talga

ASX Release
26 October 2023

ASX:TLG

Talga Presentation at Green Auto Summit

Battery materials and technology company Talga Group Ltd ("**Talga**" or "**the Company**") (**ASX:TLG**) is pleased to provide a copy of the presentation that was delivered at the Green Auto Summit in Stuttgart, Germany, by the Company's Managing Director Mark Thompson yesterday, Wednesday 25 October 2023.

The presentation is available on the Company's website via the link below:

https://www.talgagroup.com/investors/

Authorised for release by:
Dean Scarparolo
Company Secretary
Talga Group Ltd
T: +61 (0) 8 9481 6667

For further information please contact:

Mark Thompson
Managing Director
Talga Group Ltd
+61 (0) 8 9481 6667

Nikki Löf
Group Communications Manager
Talga Group Ltd
+61 (0) 8 9481 6667

For personal use only

About Talga

Talga Group Ltd (ASX:TLG) is building a European battery materials supply chain to offer products critical to the green transition. Talga's innovative technology and vertical integration of 100% owned Swedish graphite resources provides security of supply and creates additional value for stakeholders. Website: www.talgagroup.com

talga

For personal use only

Enhancing sustainability through new European battery materials

Green Auto Summit
Stuttgart, Germany
Talga Group (ASX:TLG)

© Talga Group Ltd, October 2023

For personal use only

Cautionary Statement and Disclaimer

Talga Group Ltd ACN 138 405 419 (the Company) is the issuer of this presentation.

Niska Scoping Study

The Niska Scoping Study is a preliminary technical and economic study of the potential viability of developing the Nunasvaara North, Niska South and Niska North graphite deposits by constructing an integrated mining and refining operation to produce Talga's anode products for Li-ion batteries. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves or to provide assurance of an economic development case. Further evaluation work and appropriate studies are required before the Company will be in a position to estimate any ore reserves or to provide any assurance of an economic development case or certainty that the conclusions of the Niska Scoping Study will be realised. The Niska Scoping Study is based on the material assumptions outlined in the announcement of 7 December 2020. These include assumptions about the availability of funding. While Talga considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Niska Scoping Study will be achieved. To achieve the range of outcomes indicated in the Niska Scoping Study, funding in the order of US$1,000 million plus contingencies may be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce the Company's proportionate ownership of the deposits covered by the Niska Scoping Study. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Niska Scoping Study.

Forward-looking statements

This presentation contains forward-looking statements. Those forward-looking statements reflect views held only as at the date of this presentation. Any such statement is subject to inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement, and such deviations are both normal and to be expected. Recipients must make their own assessment about the likelihood of a matter, about which a forward-looking statement is made, occurring. The Company makes no representation about the likelihood of a matter, about which a forward-looking statement is made, occurring. The Company and its directors, employees, agents, advisers and consultants: give no representation or warranty to a recipient of this presentation as to the accuracy or completeness of the statements contained in this presentation or in relation to any other matter; and to the fullest extent permitted by law, disclaim responsibility for and have no liability to a recipient of this presentation for any error or omission in or for any statement in this presentation, including any liability arising from negligence.

Reliance on presentation

A recipient of this presentation must make their own assessment of the matters contained herein and rely on their own investigations and judgment in making an investment in the Company. This presentation does not purport to contain all of the information required to make an informed decision whether to invest in the Company. Specifically, this presentation does not purport to contain all the information that investors and their professional advisers would reasonably require to make an informed assessment of the Company's assets and liabilities, financial position and performance, profits, losses and prospects.

