figure 5 - Location of Drill Holes and New SML Application

Epanko Recognised by MSP in U.S. Press Release

The Company is pleased to note its Epanko Graphite Project was recognised in a recent Joint Statement of the Minerals Security Partnership (MSP) issued by the US Department of State.

The press release recognises EcoGraf's recent significant milestone in securing German-based KfW IPEX-Bank to arrange a senior debt facility of up to US$105 million for the development of stage 1 of the Company's Epanko Graphite Project in Tanzania.

This statement follows MSP principals' meeting in Toronto during the recent Prospectors and Developers Association of Canada (PDAC) annual convention, one of the largest mining events in the world.

The theme of the principals' meeting was responsible investment in critical minerals, with the key objective to strengthen collaboration between the MSP and like-minded partners. The MSP aims to accelerate the development of diverse and sustainable critical minerals supply chains through working with host governments and industry to facilitate targeted financial and diplomatic support for strategic projects along the value chain.

The press release can be found at: **https://www.state.gov/joint-statement-of-the-minerals-security-partnership/**

Figure 6 - Epanko Western Zone – Mount Grafit Trench MHT24

Figure 7 - Oxide “Cheetah” Mineralisation, a Graphitic Schist Unique to Epanko and the Source of High-Grade Mineralisation

Figure 8 - Diamond Drilling on Mount Grafit – the Southern Extension of the Epanko Western Zone

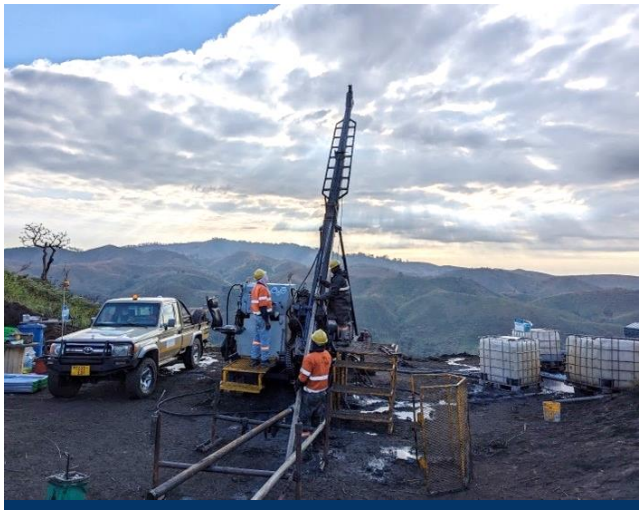

Figure 9 - Diamond Drilling on the Epanko Western Zone

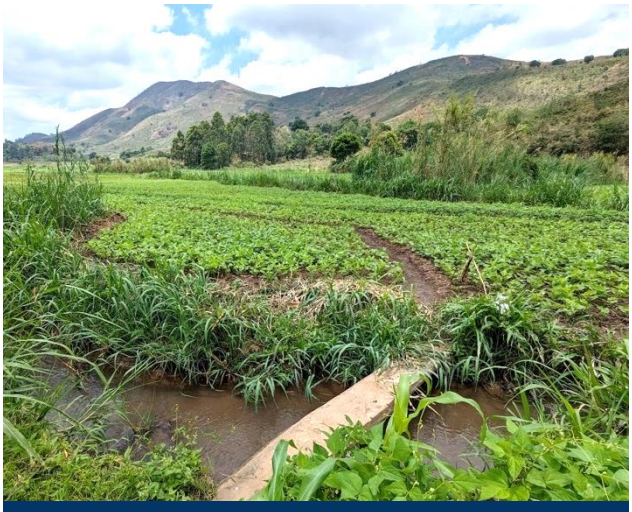

Figure 10 - View of the Mount Grafit Peak in the Distance and from the Epanko Valley (proposed TSF)

Table 3 : All 2023 Epanko Drill Holes, with Major High-Grade Significant Intercepts – greater than 10m length, greater than or equal to 7% TGC and less than or equal to 5m of included, consecutive <7% TGC material. Hole IDs marked with an asterisk indicated previously reported assay results.

