



 **EcoGraf™**



TANZGraphite

**6th Tanzanian Mining
and Investment
Conference**

**Julius Nyerere ICC
Dar Es Salaam, Tanzania**

19-21st November 2024

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 ASX announcements dated 21 June 2017 “Updated Bankable Feasibility Study” and 28 April 2023 “Epanko Pre-Development Program Delivers Outstanding Results” 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 and 28 April 2023 continue to apply and have not materially changed.

The production targets referred to in this presentation are based on 45% Measured Resources, 38% Indicated Resources and 17% Inferred Resources for an 18-year life of mine. The Measured Resources, Indicated Resources and Inferred 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 used Inferred Mineral Resources as part of the production target. There is a low level of confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. The economic feasibility of the Project has been assessed excluding the Inferred material, confirming the use of Inferred mineralisation is not a determining factor in the viability of the Project.

Competent persons

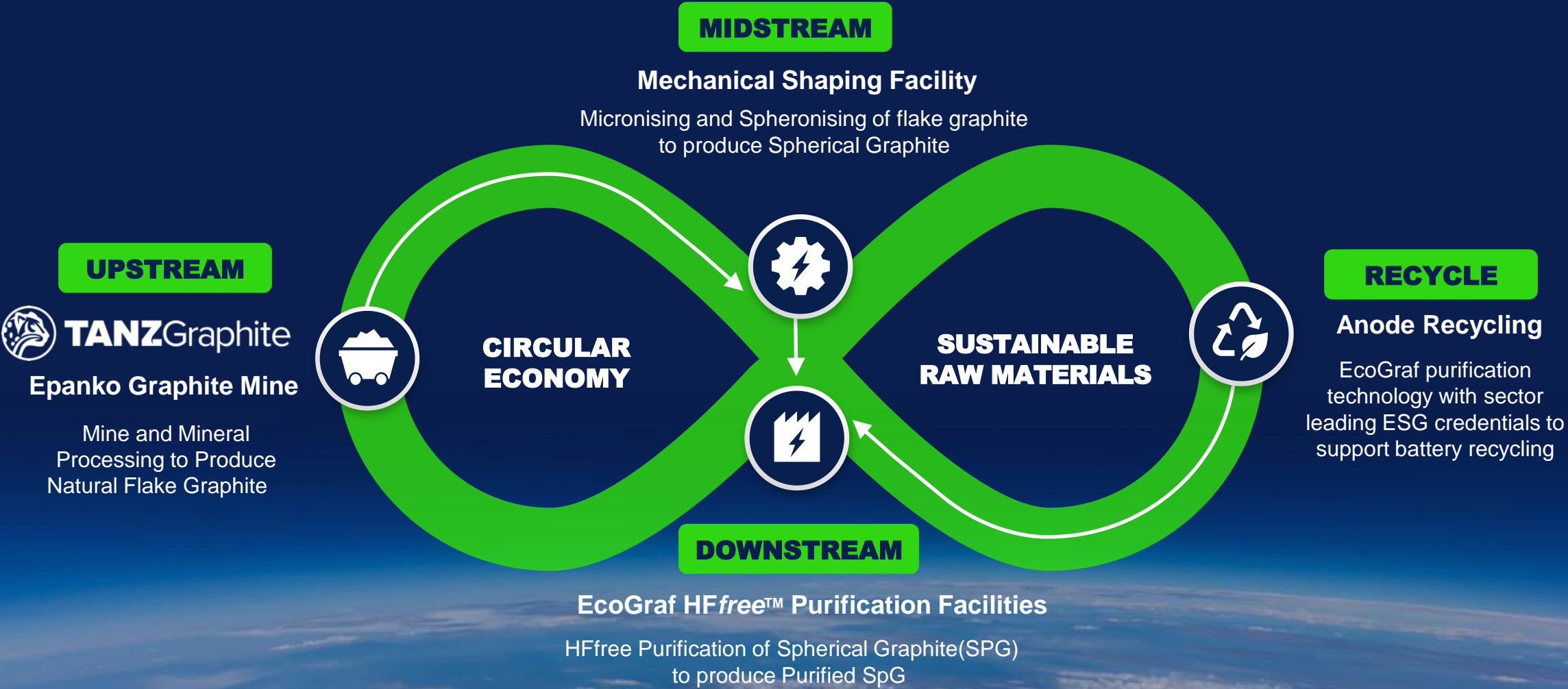
The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr. David Williams and Mr. David Drabble. Mr. David Williams is a full-time employee of ERM and is a Member of the Australian Institute of Geoscientists (#4176)(RPGeo). Mr. David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