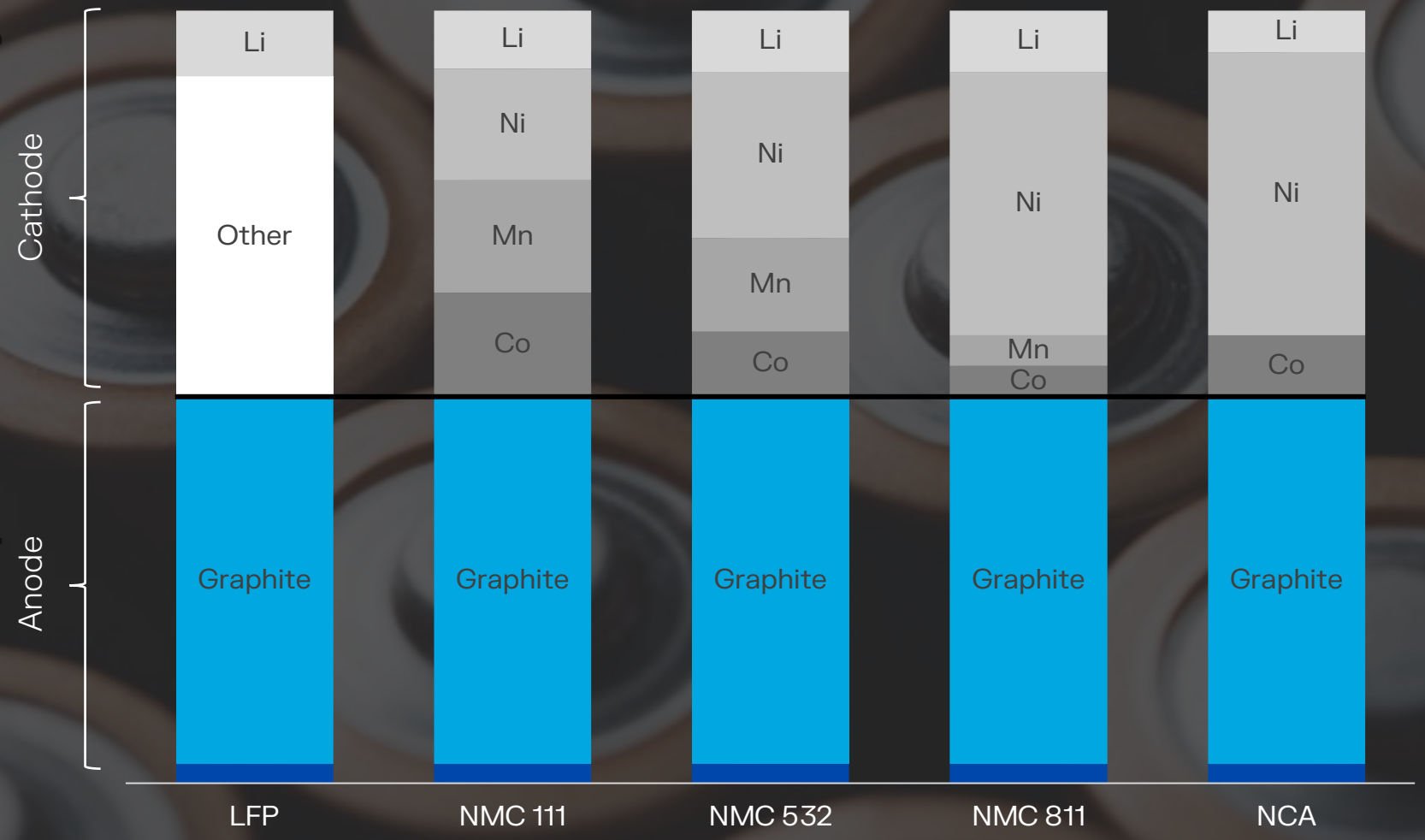
Not a recommendation or financial advice

The information in this presentation is not a recommendation to subscribe for securities in the Company and does not constitute financial advice. Any person who intends to subscribe for securities must conduct their own investigations, assessment and analysis of the Company and its operations and prospects and must base their investment decision solely on those investigations and that assessment and analysis. Prospective investors should consult their own legal, accounting and financial advisers about an investment in the Company.

Photographs and images

Photographs, maps, charts, diagrams and schematic drawings in this presentation are owned by and have been prepared or commissioned by the Company, unless otherwise stated. Maps and diagrams used are illustrative only and may not be drawn to scale. Unless stated otherwise, all data contained in charts, graphs and tables is based on information available at the date of this presentation.

