



Corporate Presentation

HFfree Vertically Integrated BAM Delivers Industry-Leading Low Cost

Disclaimer



Securities Disclaimer

This document is for informational purposes only and does not constitute an offer to sell, or solicit to purchase, any securities. Such offer can be made only through proper subscription documentation and only to investors meeting strict suitability requirements. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

Forward looking statements

Various statements in this document 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.

Production targets and financial information

Information relating to the Bankable Feasibility Study and Pre-Development Program conducted on the Epanko Graphite Project, including production targets and forecast financial information derived from the production targets, is extracted from the ASX announcements dated 21 June 2017, 28 April 2023 and 25 July 2024, available at www.ecograf.com.au and www.asx.com.au. The Company confirms that all material assumptions underpinning the production targets and forecast financial information derived from the production targets set out in the announcements released on 21 June 2017, 28 April 2023 and 25 July 2024 continue to apply and have not materially changed.

The production targets referred to in this presentation are based on the updated Epanko Reserve (25 July 2024 announcement) which is comprised of 82% Measured Resources and 18% Indicated Resources for an initial 18-year life of mine. The Measured Resources and Indicated Resources underpinning the production target have been prepared by a competent person in accordance with the requirements in Appendix 5A (JORC Code). The Company has not used Inferred Mineral Resources as part of the production target. The study includes some Inferred Resources which are mined incidentally with the Measured and Indicated Resources and treated as waste for scheduling purposes.

Competent persons

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr. David Williams and Mr. David Drabble. Mr. David Williams is a full-time employee of ERM and is a Member of the Australian Institute of Geoscientists (#4176)(RPGeo). Mr. David Drabble is a full-time employee of EcoGraf Ltd and is a Member of the Australasian Institute of Mining and Metallurgy (#307348). Mr David Williams and Mr David Drabble have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The information in this report that relates to the Ore Reserve has been compiled by Mr Steve O'Grady. Mr O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy (#201545), is a fulltime employee of Intermine Engineering and produced the Mining Reserve estimate based on data and geological information supplied by Mr Williams. Mr O'Grady has sufficient experience that is relevant to the estimation, assessment, evaluation and economic extraction of Ore Reserve that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates, including production targets and forecast financial information derived from the production targets in the relevant market announcement continue to apply and have not materially changed.

This Presentation has been approved for release by Andrew Spinks, Managing Director.

Our business



Building a vertically integrated battery anode materials business to produce high purity graphite products for the lithium-ion battery and advanced manufacturing markets

ECOGRAF VERTICALLY INTEGRATED BATTERY ANODE MATERIALS BUSINESS









UPSTREAM >

Mining and mineral processing to produce natural flake graphite



Micronising and spheronising of flake graphite to produce spherical graphite (SpG)

DOWNSTREAM >

EcoGraf HFfree® purification of SpG to produce purified SpG

< RECYCLING

EcoGraf HFfree®
purification to support
anode recycling for the
circular economy





Corporate snapshot¹



Board & Management



Robert Pett
Non-Executive Chair



Andrew SpinksManaging Director



John ConidiNon-Executive Director



Keith JonesNon-Executive Director



Christer MhingoDirector Tanzania



Howard Rae Chief Financial Officer



Clayton Hewetson GM – Project Development



Natalie Teo Company Secretary



Maria Du Plooy Financial Controller

Stock Listings

ASX: EGR Australian Securities Exchange

FSE: FMK Frankfurt Stock Exchange (Börse Frankfurt)



Major shareholders¹



Geopolitical and market drivers for new supply



GLOBAL LEGISLATION DRIVING NEW ANODE MATERIAL SUPPLY



Chinese Restrictions

- China dominates the graphite market with near 100% using their HF purification process
- Ministry of Commerce implemented tighter export controls - impact future exports to Europe and the U.S.