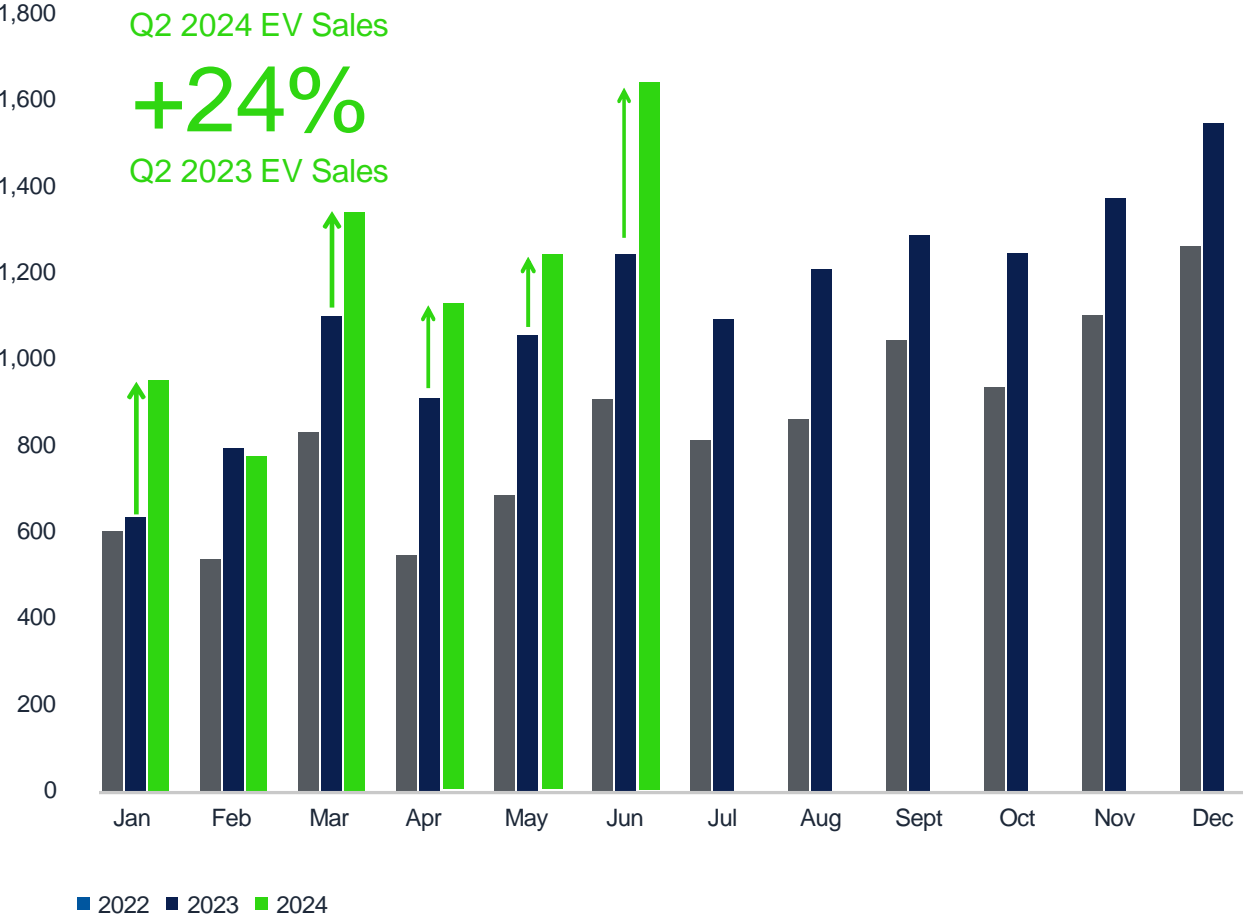
Our business

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



Geopolitical drivers for new anode material supply

GLOBAL MONTHLY EV SALES ('000 UNITS)¹



GLOBAL LEGISLATION



IRA, MS, DoE, DoD have pushed development and funding into localised resources in North America with tax credits supporting new supply chains. Exemptions end 2027. New 25% tariff on FEOC (China) anode



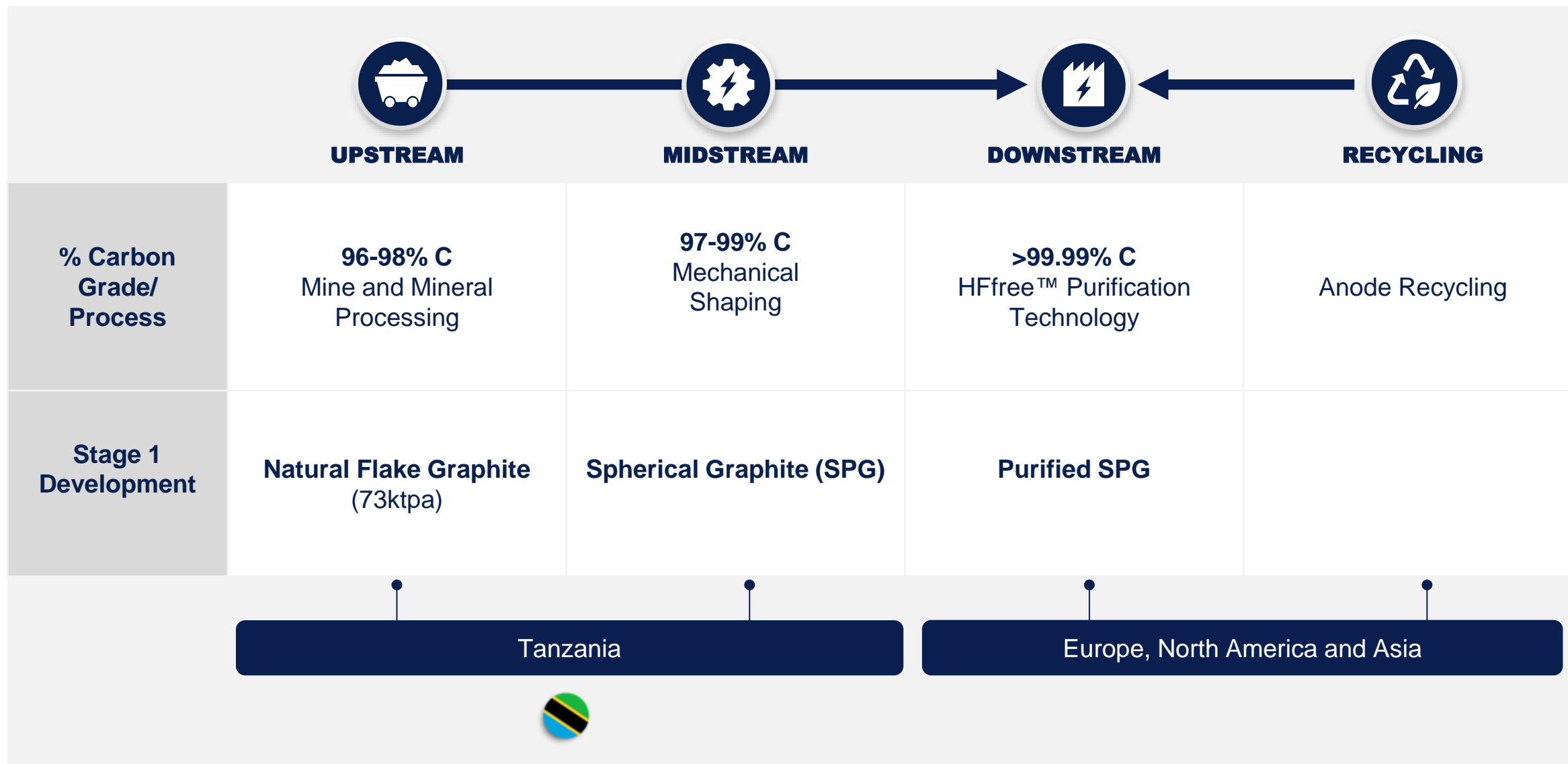
The EU Green Deal and Critical Raw Materials Act support supply chains that satisfy green targets for mining, manufacturing and recycling. CRMA now law with Strategic Projects focus. Battery passport, localisation and CO₂ targets will restrict foreign synthetic



Chinese Government export licence controls implemented from 1 December 2023 for designated graphite and anode products. Current anode manufacturing is heavily reliant on China.

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/>

EcoGraf's vertically integrated BAM strategy



Government recognition



- 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

Epanko Graphite Development

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Mine and Mineral Processing Facility to Produce Natural Flake Graphite

Priorities

Debt financing program

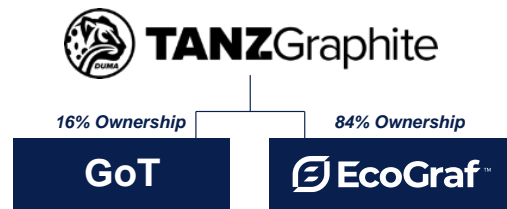
Equator Principles 4.0 update and RAP implementation

