EcoGraf™

September 2021

Stockhead VCon on the EV Revolution Presentation

ASX: EGR FSE: FMK OTCQX: ECGFF

ENGINEERING CLEAN ENERGY

Disclaimer

Securities Disclaimer

This presentation 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 in relation to the feasibility study conducted on the production of battery graphite using the Company’s EcoGraf technology, including production targets and forecast financial information derived from the production targets, included in this document is extracted from an ASX announcement dated 5 December 2017 “Battery Graphite Pilot Plant”, as updated on 17 April 2019 “EcoGraf Delivers Downstream Development” and 5 November 2020 “Completion of EcoGraf™ Processing Facility Development Report”, 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 announcement released on 5 December 2017, as updated on 17 April 2019 and 5 November 2020 continue to apply and have not materially changed.

Information in this document relating to the Bankable Feasibility Study conducted on the Epanko Graphite Project, including production targets and forecast financial information derived from the production targets, included in this document is extracted from an ASX announcement dated 21 June 2017 “Updated Bankable Feasibility Study” 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 announcement released on 21 June 2017 continue to apply and have not materially changed.

Competent persons

Any information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Spinks, who is a Member of the Australasian Institute of Mining and Metallurgy included in a list promulgated by the ASX from time to time. Andrew Spinks is a director of EcoGraf Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Andrew Spinks consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Information in this document that relates to Mineral Resources is based on information compiled by Mr David Williams, a Competent Person, who is a Member of the Australasian Institute of Mining and Metallurgy. David Williams is employed by CSA Global Pty Ltd, an independent consulting company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. David Williams consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Information in this document that relates to Ore Reserves has been compiled by Mr Steve O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy. Steve O’Grady is a full-time 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 which is relevant to the estimation, assessment and evaluation of the economic extraction of the 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, Mineral Resources and Ore Reserves”. Steve O'Grady consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Diversified HFfree™ battery anode material business supporting the global transition to clean energy and e-mobility

BATTERY ANODE MATERIAL

Western Australia and Europe battery anode material processing facilities

LITHIUM-ION BATTERY RECYCLING

Recovery of carbon anode material from lithium-ion batteries

NATURAL GRAPHITE

Scalable mining projects for long-term supply of natural graphite products

HFfree™ = Purification process eliminates Hydrofluoric (HF) Acid

Corporate summary

Board and Executive Management

Chairman
Robert Pett

Managing Director
Andrew Spinks

Director
John Conidi

Executive Director – Finance
Howard Rae

Executive Manager – Project Development
Shaun O'Neill

Executive Manager – Product Development
Michael Chan

Business Locations

Share Price

Shares on issue: 449m
Unlisted performance rights: 8.55m

Major Shareholders (Top 20 = 55%)

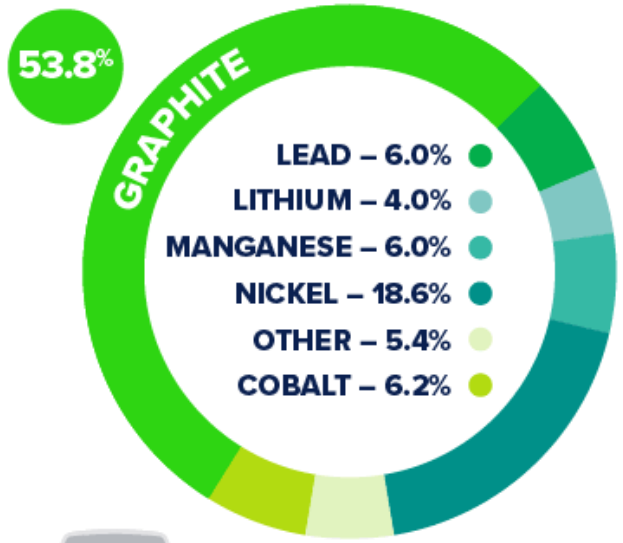
BNP Paribas Nominees 23.9%	Allianz Global Investors 5.1%
First Sentier Investors 8.6%	Paradice Investment 5.1%
Board & Management 7.5%	

ASX :	**EGR**
Börse Frankfurt :	**FMK**
USA OTCQX :	**ECGFF**
Share price	A$0.825
Market capitalisation	A$370m
Cash on hand 30 June	A$52.6m

Lithium-ion Battery Market Overview.