Graphite is largest volume material of Li-ion cell

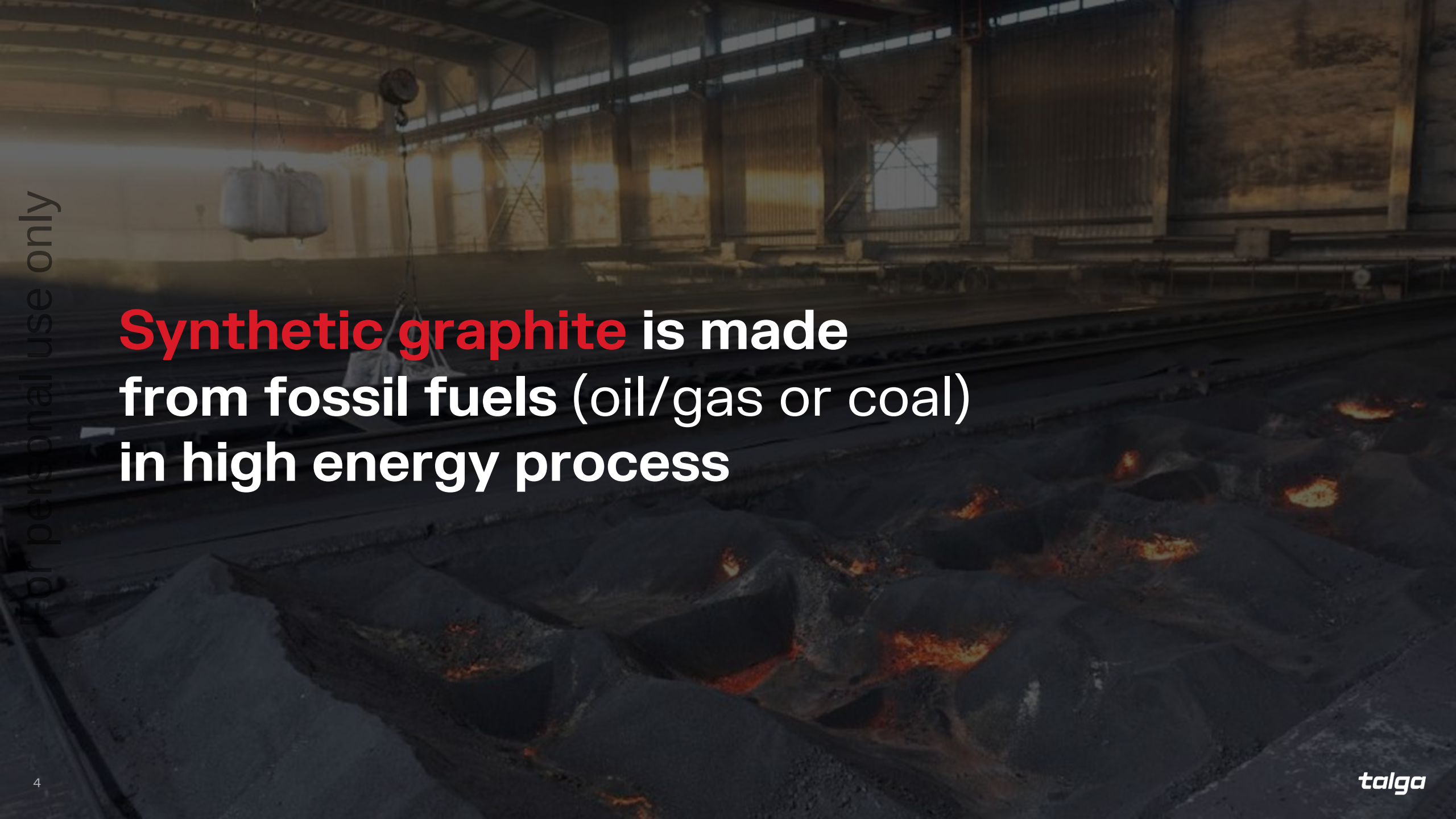


~50% of battery active material is graphite

For personal use only

Source: Macquarie Research, March 2023.

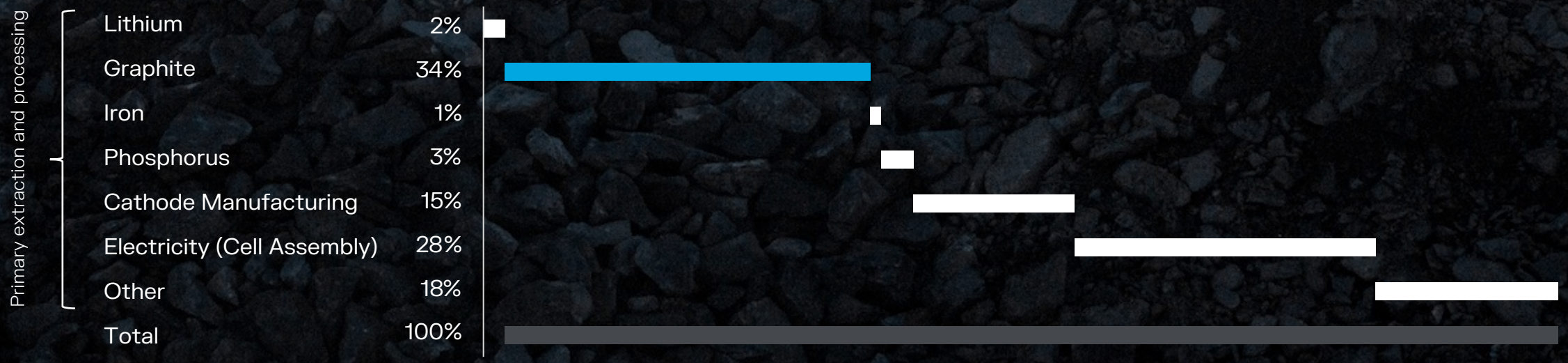
talga



Synthetic graphite is made from fossil fuels (oil/gas or coal) in high energy process