Front End Engineering Design

Investigating expansion options to 300,000tpa

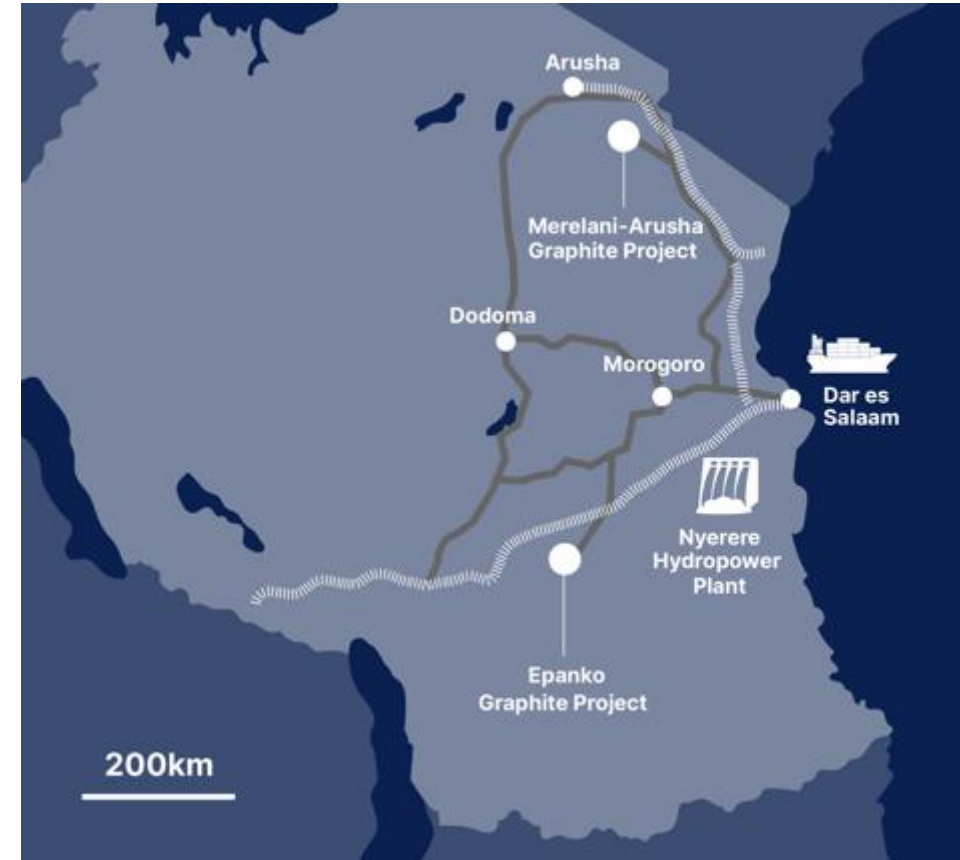
Epanko

- KfW IPEX-Bank Mandated for UFK Loan of up to US\$105m for Development of Epanko
- Bank appointed SRK Independent Engineers' review underway
- Compliance with Equator Principles 4 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 and grant of life-of-mine Special Mining Licence expected shortly



Merelani-Arusha

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



Key partners and support



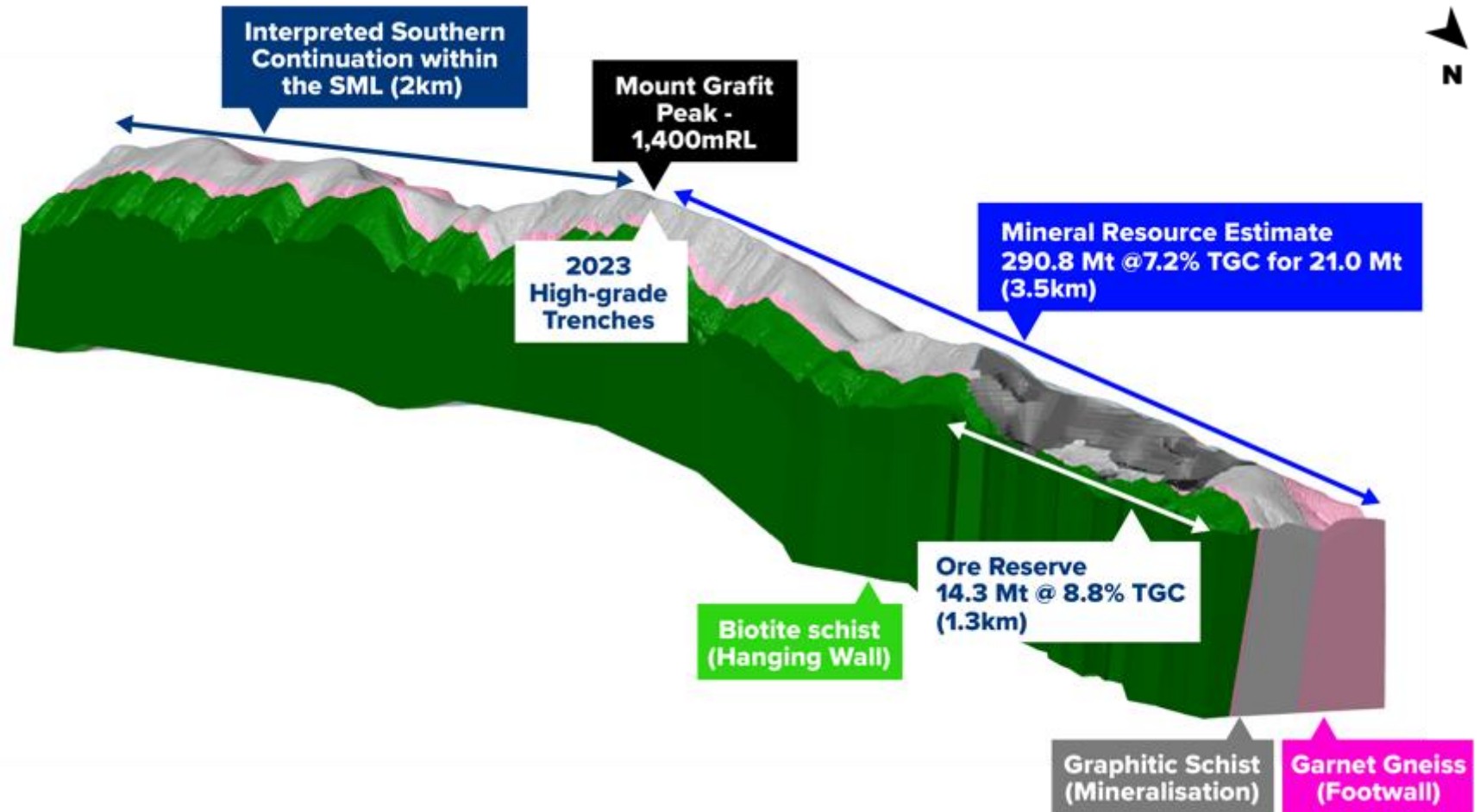
Ore Reserve update

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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 concentrate grades

Epanko project advantages

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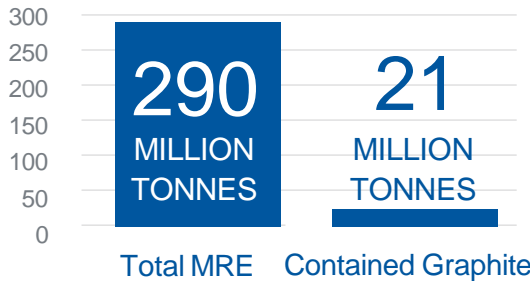