Compelling lithium-ion battery market opportunity

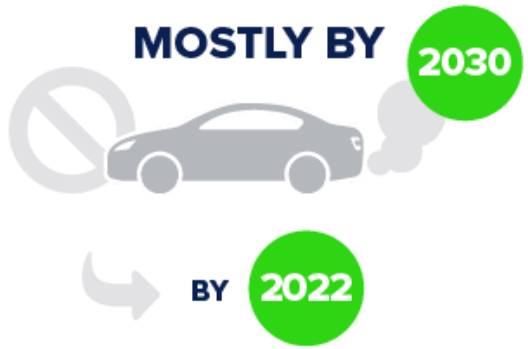
MINERAL DEMAND FROM ENERGY STORAGE



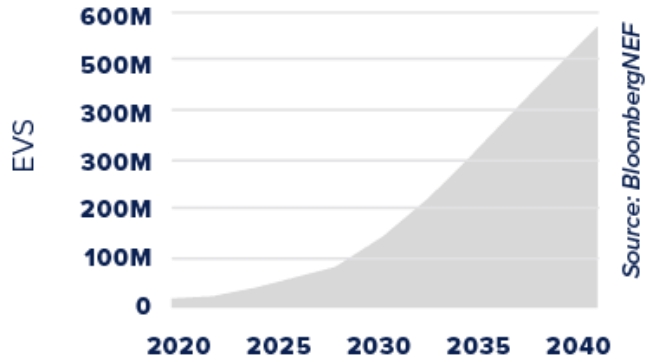
EV MARKET FORECAST TO DRIVE +700% GROWTH IN NATURAL GRAPHITE DEMAND BY 2025

GOVERNMENTS GLOBALLY

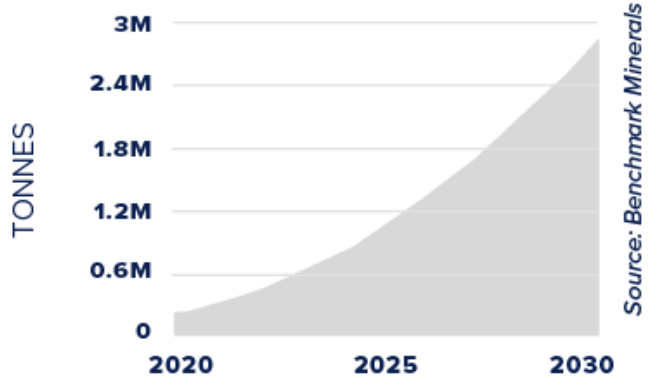
PHASING OUT SALES OF NEW INTERNAL COMBUSTION VEHICLES



EV DEMAND

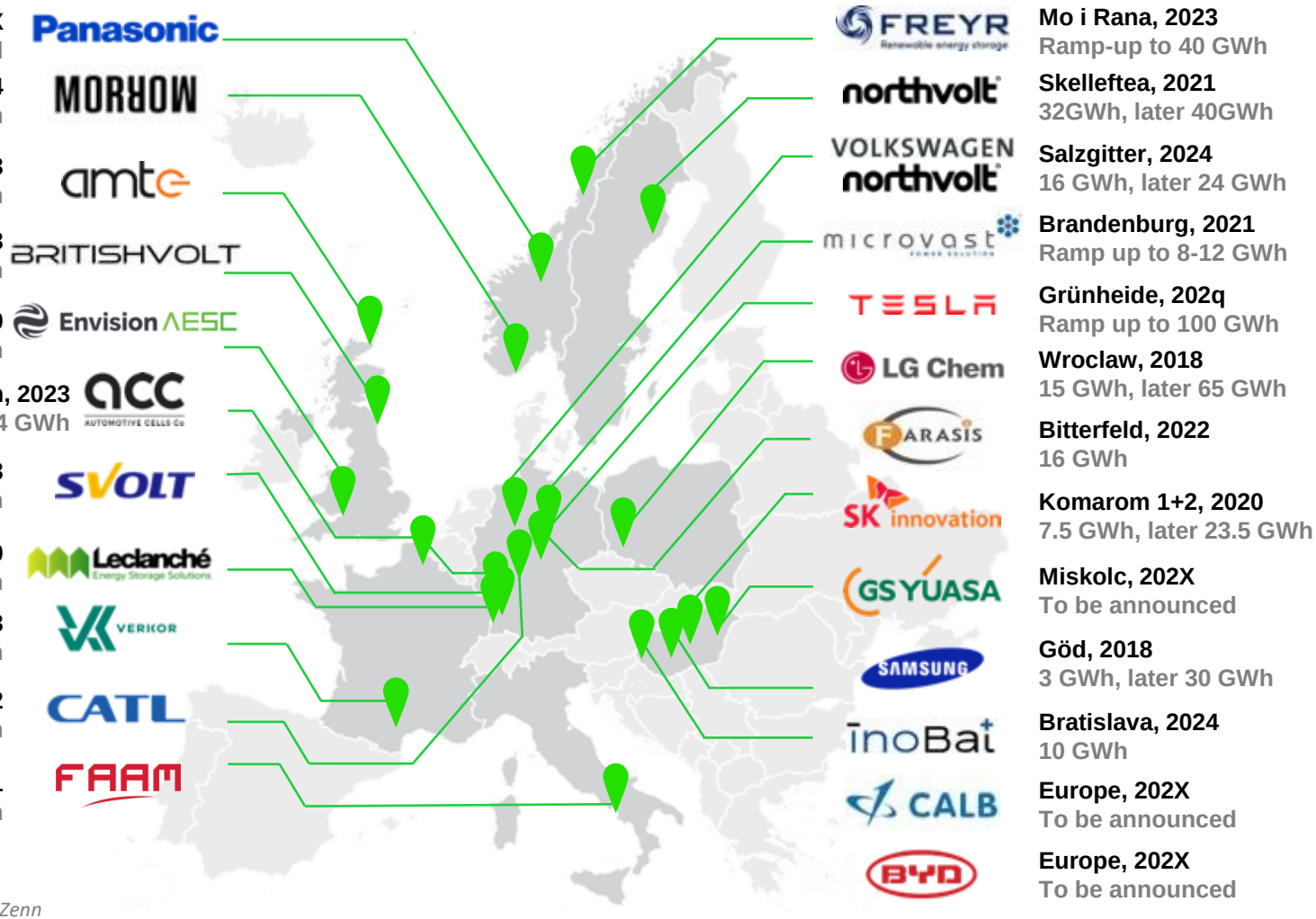


ANODE DEMAND



Unprecedented investment in new European battery capacity

24 Gigafactories announced with 600 GWh total annual production capacity = 9-10 million electric vehicles per year



Norway, 202X
To be announced

Arendal, 2024
8 GWh, later 32 GWh

Thurso, 2023
Ramp up to 5 GWh

Blyth, 2023
10 GWh, later 35 GWh

Sunderland, 2010
2.5 GWh

Douvrin+Kaiserslautern, 2023
Each 8 GWh, later 64 GWh

Überherrn, 2023
Ramp up to 24 GWh

Willstätt, 2020
1 GWh

South France, 2023
16 GWh, later 50 GWh

Erfurt, 2022
14 GWh, later 24 GWh

Teverola, 2021
Ramp up to 2.5 GWh

Mo i Rana, 2023
Ramp-up to 40 GWh

Skelleftea, 2021
32GWh, later 40GWh

Salzgitter, 2024
16 GWh, later 24 GWh

Brandenburg, 2021
Ramp up to 8-12 GWh

Grünheide, 202q
Ramp up to 100 GWh

Wroclaw, 2018
15 GWh, later 65 GWh

Bitterfeld, 2022
16 GWh

Komarom 1+2, 2020
7.5 GWh, later 23.5 GWh

Miskolc, 202X
To be announced

Göd, 2018
3 GWh, later 30 GWh

Bratislava, 2024
10 GWh

Europe, 202X
To be announced

Europe, 202X
To be announced

Source: Roland Zenn

- EU fastest growing market in the world
- Demand requires new supply
- Increasing requirement for low carbon supply chains coupled with greater recycling

- **Exposure to European supply chains from partnership with *EU support***

EU Commission's battery ESG regulations

New measures announced to promote sustainability

POLICY	ECOGRAF'S ESG
Responsible sourcing. New mandatory procedures to ensure sustainable and ethical sourcing of raw materials such as graphite.	✔ EcoGraf™ HF*free* proprietary purification process ✔ Epanko developed under Equator Principles
Carbon (CO_2) footprint, performance and durability labelling. All batteries sold in Europe must declare their carbon footprint.	✔ EcoGraf™ recycling ✔ Renewable energy inputs into businesses ✔ Implementing low impact mining methods
Traceability. All raw materials used in batteries to be procured according to OECD recognised guidelines for sustainable sourcing. Thanks to blockchain technology, each battery will have a digital passport tracking all upstream components.	✔ Implementation of Block Chain technology
Recycling and establishing a circular economy. A minimum proportion of battery content to be made up of recycled materials. To close the loop and retain valuable materials used in batteries - such as cobalt, lithium, nickel and graphite - for as long as possible, the Commission proposes to establish new requirements and targets on the collection, treatment and recycling of batteries.	✔ EcoGraf™ HFfree proprietary purification process eliminates use of toxic hydrofluoric acid ✔ EcoGraf™ recycling enables customers to achieve improved recycling efficiencies

EcoGraf's sector leading ESG credentials are matched to support the global transition to clean energy

EUROPEAN BATTERY ALLIANCE | EBA250

European Investment Bank The EU bank

EIB new energy lending policy supporting projects relating to the supply of critical raw materials

DEVELOPMENT READY

Battery Anode Material Business.

