



23 OCTOBER 2019

ASX ANNOUNCEMENT

Dear fellow Kibaran shareholders

EcoGraf Limited

At our 2019 Annual General Meeting we will seek to change our name to EcoGraf Limited to clearly reflect our strategy to be a preferred partner for the long-term supply of responsibly produced, high quality natural flake and battery (spherical) graphite products.

In the last 6 years we have invested over US\$25 million to create two highly attractive graphite businesses that are ready for development and which will enable us to serve our existing and prospective customers throughout Asia and Europe. A key part of this journey has been the identification of a unique eco-friendly graphite purification technology for which we have lodged a global patent and which underpins our commitment to provide customers with competitively priced, superior products that support their business requirements for more sustainable supply chains.

Our new name will provide clear brand recognition in these markets, particularly in the manufacture of anode materials for lithium-ion batteries, as part of the massive investment underway globally to transition towards renewable energy for vehicle and industrial applications.

In natural flake markets, our Epanko Graphite Project is differentiated by its Equator Principles development model, receiving sign-off from Independent Technical Engineers SRK Consulting (UK) on all technical aspects and achieving compliance with International Finance Corporation Performance Standards for social and environmental planning and also World Bank Group Environmental, Health and Safety Guidelines.

As recently reported (refer ASX Announcement *Epanko Debt Financing Update* on 12 September 2019), following Ministerial meetings in Tanzania, we are confident that resolution of the legislative issues delaying debt financing will be resolved now that the Barrick Gold Corporation Scheme of Arrangement has been approved and it has reported reaching a partnership agreement with the Government on its future operations in Tanzania and the formation of Twiga Minerals Corporation.

The Epanko development principles provide assurance that our natural flake graphite products will be efficiently and responsibly produced for the benefit of all stakeholders, making a long-term economic contribution to social and industrial development within Tanzania.

Within battery (spherical) graphite markets, our unique purification process that eliminates the use of costly and highly toxic hydrofluoric acid underpins the planned development of our first purification facility just south of Perth in Western Australia. Positive feedback from prospective customers and partners is very encouraging as the importance of sustainable and eco-friendly supply chains grows and our new name will provide improved recognition for our planned products in these markets.

We look forward to shareholders' attendance at our Annual General Meeting on 29 November 2019 at the Celtic Club, 48 Ord Street, West Perth, Western Australia at 10:00am (WST) and hope that you will vote in favour of the resolution to change our name to EcoGraf Limited.

Please also find attached an overview of our Company's business review which formed pages 2-13 of our 2019 Annual Report and which provides a detailed overview of both our graphite businesses. For further information, please refer to the Annual Report announced to ASX on 25 September 2019.

Yours sincerely,
Kibaran Resources Limited

Andrew Spinks
Managing Director
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INTEGRATED + ECO-FRIENDLY

*Building an integrated business for the
manufacture of high quality graphite*



KIBARAN
RESOURCES LIMITED

A long-term partner in supplying eco-friendly natural flake and battery graphite products to customers in both established and emerging global markets.



Kibaran Resources Limited (ASX: KNL) is focused on becoming a long-term partner in supplying eco-friendly natural flake and battery (spherical) graphite products to customers in both established (refractory, recarburiser, lubricant) and emerging (lithium-ion battery) global markets.

It holds 100% interests in a combination of attractive graphite businesses that are poised for development, highly profitable and scalable.

Once established, Kibaran will operate a diversified graphite portfolio, supplying high quality Tanzanian natural flake graphite products through TanzGraphite to established markets in Asia and Europe, together with EcoGraf, a multi-hub development commencing in Kwinana, Western Australia that will provide a global new supply of environmentally responsible battery graphite for lithium-ion batteries.



2019 has seen unprecedented global investment in lithium-ion battery manufacturing capacity to support the paradigm shift in transport technology to electric vehicles and battery storage for the renewable energy sector.

We are all familiar with the narrative on electric vehicles, battery storage and the growth in demand for battery minerals. This is the very understandable rationale for strong market focus on battery minerals in recent years.

We hear a lot about cathode minerals, lithium, cobalt, nickel and manganese which together make up the composition of the cathode in a lithium-ion battery. We hear less about the anode which is 100% graphite and represents almost half of the total minerals in a lithium-ion battery.

