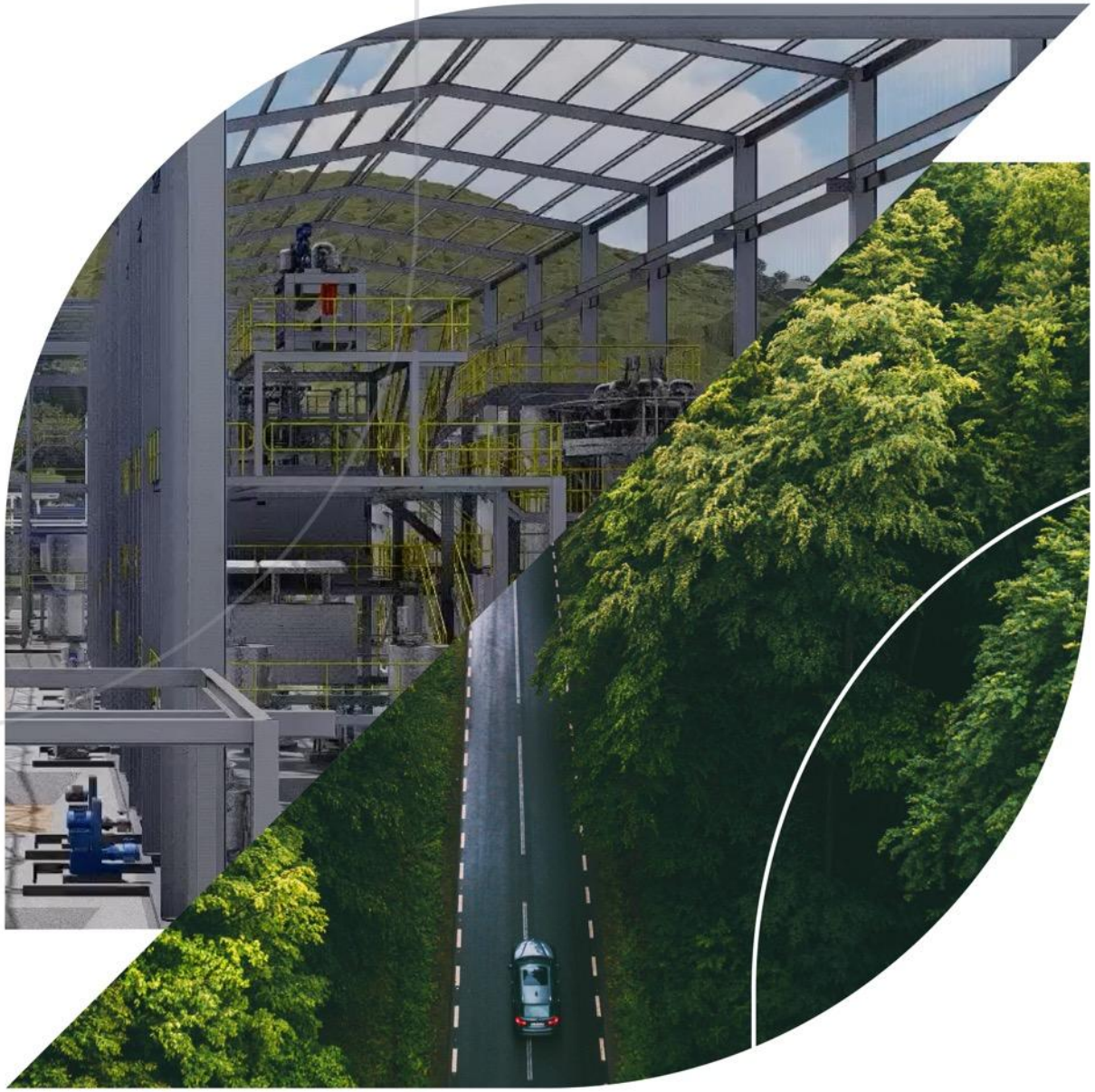


EcoGraf®

TANZGraphite

Paydirt's Critical Battery Minerals Perth Conference

29th April 2025

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

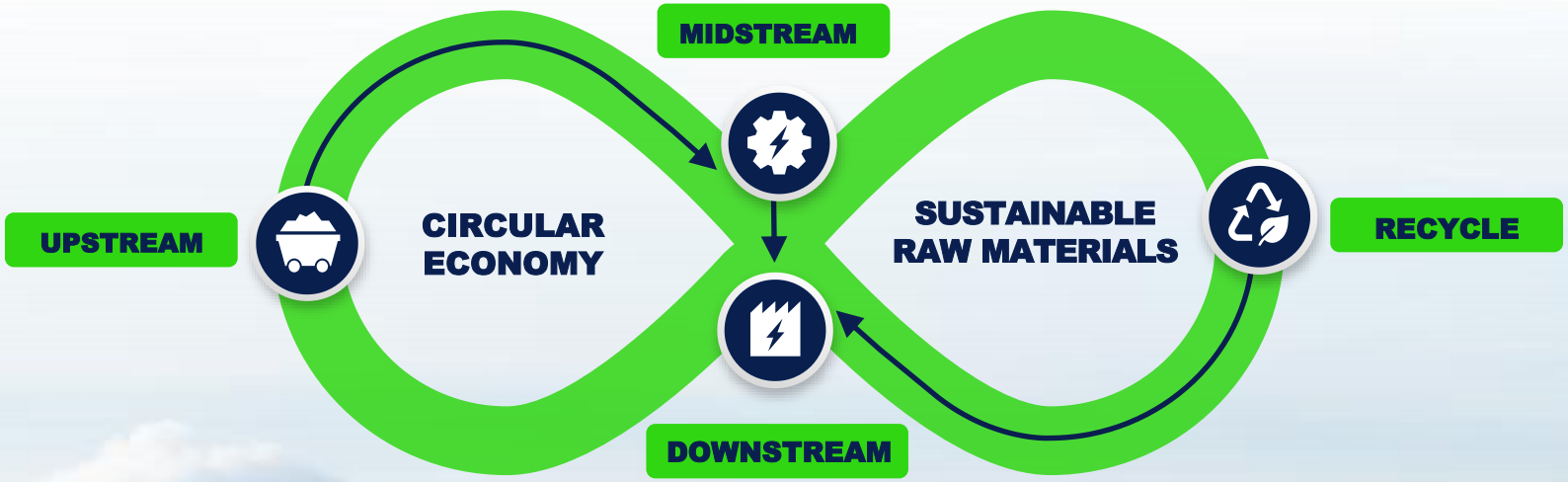
The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr. David Williams and Mr. David Drabble. Mr. David Williams is a full-time employee of ERM and is a Member of the Australian Institute of Geoscientists (#4176)(RPGeo). Mr. David 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



UPSTREAM

Epanko Graphite Project

Mine and Mineral Processing to Produce Natural Flake Graphite

MIDSTREAM

Mechanical Shaping Facility

Micronising and Spheronising of flake graphite to produce Spherical Graphite (SpG)

DOWNSTREAM

Purification Facilities

EcoGraf HFfree® Purification of SpG to produce Purified SpG

RECYCLE

Anode Recycling

EcoGraf HFfree® Purification technology to support anode recycling for the circular economy

Corporate snapshot

Company Directors & Officers

Robert Pett
Non-Executive Chair

Andrew Spinks
Managing Director

Howard Rae
Chief Financial Officer

Christer Mhingo
Director Tanzania

John Conidi
Non-Executive Director

Keith Jones
Non-Executive Director

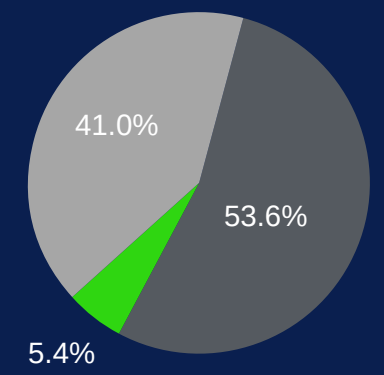
Natalie Teo
Company Secretary

Stock Listings

ASX: EGR
Australian Securities Exchange

FSE: FMK
Frankfurt Stock Exchange
(Börse Frankfurt)