HFfree™ ZERO WASTE RESPONSIBLY PRODUCED

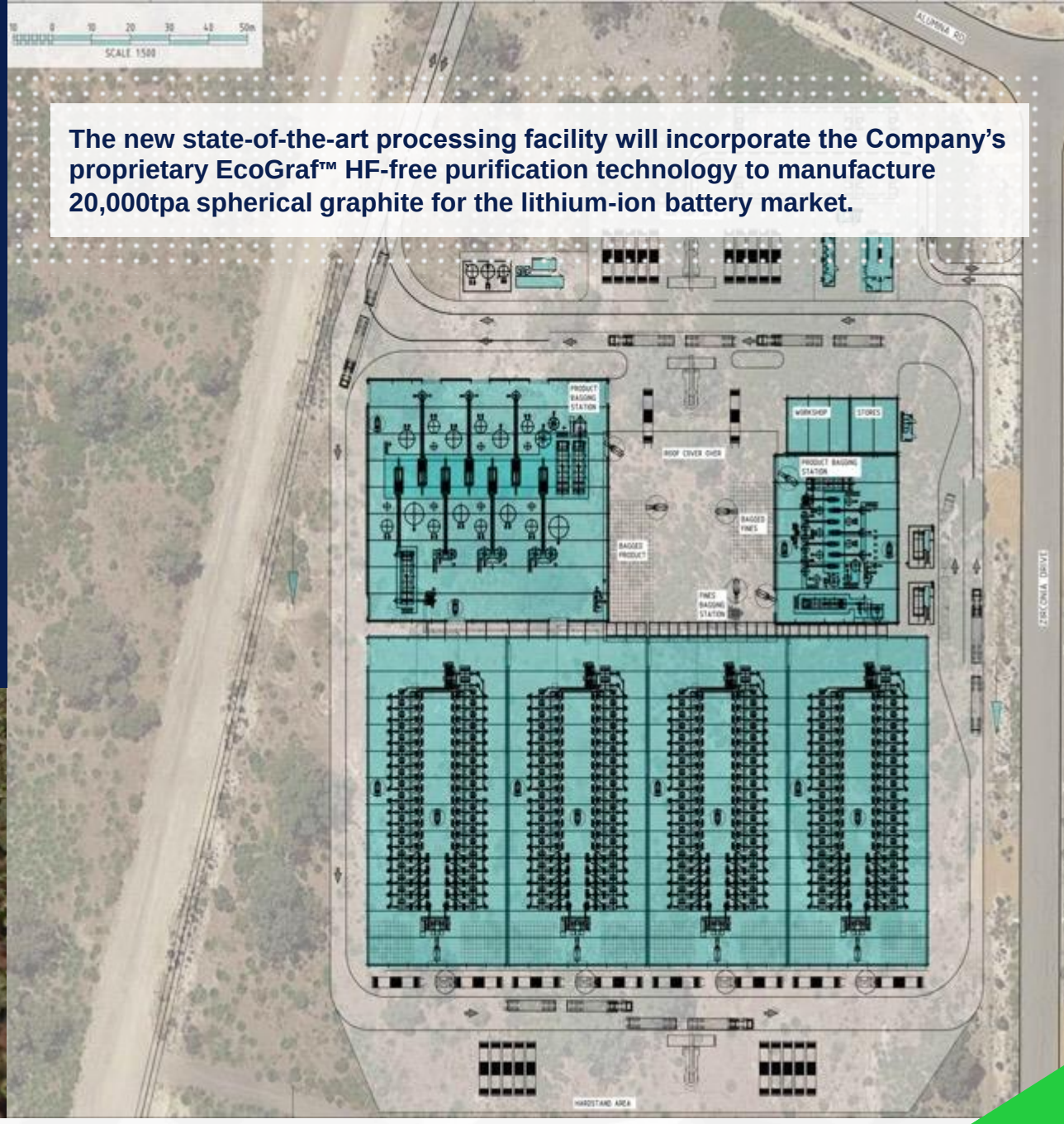
Western Australia: Kwinana-Rockingham location

Western Australian Battery Anode Materials Processing Facility

CURRENT STATUS

- Secured EFA support for US$35m expansion loan
- GR Engineering completing pre-construction works for the detailed engineering design and EPC procurement
- Identifying value engineering opportunities in yield and implementing a zero-waste operating strategy
- Finalising regulatory approvals, site infrastructure and power, water, gas and reagent procurement arrangements
- Recruitment of experienced graphite and project development professionals to support the construction and operational commissioning programs.

The new state-of-the-art processing facility will incorporate the Company's proprietary EcoGraf™ HF-free purification technology to manufacture 20,000tpa spherical graphite for the lithium-ion battery market.



Battery graphite business summary

State-of-the-art facility to deliver high quality, sustainably produced HF*free* battery anode material products

Initial commercial production plant commencing at 5,000tpa, expanding to 20,000tpa

- EcoGraf™ HFfree proprietary purification process eliminates use of toxic hydrofluoric (HF) acid
- Feasibility, engineering and costing studies completed by GR Engineering Services
- Four years of pilot plant test work undertaken in Germany:
  - Successful application of EcoGraf™ purification process to a range of global feedstock supplies
  - Long-term feedstock agreement with leading German trading group TECHNOGRAFIT GmbH
- Extensive product testing completed and sales arrangements via thyssenkrupp AG
- Financing with Australian Government US$35 million debt facility
- Completing pre-construction works for detailed engineering design

EcoGraf's first facility to meet high growth global battery demand

Capital investment		Financial returns @ 20,000tpa			
Initial 5,000tpa	**15,000tpa Expansion**	**Pre-tax project NPV_8**	**Pre-tax equity NPV_8**	**Annual EBITDA**	**IRR**
US$22.8m	US$49.2m	US$642m	US$448m	US$35m	42.4%

Sustainability focus and product development initiatives

- Commercial scale testing with leading equipment manufacturer indicates potential for product yield to exceed 60%
- Zero waste operating strategy with the goal of utilising 100% of feedstock through product innovation and development to maximise yield and value-add bi-products
- Engineered water processing solutions to treat and recycle wastewater and achieve a 75% reduction in water usage
- Adoption of renewable energy content

superBAM

- Enhanced performance
- Higher charge discharge capacity

END USE:
HYBRID CARS/ POWER TOOLS & 3C APPLICATION

greenRECARB

- Carbon additive to Cast/Grey Cast Steel & EAF Steel manufacturing

END USE:
CAST & GREY CAST STEEL FOUNDRY/EAF FURNACE

ecoCEM

- AA, AAA,8V alkaline battery, NMC CEM material

END USE:
AA, AAA, Li-ION CEM CATHODE & CAN COATING

greenRECARB is a green carbon recarburiser additive for the steel manufacturing industry