Key characterizes to drive lowest cost feedstock for lithium-ion battery market

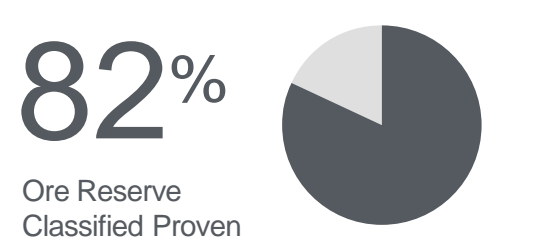
TRANSPORT DISTANCE



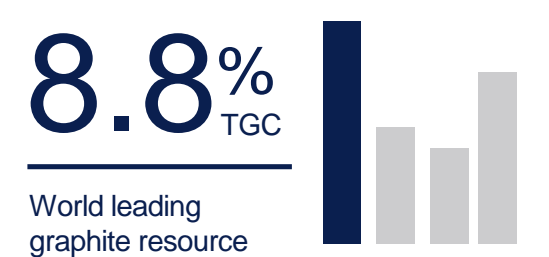
MINERAL RESOURCE ESTIMATE



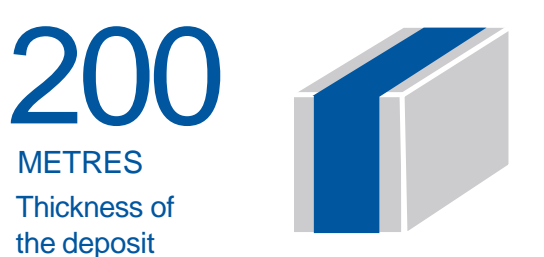
ORE RESERVE



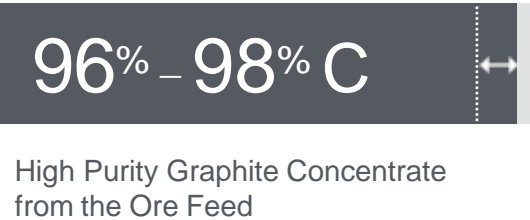
ORE RESERVE GRADE



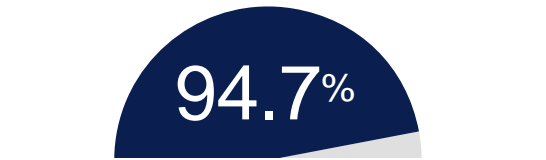
AVERAGE THICKNESS



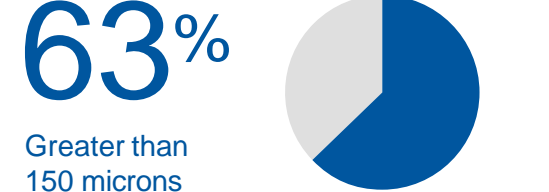
CONCENTRATION GRADE



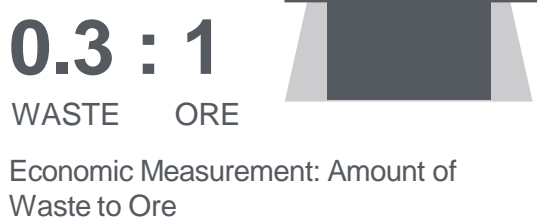
PROCESS RECOVERY



FLAKE SIZE DISTRIBUTION



STRIP RATIO



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

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- High % of Proven Ore Reserve providing the highest level of confidence for Mineral Resource development
- New mine design delivers low-cost Oxide Ore first strategy over 1.3 km strike length
- Pending **Special Mining License (SML)** will cover the full 5.5 km strike length to support expansion



View of Proposed Mining Operation



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

Epanko processing plant flythrough

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View flyover video: <https://tinyurl.com/mvu8ta3z>

Epanko processing plant layout

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PROCESSING PLANT



Improved flowsheet design and TSF expansion capacity

- Process flowsheet based on rigorous testing and independent review of single stream
- Flowsheet design to produce graphite products for industrial and high growth lithium-ion battery markets
- Knight Piésold completed assessment of expansion capacity for tailings storage facility in the Epanko valley
- Epanko expansion supported by capability of 8-fold increase to +80Mt capacity in tailings storage facility (TSF)
- Participating in research organization Amira Global sustainable and innovative tailings dam research program that aims to eliminate mine tailings

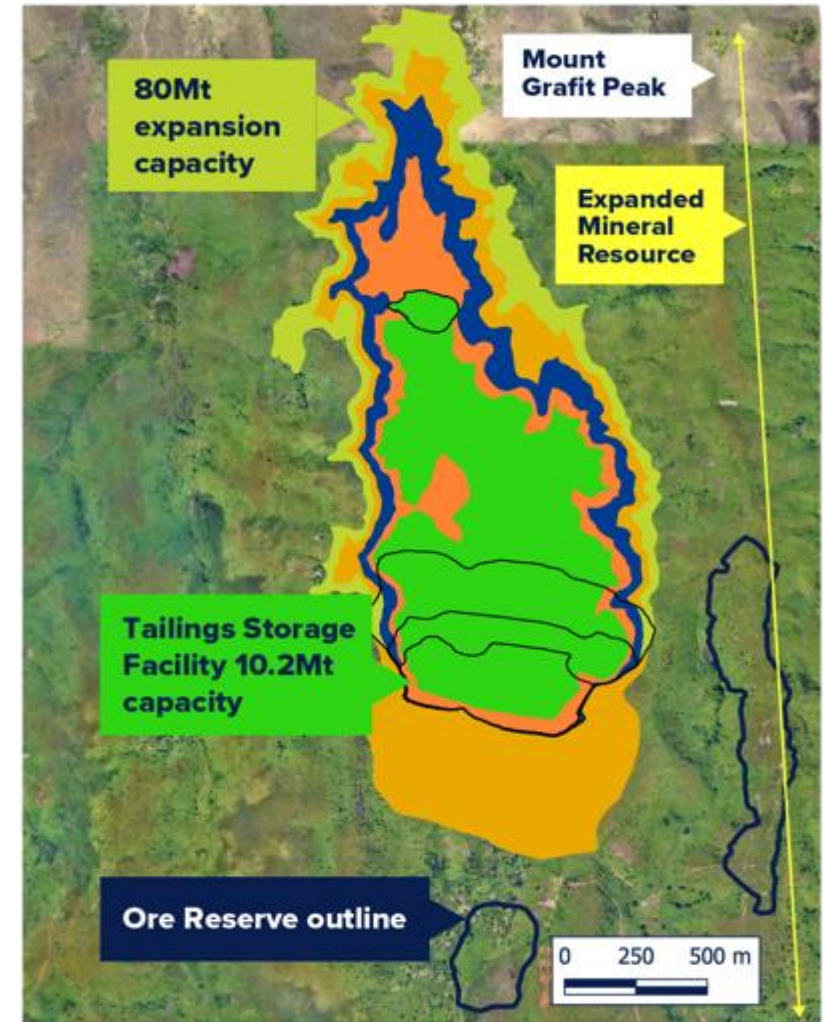
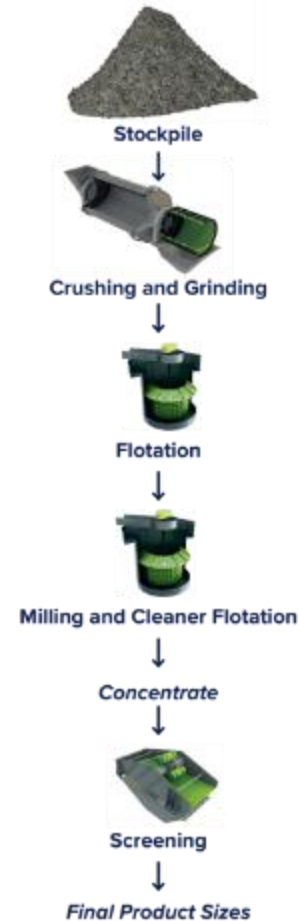