For personal use only

Graphite has major carbon footprint in cell

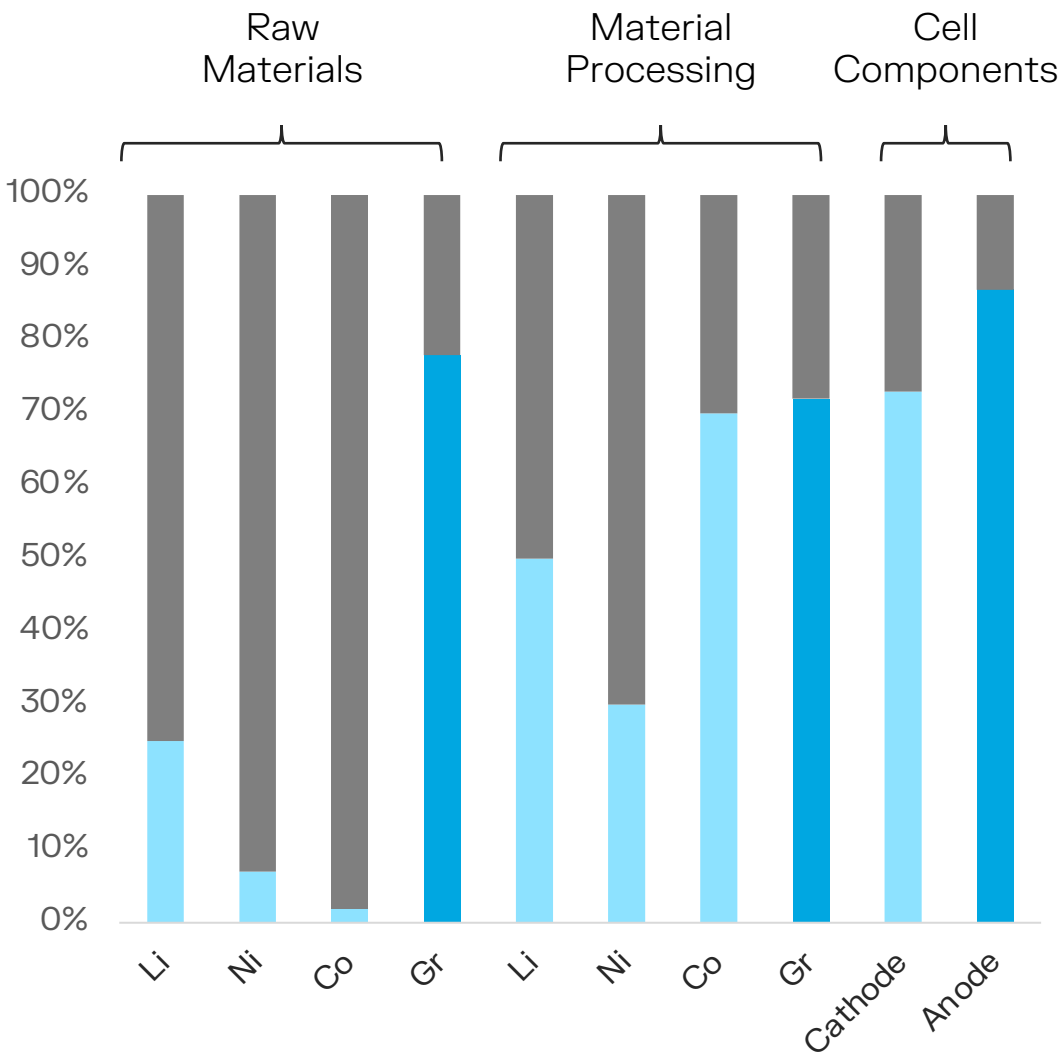


Source: Tesla, Impact Report 2022, LFP Cell – Global Warming Potential Contribution Analysis (contribution to CO_2, impact per kg).

talga

Graphite supply chain concentrated in China

New restrictions on Chinese exports starting 1 Dec, 2023



Notes: Li: lithium; Ni: Nickel; Co: Cobalt; Gr: Graphite. Geographical breakdown refers to the country where production occurs. Mining based on production data. Mineral processing is based on refining production capacity data. Cell component production is based on cathode and anode material production capacity data.