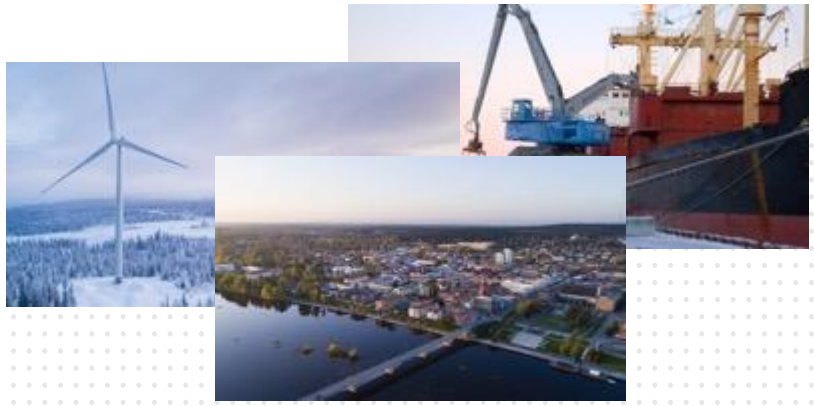
- Steel manufacturing using electric arc furnaces requires up to 4% carbon additive as recarburiser which is currently sourced from high polluting petroleum coke materials
- Product development program in progress to support changes in steel manufacturing methods, including the use of hydrogen to produce green steel

Evaluation of industrial site in Sweden

The reservation agreement signed with the Skellefteå municipality for a 65,000m² site

Key advantages of Skellefteå's main industrial area:

- Abundant supply of clean, renewable energy with the lowest industrial power costs in Europe
- Ready access to key battery and industrial markets across Europe



Global expansion strategy for battery anode business

Supply of battery anode materials to key growth markets

2021 EV BATTERY MEGAFACTORIES = 200

Current battery anode materials supply chain is 100% reliant on China. Strategy to expand production and regionalise additional manufacturing facilities in Europe, Asia and the US to support increasing demand

DEVELOPMENT READY

Natural Flake Graphite Business.

EQUATOR PRINCIPLES

IFC International Finance Corporation WORLD BANK GROUP

Natural graphite business summary

Long life Epanko Graphite Mine to supply industrial and battery markets	
Defined, de-risked and ready for construction	✔ Bankable Feasibility Study completed by GR Engineering Services ✔ Bank appointed Independent Engineer's Review completed by SRK Consulting ✔ Supporting Tanzania's industrialisation strategy ✔ Granted Mining Licence
Sector leading ESG credentials	Equator Principles development model, satisfying: ✔ International Finance Corporation Performance Standards ✔ World Bank Group Environmental, Health & Safety Guidelines
Scalable production plant	60,000tpa initial development with low cost expansion to meet market demand
Sales agreements with major international customers	thyssenkrupp (Germany) and Sojitz Corporation (Japan)

Capital investment	Financial returns @ 60,000tpa		
60,000tpa	**Pre-tax NPV_{10}**	**Annual EBITDA**	**IRR**
US$89m	US$211m	US$44.5m	38.9%

Significant contribution to Tanzanian economy

US$3+ billion

direct contribution to the economy over 40+ years through local procurement of goods and services, employment, royalties, taxes, interest income, dividends and inspection fees

300 Tanzanians

to be directly employed
(over 95% of all staff) for 40+ years

4,500 indirect jobs + new industry

Community development

via new housing, school, Church, medical dispensary, health insurance, training and positive engagement to build lasting social partnerships

- Transforming financial and social upliftment for the Mahenge region
- Strong multiplier effect across the economy, with an estimated **US$9+ billion additional indirect economic benefits over 40 years**
- New manufacturing industry
- 64% of economic returns to Tanzania

Epanko standards

Operate under International Finance Corporation - Equator Principles

Opportunity to support further manufacturing industries

Renewable energy

estimated to increase
from 25% to 65% by 2050

opportunity for graphite in
solar panel batteries to power remote villages

High returning 60ktpa BFS positions Epanko for development

- Robust technical and financial BFS completed, conforming with IFC standards
  - Average production of 60,000tpa graphite concentrate
  - High proportion of >150 micron concentrate at carbon grades demanded by the market
  - Potential to produce a 99% carbon concentrate from <150 micron flake to supply high growth battery anode market
- BFS utilised industry leading consultants
  - Including GR Engineering, Knight Piesold, CSA Global and IMO Metallurgy
  - Technical due diligence completed by independent bank appointed engineer SRK
- BFS economics are based on sale into refractory and other established markets
  - Significant upside potential through access to high value markets, including spherical and expandable graphite

Epanko bankable feasibility study outcomes		
Development period	(months)	19
Average annual throughput	(tonnes)	695,000
Strip ratio	(waste to ore)	0.4:1
Average feed grade	(% TGC)	8.3
Graphite recovery	(%)	94.7
Average product carbon grade	(%)	96
Graphite production	(tonnes per year)	60,000
Mining cost	(US$/t processed)	7.93
Processing cost	(US$/t processed)	19.61
General & administration cost	(US$/t processed)	4.75
Transport and port charges	(US$/t sold)	107
C1 FOB cost	(US$/t sold)	500
All in Sustaining cost[1]	(US$/t sold)	572
Pre-production capital cost	(US$ million)	88.9

1: Includes royalties (US$39/t), sustaining capital (US$15/t), off-site corporate functions (US$10/t) and rehabilitation (US$8/t)

High quality graphite deposit with scale

- Mineral Resource supports potential for depth and strike extensions of the Ore Reserve pit shells
- Mineralisation commences at surface with minimal cover
  - Average LOM strip ratio 0.4:1
- Favourable mineralogy delivers quality and drives robust project economics
  - High proportion of large flake sizes
  - Graphite easily liberated and delivers high yield
  - Higher carbon grade achieved through simple processing
  - Low levels of in-situ deleterious elements

Epanko Mineral Resource estimate >8% TGC

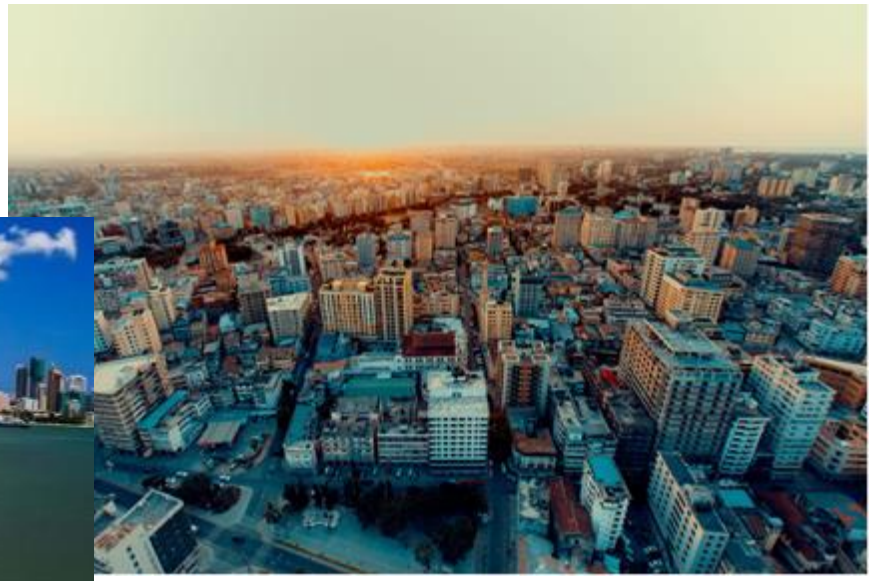
JORC classification	Tonnage (Mt)	Contained graphite (t)
Measured	7.5	738,900
Indicated	12.8	1,280,000
Inferred	10.4	1,030,600
Total	**30.7**	**3,049,500**