Major shareholders[3]



- Board & Management
- BNP Nominee account
- Other shareholders

Capital Structure

Market capitalisation[2]
A$140.7M

Share Price[2]
A$0.31

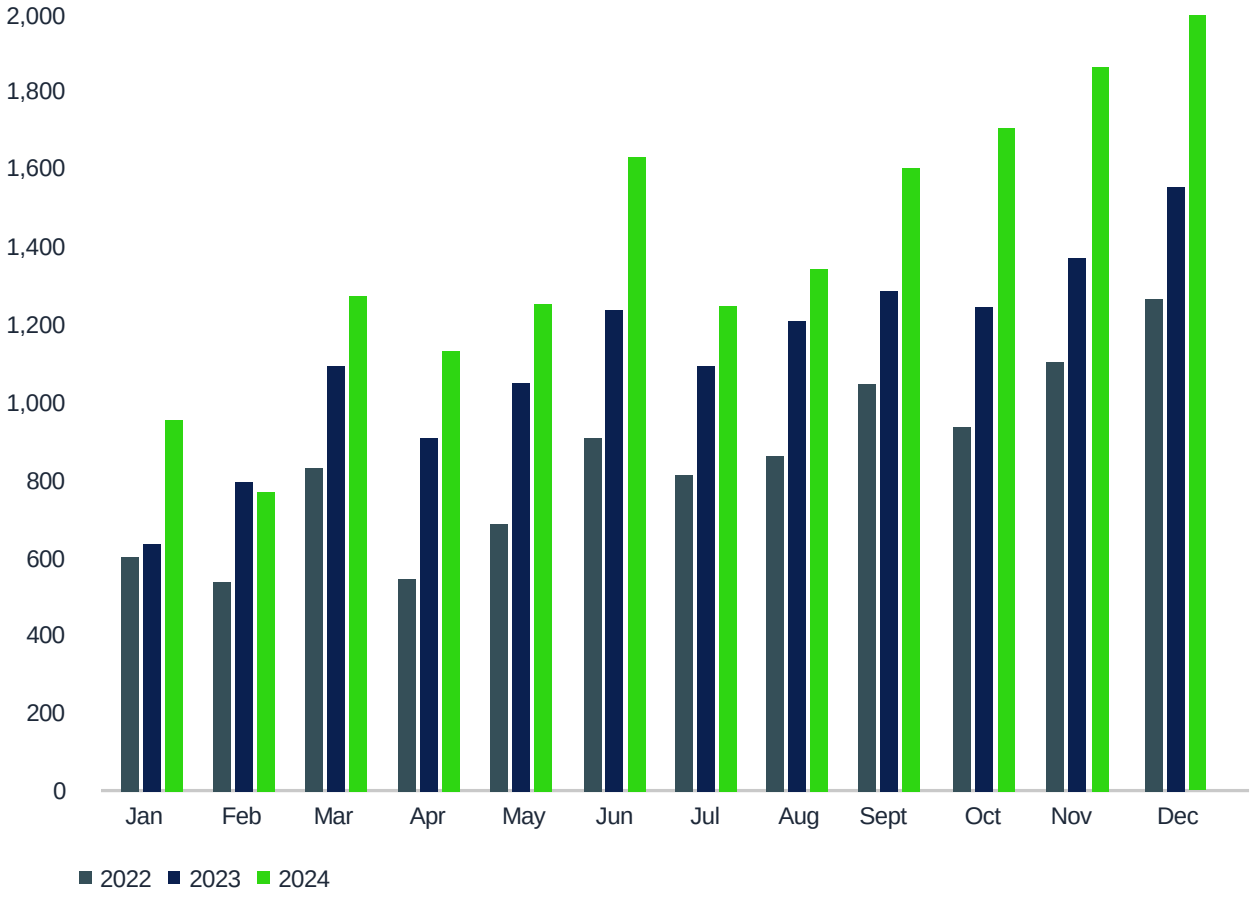
Shares on issue[1]
454M

Cash balance[1]
A$17.6M

1. December 2024 Quarterly report 2. As of 24 April 2025 3. As of 20 November 2024

Geopolitical drivers for new anode material supply

GLOBAL MONTHLY EV SALES ('000 UNITS)[1]



GLOBAL LEGISLATION

IRA, MS, DoE, DoD. Exemptions end 2027. New 25% tariff on FEOC (China) anode.

The EU Green Deal and Critical Raw Materials Act.

Chinese Government export licence controls implemented from 1 December 2023.

KEY MARKET DEVELOPMENTS

- Accelerating EV battery demand and EV adoption
- Supply chain regionalisation for diversity and security
- Processing capacity expansion outside China
- Rising energy costs affecting synthetic graphite
- Growing emphasis on ESG compliance

1. *Source: GlobalData.*
2. *Refer https://www.state.gov/minerals-security-partnership/ , 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/*

Government recognition

THE WHITE HOUSE
WASHINGTON

- EcoGraf included in US White House briefing room statement.
- Epanko included in Joint Statement of the Minerals Security Partnership (MSP) in Press Release by US Department of State noting the KfW IPEX-Bank proposed US$105m funding

- EcoGraf invited to round table discussion with German President, Frank-Walter Steinmeier and President of Tanzania H.E Samia Hassan

- Major Project Status
- Australian Minister for Resources, Hon Madeleine King visits EcoGraf at IMARC event to discuss latest developments.

Recognition and support from US, Germany, Tanzania and Australia

Business overview video

View video: https://youtu.be/71911_6LnfQ

UPSTREAM

Mine and Mineral Processing:
Natural Flake Graphite (73ktpa)

Grade:
96-98% C

MIDSTREAM

Mechanical Shaping:
Spherical Graphite (SpG 20ktpa)

Grade:
97-99% C

DOWNSTREAM

EcoGraf HFfree® Purification:
Purified SPG (20-25ktpa)

Grade:
>99.95% C

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

Refer to ASX announcements "Updated Epanko Ore Reserve", 25 July 2024 and "Proprietary Purification Achieves 4N 99.99% Carbon", 9 April 2024