Source: IEA; Reuters article 21 October 2023: China, world's top graphite producer, tightens exports of key battery material

For personal use only

talga

EU recognises supply chain risk, natural graphite listed as strategic and critical material

Battery passport legislation and Critical Raw Materials Act setting new compliance targets including:

>10% local extraction by 2030
>40% local processing by 2030
Mandatory declaration of carbon footprint in 2025

For personal use only

Source: European Commission, 16 March and 17 August 2023.

Talga is building a new, clean, integrated, secure graphite anode supply chain in Europe

mine-to-anode

A fully integrated battery anode supply chain in Sweden

For personal use only

talga

15 active patent families, 65 active cases

100% in-house Intellectual Property

100% owned technology

Talga develops products and processes across its operations (Sweden, UK, Germany & Australia)

See: ASX:TLG 26 April 2023.

talga

One-stop Shop = Full control of anode supply

Mining and Concentration ▶ Shaping and Purification ▶ Coating ▶ Talnode® ▶ Cell Manufacturer

Talga in Sweden

See: ASX:TLG 1 July 2021.

talga

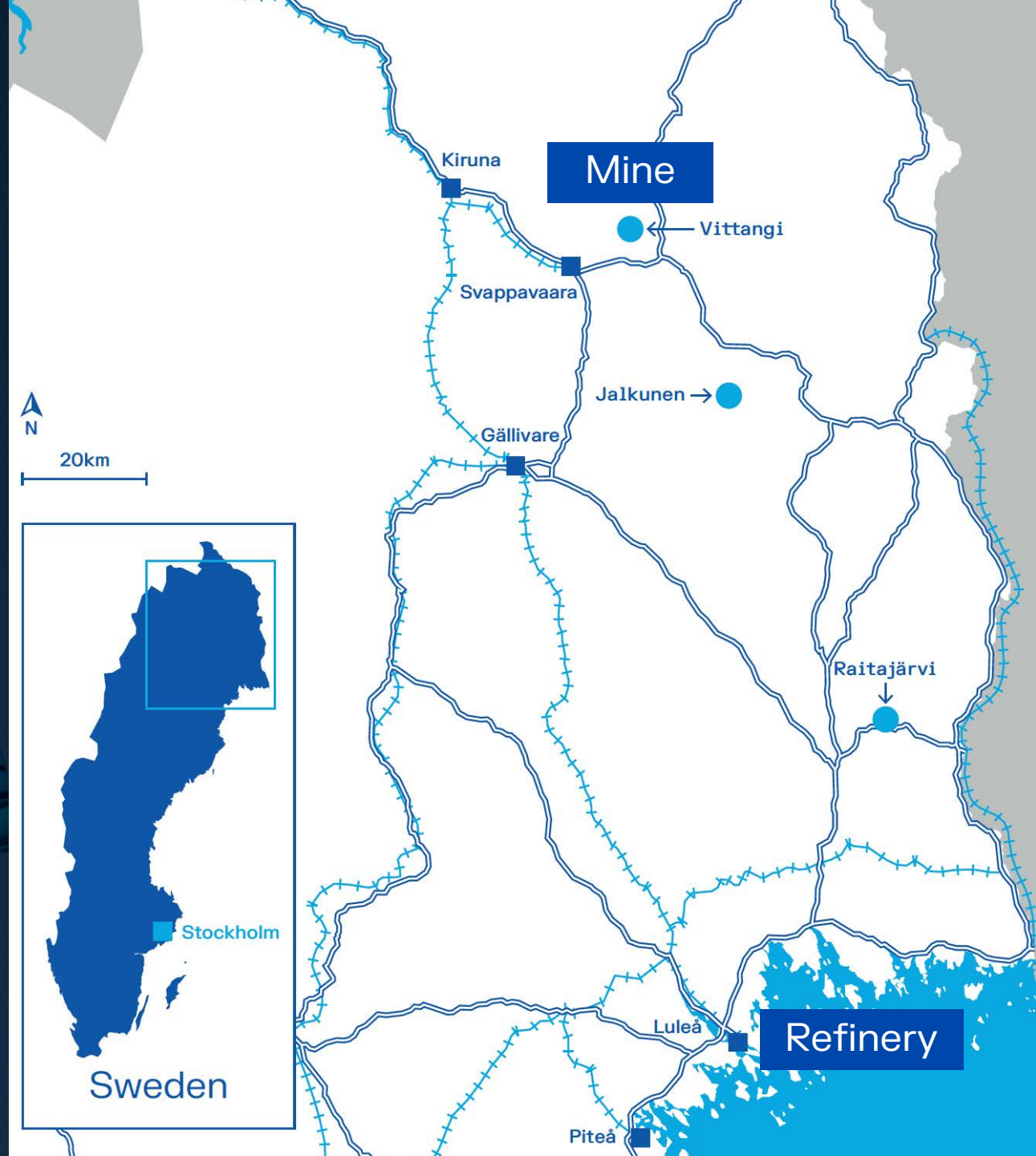
Vittangi Anode Project
north Sweden

- Integrated mine-to-anode refinery producing 19,500tpa anode (Stage 1) for 24 years

- Europe's largest and highest grade graphite deposit (Vittangi): 35.0Mt at 23.8%Cg, containing 8.3Mt graphite

- Advanced transport and logistics, with direct road and rail to rest of Europe (1-2 days delivery) from Luleå