Epanko rocks have undergone extremely high metamorphic pressure and temperature forces that have created unique ‘cheetah’ like rock textures

EcoGraf provides mine-to-market ESG supply chain assurance

- EcoGraf's Epanko mine development satisfies Equator Principles social and environmental planning standards
- Long-life, high quality supply of natural flake graphite for industrial and battery markets
- Ideally located to support European customers' supply chain management under the Paris Agreement on climate change
- German and Australian Government funding support
- US$60m debt funding proposal developed in conjunction with Germany's KfW IPEX-Bank and presented to the Government of Tanzania with the aim of simplifying and fast-tracking the financing process
- Recent initiatives by the Government of Tanzania to encourage greater foreign investment expected to support the project funding program

Epanko to transform the regional economy, operating for over 40 years and contributing over US$3 billion to Tanzanian economic and social development



PILOT SCALE READY

Lithium-ion Battery Recycling Business.

HFfree™ ZERO WASTE RESPONSIBLY PRODUCED Circular ECONOMY

Battery recycling

Market Overview

Recycling efforts have focused on cathode metals

Carbon anode materials are currently not recovered

PRODUCTION SCRAP	Carbon material which is a waste product generated from each stage of battery anode manufacturing, cell manufacturing and battery testing
BLACK MASS	Carbon material remaining after hydrometallurgical processes have recovered the high value cathode metals from end-of-life lithium-ion batteries

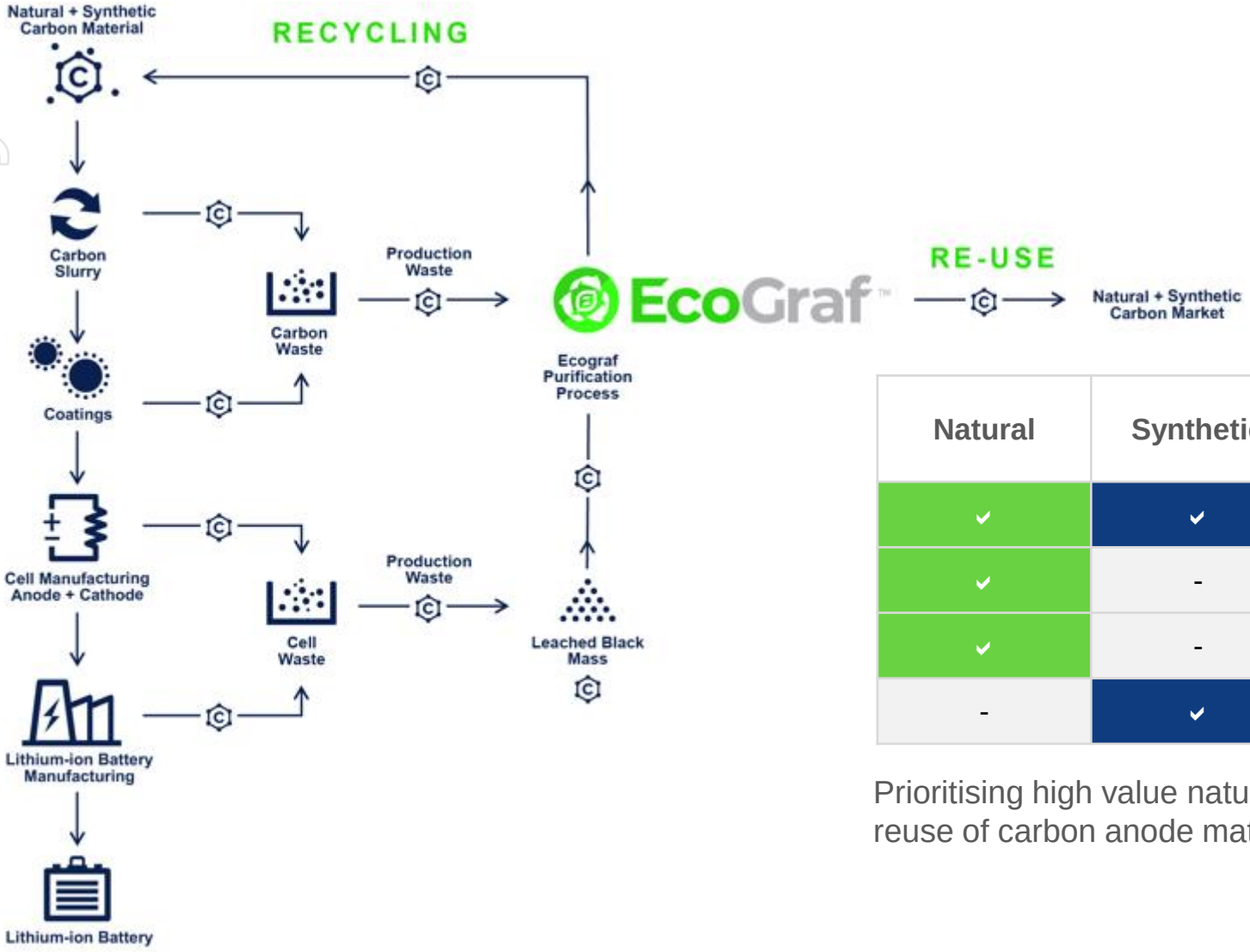
Benefits and Opportunity

Reducing battery production costs

Lowering the EV carbon footprint

Proposed EU legislation requires more battery recycling and greater transparency in the raw materials supply chain.

