



Critical Minerals and New Energy Forum
Oct 30, 2023

ASX: EGR FSE: FMK OTCQX: ECGFF

Closing the Loop with EcoGraf's HFfree Battery Anode Materials

High Value Vertically Integrated Battery Anode Material

EXTRACT



Duma TanzGraphite Natural Graphite

High quality, long life
Epanko and Merelani-
Arusha Graphite Projects

UPGRADE



EcoGraf HF^{free}™ Battery Anode Material

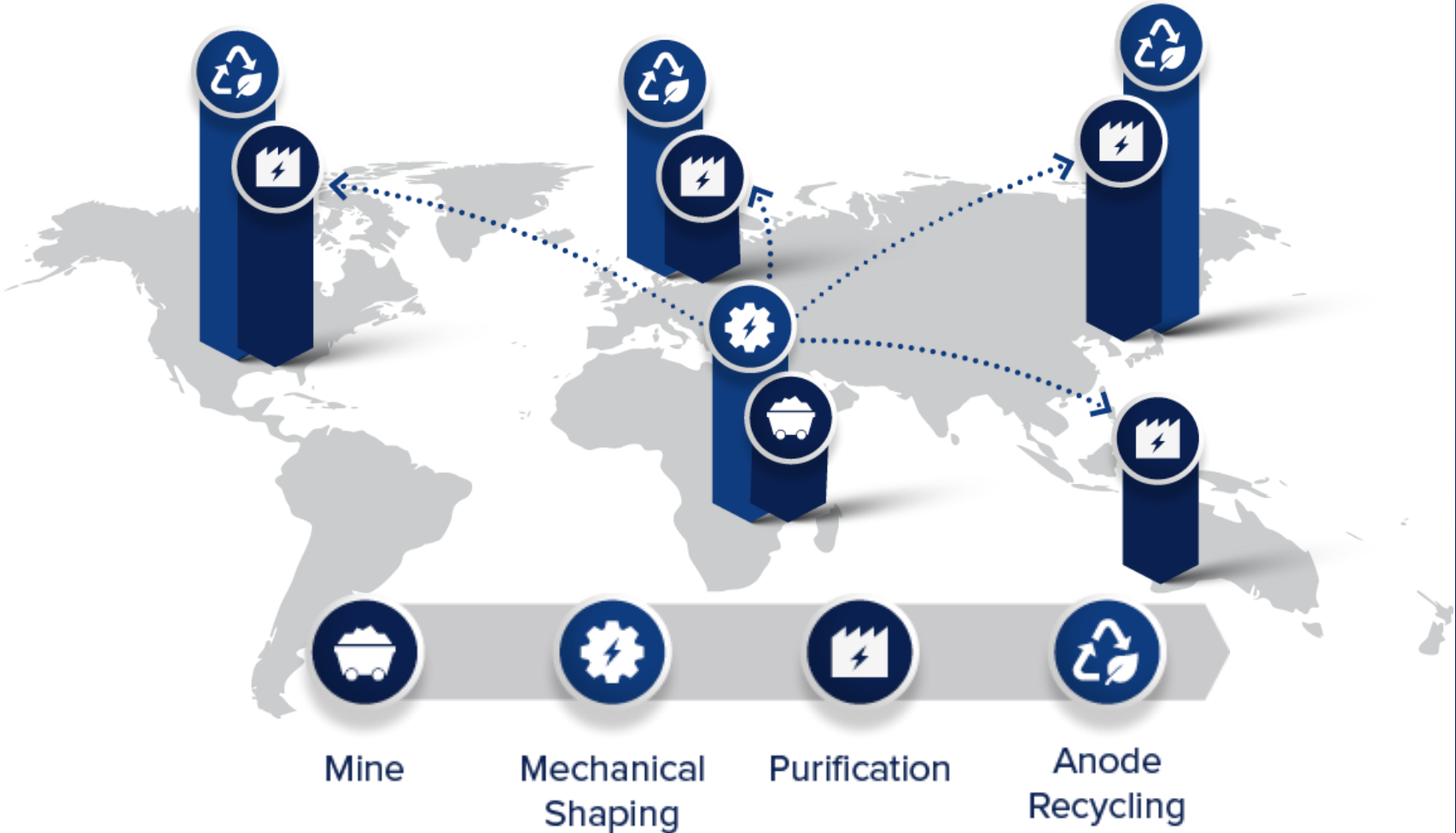
High performance,
low CO₂ battery
anode material