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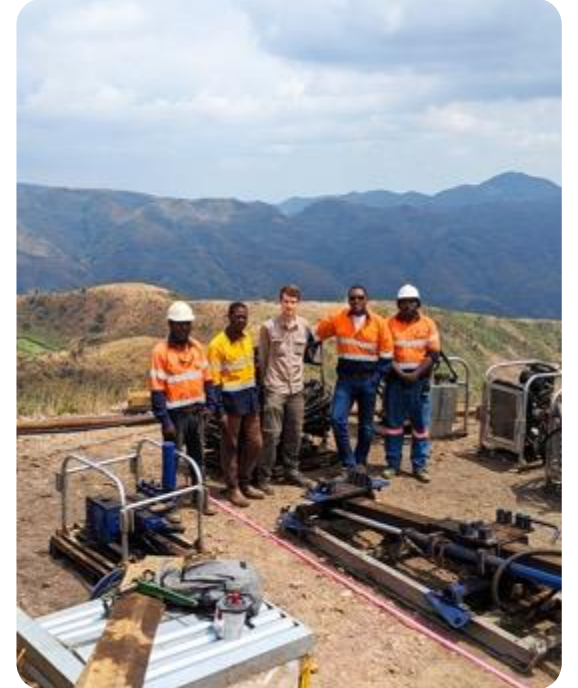
SINGLE STREAM



Our Tanzanian team delivering results

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New TZ infrastructure supporting Epanko

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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.

ESG contribution to Tanzania

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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.



Positive Impact

Transformational inter-generational financial and social upliftment for the Ulanga district.



Ore quality comparison

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	Heilongjiang (CHN)	Epanko (TZ)	Comment
Concentrate grade (%C) of -100mesh	90%-94%	95%-98%	<i>Epanko high grade concentrates require less impurities to be removed</i>
Silica Content	30-40%	10-20%	<i>Chinese graphite intercalated with the mineral muscovite with high silica content</i>
Metamorphic Gradient	Greenschist-Granulite Facies	Eclogite-Granulite facies	<i>Eclogite and Granulite facies-highest pressure and high temperature (refer slide 3)</i>

Source : Company geological reports and testwork programs



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

Priorities

Finalise site engineering studies on preferred locations

Offtake arrangements to support development

Further investment and supports the Tanzanian Government 'Vision 30' Mineral Value Addition Strategy

- Four locations identified as the preferred location along transport corridor for 20,000tpa facility
- Optimises supply chain logistics efficiencies for EV and Battery Customers
- Potential to process third party Tanzanian feedstock
- Access the new 2,115MW Nyerere Hydropower plant
- Modular plant design provides for a readily scalable development to support forecast demand
- Independent Life Cycle Assessment (LCA) studies conducted for EcoGraf confirm electricity accounts for 45-55% of CO₂ emissions



~1/4 of impacts come from the mining and concentrating stages

41% of impacts come from mechanical shaping

~1/3 of impacts come from the purification stage



The Company is seeking to pursue research on *‘developing new local Tanzanian industries’* from the graphite fines generated from produced midstream mechanical shaping facility



- Positive discussion with **European Union (EU) Tanzanian delegation** supporting the development of Midstream development which sources graphite from Epanko
- Discussion on **EU financing parties** commenced with positive feedback from lenders with ‘Letters of Interest’ underway
- Pursuing strategy to support further **mineral value addition** from midstream materials **to develop new industries**. The **Geological Survey of Finland - GTK** conducts research on the midstream materials to support the development of new materials

PROPOSED LOCAL TANZANIAN INDUSTRIES



Green recarburiser for EU steel industry as ‘carbon additive’



Grease manufacturing for local industries



Pencil manufacturing for local schools and industry

Mechanical shaping facility overview

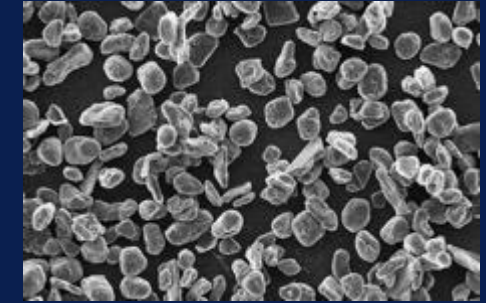
UPSTREAM

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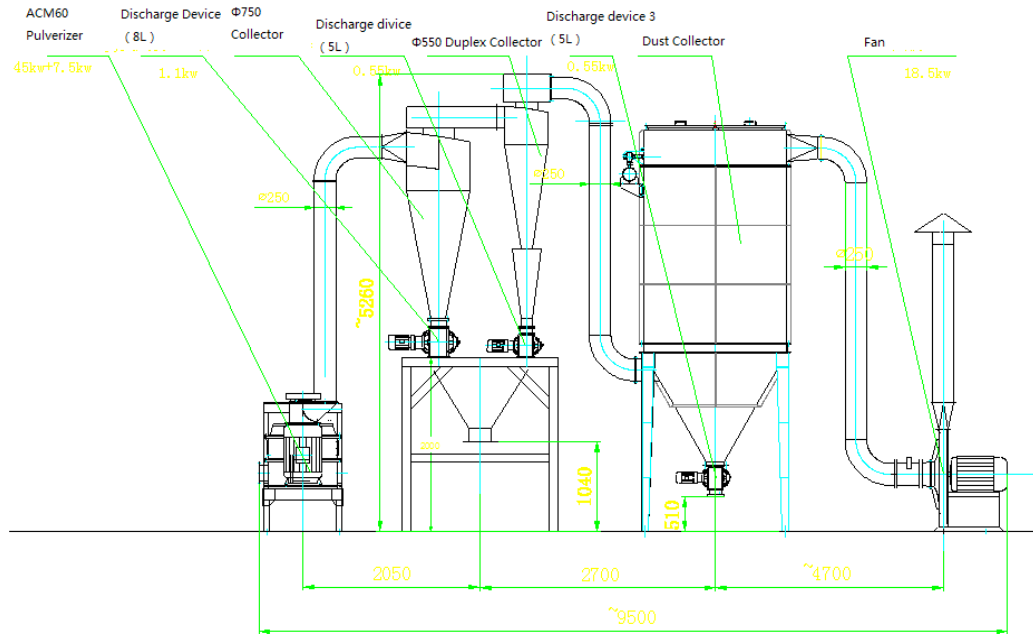
- Development to leverage off previously completed permitting, plant design, layout and equipment lists
- Extensive programs providing product samples
 - ✓ Purchased batch scale piloting equipment in Germany
 - ✓ Piloting campaigns through commercial scale plants with tonnes 4.4 tonnes piloted over 11 campaigns evaluating equipment suppliers
 - ✓ Extensive product evaluation by global customer base in EU, Asia and North America
 - ✓ Increasing engagement with customers for sales of spherical graphite