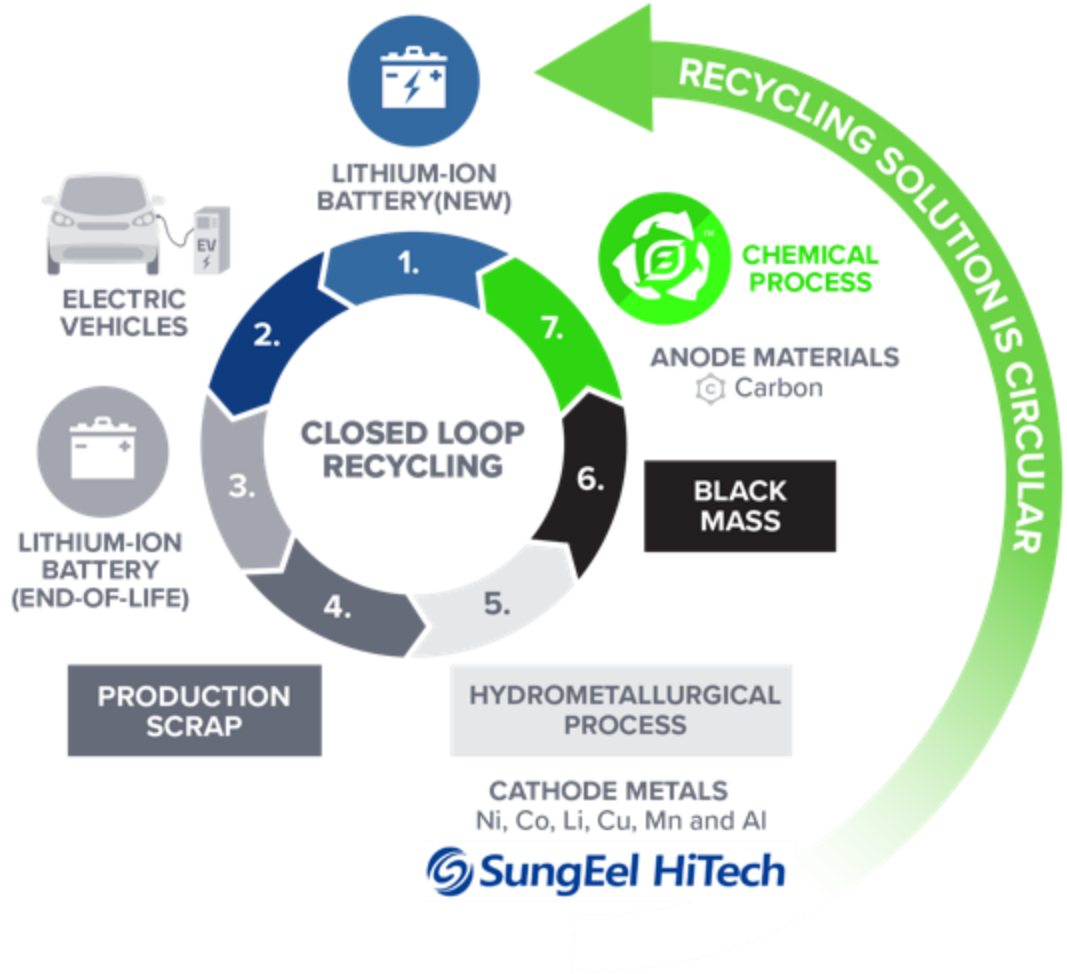
Recycling strategy for recovered anode material



Natural	Synthetic	Industrial Application Markets for Recovered Carbon Anode Material
✔	✔	Alkaline and zinc carbon batteries
✔	-	Friction materials
✔	-	Refractories
-	✔	Carbon additives

Prioritising high value natural and synthetic industrial applications for reuse of carbon anode material in industrial applications.

EcoGraf positioned to recover and reuse carbon anode material

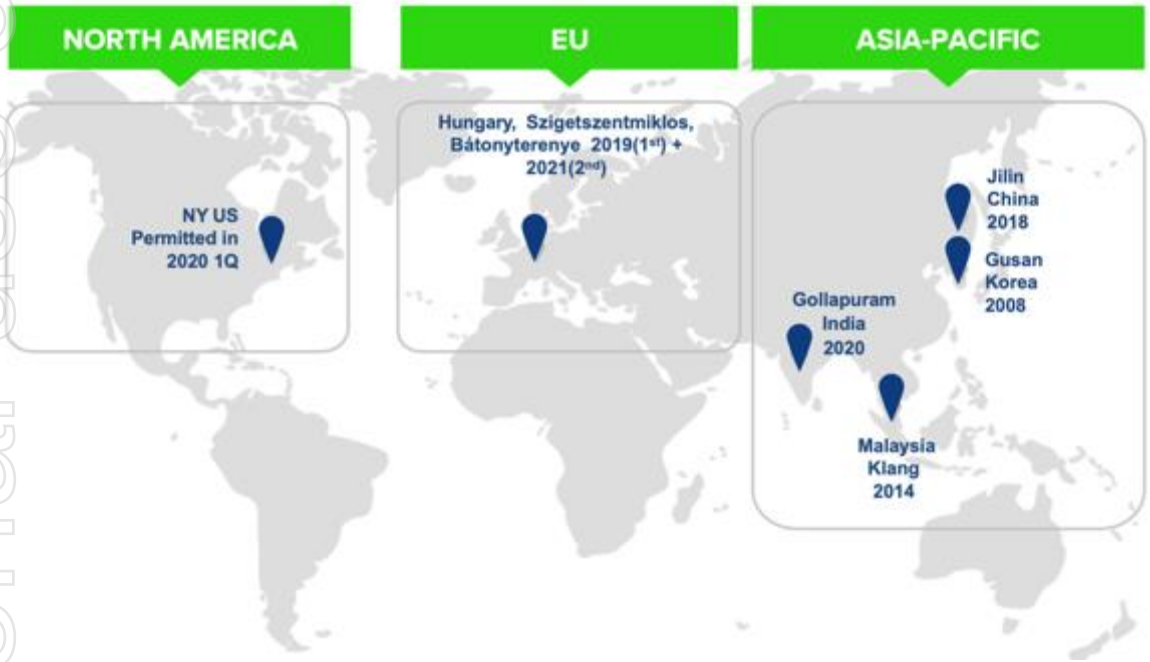


Agreement signed with South Korea's largest lithium-ion battery recycling group SungEel HiTech

SungEel HiTech strategic co-operation

Collaboration presents opportunity to provide tailored EcoGraf™ process in SungEel lithium-ion battery recycling plants