RECYCLE



Anode Recycling

EcoGraf™ purification
technology with sector
leading ESG credentials



Critical battery minerals is creating increased collaboration between companies and continents to establish new supply chains

2023 Global Legislation



IRA has pushed development of critical battery minerals under MSP and trade deals

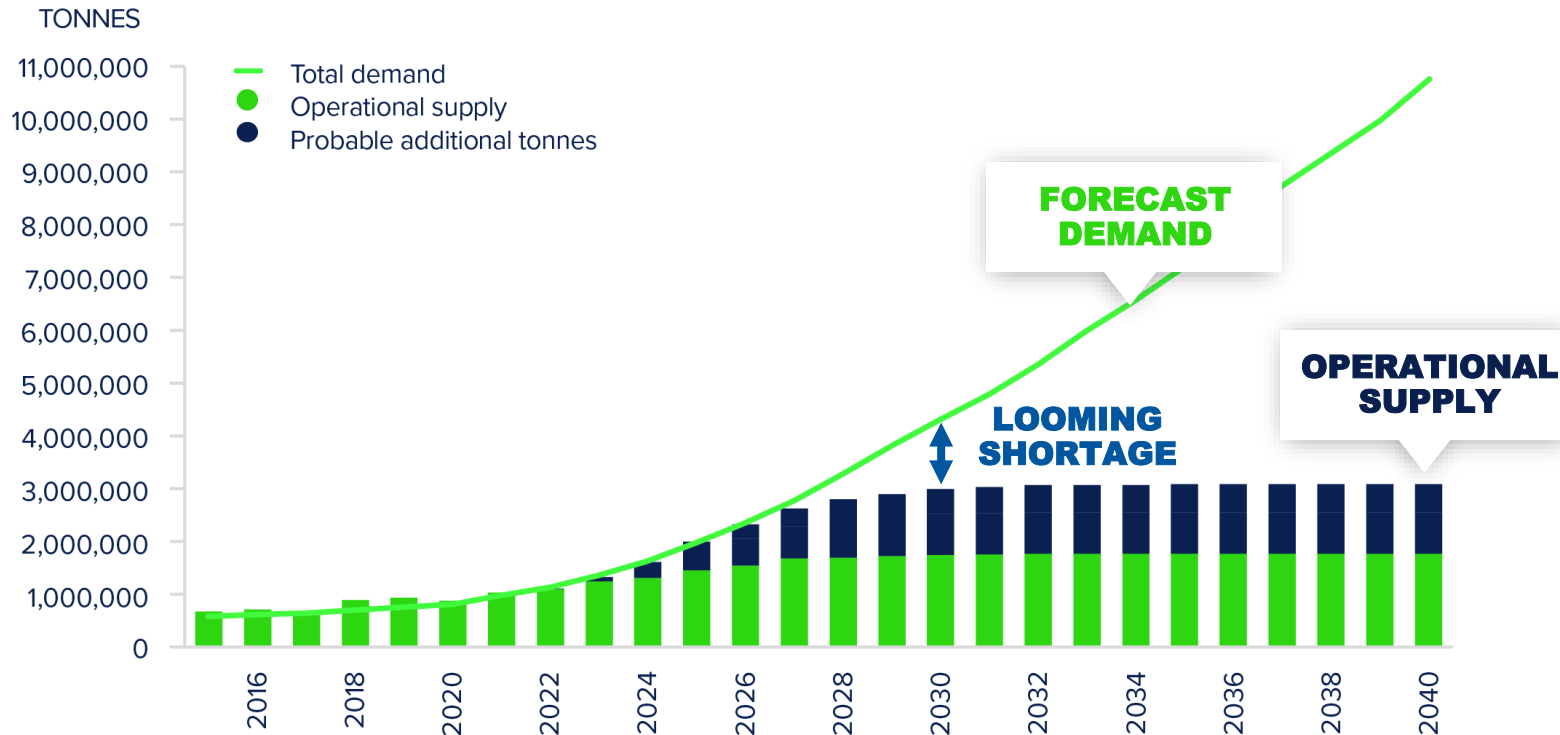


EU Green Deal to support new supply chains in EU

Structural shortage looming: demand and supply

EV adoption rates are forecast to increase demand for lithium-ion batteries with BMI forecasting the market to grow at a CAGR of 23.9% over the next 10 years.