Hole ID	Type	Easting	Northing	mRL	Azimuth	Dip	Depth (m)	From (m)	To (m)	Interval (m)	% TGC
*MHDD068	Diamond	243831	9036888	1039	270	-80	40.3	No high-grade significant intercept			
*MHDD069	Diamond	243825	9036681	1049.7	270	-70	80.5	23.2	37.42	14.22	9.3
*MHDD070	Diamond							No high-grade significant intercept			
*MHDD071	Diamond	243808	9036105	1102	90	-50	140	32.93	44	11.07	11.4
*MHDD072	Diamond	243850	9035999	1113	90	-50	200	20	40	20	9.4
								164	176.2	12.2	11.3
MHDD073	Diamond	244040	9035141	1153	90	-60	113.1	No high-grade significant intercept			
MHDD074	Diamond	244037	9035139	1153	270	-55	266.1	181.81	192	10.19	7.3
MHDD075	Diamond	244008	9034741	1303	270	-60	79.6	No high-grade significant intercept			
MHDD076	Diamond	243836	9036801	1045	90	-55	60.37	No high-grade significant intercept			
MHDD077	Diamond	244011	9034741	1303	90	-55	248.7	117	131	14	8.2
MHDD078	Diamond	243899	9035599	1181	270	-55	35.1	No high-grade significant intercept			
MHDD079	Diamond	243948	9037150	997	270	-60	65.3	No high-grade significant intercept			
MHDD080	Diamond	243900	9035400	1171	270	-55	160.16	33.7	49.5	15.8	7.5
MHDD081	Diamond	244080	9034250	1384	90	-50	200.91	16.24	27	10.76	7.1
MHDD082	Diamond	244080	9034250	1384	90	-55	4.4	No high-grade significant intercept			
MHDD083	Diamond	244080	9034250	1384	270	-55	80.84	No high-grade significant intercept			
MHDD084	Diamond	244635	9036187	935	0	-90	25	Geotechnical Drill hole - no significant intercept			
*MHRC081	RC	244745	9037050	943	0	-90	28	Sterilisation drill hole - no significant intercept			
*MHRC082	RC	244650	9036953	935	0	-90	21	Sterilisation drill hole - no significant intercept			
*MHRC083	RC	244794.3	9036961	956	0	-90	58	Sterilisation drill hole - no significant intercept			
*MHRC084	RC	244750	9036950	946	0	-90	40	Sterilisation drill hole - no significant intercept			
*MHRC085	RC	244700	9036950	939	0	-90	40	Sterilisation drill hole - no significant intercept			
*MHRC086	RC	244595	9046845	936	0	-90	5	Sterilisation drill hole - no significant intercept			
*MHRC087	RC	244655	9036850	941	0	-90	40	Sterilisation drill hole - no significant intercept			
*MHRC088	RC	244084	9036850	952	270	-60	54	Sterilisation drill hole - no significant intercept			
*MHRC089	RC	243790	9036300	1079	270	-70	70	1	12	11	10.1
								29	39	10	10.4
*MHRC090	RC	243807	9036106	1102	270	-60	80	3	15	12	9.3
								27	49	22	7.3
*MHRC091	RC	243848	9036000	1113	270	-50	100	44	64	20	8.9
*MHRC092	RC	243834	9036958	1041	270	-60	95	6	23	17	8.7
								54	64	10	7.9
*MHRC093	RC	244015	9036867	962	270	-68		No high-grade significant intercept			
MHRC094	RC	243948	9036795	998	90	-60		17	33	16	7.3
*MHRC95	RC	243832	9036800	1045	270	-60	90	13	40	27	7.4
*MHRC96	RC	243894	9035697	1172.5	270	-60	39	No high-grade significant intercept			
*MHRC97	RC	243898	9035600	1181	270	-55	42	No high-grade significant intercept			
*MHRC98	RC	243920	9035603	1171	270	-60	21	0	20	20	8.2
*MHRC99	RC	243925	9035602	1171	90	-55	45	No high-grade significant intercept			
*MHRC100	RC	243884	9035508	1180.5	270	-55	45	23	34	11	7.5
*MHRC101	RC	243894	9035508	1180.5	270	-60	33	3	15	12	12.6
*MHRC102	RC	243898	9035508	1180.5	90	-60	45	No high-grade significant intercept			
*MHRC103	RC	243909	9035400	1173	270	-60	29	0	16	16	7.1
*MHRC104	RC	243916	9035400	1173	90	-60	36	21	34	13	12.0
*MHRC105	RC	243931	9035294	1185	90	-60	28	1	28	27	7.7
*MHRC106	RC	243928	9035291	1185	270	-60	27	0	16	16	7.6