SungEel Global Pre-treatment Facilities

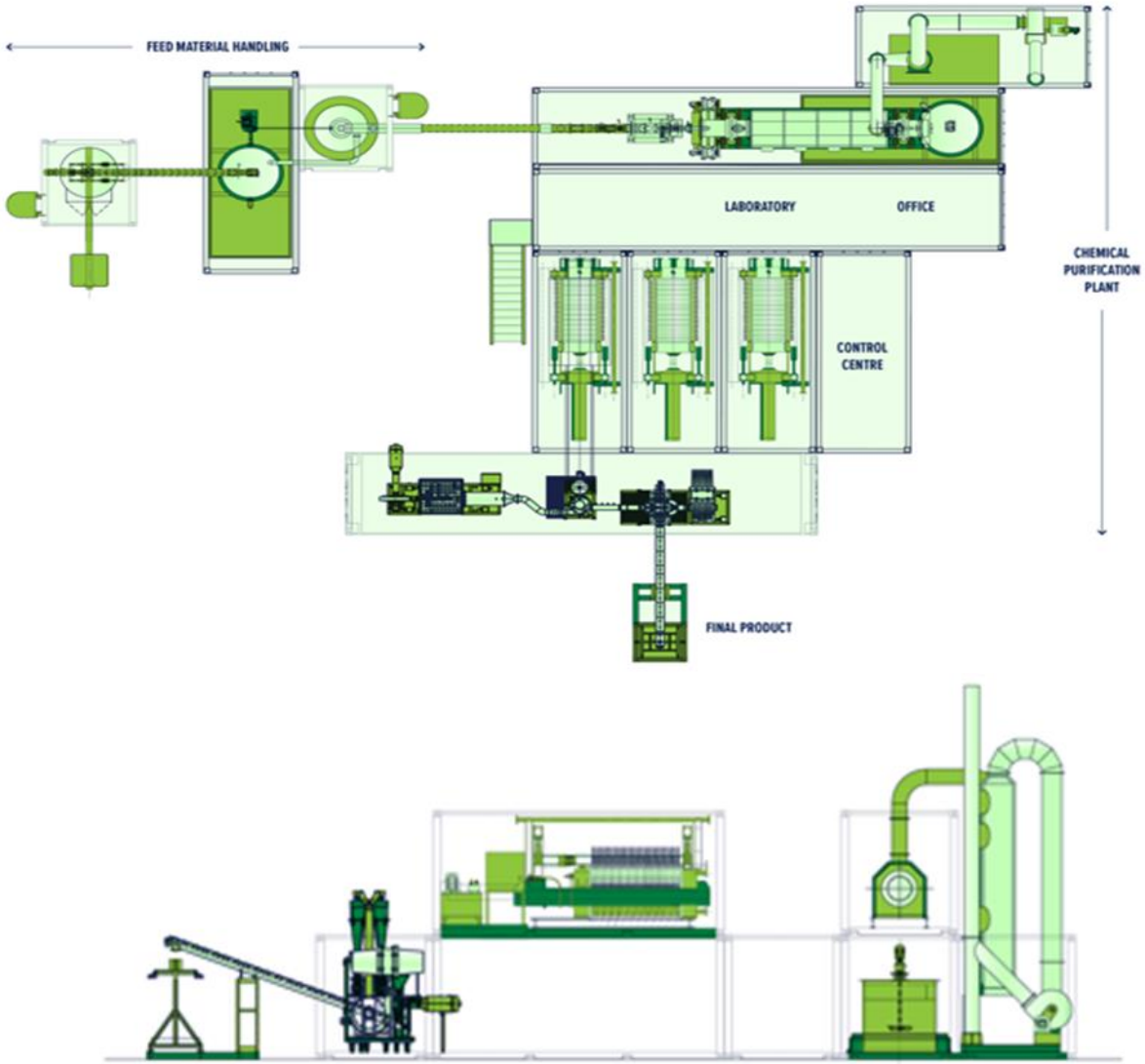


EcoGraf™ HF*free* purification process achieves recycled lithium-ion battery anode material purity of up to 99.98%C

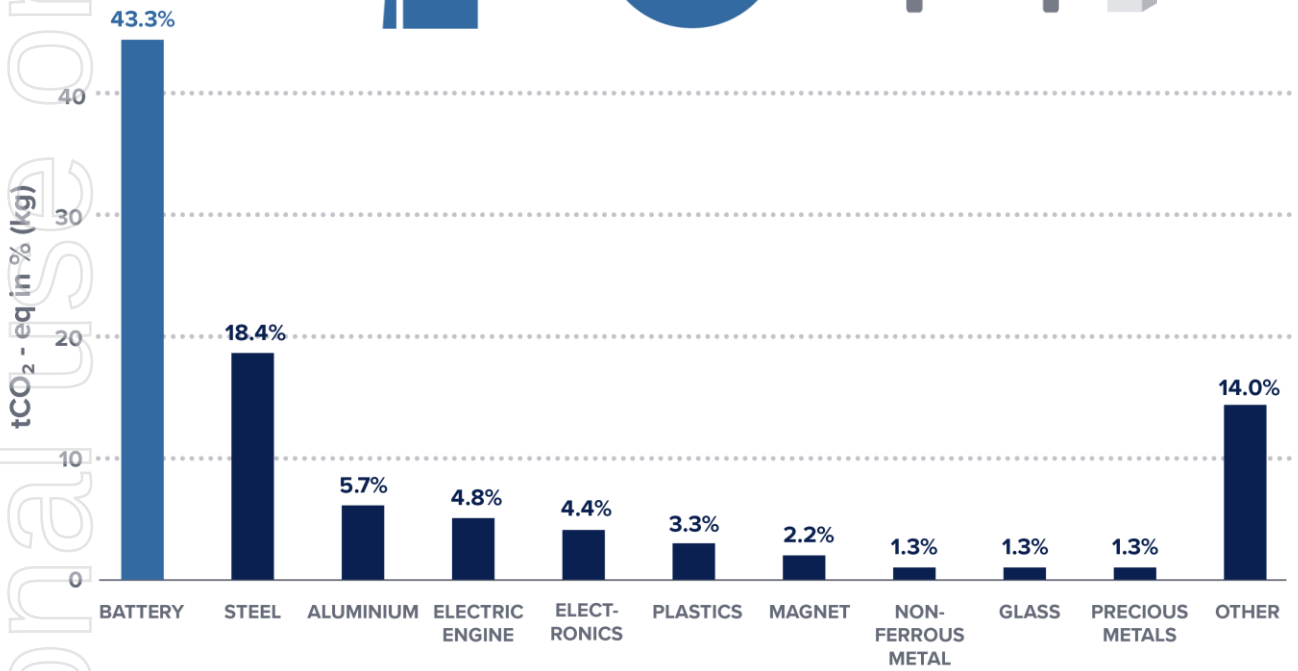
Modular recycling pilot plant

Key features:

- Capacity of 50-100kg/hr
- Capital cost A$5.8m
- State-of-the-art-facility utilising EcoGraf™ HF*free* purification process with design providing location flexibility
- Design criteria based on operating at the highest environmental standards and providing process flowsheet flexibility to evaluate various feedstocks
- Plant to provide tailored customer solutions to support new EU battery legislation for increased recycling
- Recycling of the carbon anode material to lower battery costs and reduce CO_2 footprint



EcoGraf™ recycling - lowering EV production carbon footprint



Reference (No Canary, Volkswagen)

PRODUCTION SCRAP

- Estimated 10 - 30% production loss during cell manufacturing and battery testing
- **Solution**: Develop 'In-Process' recovery of production scrap (slurries and coatings waste)
- Reuse would eliminate 13.5kg of CO_2 per kWh

Reference (No Canary)

BLACK MASS

- **Solution**: Recover and reuse carbon anode material in high purity carbon markets and battery supply chains

Battery represents over 40% of total CO2 emissions produced during EV manufacturing

Growth Strategy, Value Proposition and Outlook.