GRADE:
EPANKO UNPURIFIED SPG16

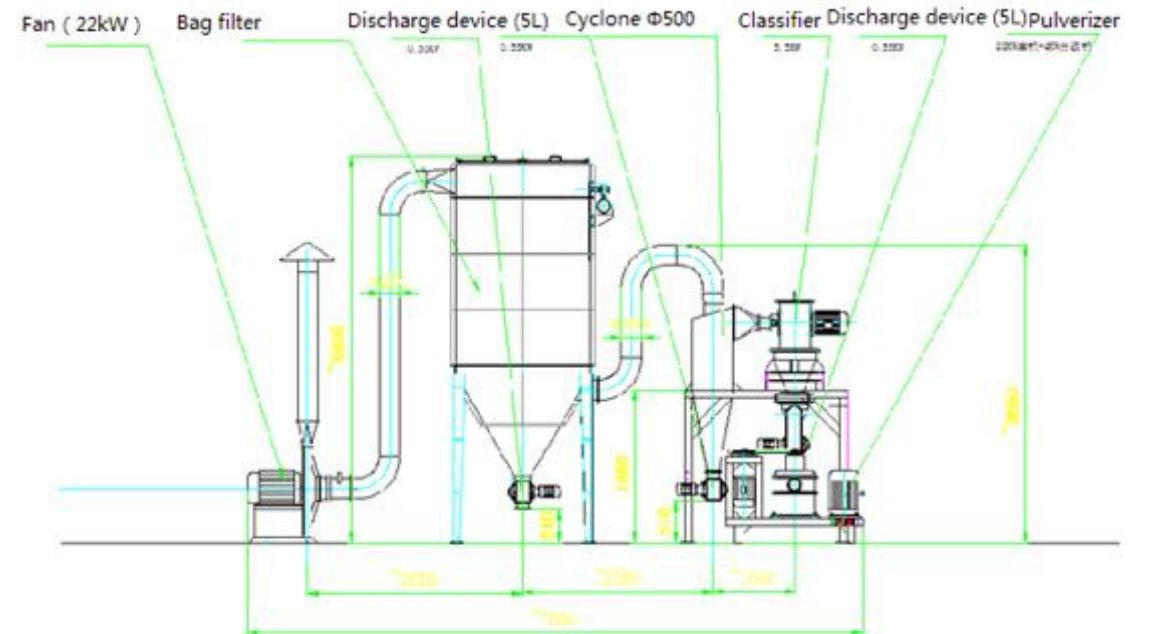


The main equipment used in the mechanical shaping facility for milling and shaping

General Arrangement of Milling (Micronisation)



General Arrangement of Shaping (Spheroidisation)



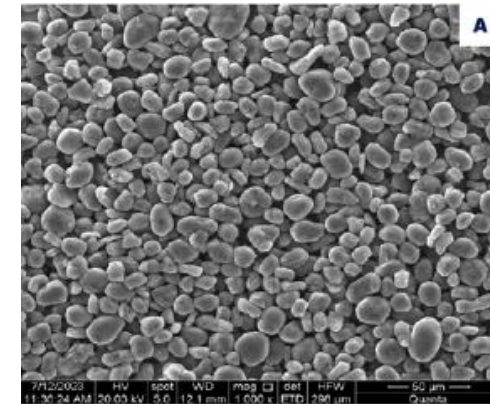
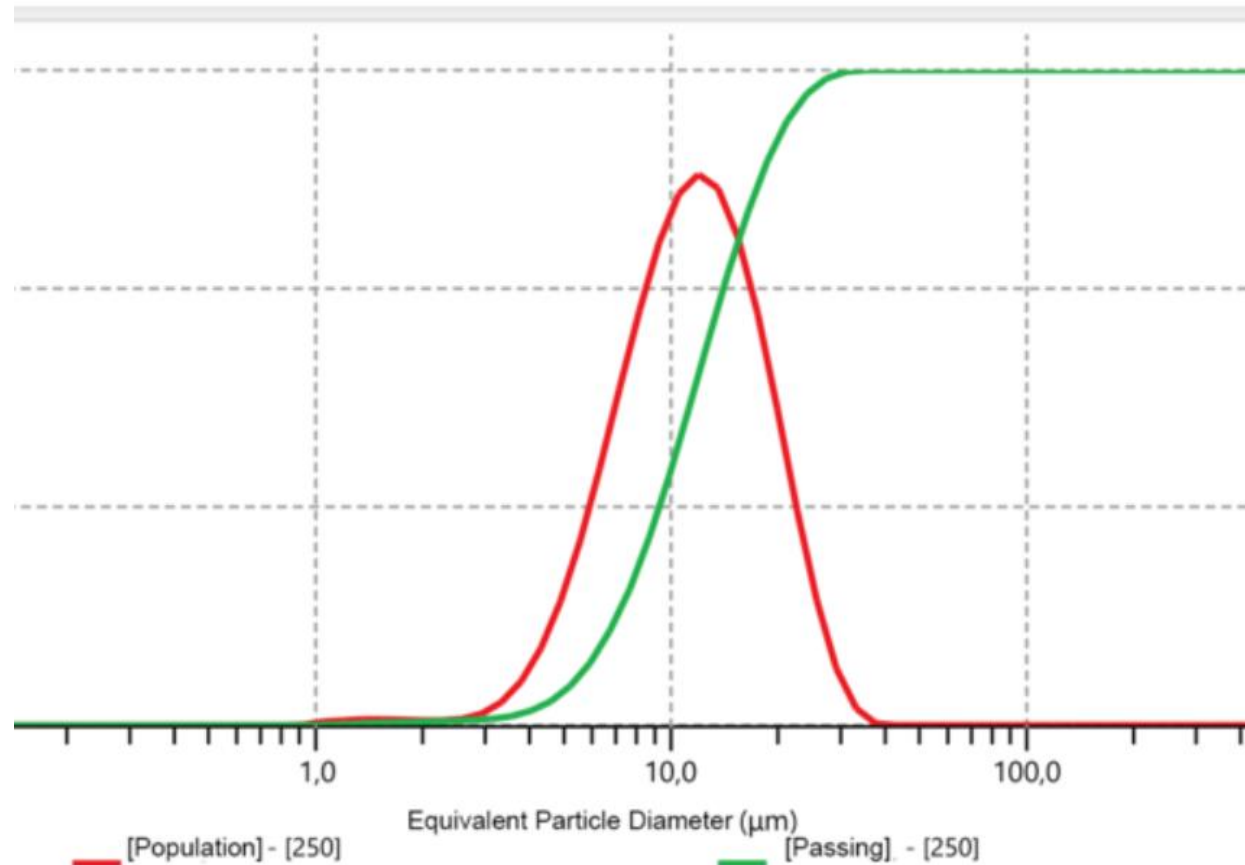
Spherical processing purpose

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Mechanical shaping equipment provides a range of customised particle size distribution (PSD) for customers. Extensive piloting confirming Epanko graphite can meet all PSD customer requirements