UPSTREAM

Epanko graphite project

EcoGraf

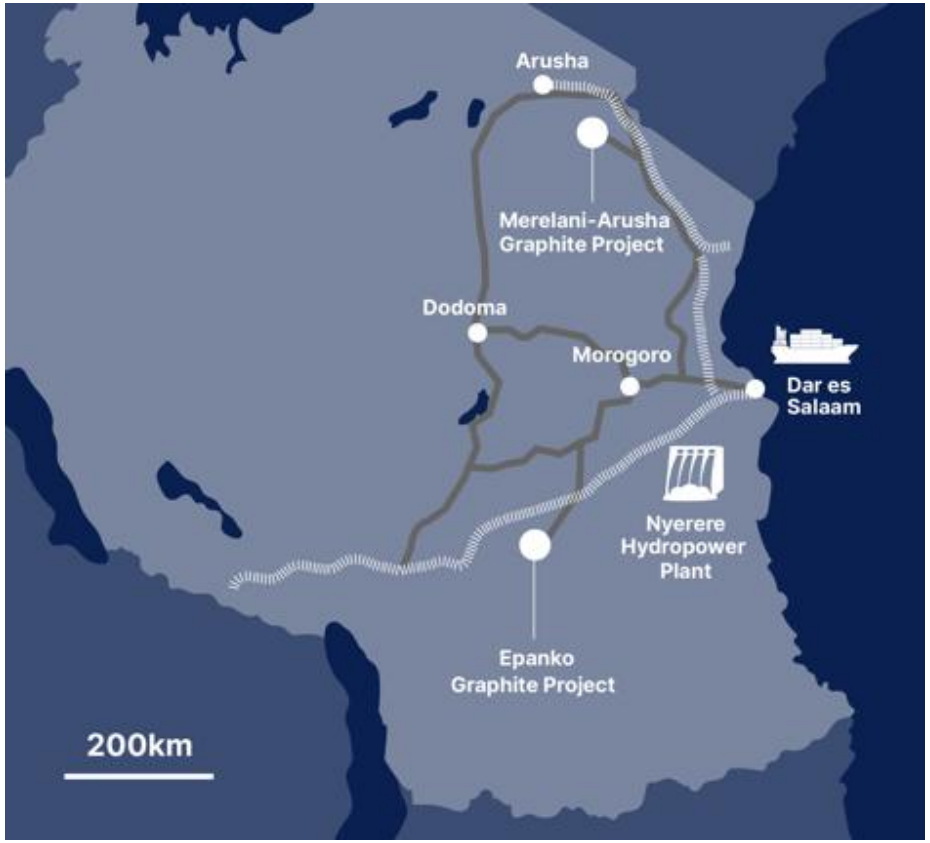
Mining and Mineral Processing Facility to Produce Natural Flake Graphite

Priorities

- Debt financing program
- Project execution planning
- Front End Engineering Design
- Investigating expansion options to 300,000tpa

Epanko

- KfW IPEX-Bank mandated for UFK Loan of up to US$105m for development of Epanko
  - ✓ 'Life of Mine' Special Mining Licence granted
  - ✓ Positive UFK Preliminary Review decision by the German Government Inter-Ministerial Committee
  - ✓ Rigorous due diligence by Independent Engineers Review – SRK
  - ✓ Development to highest environmental standards and investment in ESG
  - ✓ Compliance with Equator Principles and IFC Performance Standards
- Development ready - defined and de-risked, commencing at 73,000tpa with potential to significantly expand production to meet forecast market demand
- Framework Agreement signed with Government of Tanzania.



TANZGraphite

16% Ownership — GoT

84% Ownership — EcoGraf

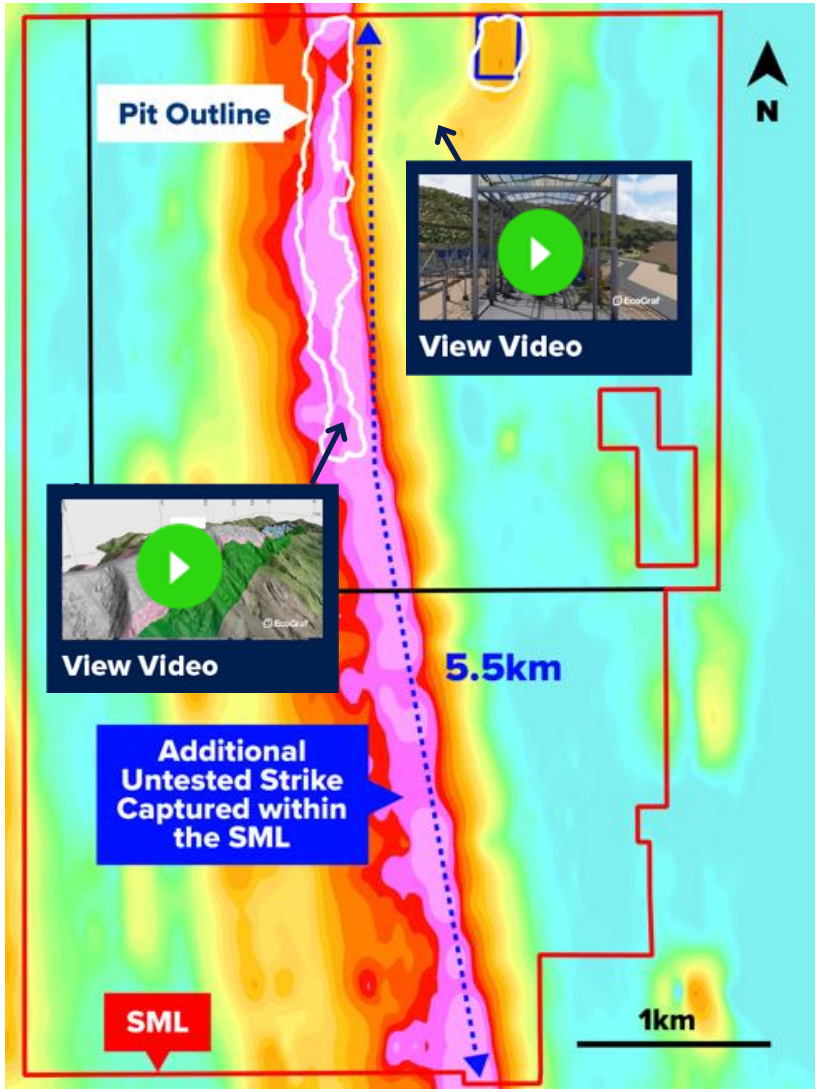
Key partners and support

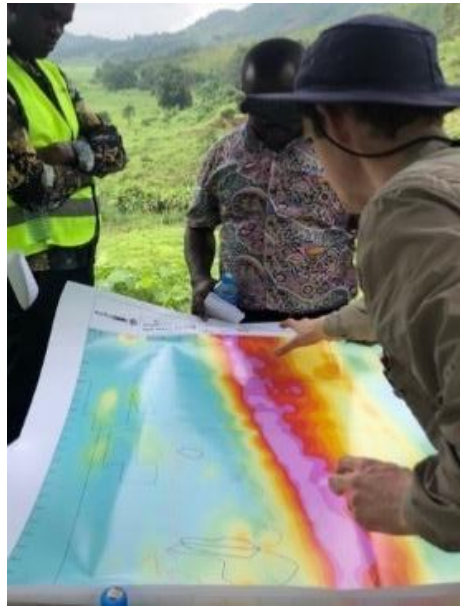
thyssenkrupp | KFW IPEX-Bank | With POSCO

Refer to ASX announcement "EcoGraf Pre Development Program Delivers Outstanding Results", 28 April 2023 and "Updated Epanko Ore Reserve", 25 July 2024

UPSTREAM | MIDSTREAM | DOWNSTREAM | RECYCLE

‘Life of Mine’ SML covers 5.5kms of Epanko deposit





UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

Refer to ASX announcement “Epanko ‘Life of Mine’ Special Mining Licence Granted”, 4 March 2025

Epanko deposit

Largest development ready graphite project in Africa

Industry-leading 82% of total Ore Reserves classified as Proven, delivering increased confidence on metallurgical factors such as process recoveries, flake size distribution and product grades

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

Refer to ASX announcement "Updated Epanko Ore Reserve", dated 25 July 2024. Mineral Resource Estimate is comprised of 202.8Mt Inferred, 55.7Mt Indicated and 32.3Mt Measured Resources