Key advantages

Diversified HFfree™
battery anode material business *supporting the global transition to clean energy and e-mobility*

- Over 8 years of technical work programs and extensive product qualification with a range of potential customers
- Bank due diligence processes undertaken with rigorous reviews of technical and engineering studies
- Product sales and collaboration with market leading counterparties
- Production levels matched to market demand with engineering designs to allow rapid expansion
- Sector leading ESG Credentials
- Downstream processing strategy centered on producing purified spherical graphite for a market forecast to grow 15x over the next decade
- Diversified battery anode materials business positioned to support recent EU legislative changes on sustainability
- Lithium-ion battery recycling business provides the opportunity to lower battery production costs and reduce carbon emissions from EV manufacturing
- Blended battery anode material provides a unique eco-friendly product
- Strategy to expand production and regionalise additional facilities in Europe, Asia and the US to support increasing demand
- Planning initiated on 2nd plant in Europe
- On-going research and innovation to identify further value adding opportunities using the EcoGraf™ purification process

Growth strategy

Lithium-ion anode demand to drive growth in 5 key area's

1

BATTERY ANODE MATERIAL

Battery anode material processing facilities

1st Plant : Australia
2nd Plant : Europe
Others: Asia/US/India

2

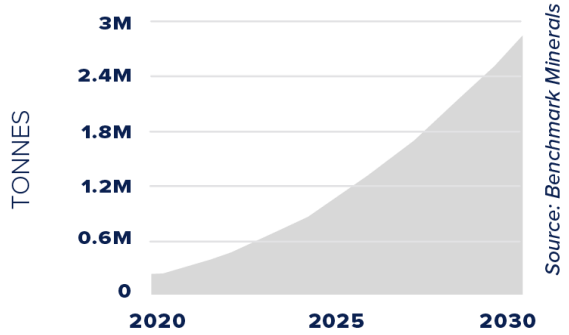
PRODUCT DEVELOPMENT

Value enhancement of bi-product fines

superBAM greenRECARB ecoCEM

Supporting the transition to clean energy and advanced manufacturing

ANODE DEMAND



EV MARKET FORECAST TO DRIVE +700% GROWTH IN NATURAL GRAPHITE DEMAND BY 2025

3

DOWNSTREAM INNOVATION OPPORTUNITIES

Enhanced Coatings

4

NATURAL GRAPHITE

Scalable mining projects for long-term supply of natural graphite products

Epanko Stage 1 - 60,000t

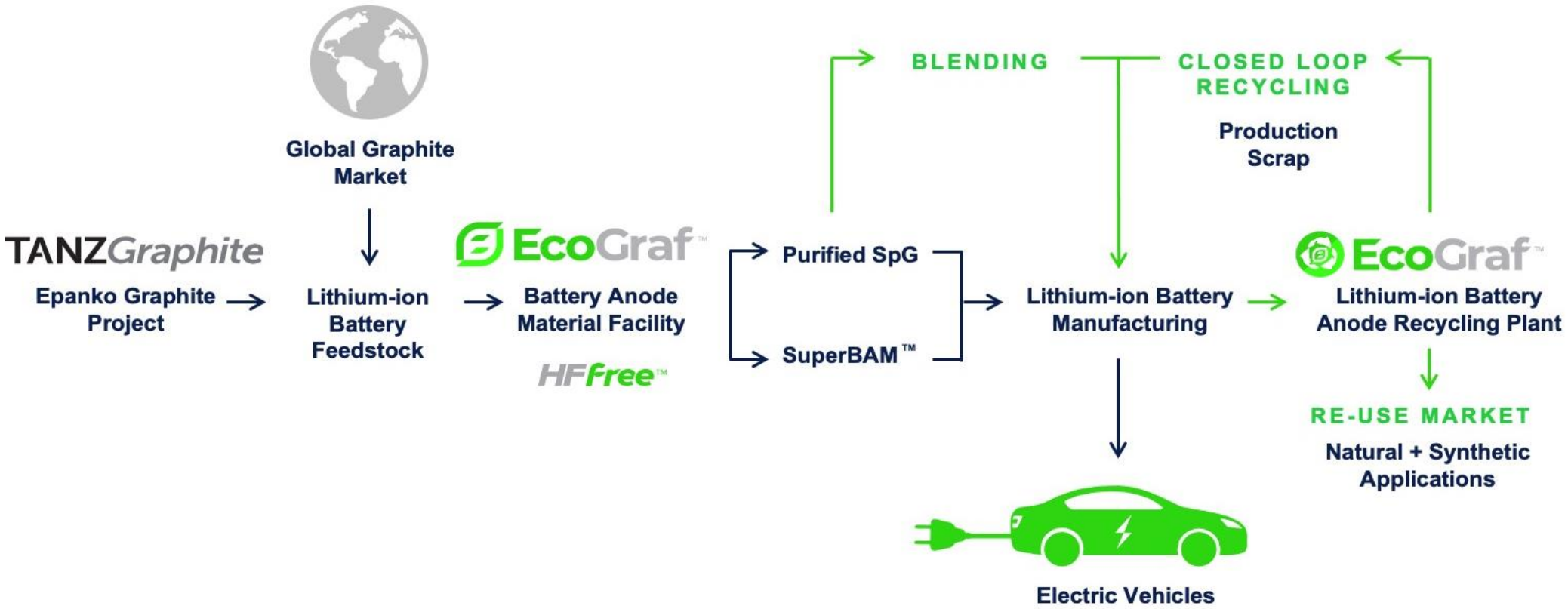
5

LITHIUM-ION BATTERY RECYCLING

Recovery of carbon anode material from lithium-ion batteries

Pilot plant scalable to demonstration plant

EcoGraf's vertically integrated product flow



Value proposition

Battery Anode Material Facility Australia

- 20,000tpa battery graphite
- US$35m annual EBITDA
- 42.4% internal rate of return
- US$642m pre-tax project NPV_8
- US$448m pre-tax[1] equity NPV_8 and payback of ~3.3yrs

Epanko Graphite Project Tanzania

- 60,000tpa natural flake graphite
- US$44.5m annual EBITDA
- 38.9% internal rate of return
- US$211m pre-tax equity NPV_{10}
- US$3bn forecast contribution to Tanzania

Recycling of Carbon Battery Anode Materials

- Significant results 99.98%C
- Production scrap – large market
- Lower battery costs and emissions
- Blended anode material opportunity
- Modular recycling pilot plant

Diversified battery anode material business positioned for the global transition to clean energy

Development ready businesses forecast to generate US$80m EBITDA per annum

Proprietary EcoGraf™ purification technology provides sector leading ESG credentials with application to battery recycling industry

#1: Post-tax equity NPV_8 is US$317m (refer ASX Announcement *Completion of EcoGraf™ Processing Facility Development Report* 5 November 2020)

The future is electric.

EcoGraf™

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