- ✓ New markets for EV driving forecast demand above existing and new sources of supply
- ✓ Benchmark Mineral Intelligence forecast that planned capacity and projects in development will not be able to meet forecast demand as soon as 2025



Gigafactories and Raw Materials. Source: Strategy&

1. Strategy& projections based on EV sales figures

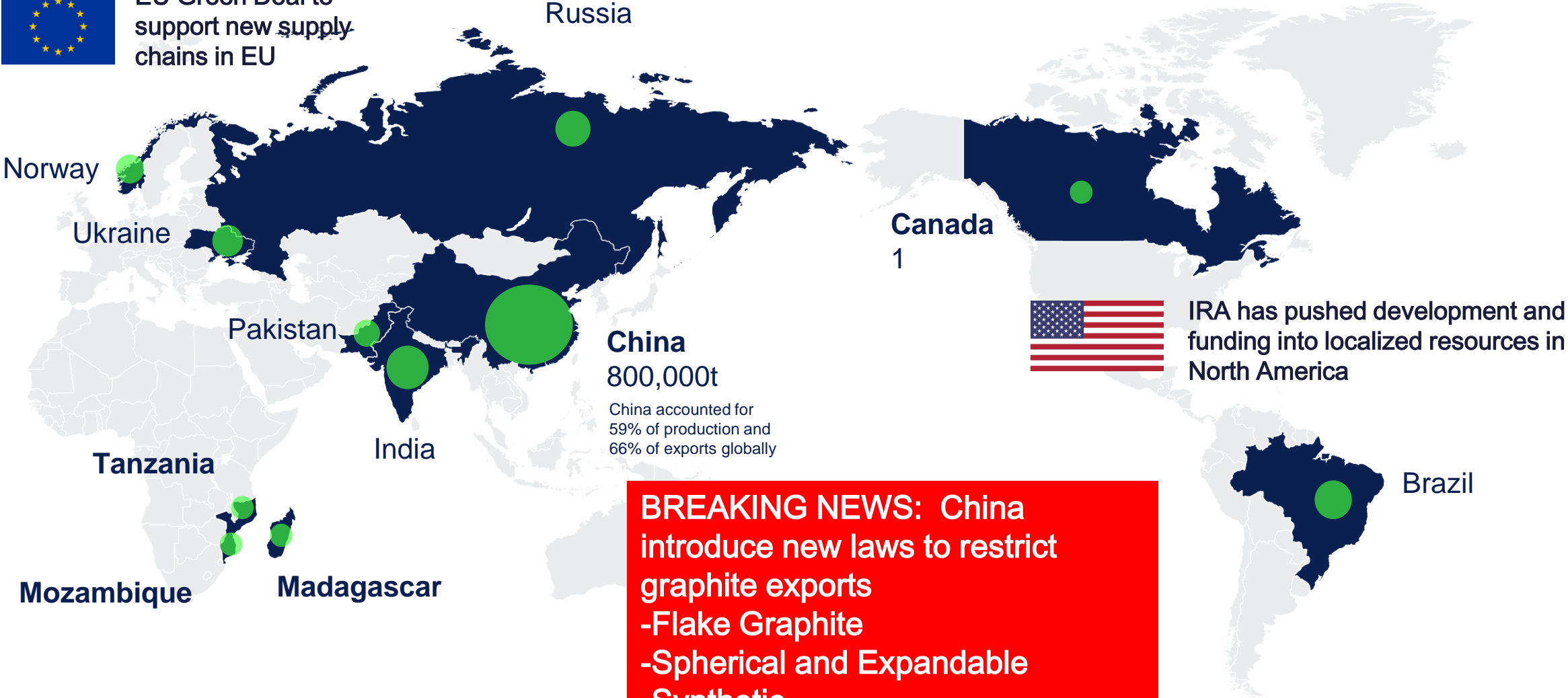
Graphite: one of the fastest growing critical minerals

