

ASX Release / 29 November 2023

# KfW IPEX-Bank Mandated for UFK Loan of up to US\$105m (A\$160m)<sup>1</sup> for Development of Epanko

Vertically integrated battery anode materials developer **EcoGraf Limited** ("**EcoGraf**" or "the **Company**") (**ASX: EGR**) is pleased to announce that it has mandated KfW IPEX-Bank ("the **Bank**") to obtain import credit cover ("**UFK Cover**") from the Federal Republic of Germany and to arrange a senior debt facility ("**UFK Tranche**") of up to US\$105 million for the development of the Company's Epanko Graphite Project ("**Epanko**" or "the **Project**") in Tanzania.

## **Highlights**

- German Government confirms Epanko eligibility for cover in principle for the Untied Loan Guarantee ("UFK") scheme based on the support of German offtakers for the Company's initial 73,000tpa Epanko development.
- Strong demand and pricing outlook in Germany and Europe for new, sustainably produced supplies of natural graphite for industrial and lithium-ion battery markets is expected to support the future expansion of Epanko, with preliminary studies indicating the potential for a phased increase to approximately 300,000tpa to meet forecast volumes.
- KfW IPEX-Bank may act as sole funder for the UFK Tranche for an amount of up to US\$105 million, subject to satisfactory due diligence and credit approvals.
- Program commenced to appoint independent experts to undertake due diligence processes on the updated Epanko development (refer ASX announcement Epanko Pre-Development Program Delivers Outstanding Results 28 April 2023) that builds on the Bankable Feasibility Study and rigorous Independent Engineers' Review completed in 2017.

Following recent meetings in Germany with KfW IPEX-Bank and Epanko offtakers, EcoGraf is pleased to confirm UFK eligibility for cover in principle under its updated Epanko development plans and the appointment of KfW IPEX-Bank for advisory, structuring and arranging services to obtain UFK Cover and arrange a UFK Tranche of up to US\$105 million. The timing of this agreement is highly favourable for Epanko, with China recently announcing the imposition of graphite export controls to come into effect from 1 December and German President Frank-Walter Steinmeier making an official visit to Tanzania earlier this month.









During his visit, the German President met Tanzanian President Samia Suluhu Hassan for political talks and engaged in discussions with representatives from German and Tanzanian businesses, that included EcoGraf director of Duma TanzGraphite, Ms Christer Mhingo.

The UFK program is provided by the Federal Republic of Germany to incentivise the development of key projects that can provide a long-term supply of critical minerals for German industry. Subject to satisfaction of credit criteria, loan funding can be provided under the program for terms longer than is generally available from commercial lenders, which provides increased financial flexibility for new developments during ramp-up and operation.

A key aspect of the UFK program is the promotion of the highest environmental and social operating standards. Epanko's development planning is based on the Equator Principles, with the extensive Independent Engineers' Review completed in 2017 confirming compliance with International Finance Corporation Performance Standards and the World Bank Group Environmental, Health and Safety Guidelines. The Company is currently completing an update of its environmental and social planning arrangements under the latest Equator Principles IV framework, providing financiers and customers with confidence in Epanko's sector leading sustainability credentials.

KfW IPEX-Bank has provided valuable support to the development of Epanko since 2017 and is an experienced and highly capable potential debt funding partner for the Project.

Following the signing of the Epanko Framework Agreement in the presence of Tanzanian President Samia Suluhu Hassan in April this year, EcoGraf has been receiving Government support to accelerate the development of Epanko. The Government is actively promoting new investment in its critical minerals sector and approval of the life-of-mine Epanko Special Mining Licence is well advanced to underpin the long-term expansion potential of the development.

The KfW IPEX-Bank appointment is a key milestone for the successful development of Epanko and the Company looks forward to updating shareholders as the parties complete the various steps of the UFK application process to secure Government and KfW IPEX-Bank approvals for the debt financing arrangements.

### **Compelling Natural Graphite Market Outlook**

Industry forecasters predict demand for natural flake graphite will significantly outstrip available supply over the next decade due to a combination of factors that are expected to fundamentally change the graphite supply chain:

- Lithium-ion battery demand from the global electric vehicle, renewable energy storage and portable device markets;
- An increasing proportion of natural graphite used in lithium battery anodes due to its lower CO<sub>2</sub> footprint and attractive value-in-use characteristics;
- Diversification of critical minerals supply chains to reduce the existing dependency on China, backed by legislative support and financial incentives to encourage greater sustainability and localised downstream processing capabilities; and
- Chinese export controls and long lead times for new offshore mine developments.

Annual natural graphite demand is expected to increase from 1.1mt in 2022 to over 4mt by 2030 leading to a market shortfall from 2026 and supporting the introduction of Epanko's high quality flake graphite products<sup>2</sup>.

As one of the few vertically integrated battery anode materials companies, EcoGraf is also planning to develop graphite mechanical shaping facilities in Tanzania (refer ASX announcement *Independent Study Confirms Highly Attractive Mechanical Shaping Opportunity* 19 September 2023) to supply feedstock for its future active anode material facilities located in key global battery markets.

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## **Epanko Progress Delivers on a Successful 2023**

On 29 September 2022 EcoGraf announced to the ASX that following the release of the US Inflation Reduction Act and the Mineral Security Partnership between Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom and the United States, the Company would broaden its development plans and increase the priority of North American and European battery markets that are being actively supported by Government legislation.