Not just any graphite, but a plus 99.95% pure spherical graphite product that is refined to meet stringent chemical and physical specifications capable of withstanding the intense operating conditions of a battery in an electric vehicle.

Along with electric vehicles and growth in battery manufacturing, demand for this specialised spherical graphite product is growing exponentially. Coupled with this there is increasing growth in demand for natural flake graphite, which is the feedstock.

To cater to this new demand for quality graphite Kibaran has developed an integrated graphite business.

To produce spherical graphite in Western Australia for export directly to major anode manufacturers while at the same time developing an upstream mining business to produce natural flake graphite as feedstock and for other traditional industrial markets.

Currently all global supply of spherical battery graphite is produced in China with a very toxic purification process using hydrofluoric acid.

There is strong demand by anode manufacturers outside China for an alternative non-Chinese supply that is environmentally friendly. This is the market demand that Kibaran is catering to.

We have spent 3 years and many millions of dollars in perfecting a new eco-friendly purification process. In research & development, in process design, feasibility studies, piloting, product testing and endorsement by anode manufacturers, and more recently on engineering and design for a processing facility in Western Australia to export spherical graphite to customers in Asia, Europe and America.

The purification process and the spherical graphite product is trademarked EcoGraf with patent pending.

This project is now development ready. The Western Australian Government is providing strong support and has allocated Kibaran land in Kwinana near Perth. Financing discussions are well underway for debt and equity with both Government and industry groups. This funding is underpinned by offtake support from major industrial groups in the sector.

The opportunity to manufacture spherical graphite for the growing battery market is now a reality.

The Epanko mining project in Tanzania is also ready for development and independent of the EcoGraf manufacturing business. Bank funding processes are now advancing well as the Tanzanian mining regulations are being implemented and the investment climate improves.

My thanks to the Kibaran management team and directors for their hard work during the year and to you, our shareholders, for your patience and continuing support. It is our goal to ensure that this is fully rewarded.



Robert Pett
Chairman



EPANKO GRAPHITE MINING PROJECT (KNL: 100%)

The Epanko Graphite Project (“Epanko” or the “Project”) is a long life, highly profitable graphite project located approximately 370km from the city of Dar es Salaam in Tanzania. It is forecast to produce 60,000 tonnes of natural flake graphite products each year and during its initial 18 years of operation Epanko will generate annual EBITDA¹ of US\$44.5 million, a 38.9% internal rate of return and pre-tax net present value₁₀ of US\$211 million.

Over the past six years, Kibaran has conducted extensive exploration, feasibility, mine planning and community development activities in Tanzania to prepare Epanko for development. A mining licence was granted in 2015 and a Bankable Feasibility Study was completed in 2017, led by GR Engineering Services Limited and involving leading consultants from Africa, Australia, Asia and Europe. At the request of proposed lender KfW IPEX-Bank an Independent Engineer’s Review was completed in August 2017 by SRK Consulting, confirming that the Bankable Feasibility Study addresses all technical aspects of the proposed development and that the social and environmental planning

aspects satisfy IFC Performance Standards and World Bank Group Environmental, Health and Safety Guidelines.

Sales agreements for Epanko products have been entered into with Germany’s ThyssenKrupp AG, Sojitz Corporation of Japan and a major European trading group. The final milestone is to complete the funding process so that construction can commence as soon as possible.

MAJOR INTERNATIONAL CUSTOMERS



60,000TPA

Natural Flake

US\$44.5M

Annual EBITDA

38.9%

Internal Rate of Return

US\$211M

Pretax NPV₁₀

US\$1B

Forecast Contribution to Tanzania

Note 1 – Earnings Before Interest, Tax, Depreciation and Amortisation.

Key Outcomes - BFS June 2017



PROJECT FINANCING

The Epanko mine development is planned to be funded through a combination of limited recourse debt finance and equity. Encouraging progress was made during the year to advance the project financing program and resolve issues arising from the impact of Tanzania's 2017 new mining legislation on international debt financing arrangements in the mineral sector.