- ✓ Equates an incremental market growth of US\$5.8 billion
- ✓ East Africa will be a key source of new supply for the lithium-ion battery industry

Global natural graphite production



EU Green Deal to support new supply chains in EU



BREAKING NEWS: China introduce new laws to restrict graphite exports
-Flake Graphite
-Spherical and Expandable
-Synthetic

Source: USGS, TradeMap 2020

Proprietary processing technology

IP protection - International Examining Authority deems all 25 patent claims novel and inventive

- ✓ Patent granted by US Patent and Trademark Office.
 - ✓ Product made (outside of the US) by a patented process (patented in the US), would be an infringement when imported into the US
- ✓ Patent submissions have been lodged by EcoGraf in all key battery markets to protect the IP : EU, Korea, Malaysia, Vietnam, East Africa, South Africa and Australia.
- ✓ Company filed Evidence in Answer lodged with IP Australia to oppositions raised by two parties to the Company's Patent Application 2021261902 "Method of producing purified graphite"
- ✓ Patent covers 'anode recycling'

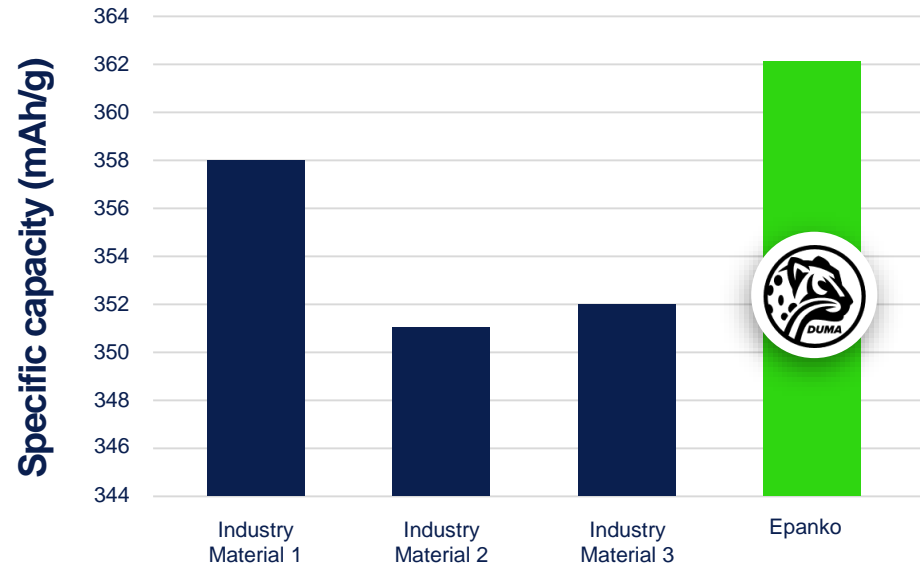
Proprietary purification process provides cost competitiveness to existing market materials

- ✓ High Purity Battery Anode Material - >99.95% achieved
- ✓ >60% yield for maximum efficiency