U.S. Tariffs

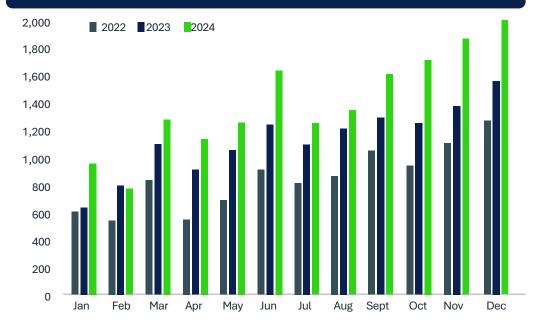
- US Department of Commerce announced preliminary antidumping duty expected to result in an effective total tariff of 160%
- Executive Order to increase domestic production of critical raw materials to bolster sovereign capability



EU Critical Mineral Act

- Critical Raw Materials Act (CRM Act) will ensure EU access to a sustainable supply of CRM, enabling Europe to meet its climate objectives
- EU unveils CRM stockpiling strategy

GLOBAL MONTHLY EV SALES ('000 UNITS)¹



KEY MARKET DRIVERS FOR NEW SUPPLY

- Increased EV adoption
- Supply chain regionalisation for diversity and sovereign capability
- Growing emphasis on ESG and sustainability

Source: GlobalData.

Refer https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en https://www.reuters.com/world/china/china-require-export-permits-some-graphite-products-dec-1-2023-10-20/

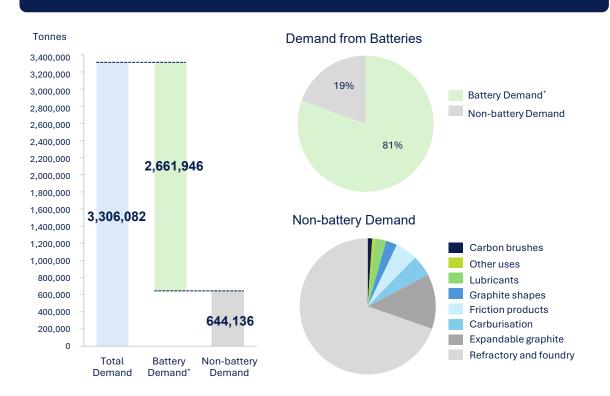
Natural graphite demand

EcoGraf

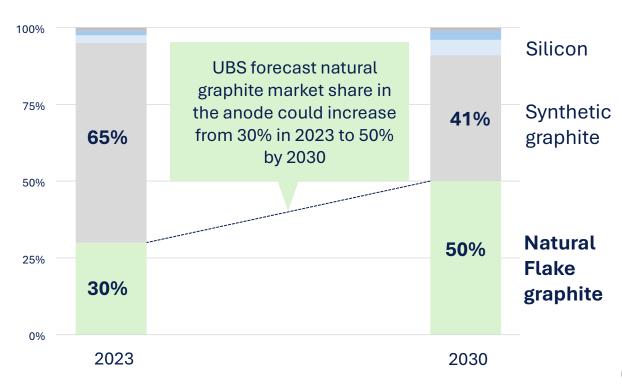
- Global graphite demand is forecast to overtake projected supply from 2026
- ✓ 2030 forecast over 3.0Mt of natural graphite will be required ~80% for battery graphite market

- Natural flake graphite is the key raw material used in Lithium-ion anode manufacturing
- ✓ Increased % natural graphite to be used in EV LIB anodes

NATURAL FLAKE GRAPHITE DEMAND FORECAST BY 2030



NATURAL FLAKE GRAPHITE IN LITHIUM-ION BATTERIES



Source: BMI Source: UBS Report 2024

Supply risk for defence applications



Gold

Hafnium

Selenium

Thorium

Zirconium

Zinc

Graphite is considered 'Very High Risk' for defence and peace keeping applications

