

## Strategy to supply lithium ion battery market

Results will help underpin marketing of Epanko project graphite, which has already been shown to be a premium product for use in lithium ion batteries

## **Highlights**

- 200 tonne sample of graphite from the Epanko project in Tanzania has been sent for next round of production-scale tests
- Previous tests have established Epanko graphite as highly suitable for use in lithium ion (Li-Ion batteries or LIB) batteries
- Results from the bulk sample tests will be used to determine production costs and establish premium pricing models for Epanko graphite sales to the booming lithium ion battery industry
- Sales to lithium ion battery industry expected to account for ~25% of Epanko's annual production with ~50% going to steel mills and ~25% for other high-end uses in Europe
- Sales to lithium ion battery industry not included in the due diligence being done on Epanko by lenders, meaning the project's already-strong economics would receive another significant boost

Kibaran Resources Limited (ASX: KNL) is pleased to advise that it has taken a another key step in its strategy to supply premium graphite to the booming lithium-ion battery market with a bulk sample of ore from its Epanko project in Tanzania despatched for production-scale testing.

The bulk sample comprises 200 tonnes of Epanko graphite ore which will be processed to produce 20 tonnes of flake graphite concentrate. A large part of this will then be used to generate ultrapure spherical-grade graphite, which is used to manufacture the anodes.

Previous testwork has confirmed that Epanko graphite has the required characteristics to supply this rapidly growing market. The next round of testing is designed to confirm these results under production conditions, therefore determining the production cost, demand and pricing.

The testing program is being supported by Japanese trading conglomerate Sojitz Corporation, with which Kibaran recently signed a Memorandum of Understanding for the supply of graphite for lithiumion batteries. Sojitz is one the largest graphite traders in Japan and Korea.

The booming lithium-ion battery market represents an outstanding commercial opportunity for Kibaran given the high quality of the Epanko graphite and the forecast increase in battery sales. Kibaran is well positioned given Panasonic (Japan) and LG Chem (Korea) are developing the world's largest gigafactories.

Kibaran intends to produce initially 40,000 tonnes a year of natural flake graphite concentrate. About 50 per cent of this is expected to be sold to the refractory industry for use in steel mills, where its heat conducting properties play a key role in steel fabrication.

Kibaran has signed a binding long-term offtake agreement with German integrated materials and technology company ThyssenKrupp for 20,000 tonnes of flake graphite a year. ThyssenKrupp will sell the graphite to refractory manufacturers for final use in steel mills.

A further 10,000 tonnes a year will be sold by the European trader for other high-end uses, leaving 10,000 tonnes for sale to the lithium-ion battery industry and other markets. The Epanko plant design will be modular and will allow for production increases aligned with the expected growth in demand.

Kibaran Managing Director Andrew Spinks said the sale of graphite to the battery market would provide a strong boost to the project's already robust economics.



The debt funding proposal for Epanko, which is currently the subject of an advanced due diligence process by lenders, does not take into account any sale of graphite to the battery industry. This means that sales to the battery market could provide a substantial additional revenue stream for Kibaran.

"The battery market is booming and based on the very positive test results obtained so far, we believe our graphite has the qualities to supply this market," Mr Spinks said.

"The testing underway will provide important information to help us pursue also this potentially lucrative aspect of our strategy."

## Further information, please contact:

Managing Director Andrew Spinks Media

Paul Armstrong Read Corporate P: +61 8 9388 1474

Kibaran Resources Limited | ABN: 15 117 330 757

338 Hay Street Subiaco WA 6008 | PO Box 2106 Subiaco WA 6904

T: +61 8 6380 1003 | E: info@kibaranresources.com | www.kibaranresources.com