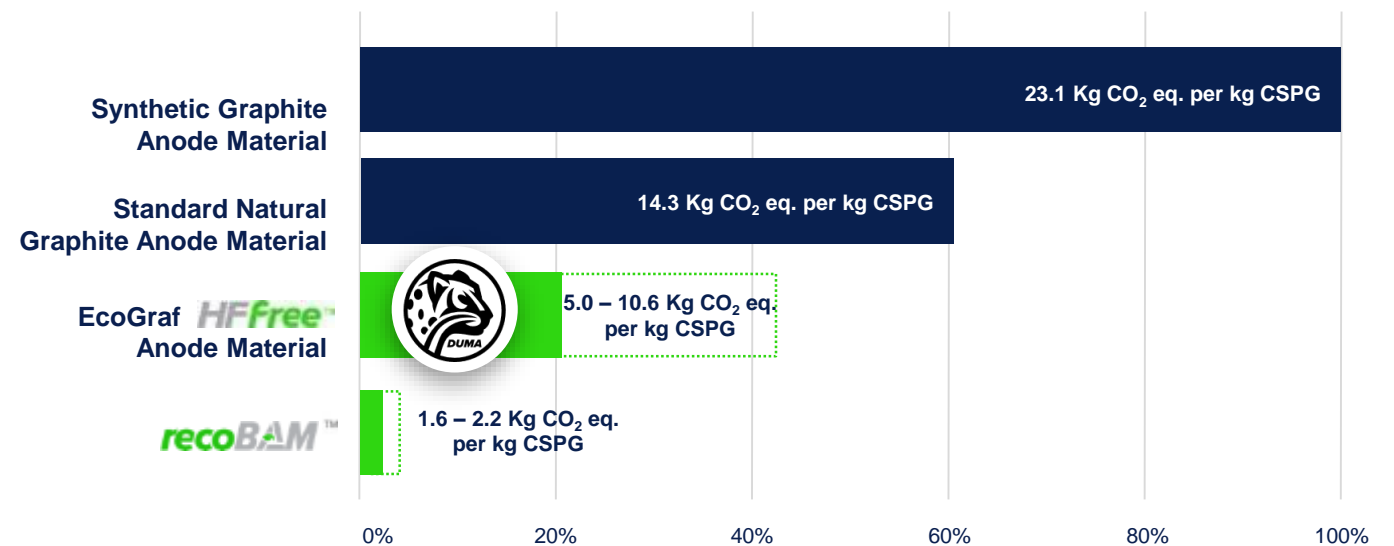




Superior Energy Storage



Lowest CO₂ footprint



EcoGraf HFfree™ anode material delivers improved battery performance and significantly lower CO₂ footprint



Natural Graphite Projects

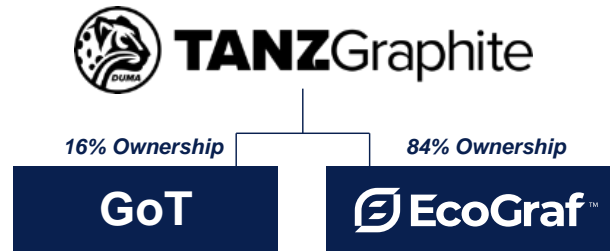
KEY ACTIVITIES

- ✓ Signed framework agreement with Tanzanian Government for Epanko
- ✓ Confirming expansion options and evaluating benefits of in-country micronizing and spheronizing to optimize global supply chain
- ✓ Financing and development

Exceptional geology provides superior performance

EPANKO

- Development ready - project defined and de-risked, commencing at 73,000tpa with potential to significantly expand production to meet market demand¹
- Evaluation of multi-stage expansion of Epanko in progress, targeting 300,000tpa of production
- 2017 bank appointed Independent Engineer’s Review completed by SRK Consulting.
- Sector leading ESG credentials with Equator Principles development model



MERELANI-ARUSHA

- Supportive Government with plans for additional development of the Arusha mining sector

Two advanced, high quality, long life Tanzanian natural graphite projects provides supply diversity and scale-up optionality



Refer to ASX announcement “EcoGraf Pre Development Program Delivers Outstanding Results”, 28 April 2023



HF free™ Battery Anode Material

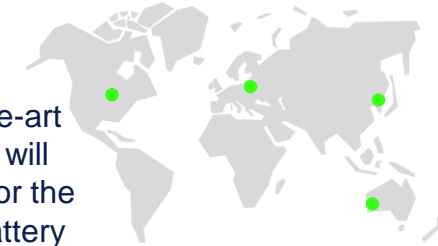
Key activities

- ✓ Development of product qualification facility in Australia
- ✓ Evaluate BAM facility in Vietnam with VinES and VinFast
- ✓ Formalise strategic partnerships for commercial scale production
- ✓ Evaluate potential development site locations in North America and Europe
- ✓ Advance coatings capability

Global expansion driven by EV demand and legislation to encourage new and more sustainable supply chains

Increased requirement for new supply of battery anode materials following launch of US Mineral Security Partnership (June 2022) and Inflation Reduction Act (August 2022)