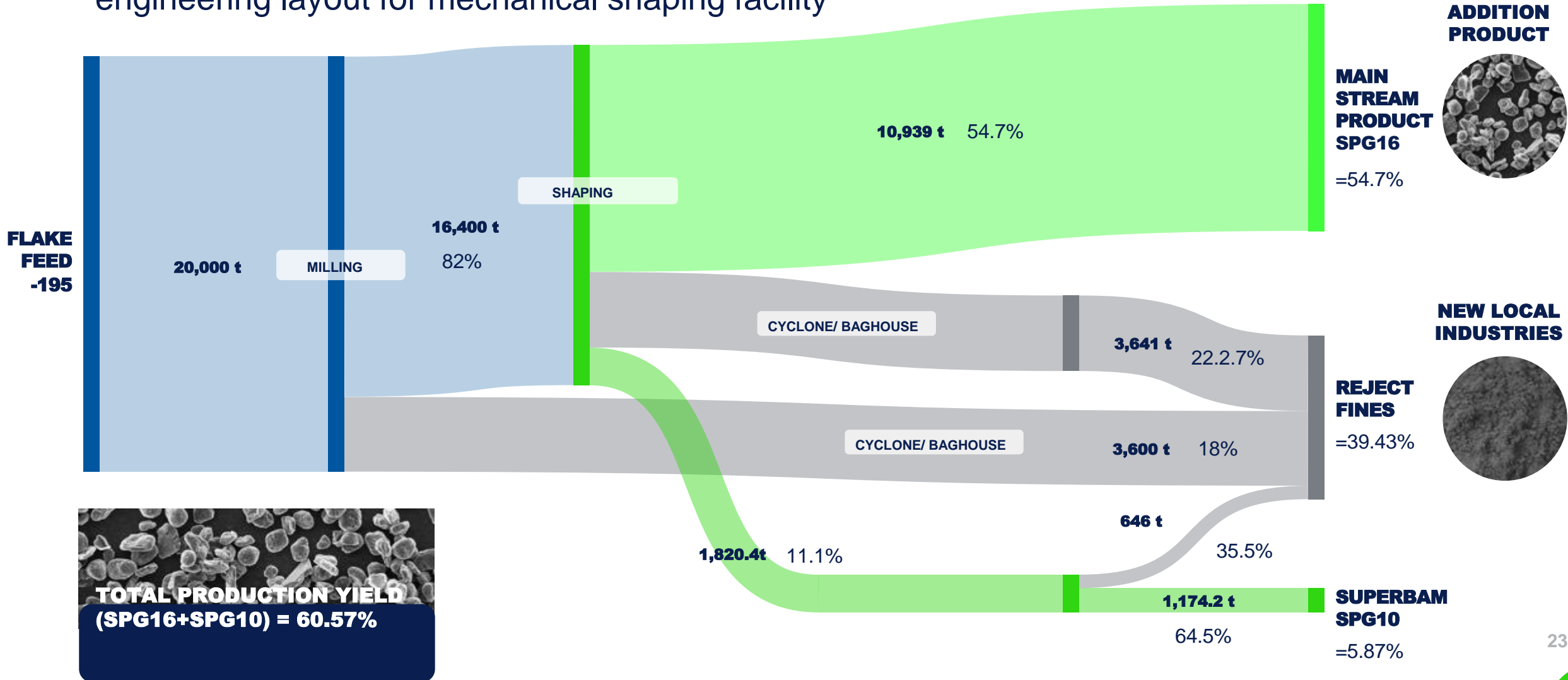
Piloting results for 20,000tpa

UPSTREAM

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Diagram (Sankey) showing product flow to underpin development plans for the engineering layout for mechanical shaping facility