Barium

Borates

Cadmium

Selenium

Thorium

Zinc

Legend

Very high risk

Medium risk

High risk

Low risk

Yttrium

Gallium

Indium

Hafnium

Lead

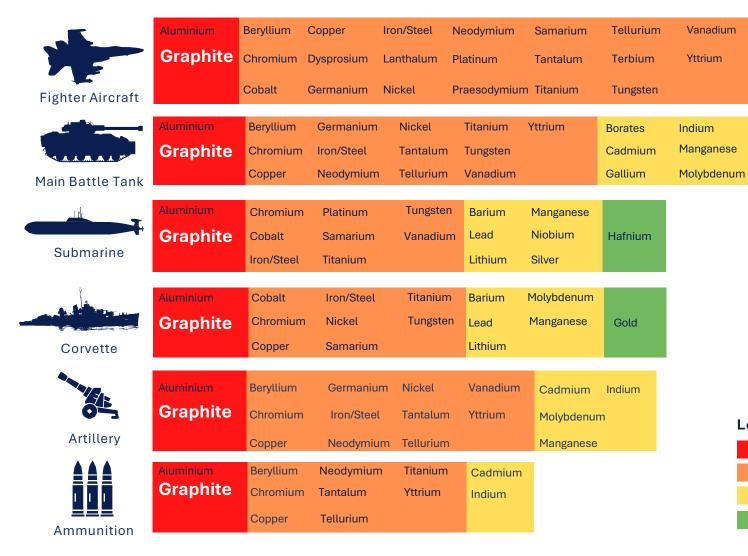
Lithium

Manganese

Molybdenum Tin

Niobium

Silver

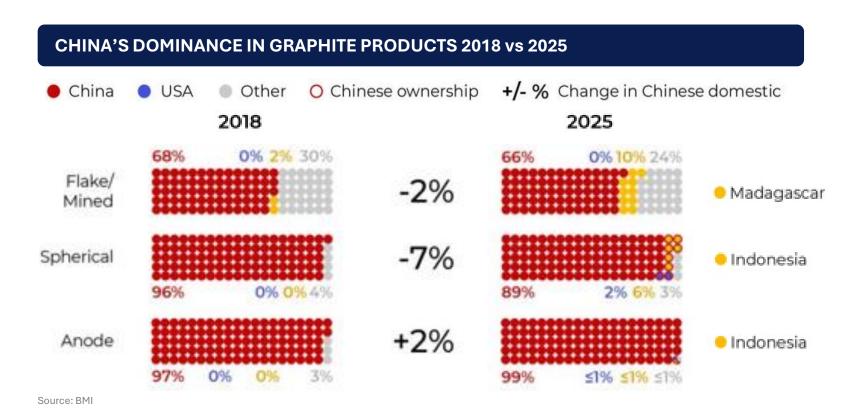




Australian Department of Defence evaluating EcoGraf product samples

China dominance creating supply diversification





Compelling demand and diversification supports EcoGraf's vertically integrated BAM development strategy

SUPPLY DIVERSIFICATION

- Western recognition has shifted: graphite is now on US and EU critical minerals lists, elevating it to a national security priority
- Clean energy transition demand rising and supported by ex-China markets, creating strategic urgency for new supply chains

Government support for the mining sector



TANZANIA'S MINING SECTOR: A BEACON OF GROWTH AND SUSTAINABILITY



"look at Africa for energy needs...we have everything when we talk about green energy."

Tanzanian President, Samia Suluhu Hassan, Speaking at the 53rd World Economic Forum President Samia Suluhu Hassan is promoting mining in Tanzania by strengthening legal frameworks, encouraging foreign investment, and supporting local participation

- Contributing 10.1% to the GDP, surpassing the 10% target set for 2025
- Accelerating major infrastructure projects bringing power stability and transport efficiency including Julius Nyerere Hydroelectric Power Project and Standard Gauge Railway
- Empowering regional communities through local content regulations and creating employment