Hole ID	Type	Easting	Northing	mRL	Azimuth	Dip	Depth (m)	From (m)	To (m)	Interval (m)	% TGC
*MHRC107	RC	243925	9035293	1182	270	-55	103	4	22	18	7.2
								25	44	19	7.1
*MHRC108	RC	243961	9035209	1181	90	-60	40	15	37	22	12.3
*MHRC109	RC	243956	9035208	1181	270	-60	44	0	44	44	7.6
*MHRC110	RC	243952	9035209	1181.5	270	-55	103	0	69	69	8.1
*MHRC111	RC	243920	9035691	1166	90	-65	28	No high-grade significant intercept			
*MHRC112	RC	243914	9035691	1166	270	-60	22	No high-grade significant intercept			
*MHRC113	RC	243851	9037047	1028	270	-60	42	26	42	16	9.1
*MHRC114	RC	243903	9037049	1017.5	270	-60	45	No high-grade significant intercept			
*MHRC115	RC	243936	9037037	1004	270	-60	54	6	53	47	11.0
*MHRC116	RC	243944	9037146	998	270	-60	65	3	48	45	13.0
*MHRC117	RC	243954	9037147	998	90	-60	52	5	35	30	9.8
*MHRC118	RC	243900	9037150	1002	270	-60	61	7	30	23	7.6
								40	51	11	7.6
*MHRC119	RC	243854	9037144	994	270	-60	67	6	21	15	8.9
								29	45	16	12.0
*MHRC120	RC	243841	9037196	946	270	-60	79	No high-grade significant intercept			
*MHRC121	RC	243900	9037245	955	270	-60	31	No high-grade significant intercept			
MHRC122	RC	243944	9037238	953.5	270	-60	37	0	37	37	11.5
*MHRC123	RC	243845	9036950	1041	90	55	57	35	55	20	7.5
MHRC124	RC	244745	9037197	970	270	55	79	No high-grade significant intercept			
MHRC125	RC	244750	9037195	970	90	-70	86	12	28	16	12.6
								29	53	24	10.9
MHRC126	RC	243788	9036492	1051	270	-75	90	No high-grade significant intercept			
MHWB008	RC	243930	9035927	1091.5	0	-90	106	0	33	33	12.5
MHWB009A	RC	243976	9036476	973	0	-90	57	5	29	24	9.8
*MHWB010	RC	244221	9036974	926	0	-90	19	Water bore - no significant intercept			
*MHWB011	RC	244469	9036776	929	0	-90	65	Water bore - no significant intercept			
*MHWB012	RC	244647	9036850	936.45	0	-90	95	Water bore - no significant intercept			
*MHWB013	RC	244777	9036519	938	0	-90	82	Water bore - no significant intercept			
*MHWB014A	RC	245070.3	9034326.1	958.59	0	-90	16	Water bore - no significant intercept			
*MHWB015	RC	244968.3	9035480.4	973.53	0	-90	76	Water bore - no significant intercept			
MHT23	Trench	244111.4	9034156.5	1386.1	270	0	33	3	18	15	8.3
MHT24	Trench	244107.3	9034056.5	1378.5	270	0	63	30	63	33	19.7
MHT25	Trench	244104.1	9033959.8	1382.2	270	0	52	0	40	40	16.8
MHT26	Trench	244113.5	9033856.9	1367.8	270	0	43	0	43	43	20.8

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 announcements released on 21 June 2017, 2 March 2023 and 28 April 2023 continue to apply and have not materially changed.