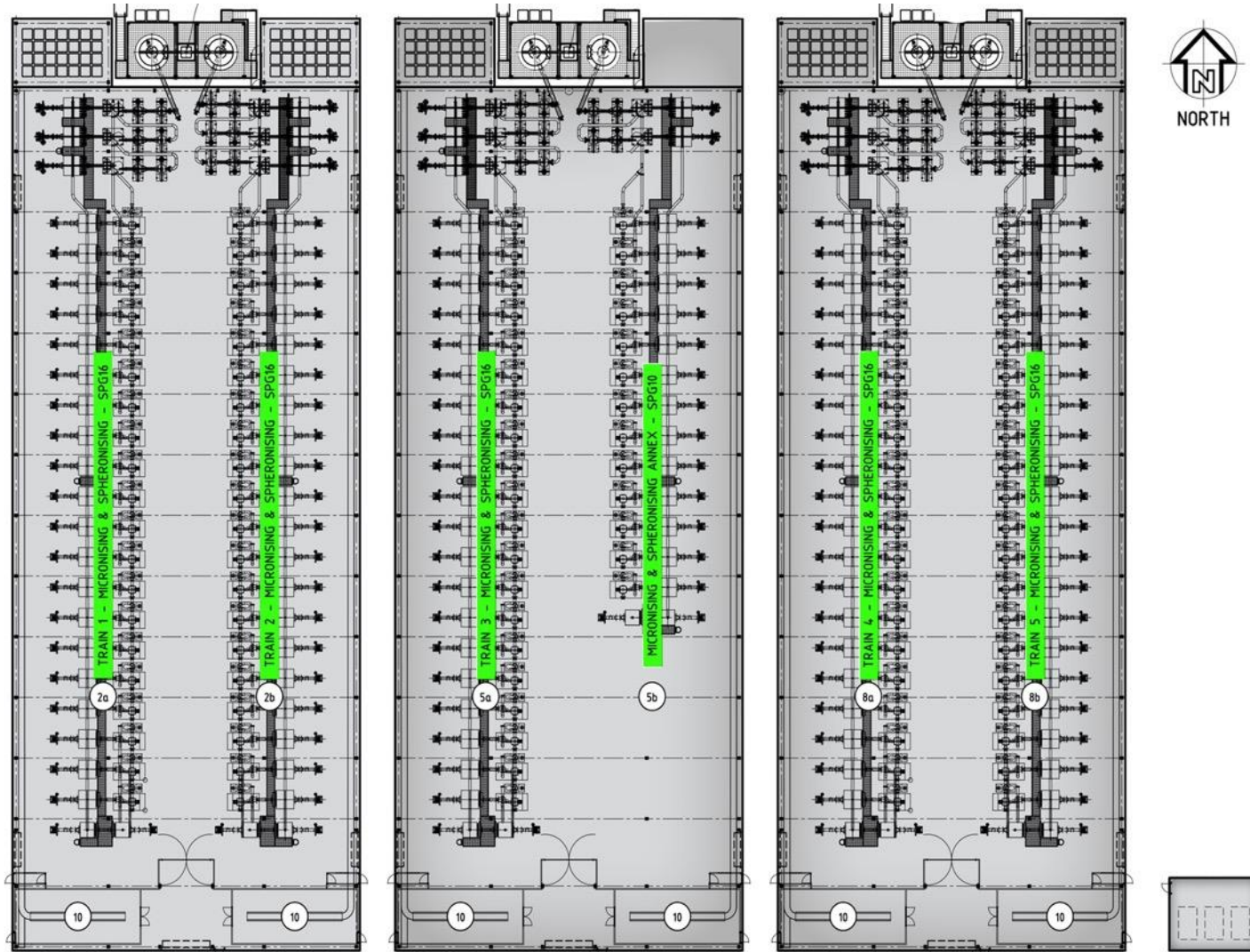


Engineering layout for 20,000tpa facility

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MICRONISING AND SPHERONISING PLANT LAYOUT

High performance graphite with low CO₂

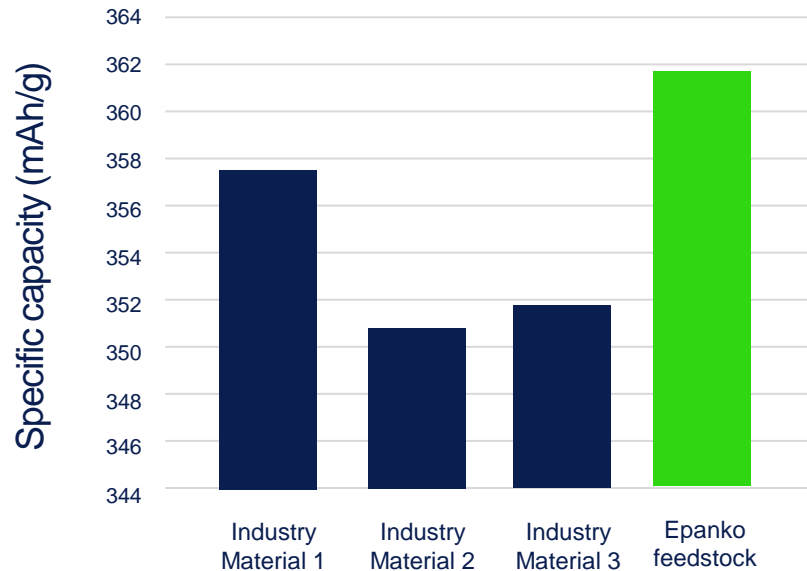
UPSTREAM

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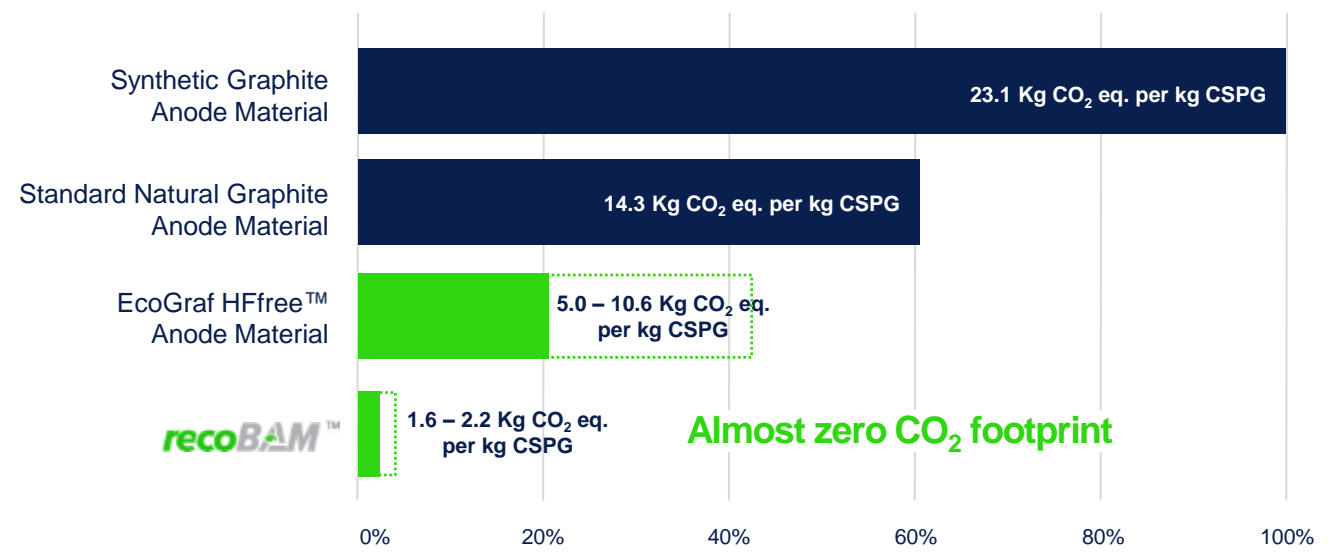


Epanko graphite and spherical graphite provides improved battery performance and significantly lower emissions

SUPERIOR BATTERY PERFORMANCE

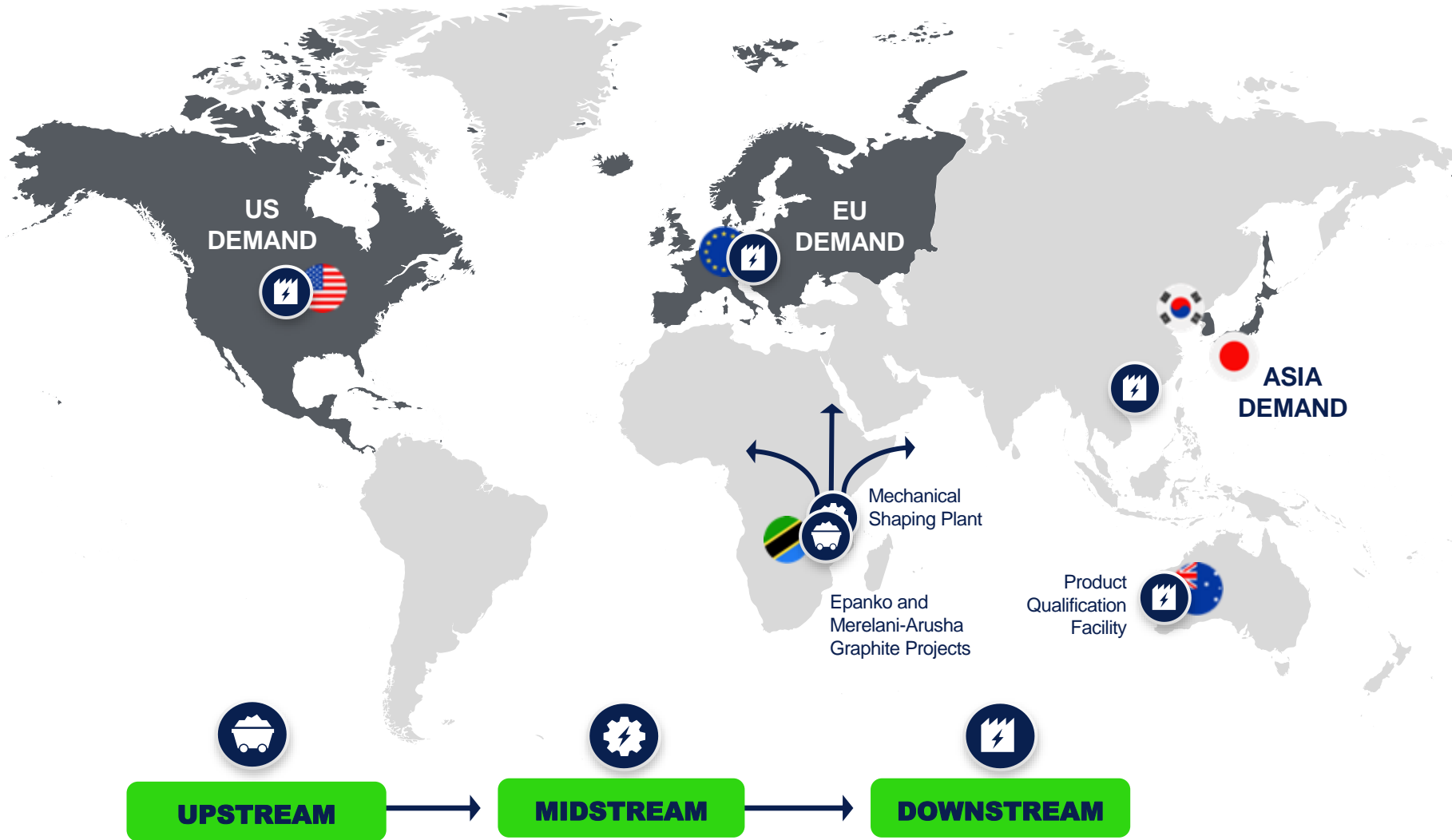


LOW CO₂ FOOTPRINT



(LCA Study at ISO)

Compelling product value to customers



KEY ADVANTAGES

Vertically Integrated

Cost Competitive

ESG Position

Expansion Potential

Engineering clean energy with Tanzanian graphite.

 EcoGraf™

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