- Australian Government grant of A\$2.9m towards a battery anode material product qualification facility
- Product Qualification facility provides product samples and engineering design for single-phase commercial scale development
- Australian Government support for commercial scale development through Major Project status, Project of State Significance status and conditional approval of US\$40m debt financing package
- Strategy to develop multiple production facilities in key global battery markets
- Co-operation Agreement signed with POSCO May 2023
- Signed agreement with VinES to evaluate BAM facility in Vietnam
- Partnership opportunities under discussion with European, North American and Asian battery market participants



The new state-of-the-art processing facilities will manufacture BAM for the global lithium-ion battery markets



EcoGraf's vision is to be a leader in the supply of high performance, sustainably produced battery anode material

With POSCO

RECYCLE



EcoGraf Anode Material Recycling

KEY ACTIVITIES

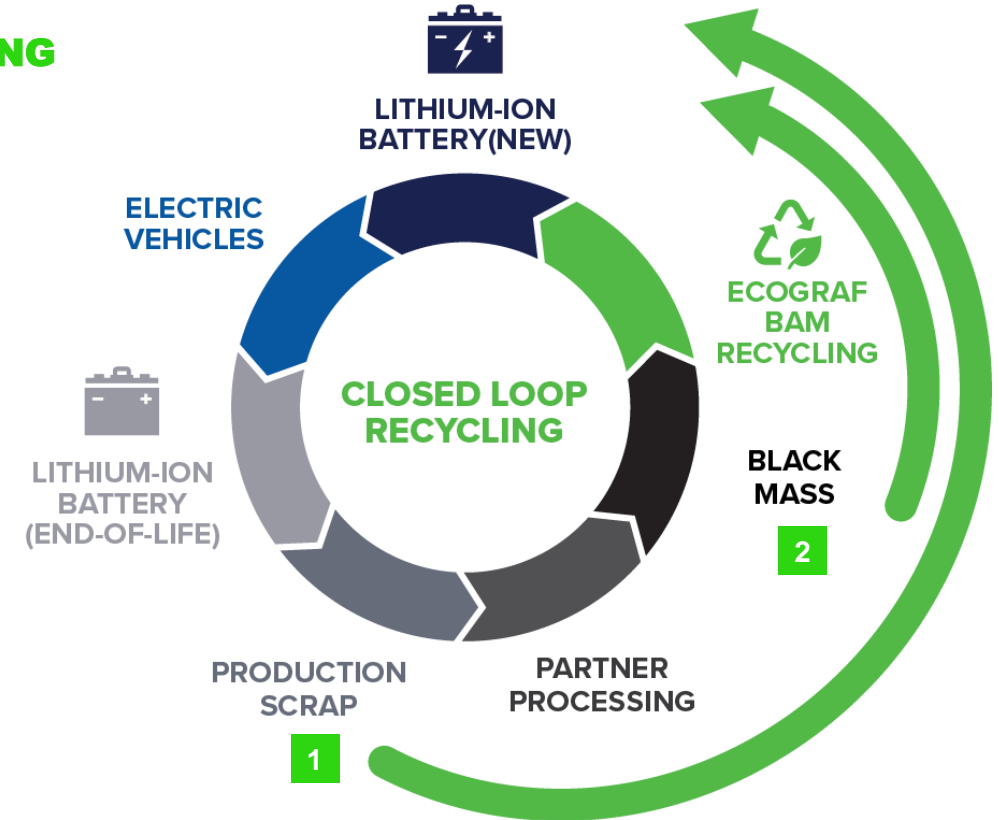
- ✓ Developing 'Proof of Concept' based on positive results for Production Anode Scrap
- ✓ Ongoing testing with EV and battery manufacturers
- ✓ Establish partnerships for pilot plant for product development and qualification processes for recycling and downcycling into industrial markets

Full cycle active anode recovery



ECOGRAF HFFREE™ PURIFICATION SUPPORTS CLOSED LOOP RECYCLING

- **Objective:** Recover battery anode materials to provide customers lower battery costs and CO₂ emissions:
 - 1 **Production Anode Scrap:** Priority
 - 2 **Leached Black Mass:** Develop under long term partnership
- Increasing efforts given recent EU + US legislation for battery recycling



CURRENT PARTNERS



Supported by long standing partnerships



Australian and German Government Support



Memberships and Affiliations



The future is electric

ASX: EGR FSE: FMK OTCQX: ECGFF

 EcoGraf™



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