

## Recycled Lithium-Ion Battery Anode Material Achieves 99.98%C

### BATTERY CELL PERFORMANCE TESTS UNDERWAY WITH BATTERY MANUFACTURER

Diversified battery anode materials company **EcoGraf Limited (EcoGraf or the Company)** (ASX: **EGR**; FSE: **FMK**; OTCQX: **ECGFF**) is pleased to announce the results of the EcoGraf™ HFfree purification of a lithium-ion anode cell production scrap sample from SungEel Hitech Co. Ltd (**SungEel**).

The result is a significant achievement, with the purification process upgrading the material to 99.98% carbon and reducing impurities to minimum levels, whilst retaining the original physical characteristics. These results are in line with major lithium-ion battery manufacturer specifications.

The carbon anode cell production sample that was purified is representative of production anode scrap materials from lithium-ion battery cell manufacture. Battery manufacturers currently generate several thousand tonnes of this material per annum, which is expected to increase significantly with the adoption of EV's.

SungEel will now submit the purified product to the South Korean lithium-ion battery manufacturer for battery cell tests and evaluation to assess the potential to recycle this material back into the supply chain.

This purified carbon anode material is a high value finished product, which is comprised of both natural and synthetic graphite, and by weight, represents over half the contained raw materials of a lithium-ion battery. The recovery and recycling provides significant benefits to battery manufacturers, including lowering of battery unit costs and a reduction in carbon emissions.

SungEel is one of the largest lithium-ion battery recycling groups in Asia. EcoGraf is working closely with SungEel to include a tailored EcoGraf™ recycling process in their proposed new South Korean and European recycling plants to support SungEel ecofriendly process and provide a total recycling solution for lithium-ion batteries.

### **SungEel HiTech** PHYSICAL / CHEMICAL PROPERTIES

Physical Values		Chemical properties	
d10	7.7 micron	Carbon Content (LOI)	99.98%
d50	15.9 micron	Al	<5 ppm
d90	29.1 micron	Ca	<15 ppm
		Cu	<15 ppm
		Fe	<10 ppm
Tap Density	0.99+/-0.01 g/mL	S	<10 ppm
		Si	<10 ppm

These results, together with previous positive customer feedback, supports the decision for the engineering design for a containerised modular pilot plant facility, which is expected to be completed shortly.

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

**For further information, please contact:**

## INVESTORS

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## ENGINEERING CLEAN ENERGY



## 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 HF free 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 carbon anode material from recycled batteries using its EcoGraf™ process will enable the recycling industry to reduce battery waste and use recycled carbon 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.



A video fly-through of this new facility is available online at the following link:

<https://www.ecograf.com.au/#home-video>

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