Tanzania has continued to develop its capacity to regulate the mineral sector, establishing a new Mining Commission in 2018, appointing a new Minister of Minerals Hon. Doto Biteko in January 2019 and issuing further regulations to improve transparency and accountability across the industry.

Kibaran representatives have held meetings with Ministers and senior Government officials from the Tanzanian Ministry of Minerals, the new Mining Commission, the Bank of Tanzania and the Tanzanian Investment Centre. These meetings have focused on Epanko financing arrangements and the impact of the new laws, in particular the local content regulations relating to the use of banks and operation of bank accounts, the Government free-carried interest, the extent of Tanzanian participation and warehousing and export procedures.

Feedback across all levels of Government has been supportive of new investment and includes confirmation of the Mining Commission's intention to renew the Epanko mining licence upon expiry in 2025 and the continued eligibility of foreign financial institutions to fund mineral

REGIONAL DEVELOPMENT OPPORTUNITIES

The Company's long term plan is to develop multiple natural flake graphite operations within Tanzania. Geophysical mapping undertaken at Epanko indicates the potential for additional graphite mineralisation to support the expansion of operations and extension of mine life, enabling the Project to respond to the forecast growth in graphite demand.

projects. As a result of this progress, in April 2019 German financier KfW IPEX-Bank was mandated to arrange senior debt funding of approximately US\$40 million for Epanko, including preparing an application for approval under the German Untied Loan Guarantee ("UFK") scheme through Euler Hermes AG. The UFK process is very thorough but enables Epanko to access long term debt finance at competitive interest rates. Due diligence and credit approvals are progressing as quickly as possible on the basis that the remaining regulatory aspects impeding new Tanzanian mine financing arrangements will be satisfactorily resolved.

In conjunction with the UFK program, a second lender has commenced credit processes in relation to the provision of senior debt funding of up to US\$20 million under a common terms loan facility with KfW IPEX-Bank, for a combined project debt funding amount of US\$60 million.

Kibaran has also continued discussions with several potential strategic partners about equity investment in Epanko, with interest received from European and Asian industrial organisations as projected demand for battery graphite continues to increase, attracting investment attention to the sector.

➤ *Kibaran also continued discussions with several potential strategic partners about equity investment*

In addition, Kibaran also holds a 100% interest in the Merelani-Arusha Graphite Project, located 55km south-east of Arusha in northern Tanzania and a 100% interest in the Tanga Graphite Project, located approximately 200km north of Dar es Salaam, both of which offer the potential to support future development of new sources of graphite production.



TANZANIAN ECONOMIC AND SOCIAL DEVELOPMENT

Epanko is forecast to make a significant positive impact on the Tanzanian economy, with key benefits that include:

- Over US\$1 billion in direct financial contributions over the first 20 years of operation through procurement, employment, royalties, taxes, fees and dividends, generating an estimated additional US\$3 billion in indirect GDP within Tanzania;
- Direct employment of approximately 300 Tanzanians (over 95% of all staff), creating an estimated 4,500 indirect jobs through the supply of local goods and services; and
- Construction of new community housing, school facilities, Church and medical dispensary, together with the provision of social supports such as health insurance and training programs to build lasting local partnerships.

The long-term nature of the Project will provide for inter-generational social and economic development within Tanzania and support its industrialisation goals by facilitating the establishment of new carbon product industries that require natural graphite feedstocks.

Kibaran submitted its inaugural Local Content Plan and Integrity Pledge to the Mining Commission, demonstrating the extensive social planning that has been undertaken to satisfy rigorous Corporate Social Responsibility standards and expectations. Visits were made to the Epanko minesite by the Minister of Minerals Hon. Doto Biteko, Deputy Minister of Minerals Hon. Stanslaus Nyongo, Chairman of the Mining Commission Professor Idris Kikula and the new District Commissioner Hon. Ngollo Malenya.

Community activities undertaken during the year included construction of a classroom at Nawenge Secondary School, a funding campaign for construction of a secondary

school in Ulanga launched by the Regional Commissioner of Morogoro, meetings with the Mikumi Vocational Education Training Authority to arrange the next intake of sponsored students from the surrounding communities, construction of demonstration resettlement housing, provision of medical insurance, training programs and community discussion forums to increase Project awareness and ensure community members are involved in planning decisions.