UPSTREAM



Mine and Mineral Processing Facility to Produce Natural Flake Graphite

PRIORITIES

Debt financing

Project execution planning

KEY PARTNERS AND SUPPORT

KFW IPEX-Bank

thyssenkrupp

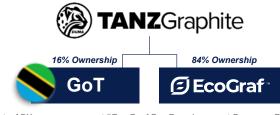
posco

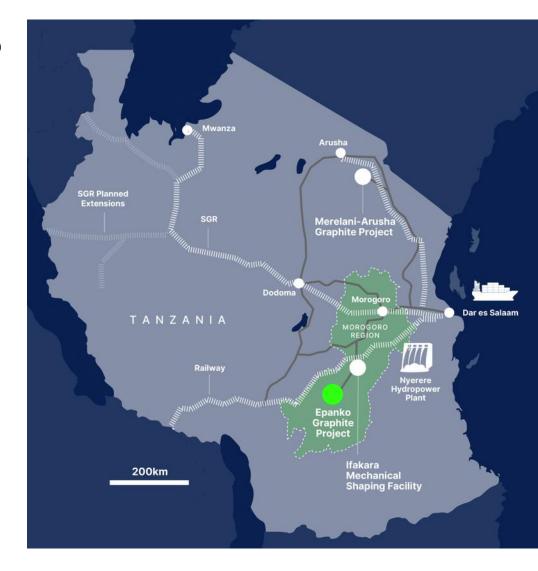
Epanko Graphite Project



KfW IPEX-Bank mandated for UFK loan up to US\$105m

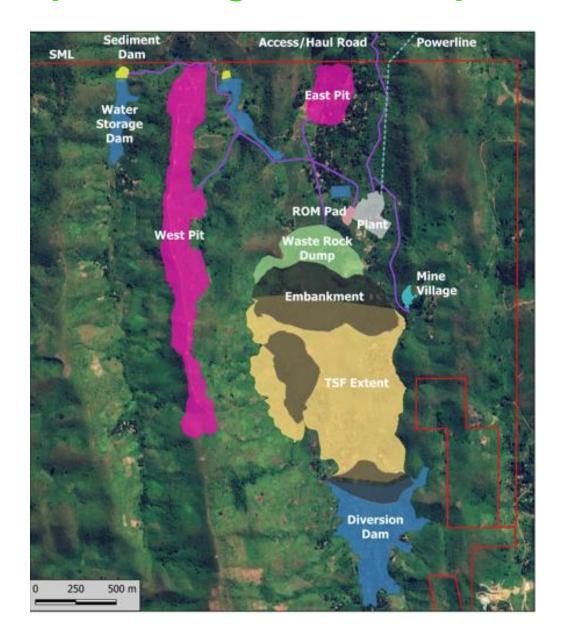
- Stage 1 73,000tpa of natural graphite with staged expansion plan to >300,000tpa
- Framework Agreement signed with Tanzanian Government
- Life of Mine Special Mining Licence granted
- Feasibility studies and process plant front-end engineering and design completed
- Compliance with Equator Principles and IFC Performance Standards





Epanko stage 1 status update





- German Government Inter-Ministerial Committee positive Preliminary Review Decision on UFK Cover for long-term UFK loan funding of up US\$105m
- Completion of independent Environmental & Social Due Diligence Report and Action Plan
- Independent Engineer's Review program nearing completion
- EcoGraf vertically integrated graphite value chain presented at *EU Priority Projects Showcase* as part of *EU Critical Raw Materials Facility* initiatives, followed by Epanko site visit
- Execution planning for project construction well advanced



Epanko graphite project



Epanko deposit is the largest development ready Mineral Resource in Africa providing a long-term scalable lowest-cost natural graphite feedstock for the Company's downstream





Epanko project advantages



Key advantages to drive lowest cost feedstock for lithium-ion battery market



Epanko processing plant layout

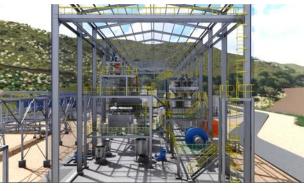














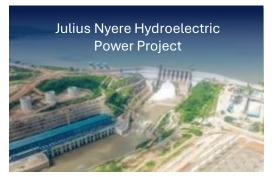


Infrastructure



POWER

- Epanko stage 1 2.8MW power requirement
- TANESCO Ifakara substation funded by EU and opened 2024
- Finalising power supply agreement with TANESCO to connect 33kV Epanko line at Mahenge substation





ROAD AND RAIL LOGISTICS

- Stage 1 73,000tpa transporting bagged graphite product by truck
- Option of locating a warehouse at Ifakara near the railway station
- Expansion study to support greater road/rail use





PORT

- Export through Port of Dar es Salaam
- Dar es Salaam is Tanzania's principal port with a rated capacity of 14.1Mt dry cargo.