Epanko project advantages

EcoGraf

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

UPSTREAM | MIDSTREAM | DOWNSTREAM | RECYCLE

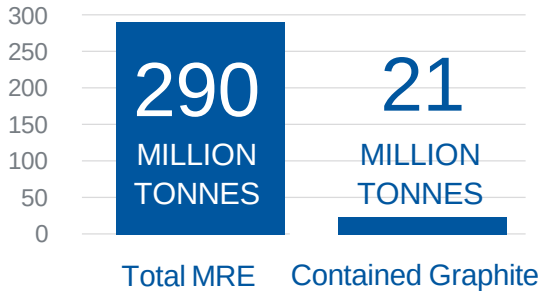
TRANSPORT DISTANCE

EPANKO MINE

75km TO RAIL

450km TO PORT

MINERAL RESOURCE ESTIMATE



ORE RESERVE

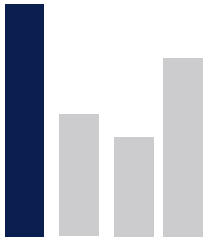
82%

Ore Reserve Classified Proven

ORE RESERVE GRADE

8.8% TGC

World leading graphite resource



AVERAGE THICKNESS

200

METRES

Thickness of the deposit

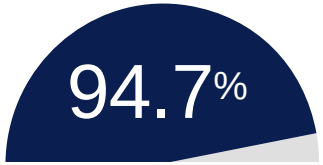
CONCENTRATION GRADE

96% – 98% C

High Purity Graphite Concentrate from the Ore Feed

PROCESS RECOVERY

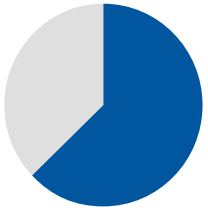
94.7%



FLAKE SIZE DISTRIBUTION

63%

Greater than 150 microns



STRIP RATIO

0.3 : 1

WASTE ORE

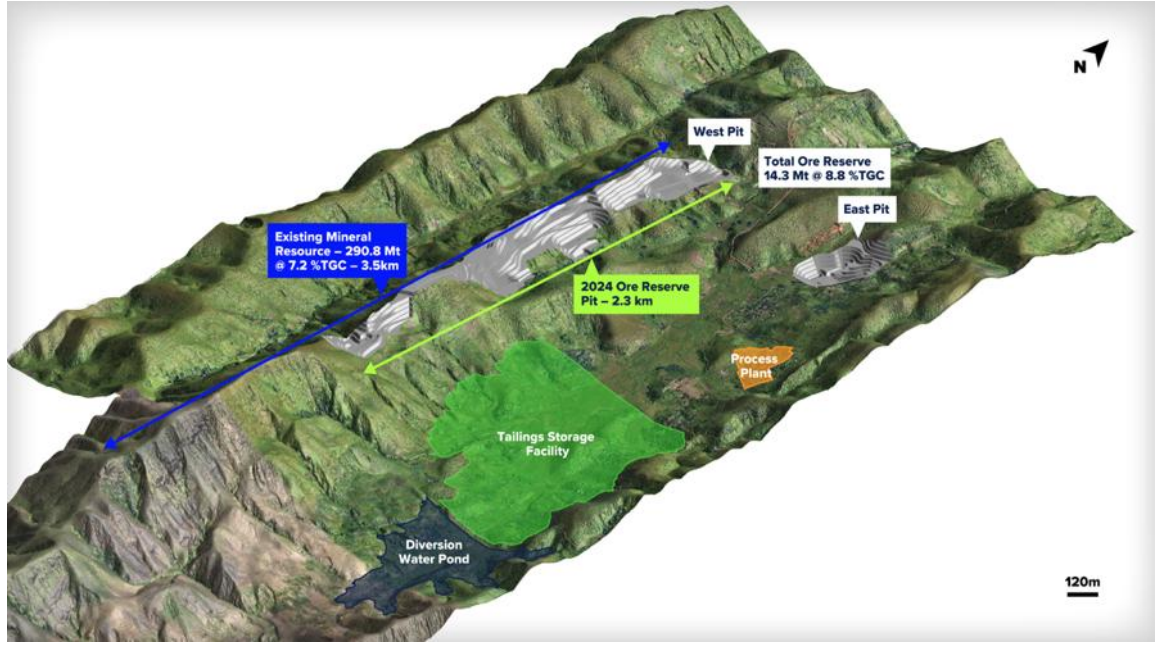
Economic Measurement: Amount of Waste to Ore

Refer to ASX announcement "Update Epanko Ore Reserve", dated 25 July 2024 and "127% Increase in Epanko Mineral Resource", 11 March 2024

Epanko mine layout and overview

Extensive engineering studies, drilling and resource evaluation undertaken that's delivered

- ✓ New mine design
- ✓ Low-cost mining strategy



View of Proposed Mining Operation

View flyover video: https://tinyurl.com/uh8cdaxp

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

Refer to ASX announcement "127% Increase in Epanko Mineral Resource" dated 11 March 2024

Epanko processing plant layout

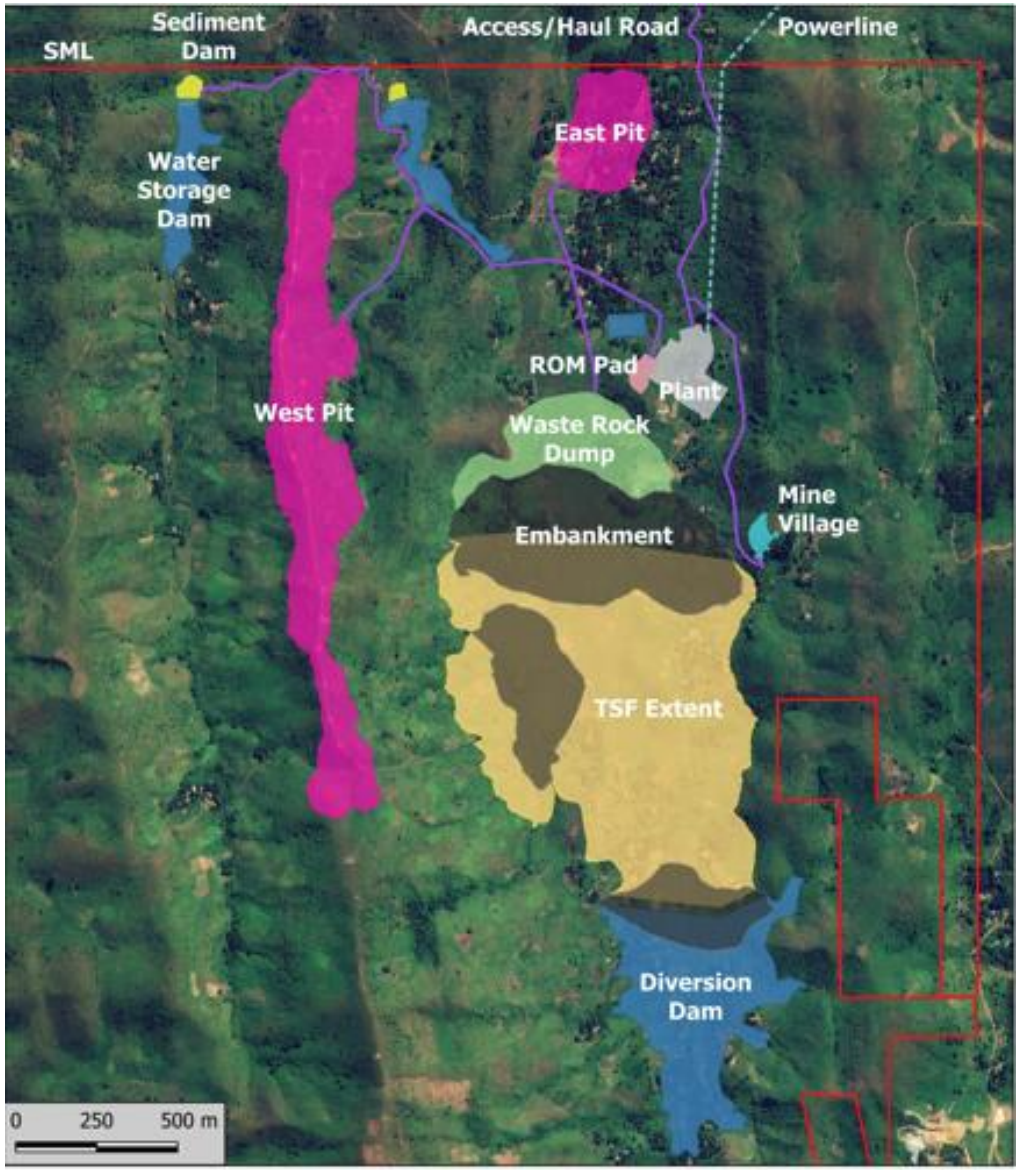
Flowsheet design to produce graphite products for industrial and high growth lithium-ion battery markets