- Plans for major expansion to >100,000tpa anode

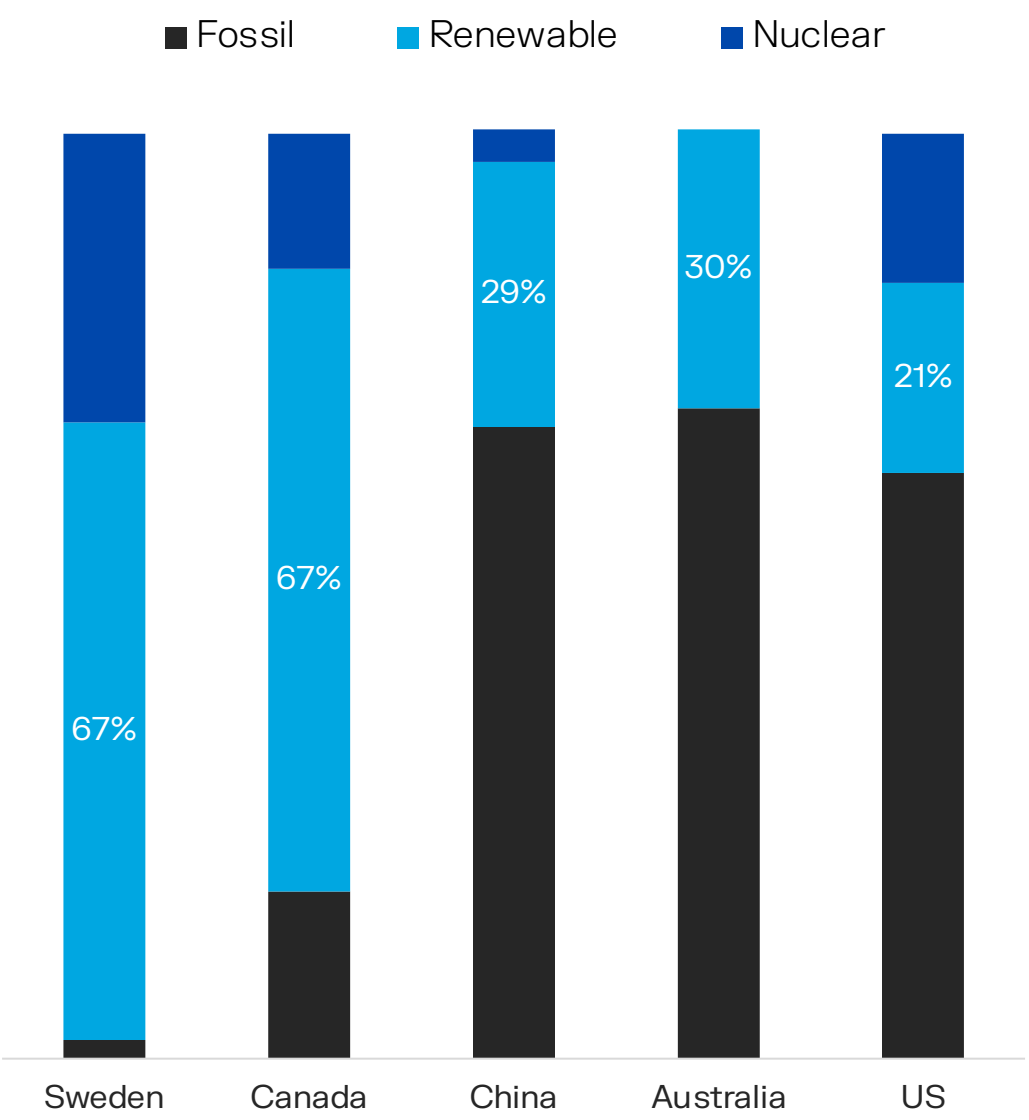


See: ASX:TLG 7 December 2020, 1 July 2021, 6 October 2023

For personal use only

Powered by reliable clean electricity

100% hydropower used in Talga anode production



Source: Electricity generation mix 2021, graph produced using data points from Fastmarkets and IEA.

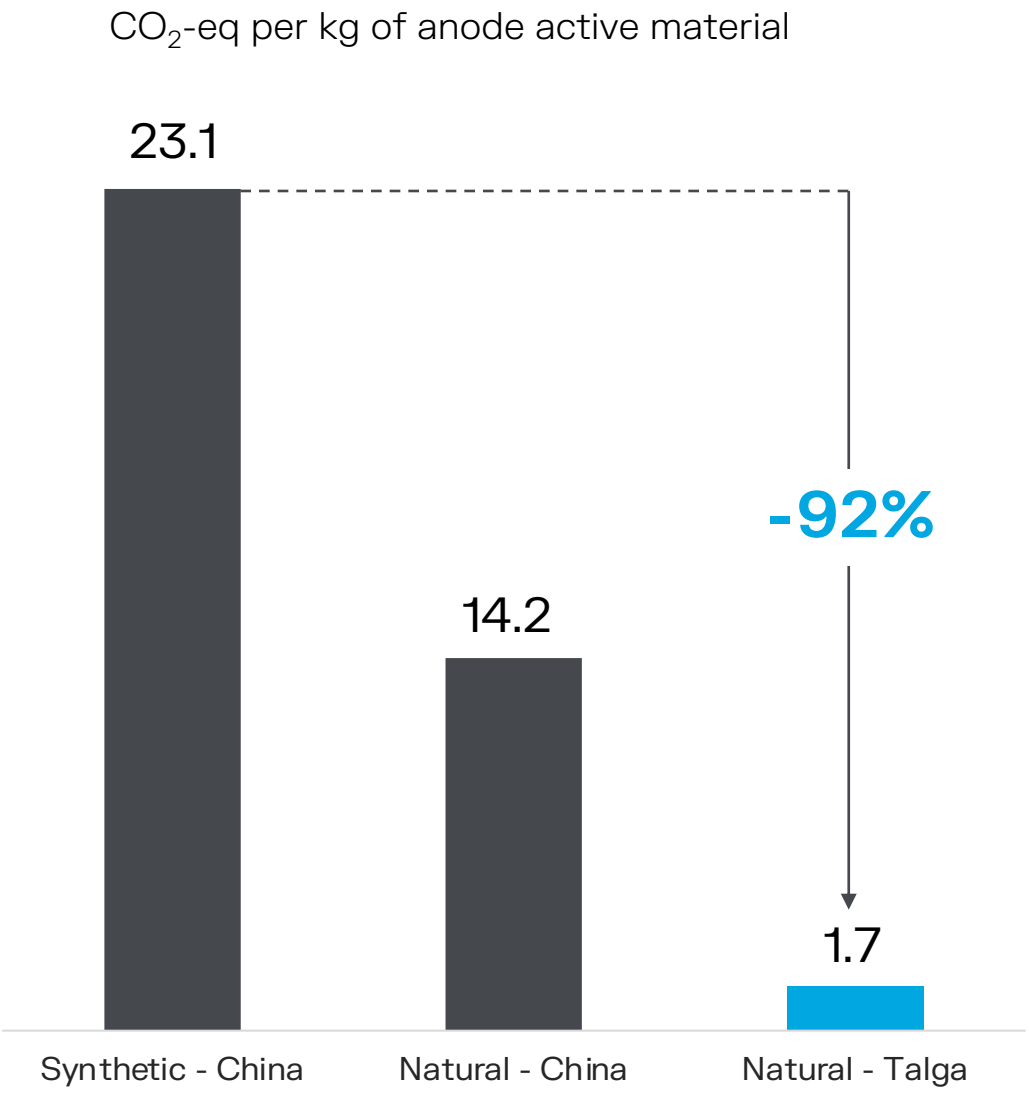
For personal use only

Cleaner anode production

-92% less emissions

Super *high-grade* graphite, *renewable* energy and high-yield *processing technology* result in ultra-low carbon footprint

The peer-review LCA was conducted according to ISO 14040:2006 and ISO 14044:2006 standards



For personal use only

See: ASX:TLG 9 August 2023.

talga

For personal use only

Talnode®-C

Flagship graphite anode

Coated active anode with excellent capacity, good 1st-cycle efficiency and ultra-low CO_2.

