

ASX Release / 15 April 2025

## New SPG Specification Milestone & Patent to Proceed to Grant

### IP Australia to grant second EcoGraf HFfree® purification patent

**EcoGraf Limited** (ASX: **EGR**; FSE: **FMK**) is pleased to announce the latest results for its Product Qualification Plant (PQF) which has met highest customer chemical specification for Spherical Graphite (SPG) while also retaining the important physical specification, which is a breakthrough for the development of a new and environmentally superior battery anode materials.

#### **Key Highlights**

- PQF delivers results meeting the highest customer specifications for purified SPG
- EcoGraf's HFfree® second purification patent application will now proceed to grant
- New demand driven by increasing EU and US Government legislation to incentivize the development of new supply channels.

These milestones follow the successful commissioning of a product qualification piloting facility and multiple operational campaigns through this plant. This work has demonstrated that the HF*free* purification processing technology achieves extremely high purification levels of 99.99% carbon¹ and low levels of impurities under operational conditions meeting the highest customer specifications for purified SPG.

The Company is pleased to report the process flowsheet meets the following chemical impurity levels (refer table below).

Element	Level
Iron (Fe)	< 20 ppm
Silicon (Si)	< 20 ppm
Calcium (Ca)	< 20 ppm
Aluminium (AI)	< 12 ppm
Copper (Cu)	< 5 ppm
Sulphur (S)	< 15 ppm



The Company is also pleased to report that IP Australia has now accepted EcoGraf's second HF*free*® purification patent application and this patent application will now proceed to grant. The second patent application was lodged to provide broader protection of the Company's HF*free*® purification technology flowsheet.

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement dated 9 April 2024



The second Australian patent covers the additional use of the Company's EcoGraf HF*free*<sup>®</sup> purification technology across a range of applications relating to the manufacture of battery anode material and high purity graphite products, together with the recycling of lithium-ion battery anodes.

The Company is continuing discussions with a range of auto OEMs, battery manufacturers and potential supply chain customers and seeking to qualify the product samples with over six major battery groups in Europe, Asia and North America. The Company also expects to advance offtake and collaboration for its HF*free*® purification technology with some of these leading groups in the industry.

The Company's downstream HF*free*® development strategy is to produce unpurified spherical graphite in Tanzania using low cost hydro green energy and is seeking to build out the purification facilities in the major battery manufacturing hubs across Europe, North America and Asia using its EcoGraf HF*free*® US patented technology.

The Company is evaluating a number of potential development locations as it expects customer adoption of new non-Chinese demand to significantly grow from the beginning of 2027 in Europe and North America driven by increasing EU and US Government legislation.

The graphite for these facilities will be sourced from the Company's Epanko Project in Tanzania where the Company has mandated KfW IPEX-Bank to arrange a senior debt facility (UFK Tranche) of up to US\$105 million for the construction of Epanko. The Company has recently finalised a substantial environmental and social planning program to support the financing and development of Epanko<sup>2</sup>.

EcoGraf's vertically integrated battery anode materials business which commences with the high-quality natural flake graphite is expected to provide significant customer cost and environmental benefits.

Figure 4: EcoGraf HFfree® BAM competitive and cost benefit advantages<sup>3</sup>

# UPSTREAM Epanko Graphite Project

- ✓ High Ore Grade
- High Processing Recoveries
- High Concentrate Grade
- Low Mining Strip Ratio
- ✓ Low Energy Cost



- ✓ High Yields
- Low Energy Cost
- Reduced transport cost (removal of 40% fines)



- Low Cost Chemicals
- Minimal waste products
- Logistic efficiency
- Processing cost advantage



- ✓ Low Cost Chemicals
- Minimal waste products
- High Processing Recoveries
- Increased value from reuse of production anode materials

The PQF is jointly funded through the Commonwealth Government's A\$48.9 million Critical Minerals Development Program, which is supporting Australian battery minerals processing capability. The positive support from the Australian Government is well received with the Company in receipt of \$2.9m grant funding disbursement for the PQF program.

Refer ASX announcements dated 26 March 2024 and 17 July 2024 for further information regarding the PQF.

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

www.ecograf.com.au 2

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement dated 17 March 2025

<sup>&</sup>lt;sup>3</sup> Company reports and internal studies (www.ecograf.co.au)



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#### Forward looking statements

Various statements in this announcement constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. The Company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forward-looking statements will be achieved.

#### About EcoGraf

EcoGraf is building a vertically integrated battery anode materials 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 a highly attractive graphite business which includes:

- · Epanko Graphite Mine in Tanzania;
- · Mechanical Shaping Facility in Tanzania;
- · EcoGraf HFfree® Purification Facilities located in close proximity to the electric vehicle, battery and anode manufacturers; and
- EcoGraf HFfree® Purification technology to support battery anode recycling.

In Tanzania, the Company is developing the TanzGraphite natural flake graphite business, commencing with the Epanko Graphite Project, to provide a long-term, scalable supply of feedstock for EcoGraf® battery anode material processing facilities, together with high quality large flake graphite products for specialised industrial applications.

In addition, the Company is finalising its Ifakara Mechanical Shaping Facility in Tanzania, which will manufacture natural flake graphite into spherical graphite (SPG). This mechanical micronising and spheronising is the first step in the conversion of high-quality flake graphite concentrate into battery grade anode material used in the production of lithium-ion batteries.

Using its environmentally superior EcoGraf HFfree® purification technology, the Company will upgrade the SPG to produce 99.95%C high performance battery anode material to supply electric vehicle, battery and anode manufacturers in Asia, Europe and North America.

Battery recycling is critical to improving supply chain sustainability and the Company's successful application of the EcoGraf HF free® purification process to recycle battery anode material provides it with a unique ability to support customers to reduce CO2 emissions and

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