PROCESSING PLANT

View flyover video: https://tinyurl.com/ypmd7vme

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

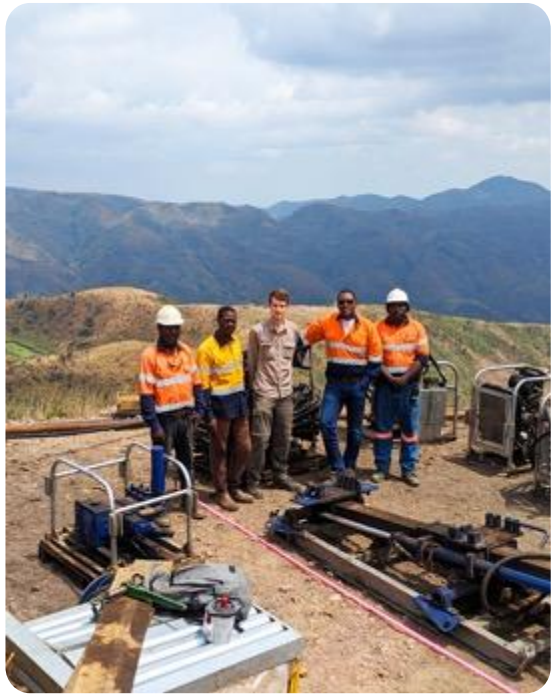
Epanko project infrastructure for Stage 1 - 73,000tpa



- Completion of various pre-development programs to support lender due diligence processes and the commissioning of the Independent Expertise
- Process flowsheet based on rigorous testing
- Knight Piésold completed studies to ensure Tails Storage Facility (TSF) and Water Storage Design (WSD) and operations meet GISTM requirements
- Epanko expansion supported by capability of 8-fold increase to +80Mt capacity in tailings storage facility (TSF)providing 'Life of Mine' TSF solution

Our Tanzanian team delivering results

EcoGraf



UPSTREAM

MIDSTREAM

DOWNSTREAM

RECYCLE

Corporate commitment to leading ESG standards

- Developing Epanko in compliance with the highest standards in terms of environment, social and governance responsibility, including establishing and implementing planning frameworks that are aligned with the following:
  - IFC Performance Standards (“IFC PS”);
  - Equator Principles IV (“EP IV”); and
  - Global Industry Standard on Tailings Management (“GISTM”);
  - Sustainable Development Goals (“SDGs”);
  - Global Reporting Initiative Standards (“GRI”);
  - Initiative for Responsible Mining Associations (“IRMA”) Standards[1]

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

New Tanzanian infrastructure supporting Epanko

EcoGraf

Great Ruaha Bridge

Improving the transportation of agriculture and mining products.

Ifakara Substation

Funded through the European Union to support new business in the region.

Julius Nyerere Hydropower Station

Providing low-cost, renewable power with recent announcement now energising grid.

Electric Train

Positioned to support new industries, given its location on the transport corridor.

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

ESG contribution to Tanzania

Positive Impact

Transformational inter-generational 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.

Uplifting Community

Play movie:
https://youtu.be/ESoYB1Knfvc

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

MIDSTREAM

Mechanical shaping facility

EcoGraf

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

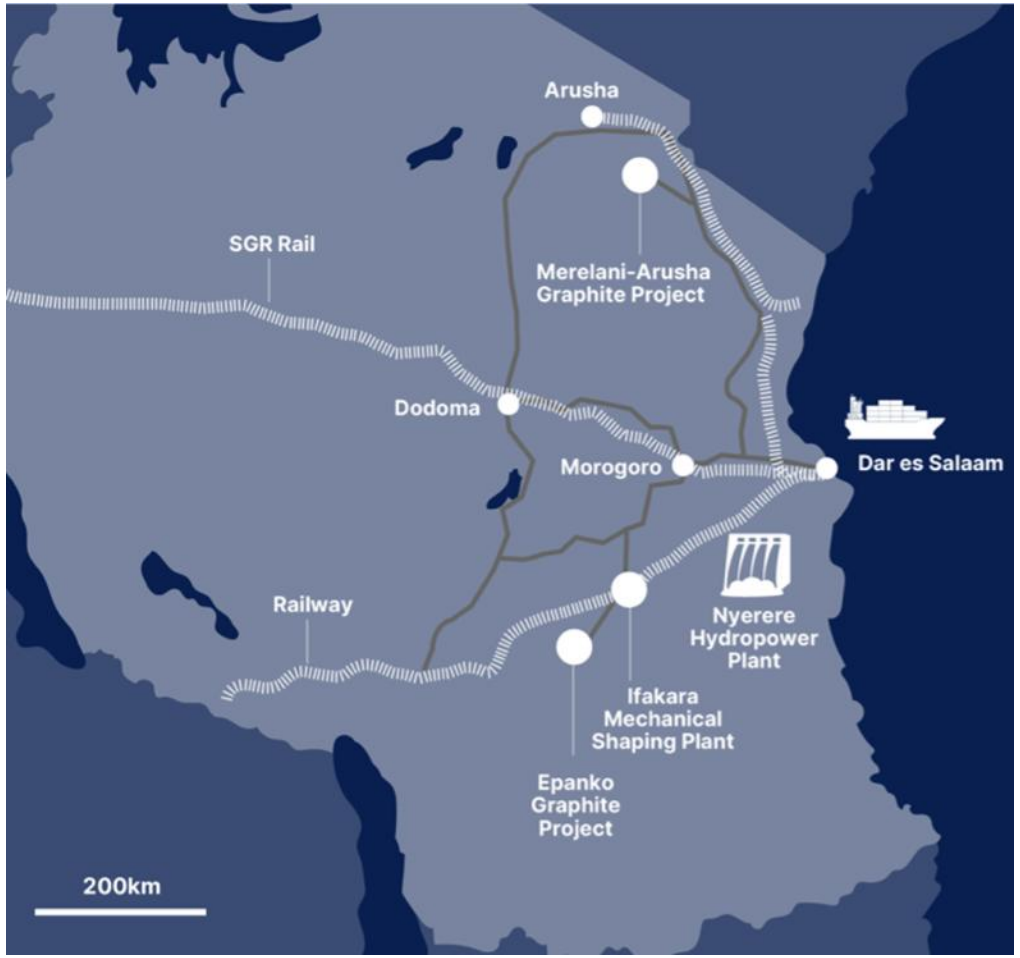
Priorities

Engineering study on preferred location completed

Sales arrangements to support financing and development

Development supports Tanzanian Governments **'Vision 2030'** value adding strategy

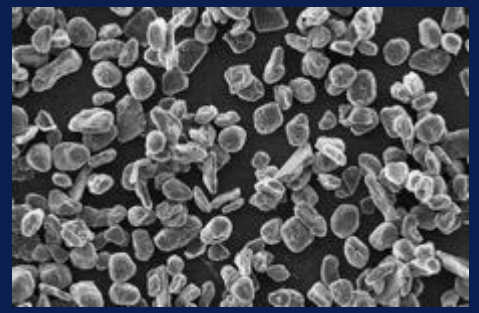
- Ifakara identified as the preferred location
  - 75km from mine gate
  - EU €$9m substation
- Energized by 2,115MW Nyerere Hydropower plant
- Optimises supply chain logistics efficiencies for EV and battery customers
- Independent Life Cycle Assessment (LCA) studies conducted for EcoGraf confirm electricity accounts for 45-55% of CO_2 emissions