Letters of recognition were received by Kibaran from the District Commissioner and the Nawenge ward Executive Officer for contributions to community activities.





SPHERICAL GRAPHITE MANUFACTURING PROJECT (KNL: 100%)

Early in the year, Kibaran completed the EcoGraf optimisation study in Germany, which confirmed the successful application of its non-hydrofluoric ("HF") acid purification process to natural flake graphite supplies sourced from Afro-Eurasia.

Ongoing test work confirmed the process could consistently produce graphite to battery anode manufacturer specifications at a competitive cost. Validation of the process on a range of natural graphite supplies demonstrates the potential to commence operations without reliance on graphite feedstock from the Company's Epanko project.

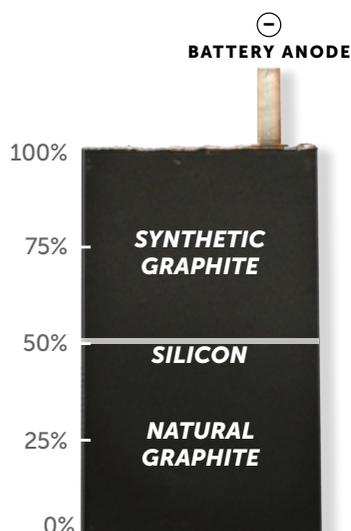
"Successful application of EcoGraf purification to other feedstocks was a milestone achievement and the basis of developing EcoGraf as a standalone business"

The optimised flowsheet developed during the test work program was incorporated in an updated global patent application, containing

refinements to the 2017 process to satisfy the highest physical and chemical specifications required by anode manufacturers.

Strong interest from potential customers during the 2018 product test work program led Kibaran to evaluate various ramp-up options for the first manufacturing facility, focusing on supporting the existing markets of South Korea, Japan and China. Growth in the electric vehicle ("EV") market has resulted in higher forecast anode demand and Kibaran incorporated these requirements into design plans for the initial EcoGraf production plant.

A new spheronising batch plant in Germany was successfully commissioned during 2019, and consistently producing high quality spherical graphite to support prospective customer and partner testing programs.



27 KGS > *Natural (spherical) graphite required per EV*

54 KGS > *Natural graphite feedstock required to manufacture 27kg of natural graphite*

< NATURAL GRAPHITE USED IN BATTERY ANODE IS CURRENTLY SOURCED FROM CHINA >



GR Engineering recently updated the 2017 study to incorporate the results of the German pilot plant program and completed an updated estimate of capital and operating costs.

GR Engineering’s 2019 capital cost estimate was based on construction of a new EcoGraf production facility in both Asia and Kwinana, Western Australia, using existing sea and land transport infrastructure, water and power supplies.

The additional engineering studies have resulted in a faster ramp-up phase to meet the growing demand requirements of battery anode manufacturers, which has also enabled the Company to increase the capital efficiency of the new EcoGraf development.

	DEVELOPMENT COST		KEY STUDY OUTCOMES (20,000TPA)			
	5,000tpa	15,000tpa	NPV ₁₀	EBITDA	IRR	Payback
Kwinana, WA	US\$22.8m	US\$49.2m	US\$141m	US\$35m	37.0%	~4yrs
Asia	US\$20.0m	US\$44.4m	US\$194m	US\$42m	49.8%	~4yrs

Results of the engineering studies have been used to update the EcoGraf financial model, demonstrating a highly attractive return on investment for both locations.

The investment has a pay-back period of less than four years and capital and operating costs adopted in the engineering study were prepared on the basis of independent quotations submitted by equipment vendors and service providers.

KWINANA DEVELOPMENT

Increasing transparency for ethical raw materials and the Australian Government support for battery minerals value-adding, has resulted in Kibaran pursuing Kwinana as a priority location for the EcoGraf initial production facility.

the Company expects commercial production to begin after 11 months at an initial rate of 5,000tpa. This production will provide commercial quantities to enter the battery manufacturers’ production lines prior to expanding the plant to achieve a production rate of 20,000tpa.

The Kwinana development schedule outlines a staged 5,000tpa and 20,000tpa production design capacity. Subject to a final investment decision,

The Company has received strong support from European customers where major investment is underway in battery manufacturing for electric vehicles.

