EcoGraf Limited: German Research Institute Confirms Recycled Graphite Performance

14.06.2022 | DGAP

EcoGraf HFfree™ purified graphite from used lithium-ion batteries matches the electrochemical performance of newly manufactured commercial battery graphite

EcoGraf Ltd. (EcoGraf or the Company) (ASX: EGR; FSE: FMK; OTCQX: ECGFF) is pleased to provide the positive findings from a research program completed by the Helmholtz Institute in Germany, where EcoGraf HFfree^{TM} proprietary processing technology has been used to purify graphite particles recovered from end-of-life lithium-ion batteries.

EcoGraf contributed its environmentally superior HFfree processing expertise to the research program and purified the recovered graphite particles to battery grade specification. The German Government funded program then compared the electrochemical performance of the recycled EcoGraf HFfree™ graphite with a number of commercial battery graphite products.

The testing confirmed that the electrochemical performance of the EcoGraf HFfree™ recovered graphite matches that of the brand-new commercial anode graphite as shown in the summary below.

These results are further validation of the effectiveness of the EcoGraf HFfree™ purification process for the production of high performance battery graphite, as well as the reuse of recycled battery anode material for anode, battery and electric vehicle customers. The Company is currently developing the world's first HFfree battery anode material facility in Western Australia and this research demonstrates the benefits of additionally leveraging the EcoGraf HFfree™ process for graphite recycling.

EcoGraf believes this recycling capability will fundamentally change the dynamics of the battery supply chain, leading to a significant reduction in CO_2 emissions and lowering overall battery production costs. It uniquely positions the Company to support EU Commission requirements for lithium-ion battery recycling and will assist the global battery industry to optimise its supply chain and transition to closed-loop manufacturing efficiencies.

The research program was undertaken in Germany, through a collaboration between the Helmholtz Institute Freiberg for Resource Technology and the Helmholtz Institute Ulm. The results were presented by Anna Vanderbruggen at the Advanced Automotive Battery Conference (AABC Europe) on Monday 13 June 2022.

The conference is a leading forum for battery technologists from major automotive OEMs and their key suppliers to explore development trends and breakthrough technologies shaping the future of vehicle electrification.

Anna is an acknowledged expert in anode recycling at the Helmholtz Institute Freiberg for Resource Technology, with her research focussing on the joint recovery of lithium metal oxides and graphite from lithium-ion batteries.

She is working with EcoGraf to optimise its HFfree purification technology for recycling a range of lithium-ion battery anode materials.

The presentation given by Anna for the AABC Europe is available at the ReseachGate website via the link:

www.researchgate.net/publication/361265390_Joint_recovery_of_lithium_metal_oxides_and_graphite_particles_from_

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

For further information, please contact:

INVESTORS
Andrew Spinks
Managing Director
T: +61 8 6424 9002

MEDIA
Michael Vaughan
Fivemark Partners
T: +61 422 602 720

About EcoGraf

EcoGraf is building a diversified battery anode material 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 two highly attractive, development ready graphite businesses.

The first new state-of-the-art EcoGraf processing facility in Western Australia will manufacture spherical graphite products for export to Asia, Europe and North America using a superior, environmentally responsible HFfree purification technology to provide customers with sustainably produced high performance battery anode material. Subsequently, the battery graphite production base will be expanded to include additional processing facilities in Europe and North America to support the global transition to clean, renewable energy in the coming decade and the rapid growth in battery materials.

In addition, the Company's breakthrough recovery of anode material from recycled batteries using its EcoGraf™ process will enable the recycling industry to reduce battery waste and use recycled anode material to improve battery lifecycle efficiency.

To complement these battery graphite operations, the Company is also advancing the TanzGraphite natural flake graphite business, with development of the Epanko Graphite Project, which will supply additional feedstock for the battery anode material facilities and provide customers with a long term supply of high quality graphite products for industrial applications such as refractories, recarburisers and lubricants.