History of community and social support





2014

Supply of roofing materials for a new classroom at the Nawenge Secondary School

Construction of additional buildings for the Epanko Primary School

Construction and handover of two new demonstration houses

2016



2018

Donations to orphanage

Purchasing medical supplies





Financial literacy training

Sponsored educational excursions for local students

2021

PreIWD 2024 continues and grows with president H.E Samia Suluhu Hassan as the guest of honour

Road construction - 3.5km

Sponsored educational excursions for local students

Training Epanko residents in various work programs

2024



AAL WOMEN'S DAY EVENT 2024 MD

2022

Donations to Local School Communities & Orphanage

Wheelchairs for Local Special Needs Children

2015

Bridge2Aid founding donor

Sponsorship of Local Youth

Keep a Girl in School initiative

Construction of a classroom at Nawenge Secondary School

2017

Vocational Education Training (VETA)

Presidential visit and training sponsorship

Sponsor \$6k of local university

Donations to Mahenge hospital

2020

Uhuru Torch annual sponsorship (2014 – 2025)



2019



The inaugural PreIWD event was established

2023

School tree planting program

Women financial and business empowerment programs

Local weather station installed

Hosted Epanko Sports Gala

EcoGraf hands over renovated medical dispensary in the Ulanga district

2025

PreIWD 2025

Provided health insurance to elder Epanko residents





16

Epanko development contribution to Tanzania





Positive Impact

Transformational intergenerational financial and social upliftment for the Ulanga district.

Economic growth

Direct contribution to the economy through procurement of goods and services, employment, royalties, taxes and dividends.

Multiplier effect with an estimated US\$9+ billion additional indirect benefits over 40+ years.



Employment and **Training**

300 to be directly employed.

4,500 indirect jobs + new industry technologies.





MIDSTREAM



Mechanical shaping of natural flake graphite to produce Spherical Graphite (SpG)

PRIORITIES

Secure conditional financing arrangements

Finalise offtake agreements

Final engineering programs, environmental and project execution planning

Mechanical shaping facility



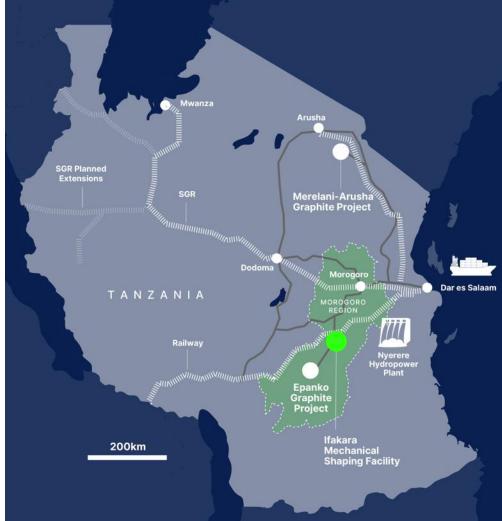
Positioning to be first development that supports Tanzanian Governments 'Vision 2030' value-addition strategy

- Ifakara identified as the preferred location
 - 75km from mine
 - EU substation



- Energised by 2,115MW Nyerere Hydropower plant
- Optimises supply chain logistics efficiencies for EV and battery customers
- Modular plant design provides for a readily scalable development to support forecast demand





Mechanical shaping facility design

EcoGraf

- Extensive testwork programs delivering high yields of ~60%
- Independent engineering study completed for 20,000tpa

Stage 1 Facility Cost	Operating Cost	
US\$58.6m	US\$419/t	

- Positive discussion with European Union (EU)
 Tanzanian delegation supporting the
 Midstream and Downstream development
- Pursuing programs to support further mineral value addition from midstream materials to develop new industries and new develop localised products





DOWNSTREAM



EcoGraf HFfree® Purification of SpG to produce purified SpG

PRIORITIES

Formalise strategic partnerships for commercial scale production

Evaluate development options in Europe, U.S. and Asia

KEY PARTNERS AND SUPPORT



HFfree purification facilities



Industry-leading lowest cost to drive new developments and expansion supported by legislation to encourage sustainable supply chains