Mechanical shaping facility overview

- Extensive technical planning completed
  - ✓ Purchased batch scale piloting equipment and piloting campaigns through commercial scale plants with tonnes 4.4 tonnes piloted over 11 campaigns evaluating equipment suppliers
  - ✓ Rigorous product evaluation by global customer base in EU, Asia and North America
  - ✓ Discussion with customers commenced for sales of spherical graphite
- Proposed 'Export Processing Zone' designation by EPZA

GRADE: EPANKO UNPURIFIED SPG16



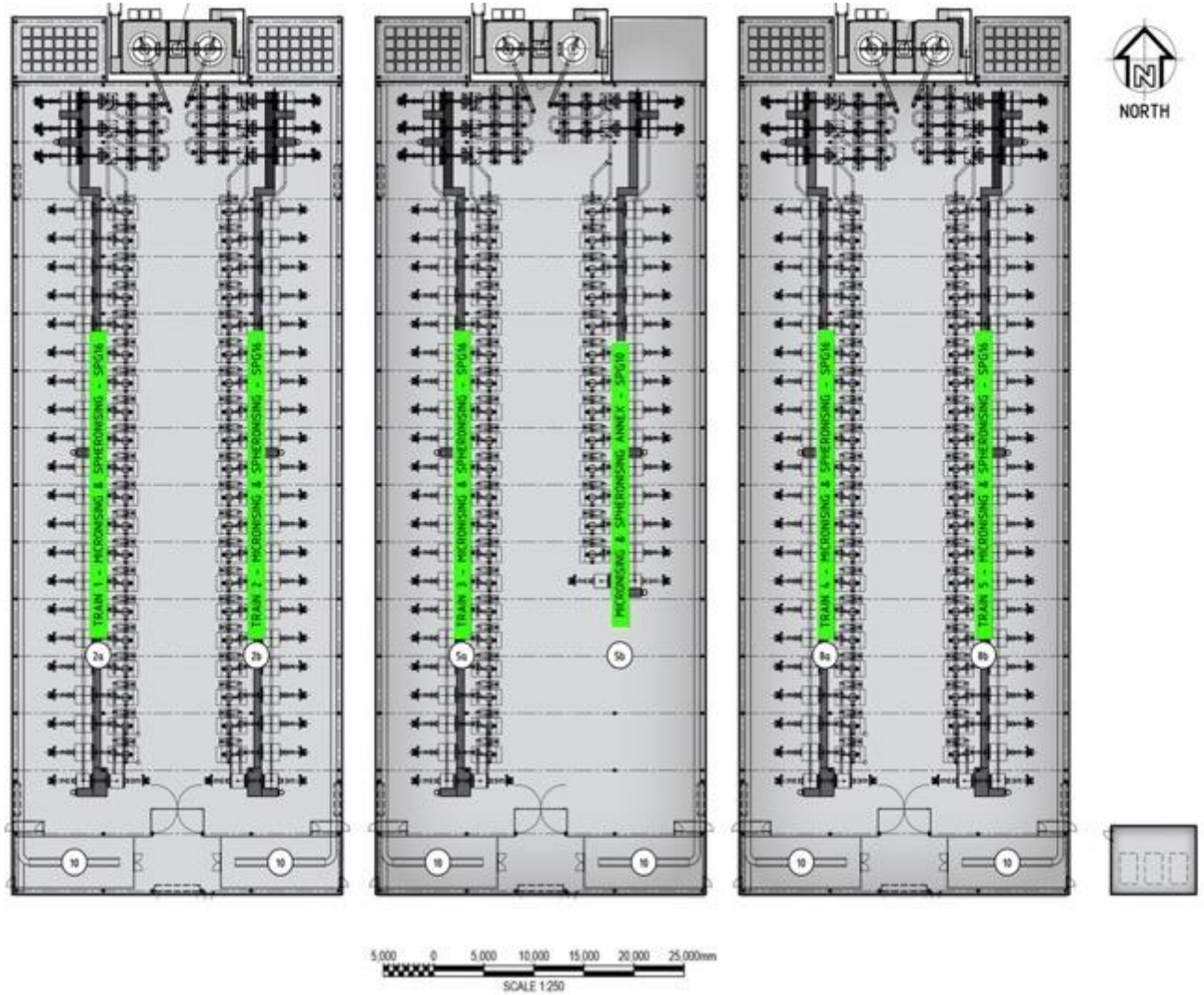
UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

Refer to ASX announcement "Commercial Scale Program Delivers 20% Product Yield Increase", 14 July 2021 and "EcoGraf Expands BAM Facility Development Plans", 29 September 2022

Mechanical shaping facility design

EcoGraf

MICRONISING AND SPHERONISING PLANT LAYOUT



Engineering study completed for 20,000tpa

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

- First value-addition development in Tanzania

Next steps

- Confirm EPZ development site arrangements with Government
- Secure conditional financing arrangements
- Finalise offtake agreements
- Final engineering programs, environmental and project execution planning

Refer to ASX announcement "Engineering Study Completed for Midstream Development", 24 March 2025

DOWNSTREAM

EcoGraf HF*free*® purification facilities

EcoGraf®

HF*free* Purification to produce Purified SPG

Priorities

Complete PQF campaigns to finalise commercial developments

Formalise strategic partnerships for commercial scale production

Evaluate development options in Europe, North America and Asia

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

Requirement for new suppliers of battery anode materials following launch of EU Green Deal, US Mineral Security Partnership and Inflation Reduction Act

- Product qualification facility (PQF) successfully commissioned and operated
- US patent granted 2023 and 2nd patent application accepted by IP Australia
- Product qualification facility co-funded with Australian Government grant and supported by collaboration with a leading Australian Government research organisation
- Benchmarking and engineering study confirms capital and operating cost advantages of the EcoGraf HFfree® process
- Extensive product testing with global anode, lithium battery and EV manufacturers
- Technical and commercial cooperation agreements in place

Product Qualification Facility (PQF)

- PQF piloting facility developed for purification of Spherical Graphite (SpG)
  - ✓ Confirmation of process technology to support commercial development
  - ✓ PQF delivers results meeting the highest customer specifications for purified SpG
- Capital cost estimate to be updated in Q2 2025
- Ability to process other SpG feedstocks