In the period since, the Company has made substantial progress across each element of its vertically integrated battery anode materials business, including achievement of the following:

## **EXTRACT** EcoGraf Natural Graphite Projects

- 38% increase in the Epanko Mineral Resource Estimate to 128.2mt.<sup>3</sup>
- Signing of a Memorandum of Understanding with the Tanzanian Electric Supply Company (TANESCO) to deliver low cost, renewably sourced grid power for Epanko.<sup>4</sup>
- Negotiation of Epanko Framework and Shareholders' Agreements with the Tanzanian Special Presidential Government Negotiating Committee, signed in the presence of President Samia Suluhu Hassan in April 2023.<sup>5</sup>
- Completion of the Epanko Pre-Development Program delivering a 22% increase in stage 1 annual production (to 73,000tpa) for modest additional capital, a pre-tax ungeared NPV<sub>10</sub> of US\$348m (vs US\$211m previously) and C1 operating costs FoB Dar es Salaam of US\$508/t (vs (US\$509/t previously).<sup>6</sup>
- Agreement with the Tanzanian Government to replace the Epanko Mining Licence with a 50year Special Mining Licence, also delivering an 87% increase in the strike length of the graphite unit.<sup>7</sup>
- Commissioning of an independent study to confirm cost savings of up to 50% and emissions reductions of up to 20% by locating graphite micronizing and spheronizing facilities within an Export Processing Zone in Tanzania.<sup>8</sup>
- Appointment of KfW IPEX-Bank to provide advisory, structuring and arranging services to obtain UFK Cover and arrange a UFK Tranche for the development of Epanko of up to US\$105m (A\$160m).<sup>1</sup>

## **UPGRADE** EcoGraf™ Battery Anode Material

- Completion of an independent Life Cycle Assessment confirming EcoGraf HFfree™ purification, anode recycling and renewable energy eliminate >92% of CO₂ emissions compared to existing battery anode material.<sup>9</sup>
- Award of Australian Government grant of A\$2.9m towards establishment of an EcoGraf HFfree™ battery anode material Product Qualification Facility under the Critical Minerals Development Program.<sup>10</sup>
- Signing of a non-binding Cooperation Agreement with Korean multinational POSCO for the sale
  of graphite products, establishment of a global battery anode materials supply chain hub in
  Tanzania and leveraging of EcoGraf's proprietary graphite purification technology.<sup>11</sup>
- Grant of a United States patent (Method of Producing Purified Graphite) for EcoGraf HFfree™ purification technology, that complies with US Treasury Inflation Reduction Act guidance on Clean Vehicle Credit Criteria.<sup>12</sup>
- Signing of a non-binding Memorandum of Understanding with Vietnam based VinES Energy Solutions Joint Stock Company to evaluate a potential battery anode material production facility in Vietnam.<sup>13</sup>
- Advancement of discussions with several corporate groups in relation to the potential codevelopment of EcoGraf HF free™ battery anode material facilities in Europe and North America.

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## **RECYCLE** EcoGraf™ Anode Material Recycling

- Signing of a non-binding Memorandum of Understanding with French battery recycler MTB Group to jointly evaluate anode recycling processing technologies.<sup>14</sup>
- Successful initial electrochemical testing program with Korean battery recycler SungEel Hitech.<sup>15</sup>
- Completion of multiple technical collaboration programs with battery and electric vehicle manufacturers in Europe and North America to optimise anode recycling processes using EcoGraf HFfree™ purification to provide data for a future pilot plant development.

As a result of this progress over the last year, EcoGraf has established the foundations for its vertically integrated battery anode material business across key global markets, positioning the Company for significant advancement during 2024.

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

## For further information, please contact:

#### **INVESTORS**

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#### **About KfW IPEX-Bank**

Within KfW Group, KfW IPEX-Bank is responsible for project and export finance. It supports German and European companies operating in key industrial sectors in global markets by structuring medium and long-term financing for their exports, funding infrastructure investments, securing the supply of raw materials and by financing environmental and climate change mitigation projects worldwide.

As a bank that stands for transformation, it finances technologies of the future to support the transition towards sustainable society in all three dimensions of the economy, environment and social. By implementing ambitious sector guidelines for CO<sub>2</sub>-intensive sectors KfW IPEX-Bank ensures its financings are compatible with the goals of the Paris Agreement. By introducing GHG accounting it aims to achieve a net zero emissions portfolio by 2050.

As a specialist bank, KfW IPEX-Bank has extensive industry, structuring and country expertise, it takes on leading roles in financing consortia and actively involves other banks, institutional investors and insurance firms. KfW IPEX-Bank operates as a legally independent group subsidiary and is represented in the most important economic and financial centres across the globe.

#### References:

Note 1: AUD equivalent, assuming spot exchange rate of 0.6575 (source - RBA 27 November 2023)

Note 2: Source - Benchmark Mineral Intelligence, 2022

Note 3: Refer ASX announcement 2 March 2023 Note 4: Refer ASX announcement 5 April 2023

Note 5: Refer ASX announcement 18 April 2023

Note 6: Refer ASX announcement 28 April 2023

Note 5: Refer ASX announcement 28 April 2023 Note 7: Refer ASX announcement 31 July 2023

Note 7: Refer ASX announcement 31 July 2023 Note 8: Refer ASX announcement 19 September 2023

Note 9: Refer ASX announcement 20 October 2022

Note 10: Refer ASX announcement 18 May 2023

Note 11: Refer ASX announcement 31 May 2023

Note 12: Refer ASX announcement 19 July 2023 Note 13: Refer ASX announcement 9 October 2023

Note 14: Refer ASX announcement 20 December 2022

Note 15: Refer ASX announcement 22 March 2023

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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 HFfree™ 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<sub>2</sub> emissions and lower battery costs.

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