- Product qualification facility (PQF) programs have delivered breakthrough cost efficiency
- Competitive advantage positions the Company to supply growing ex-China anode demand from 2026-2027 given recent EU legislation and U.S. tariffs
- EcoGraf HFfree® process US patent granted and 1st + 2nd Australian patent granted
- Benchmarking and engineering study confirms operating cost advantages of the EcoGraf HFfree® process
- Extensive product testing with customers
- Pursue Government grant funding in EU and U.S. markets, with positive feedback from EU and U.S. DoD white paper submission for US\$76.3m award funding





EcoGraf HFfree® process advantages



HIGHLY EFFECTIVE CHEMICAL PROCESS TO REMOVE IMPURITIES FROM NATURAL GRAPHITE & CARBON MATERIALS

Low cost

Competitive economics compared to the other purification methods

Eco-friendly

Low carbon footprint with minimal waste streams

Scalable

Process capable of being located within battery manufacturing hubs



Proprietary technology

- Europe patent submission
- U.S. Patent granted No. 11,702342.
- Australia Patents 1 & 2 granted No. 2022387279 & 2021261902



Minimum impurities

4N achieved through on-going purification optimisation testwork resulting in reduction of total impurity levels to less than 100ppm

Versatility

Purification technology successfully applied to anode recycling and enhanced through purification cost reductions

EcoGraf HF*free*[®] delivers industry-leading low cost



- Porecast process operating cost for initial 25,000tpa facility reduced by 25% to **US\$478/t** driven by process design breakthroughs and process efficiencies,
- Financial metrics robust for an initial 25,000 tpa facility based on capital and operating costs for a U.S. location

Capital cost	Pre-tax NPV ₁₀	IRR	Annual EBITDA
US\$95m	US\$282m	39%	US\$42m

 European location being pursued with a strong focus on Germany with financial metrics expected to be similar to U.S. facility







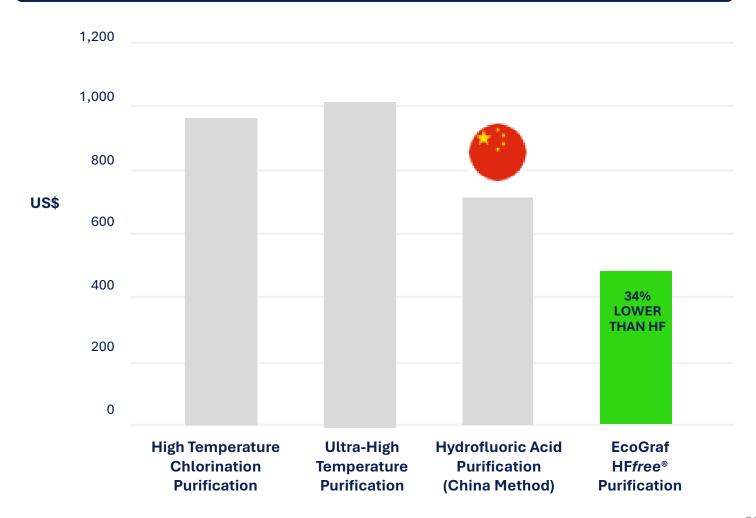
EcoGraf HF*free*[®] purification cost advantage



Significant cost advantage confirmed via updated benchmarking study

- Updated cost comparison based on initial global engineering & construction consultancy, comparing EcoGraf HFfree[®] purification vs the three other known technologies, based on a 25,000tpa reference base in the U.S.
- EcoGraf HFfree® provide a high purity, minimal waste, low carbon emission alternative to existing supply chains.
- Forecast process operating cost reduced by 25% to US\$478/t

PURIFICATION OPERATING COST COMPARISON - US LOCATION



HFfree battery anode material development history



Extensive testwork, bench scale and piloting programs completed underpins and derisks HFfree processing technology



Product testing and endorsement Commences

EcoGraf[™] process developed in Australia and Germany

Preliminary feasibility study completed, EcoGraf™ provisional patent lodged Engineering studies completed on Asian EcoGraf™ facility

Engineering study completed on Australian EcoGraf™ facility

EcoGraf[™] feedstock benchmarking program Major Project Status Approved by Australian Government

