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ASX Announcement

Major breakthrough to process third-party graphite using Kibaran's proprietary **EcoGrafi** technology

Strong results pave way to develop a diversified supply to the lithium-ion battery market

Highlights

- Kibaran's proprietary **EcoGrafi** non-hydrofluoric purification process successfully applied to natural flake graphite product samples sourced from producers in Europe, Asia, the Americas and Africa to manufacture spherical battery grade graphite
- Carbon purity of 99.95% delivered by **EcoGrafi** from all samples
- The results support the opportunity for Kibaran to establish a diversified battery graphite supply in addition to the development of its 60,000tpa Epanko Graphite Project and associated downstream processing in Tanzania
- Demand among battery groups for ethically-produced raw materials is increasing and is expected to result in greater demand for eco-friendly products such as that produced using **EcoGrafi**

Kibaran Resources Limited (Kibaran or the Company) (ASX: KNL) is pleased to announce strong results from processing of third-party natural flake graphite sourced from Europe, Asia, the Americas, and Africa into spherical battery grade graphite using its proprietary eco-friendly **EcoGrafi** purification process.

The results are commercially important to Kibaran because they affirm the opportunity for the Company to develop a second revenue-generating arm in addition to its planned Epanko Graphite Project and associated downstream processing operation in Tanzania.

This would entail a processing plant utilising **EcoGrafi** being built in Europe to upgrade natural flake graphite from other miners to a product meeting battery grade specification for supply to anode manufacturers.

All the samples evaluated during this test work program responded positively to the process, consistently delivering a graphite carbon content of at least 99.95% and demonstrating the effectiveness of the eco-friendly purification process across a range of feedstock sources.

Existing feedstock to produce battery (spherical) graphite is typically of -100 mesh sizing, with 94-96% carbon content, which is readily available as a fines product from a range of existing graphite producing facilities.

The development of **EcoGrafi** battery (spherical) graphite products is timely given growing awareness for 'Ethical' material sourcing from customers and major battery groups. This includes the treatment of waste water, disposal of residues and storage of tailings.

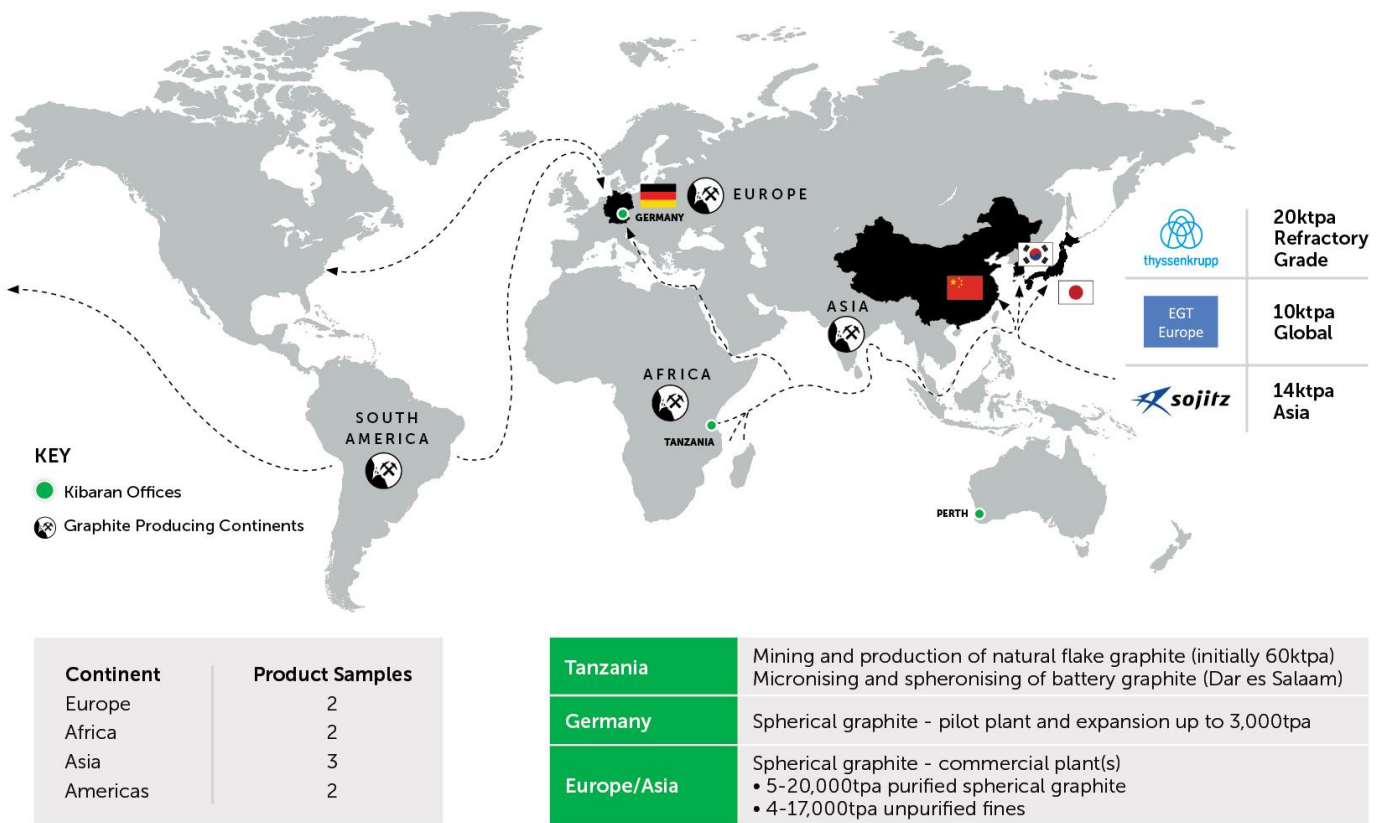
EcoGrafi has met the specifications of the leading battery groups and is being recognised as an eco-friendly and competitive alternative to existing battery graphite supply.

As previously reported (refer ASX Announcement 4 July 2018) Kibaran has been undertaking a pilot plant test work program in Germany and evaluating the performance of various existing supplies of natural flake graphite products during the **EcoGrafi** purification process and the influence of regional geology on the production of spherical graphite for lithium-ion battery applications.

The previous work included the identification, procurement and standardisation undertaken to achieve a common flake distribution and carbon grade. Based on the positive results, the Company has commenced a comprehensive assessment of the product samples, with the results to be incorporated into planning for the proposed expansion of the pilot plant and commercialisation.

The pilot plant testing of global natural flake graphite samples is being conducted in parallel with the Epanko graphite downstream optimisation program, that is nearing completion and will be reported shortly.

Figure 1. EcoGrafi distribution of Battery (Spherical) Graphite.



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