Exploration Results and Mineral Resources - Competent Person Statement

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 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr David Williams and Mr David Drabble consent to the disclosure of the information in this report in the form and context in which it appears. Mr David Drabble assumes responsibility for matters related to Sections 1 and 2 of JORC Table 1, while Mr David Williams assumes responsibility for matters related to Section 3 of JORC Table 1.

The information in this report that relates to Exploration Results is based on, and fairly reflects, information compiled by Mr. David Drabble. 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 Drabble has 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 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr David Drabble consents to the disclosure of the information in this report in the form and context in which it appears.

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

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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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APPENDIX 2 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 SGS laboratory in Mwanza for preparation and multi-element analysis, before forwarding to SGS laboratory in Randfontein for LECO analyses. All samples are crushed using ALSTO PV2 mill to –2 mm and pulverised to nominal 85% 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 HQ3 diameter, with some occasions reducing to NQ when hole conditions required it. 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 the 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.
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 and trenches 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, and RC chip photos for every tray of RC samples
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.*	All RC holes and trenches 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

Criteria	JORC Code explanation	Commentary
	• *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.*	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 SGS (Tanzania) laboratory in Mwanza involves the original sample being dried at 105ºC between 8 to 12 hours and weighed on submission to laboratory. Crushing to nominal –2 mm. Sample is split to 1.5 kg through riffle 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 ALSTO PV2 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, 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.*	Drill samples were sent to SGS (South Africa) for LECO graphite assaying. The following methodology is used by SGS for total graphitic carbon (TGC) analyses during 2023, and Bureau Veritas 2012 to 2017. Total carbon is measured using LECO technique. The sample is combusted in the oxygen atmosphere and the IR used to measure the amount of CO2 produced. The calibration of the LECO instrument is done by using certified reference materials. For the analysis of graphitic carbon, a 0.1 - 0.2 g sample is roasted at 500°C for 1 hour to remove all organic carbon from the sample. Carbonate carbon is then leached/evolved using HCl. The sample is then dried to remove the chlorides and the residue analysed by combustion infrared detection, where this product is fully oxidized in a stream of oxygen and the CO2 gas evolved is detected by calibrated IR cell. Multi-element analysis was completed via Aqua regia digest/ ICP-OES with the following method. The samples are digested with HNO3 and HCl in a hot water bath. The sample is introduced by pneumatic nebulization into plasma causing atomization and ionization. The atoms and ions produce element specific emission spectra. The polychromatic radiation passes into the spectrometer where the light is differentiated using an Eschelle diffraction grating. The diffracted light is measured using a single device covering the entire spectrum (Agilent instruments). The analyte concentration is calculated from the emission of the sample relative to that of known calibration standards at a particular wavelength for each element. All emission intensities are corrected for matrix effects using an internal standard (typically lutetium) by dividing the intensity of the analyte or standard by the intensity of the internal standard prior to calculation of the concentration using a regression. Laboratory certificates were sent via email from the assay laboratory to Ecograf. EcoGraf imported this into an Access database, and subsequently into Micromine for review and interpretation. QAQC samples are inserted at 10% frequency with standards, blanks and field duplicates evenly comprising that 10%.

Criteria	JORC Code explanation	Commentary
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 Differential GPS equipment by a qualified surveyor. UTM Zone 37 South was the grid system used. No coordinate transformation was applied to the data. Downhole surveys were completed using Reflex ACTIII RD tool. Data was collected via single-shot for diamond and RC holes. Topographic DTM was from a LIDAR survey flown in 2015 and 2016.
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.* • *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.*	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. 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 SGS Mwanza 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 ERM 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 and prospecting license PL11598/2021. The Mineral resource and contributing holes are in Mining License ML 548/2015, with the exception of new holes MHDD081, 082 & 083 and trenches MHT23, 24, 25 & 26. These exceptions are located in granted Prospecting License PL 11598/2021 which continues a further 1.1km further south of the ML. The area of the Mineral Resource within PL 11598/2021 is covered by the pending Special Mining License.