UPSTREAM
MIDSTREAM
DOWNSTREAM
RECYCLE

EcoGraf HF*free*® process advantages

EcoGraf®

UNITED STATES PATENT GRANTED

Low cost

Competitive economics compared to the other purification methods

Proprietary technology

Europe patent submission and US / Australia patent granted

Eco-friendly

Low carbon footprint with minimal waste streams

Minimum impurities

99.99%C with impurity levels to less 100ppm

Scalable

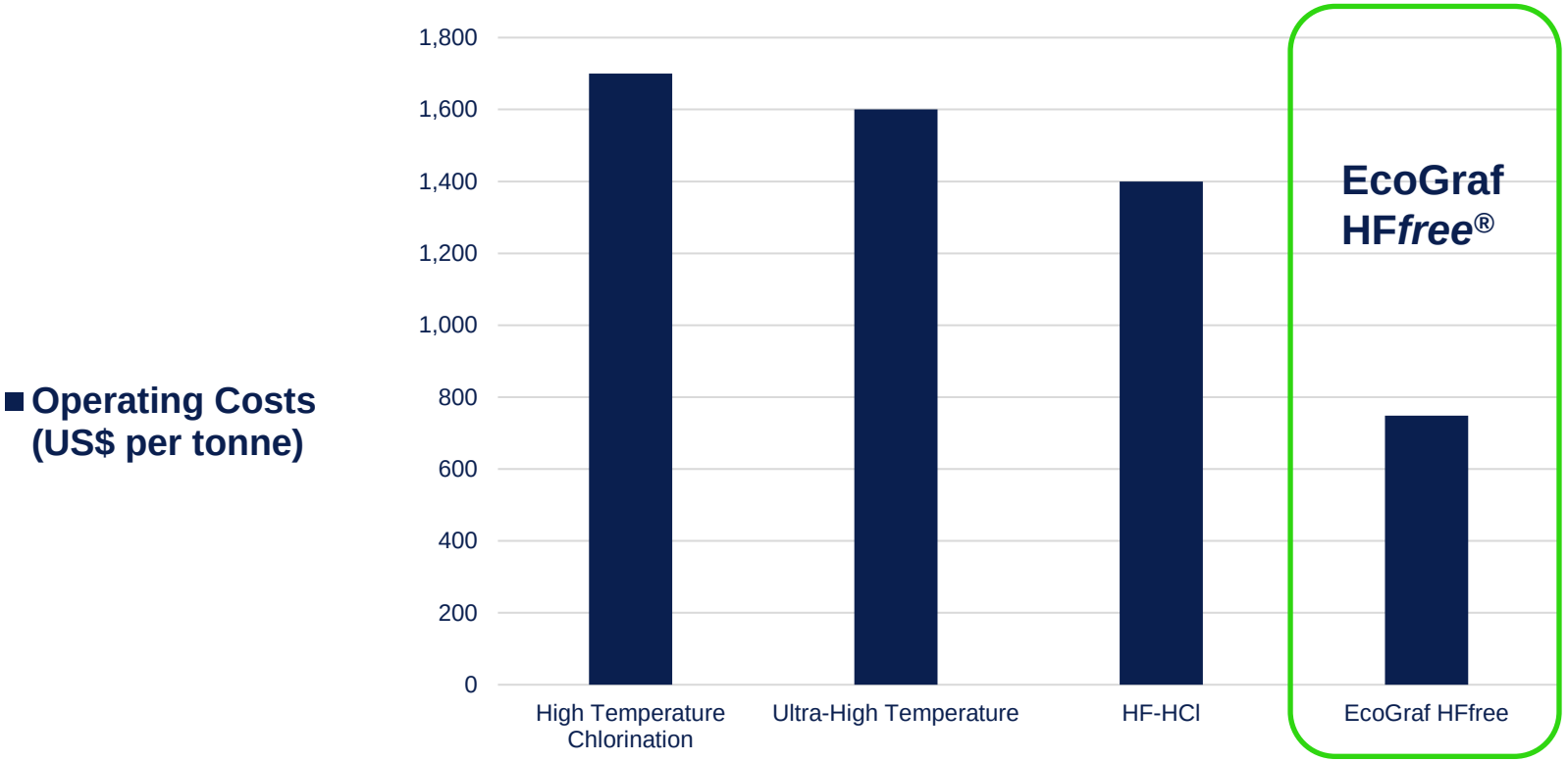
Process capable of being located within battery manufacturing hubs

Versatility

Purification technology successfully applied to anode recycling

EcoGraf HF*free*® purification cost advantage

- Cost comparison conducted by global engineering & construction consultancy, comparing EcoGraf HF*free*® purification vs three other technologies in use based on a 25,000tpa reference base
- EcoGraf HF*free*® products will be produced at competitive cost and provide a high purity, low emission alternative to existing supply chains.



Cost advantage confirmed via independent benchmarking study

Refer to ASX announcement "Study Confirms EcoGraf HFfree™ Process Cost Advantages", dated 11 July 2024

RECYCLE

Anode recycling

EcoGraf®

EcoGraf® purification technology applied to lithium-ion battery recycling

Priorities

Testwork programs with feedstocks supplied by EV and battery manufacturers

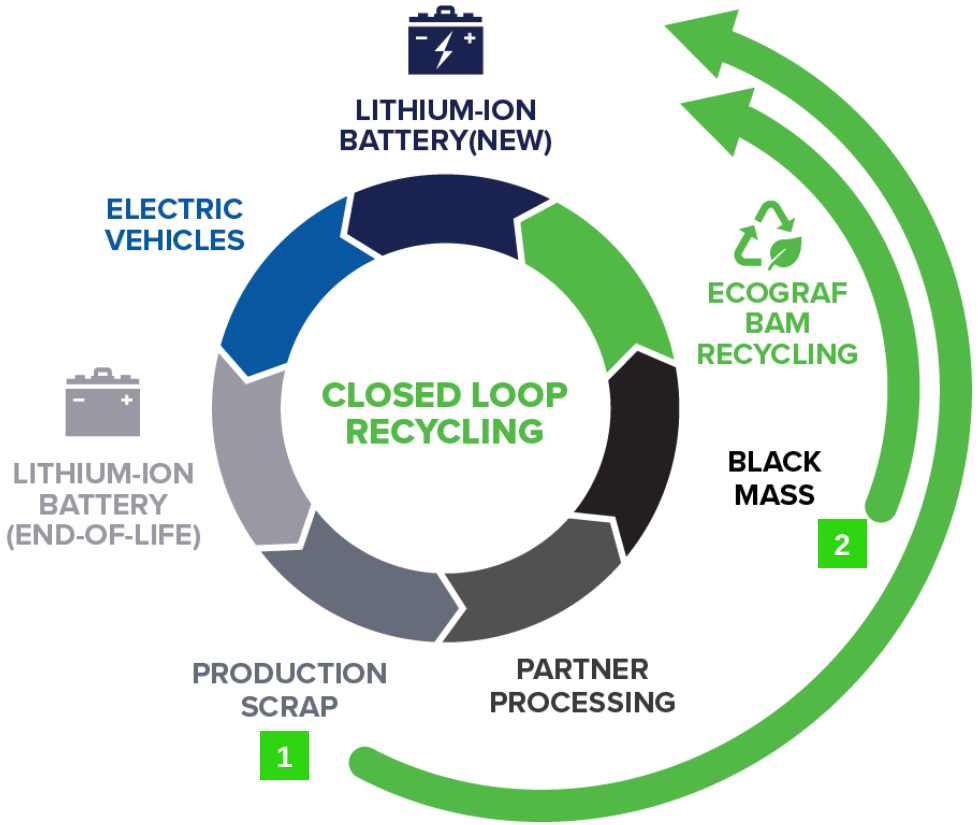
Collaboration with battery and EV market participants

EcoGraf HF*free*® purification supports closed loop recycling and battery circular economy

recoBAM

Recovery of battery anode materials to provide customers with lower battery costs and support a reduction in battery and EV CO_2 emission footprints:

1. **Production Anode Electrode**
2. **Leached Black Mass**



Collaborating with

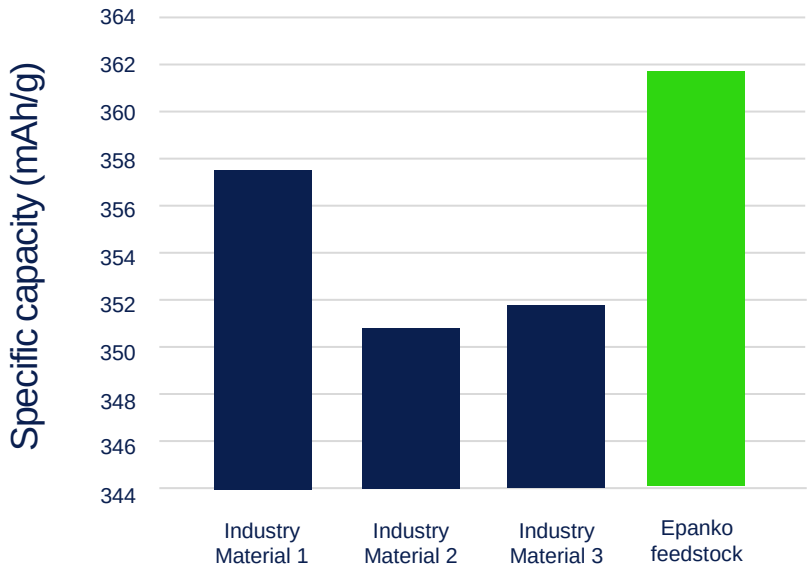
BASF We create chemistry

SungEel HiTech

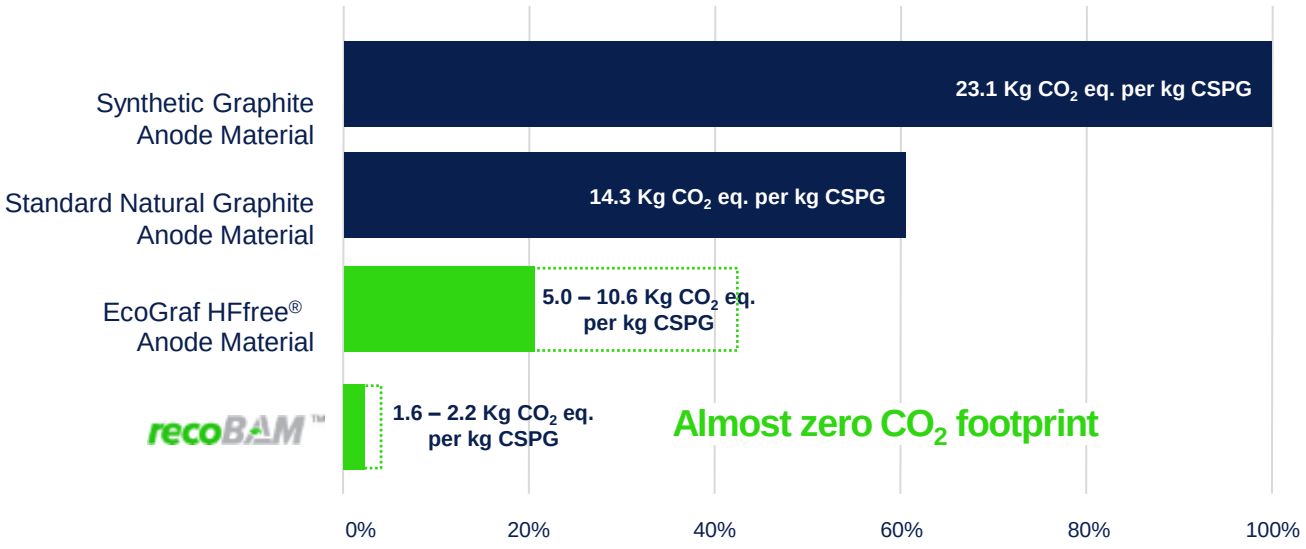
High performance graphite with low emissions

EcoGraf HF*free*® anode material delivers improved battery performance and significantly lower CO_2

SUPERIOR BATTERY PERFORMANCE



LOW CO_2 FOOTPRINT



(LCA Study at ISO)

Competitive cost advantages

UPSTREAM

Epanko Graphite Project

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

MIDSTREAM

Mechanical Shaping Facility

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

DOWNSTREAM

Purification Facilities

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

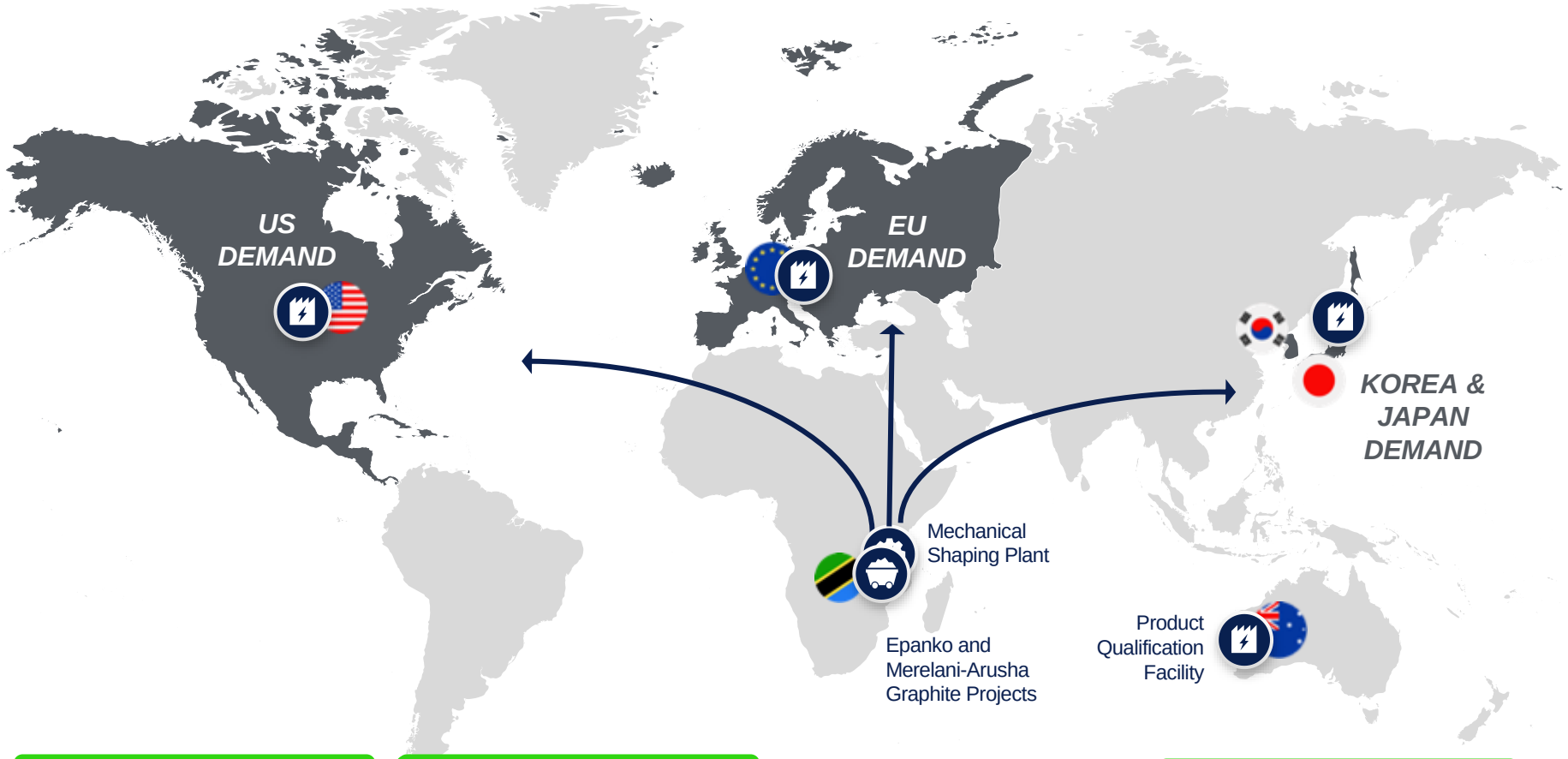
RECYCLE

Anode Recycling

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

Compelling value proposition

Each business development stream holds significant value, with value multipliers expected from vertical integration

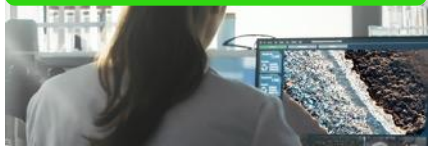


UPSTREAM

MIDSTREAM

DOWNSTREAM

RECYCLE



KEY ADVANTAGES

- Vertically Integrated
- Cost Competitive
- ESG Position
- Expansion Potential

The future is electric with Tanzanian graphite

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