➤ *The Company has received strong support from European customers where major investment underway in battery manufacturing for electric vehicles.*



Source: Landcorp

■ FUTURE BATTERIES INDUSTRIES

■ AVAILABLE LAND

Proposed EcoGraf Kwinana Plant Location

MAJOR INVESTMENT UNDERWAY IN BATTERY MANUFACTURING FOR ELECTRIC VEHICLES

The German Government has recently announced support for three battery cell alliances with earmarked funds of 1 billion euros for the domestic production of battery cells to reduce German EV car manufacturers' dependence on Asian markets and support a battery industry in Europe.

The German Economy Minister Peter Altmaier stated, "Germany and Europe need to develop and build competitive, innovative and environmentally sustainable battery cells."

Kibaran is in discussion with the Australian Federal and State Governments on the benefits of the unique EcoGraf process, as there are a range of mechanisms initiated by the Government to incentivise Australian industry to develop lithium-ion battery capabilities. The Company's development also meets the criteria for the planned creation of WA's Future Battery Industry within the Kwinana Industrial Area.

➤ *Australia's reputation as a reliable supplier of high-quality industrial products supports the proposed Kwinana location.*



NEXT STEPS

Key activities are underway with the final investment decision expected in the first half of 2020.

- ✓ Working with LandCorp to finalise lease arrangements for a site within the Kwinana Industrial Area
- ✓ Independent verification process test work and equipment evaluation with major suppliers
- ✓ Local permitting and environmental approvals
- ✓ Offtake and financing arrangements

WA STATE GOVERNMENT SUPPORT

The Kwinana development has secured support from Western Australian Premier Hon. Mark McGowan, who requested the Department of Jobs, Tourism, Science and Innovation (“JTSI”) to provide lead agency support to Kibaran as it develops the project. Premier Mr McGowan said

“The potential to produce battery grade graphite from the Ecograp Battery Graphite Project presents a significant step in diversifying Western Australia’s downstream processing activities and contribution to the global battery value chain.”

**HON. MARK MCGOWAN,
WESTERN AUSTRALIA PREMIER**

Proposed development of EcoGraf at Kwinana is aligned to the WA Government’s Future Battery Industry Strategy to secure Australia an expanded place in the rapidly transforming global battery value chain.



➤ *The Kwinana development has secured support from Western Australian Premier to provide lead agency support as it develops the project*



GRAPHITE MARKET

The outlook for spherical graphite remains positive with forecast demand expected to increase by over 700% by 2025.

Bloomberg New Energy recently reported that on current plans, total battery cell production capacity will exceed 1,000 GWh by 2025.

Prices increased 20% during 2018 and Benchmark Minerals has reported exports from China expanded by 16% from Jan-July 19, with coated products growing by over 200%.

Continued restriction has been seen in Chinese supply, due to increasing environmental pressure with fluorine residues, given such production is reliant on highly toxic hydrofluoric acid to achieve 99.95% carbon grade.

BENCHMARK MINERAL INTELLIGENCE
GRAPHITE PRICES (USD/TONNE) : JAN 2018 - SEP 2019

■ SPHERICAL UNCOATED (99.95% 15 MICRONS)



2019 LATEST MARKET NEWS

Major investment in Europe requiring ethical raw material underway.

JUN 15



Toyota increases EV production and Volkswagen invests €900m to establish a new battery production facility with Northvolt.

JUN 18



Germany will award to three consortiums 1 billion euros in funding it earmarked last year to support domestic battery cell production.

JUN 28



CATL hikes investment in German battery plant 1.8 billion euros from a previous plan of 240 million euros to expand output.

SEP 02



By 2030, Daimler aims to have all-electric and plug-in hybrids make up more than half of its car sales.

SEP 10



VW begins electric makeover as it unveils the ID3. The first cars will be delivered to customers in Europe in the spring of 2020.

SEP 06



Germany Gov't announced that it would make 1 billion euros in subsidies available to help enhance and preserve the automotive value chain in Germany and Europe.

SEP 06



German government supports second European EV battery consortium with BASF, BMW.

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STRONG EUROPEAN DEMAND

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