Criteria	JORC Code explanation	Commentary
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 Epanko 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 29% TGC.
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 21 December 2023, 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 7% TGC. The purpose of this is to report intervals that may be significant to future geological interpretation. There is no implication about economic significance. Intervals reporting above 7% 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 drillhole collar locations and appropriate sectional views.*	Not applicable to this announcement
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;*	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

Criteria	JORC Code explanation	Commentary
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	provided important information used to compile the Mineral Resource estimate and for drill hole planning. The southern 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.*	Further work may involve closer spaced drilling within the new southern Inferred part of the Mineral Resource, with the aim of converting it to Indicated and Measured classification. Additional metallurgical testwork is in progress which is contributing to the on-going Front End Engineering Design for the final processing plant design.

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. ERM carried out a low-level validation of the database and it was found to be fit for purpose to support the Mineral Resource estimate. Validation of the data import include checks for 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 (Estimation and Reporting of 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. The Competent Person (JORC Table 1, Sections 1 and 2) spent considerable time on site during 2023 during the drilling programme, and monitored all aspects of the drilling and sampling with no negative outcomes noted.
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.*	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

Criteria	JORC Code explanation	Commentary
	• *The factors affecting continuity both of grade and geology.*	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. Mineralisation domains for TGC were not modelled. 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. A zone of overburden material was modelled for Epanko East, and is barren of TGC. 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 assays 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 3,500 m in strike, 250 m in plan width and reaches 300 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.*	The geological models were interpreted and prepared by EcoGraf using Micromine 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

Criteria	JORC Code explanation	Commentary
	• *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 comparison of model data to drillhole data, and use of reconciliation data if available.*	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. Sub-blocking was used to ensure the wireframe models were adequately filled with blocks. 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. Variograms were modelled to determine sills and ranges to use in the kriging algorithms. 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 used 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 graphitic schist domains (Epanko East), acting as hard boundaries. The Base of Complete Oxidation acted as a hard boundary for both Western and Eastern deposits. The transitional and fresh domains were combined for grade interpolation purposes, with the top of fresh rock surface acting as a soft interpolation boundary. The current Mineral Resource was checked against the previously reported Mineral Resource (2023) and showed an increase in global tonnage, with a 39% 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 ERM. 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*	Tonnages are estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
	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.*	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.
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.*	The 2017 BFS has determined the project can be mined by open cut methods. Geotechnical drilling, logging and rock strength and shear strength analyses have been 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 past few years, 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. During 2023, EcoGraf conducted a programme to test the possibility of changing the process plant design to a single stream flotation circuit. 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.
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. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of*	Preliminary designs for a valley fill tails dam and waste dumps with a life of up to 25 years have been produced, with the option to increase capacity eight fold, within the natural contours of the valley. 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

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	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.	impacted by the project are well advanced. 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. A total of 1,183 SG samples have been measured over the project history, with 771 SG measurements taken during the 2023 drilling programme. The Epanko West density database is based upon 802 diamond core samples, and Epanko East based upon 370 diamond core samples, with samples wax coated prior to immersion in a water bath. Laboratory testwork comparing the SG measurements for core samples coated in paraffin wax, compared to cling wrap, showed that wax coated samples returned a slightly higher SG measurement compared to the cling wrap samples. Since 2015, all SG measurements taken from diamond core with cling wrap have used a correction factor of 1.057 applied to the SG record. EcoGraf are commissioning further testwork to verify this conversion factor. EcoGraf carried out a study of SG results and provided ERM with a memorandum with recommended density values for the weathering profiles within the graphitic schist. ERM flagged the drill hole files with density records against lithological and weathering domains, and a statistical study supports EcoGraf's findings. Density values of 1.92 t/m^3, 2.34 t/m^3 and 2.83 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, 2.57 t/m^{3}and 2.83 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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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), trenching 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 planned to occur following this announcement, to support the use of the Mineral Resource in updating the BFS.
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 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.*	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 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.