

# SungEel HiTech LiB Recycling Update

## COLLABORATION TO INCLUDE TAILORED ECOGRAF™ PROCESS IN FUTURE LITHIUM-ION BATTERY RECYCLING PLANTS

**EcoGraf Limited (EcoGraf or the Company)** (ASX: EGR) is pleased to announce an update on progress with SungEel HiTech Co. Ltd ('SungEel') to evaluate the EcoGraf™ proprietary purification process to recover and re-use high-purity battery carbon anode material from production scrap and 'black mass' from lithium-ion battery materials produced at their South Korean plant.

The positive results reported and ongoing program support the Company's decision to commence the engineering design for the modular pilot plant and analysis of the recovered carbon anode material, which will include electrochemical testwork.

Based on the positive progress, SungEel has agreed to collaborate with EcoGraf on battery recycling and to include a tailored EcoGraf™ recycling process to recover the carbon anode materials in their proposed new recycling plants in Europe and South Korea.



This collaboration, together with the engineering and piloting program that is now underway, provides a clear path for the Company to commercialise its EcoGraf™ recycling process with a major Asian lithium-ion battery recycling company with an extensive and expanding global network of pre-treatment plants to cater to growth in recycling demand.

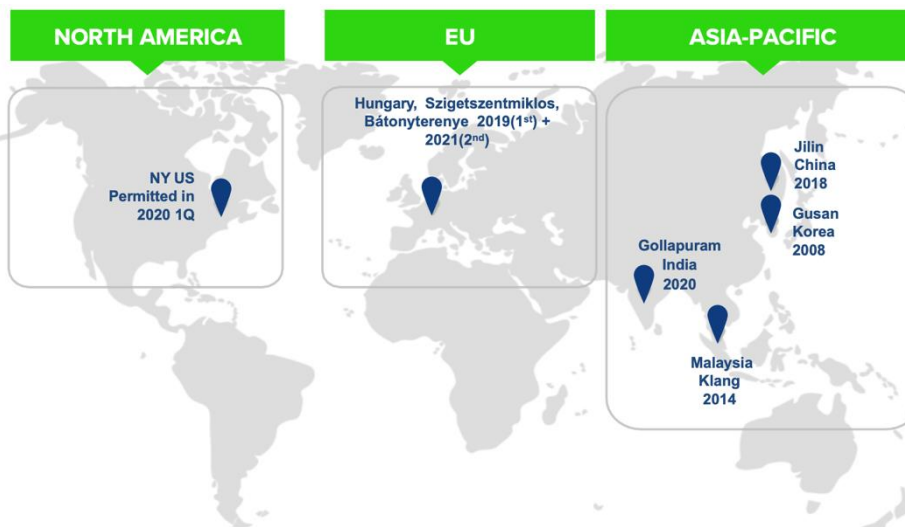
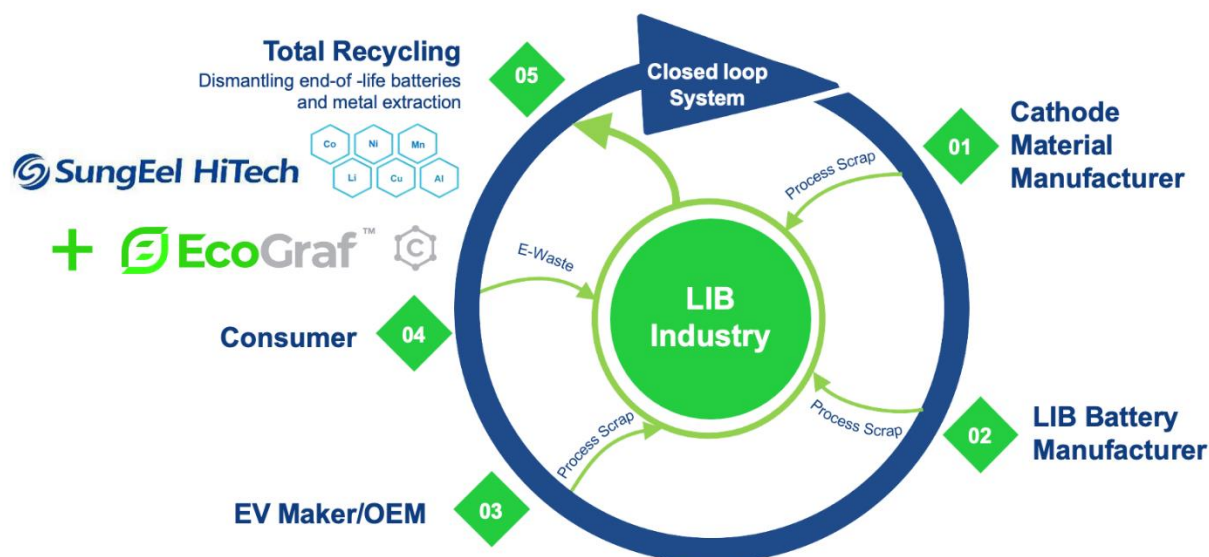


Figure 1 – SungEel Global Pre-treatment Plants (refer [www.sungeelht.com](http://www.sungeelht.com))

SungEel, through their South Korean hydrometallurgical plant, currently produces 6,000 tonnes of lithium-ion battery materials per year, with plans to increase to 18,000 tonnes per year. SungEel recover cathode metals that include Ni, Co, Cu, Mn, Al and Li. Currently the carbon anode material is not recovered.

The addition of the EcoGraf™ process, for recovery of carbon anode material, will enable SungEel to close the loop on battery recycling and contribute to a Circular Economy Solution.



**Figure 2** – SungEel Circular Economy Solution

Closing the carbon loop on battery recycling has the potential to not only lower the battery unit costs, but also to reduce carbon emissions for the whole EV sector. Battery recycling is gaining increasing importance with leading EV and lithium-ion battery manufacturers stimulated by recent government intervention.

For example, the European Commission policy landscape and recently proposed legislative changes will require significantly increased recycling within the battery industry. This is very positive for both SungEel and EcoGraf recycling developments.

The proposed plant will accommodate the existing EcoGraf™ purification flowsheet and be designed to deliver sufficient material to enable commercial qualification of the recovered carbon anode material for both the lithium-ion battery and industrial markets.

The engineering design works will provide a pilot plant capital cost estimate which the Company plans to fund with support from its R&D programs and collaboration with potential customers.

Other aspects of the partnership with SungEel include:

- SungEel will provide black mass for the pilot plant for the product qualification phase and will review its co-investment in the piloting process once the initial engineering design is completed and costing estimates made available.
- SungEel and EcoGraf will undertake co-marketing and co-promotion by continuing to introduce battery partners to collaborate and support the evaluation of the recovered anode material, including the EcoGraf's blended anode material back into the battery supply chain.

EcoGraf is pleased to support SungEel with recovery carbon anode materials and contribute to closing the loop on battery recycling. The Company looks forward to providing further updates.

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



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**ENGINEERING CLEAN ENERGY**



**About EcoGraf**

Founded on a commitment to innovation and sustainability, EcoGraf is building a vertically integrated business to produce high purity graphite for the lithium-ion battery market.

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

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

To complement the battery graphite operations, EcoGraf is also developing the TanzGraphite natural flake graphite business, commencing with the Epanko Graphite Project, which will supply additional feedstock for the spherical graphite processing facilities and provide customers with a long term supply of high quality graphite products for industrial applications such as refractories, recarburisers and lubricants.

EcoGraf, a unique vertically integrated graphite business, positioned for the future of clean energy.



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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