EcoGraf evaluates industrial sites in Sweden

International Patent Examiner confirms EcoGraf[™] process novel and inventive

POSCO and EcoGraf enter into Battery Anode Material Agreement



POSCO Cooperation Agreement

US patent granted

TZ mechanical shaping study

Australian Product Qualification Facility

Strategic Collaboration with VinES for BAM Facility PQF Delivers HFfree Cost Competitiveness

Australian Patent Granted

Successful PQF Operational Campaign

SPG Specification Milestone & Patent accepted by IP Australia

Engineering Study Completed for Midstream Development

Positive feedback on U.S. DoD White paper submission

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

200 tonne Epanko bulk sample battery material test work

Battery graphite

scoping study

completed

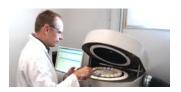
Battery graphite feasibility and engineering studies commenced with GR Engineering

Battery graphite produced in commercial facility in Asia

German pilot plant optimisation program commenced

German optimisation and feedstock testing completed

EcoGraf[™] international patent lodged



Technical cooperation commenced with Future Battery Industries CRC

EcoGraf[™] provisional patent lodged for recycling applications

Agreement signed with Thyssenkrupp for EcoGraf™ SpG and fines

Strategic Agreement with South Korean Battery Recycler Australian Government conditionally approves US\$40M loan

German research confirms recycled graphite performance

Independent LCA study

US purification facility location study

Single phase development strategy

Collaboration agreement with BASF on anode recycling

EcoGraf HFfree™ product qualification facility commissioned

Propriety purification achieves 99.99%C



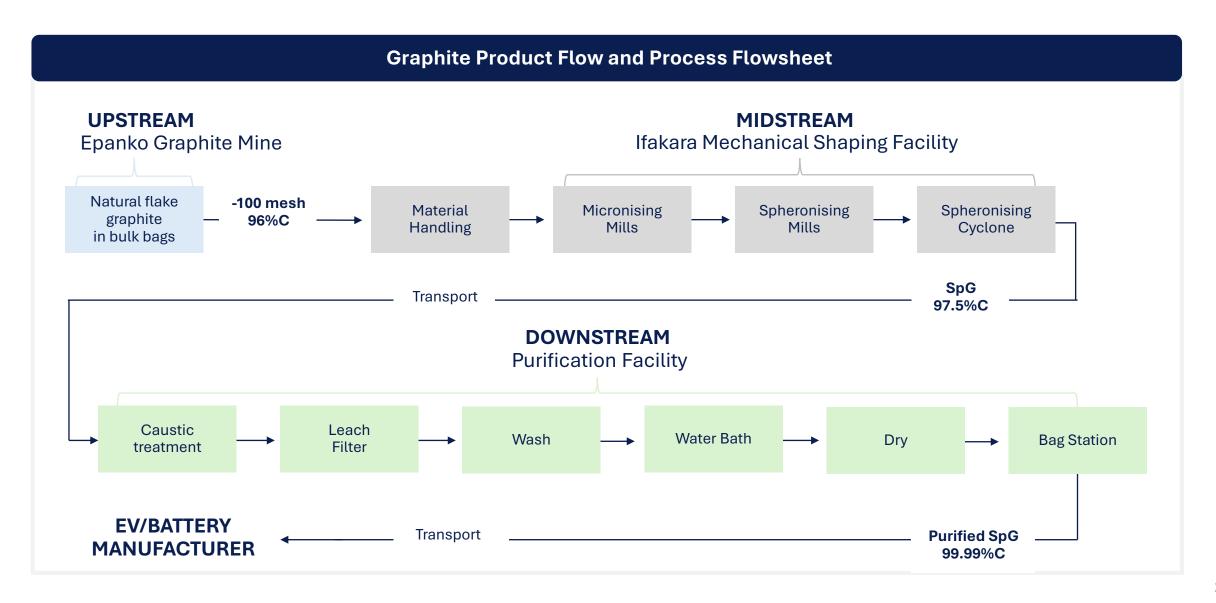
Product Qualification Facility (PQF)





EcoGraf HFfree® vertically integrated BAM supply





RECYCLE



EcoGraf HFfree® purification technology applied to support anode recycling

PRIORITIES

Testwork programs with feedstocks supplied by EV and battery manufacturers

COLLABORING WITH

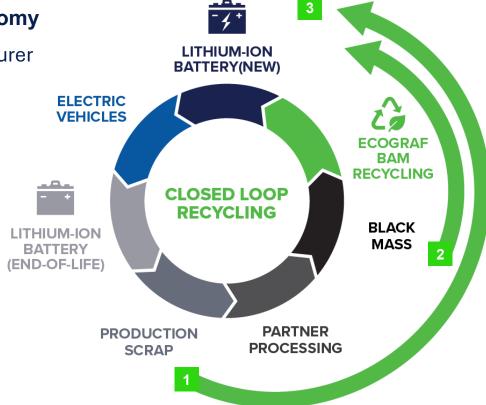
D - BASF

SungEel HiTech

Anode recycling

EcoGraf HFfree® purification supports closed loop recycling and battery circular economy

- Essential for maximising battery manufacturer processing efficiency and compliance with regulatory waste management
- Significant environmental benefit, with an almost zero or "CO₂ free" footprint of approximately 1.6kg to 2.2kg CO² eq. per kg EcoGraf RecoBAM™
- Led by Dr Anna Vanderbruggen who won the EIT CHANGE Award in 2022 for a new method for extracting graphite from lithium-ion batteries, for circular battery supply chain.





Dr Anna VanderbruggenEcoGraf Consultant –
Anode Recycling Specialist

- 1 Production Anode Electrode
- 2 Leached Black Mass
- 3 recoBAM

EcoGraf

Corporate commitment to leading ESG standards



Our team is committed to the highest standards in terms of environment, social and governance responsibility, including developing and implementing planning frameworks that are aligned with the following IFC Performance Standards ("IFC PS")

- Equator Principles IV ("EP IV")
- Global Industry Standard on Tailings Management ("GISTM")
- Sustainable Development Goals ("SDGs")
- Global Reporting Initiative Standards ("GRI")
- Initiative for Responsible Mining Associations ("IRMA") Standards¹













^{1.} EGR aims to incorporate IRMA policy requirements into the sustainability policies. Thereafter EGR to develop a program to achieve certification.

Epanko feedstock technical advantage over China



TECHNICAL ADVANTAGE OF EPANKO FEEDSTOCK COMPARED TO CHINA

- ✓ High concentrate grade 96-98% carbon vs China 92-94% carbon
- ✓ Higher grade means less impurities to remove during purification process and graphite market hierarchy, that
 higher grade can replace lower grade markets
- ✓ Increased shaping yield of 60% due lower silica content of 10-20% vs China 30-40% silica
- Lower equipment wear due to lower levs abrasiveness of silical



EcoGraf's development strategy



Pathways advancing for establishing HFfree facilities in Europe, US and Asia



US MARKET

- Tariffs driving new supply opportunities.
- → Positive feedback DoD White Paper Submission for up to US\$76.3m
- Support by a Tier-1 battery manufacturer

EU MARKET

- EcoGraf recognised as a EU Priority Project under CRM Act.
- **✔** EU is exploring support options
- Leading consultancy assessing purification sites, strongly focused on Germany.

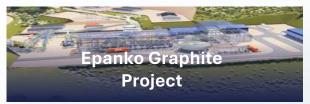
ASIA MARKET (Ex-China)

- Largest anode producer and key raw material demand
- EcoGraf is partnering to develop purification plants and engage markets in South Korea, Japan, Malaysia, and Vietnam.

Environmental and technical advantages



KEY ADVANTAGE OF ECOGRAF VERTICALLY INTEGRATED BAM SUPPLY









UPSTREAM

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

MIDSTREAM

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

DOWNSTREAM

- ✓ Low Cost Chemicals
- Minimal waste products
- ✓ Logistic efficiency
- ✓ Processing cost advantage
- ✓ Lower carbon emissions

RECYCLING

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

Corporate Social Responsibility (CSR) achievements