Fast charging capability with excellent power density and low resistivity.

Low temperature performance maintains capacity at freezing temperatures.

Swelling similar to synthetic graphite. EU origin and compliance.

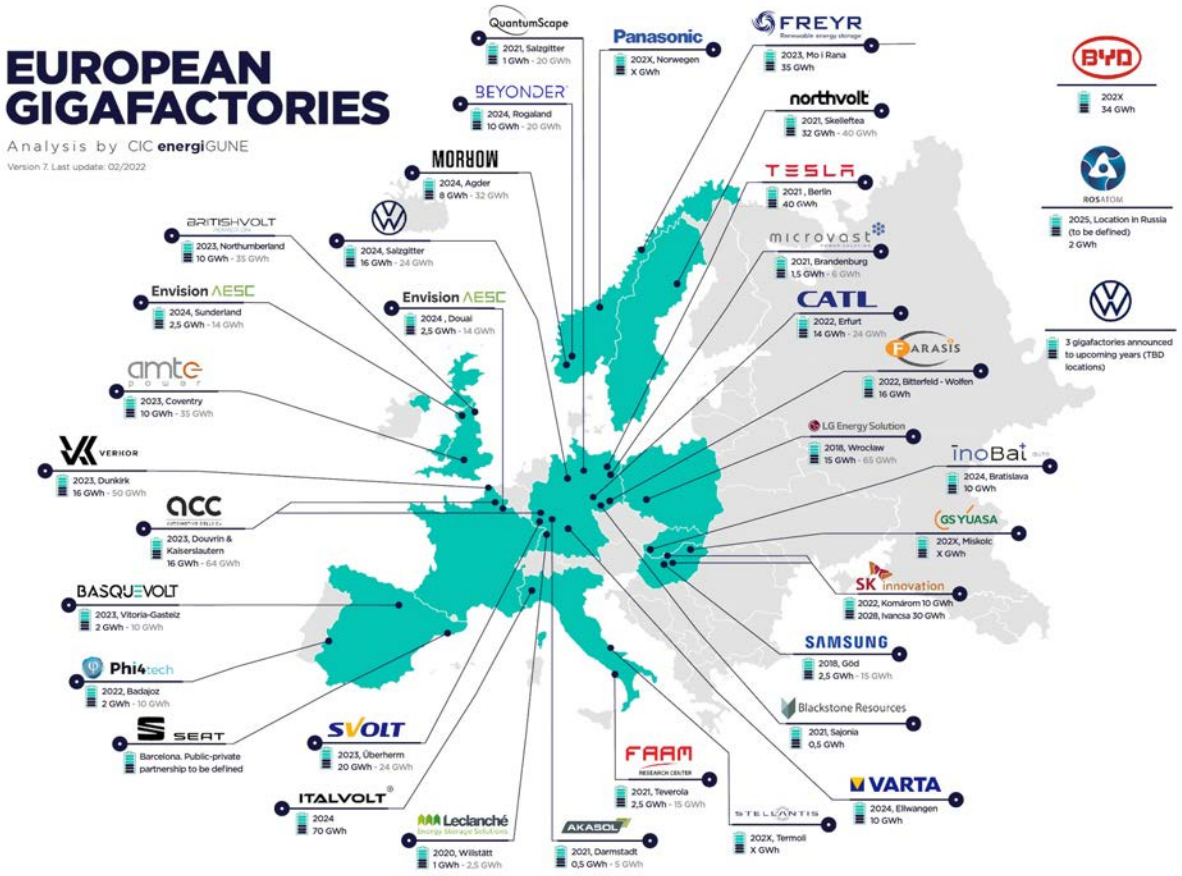
See: ASX:TLG 15 May 2018 , 26 March 2019 , 9 August 2023.

talga

Talnode® validated by numerous customers under NDAs

- Cell manufacturers
- Anode manufacturers
- Auto OEMs

Map showing current and planned European Li-ion battery factories and capacity in 2022. Source: CIC energiGUNE



For personal use only

See: ASX:TLG 30 November 2022, 11 January 2023.

talga

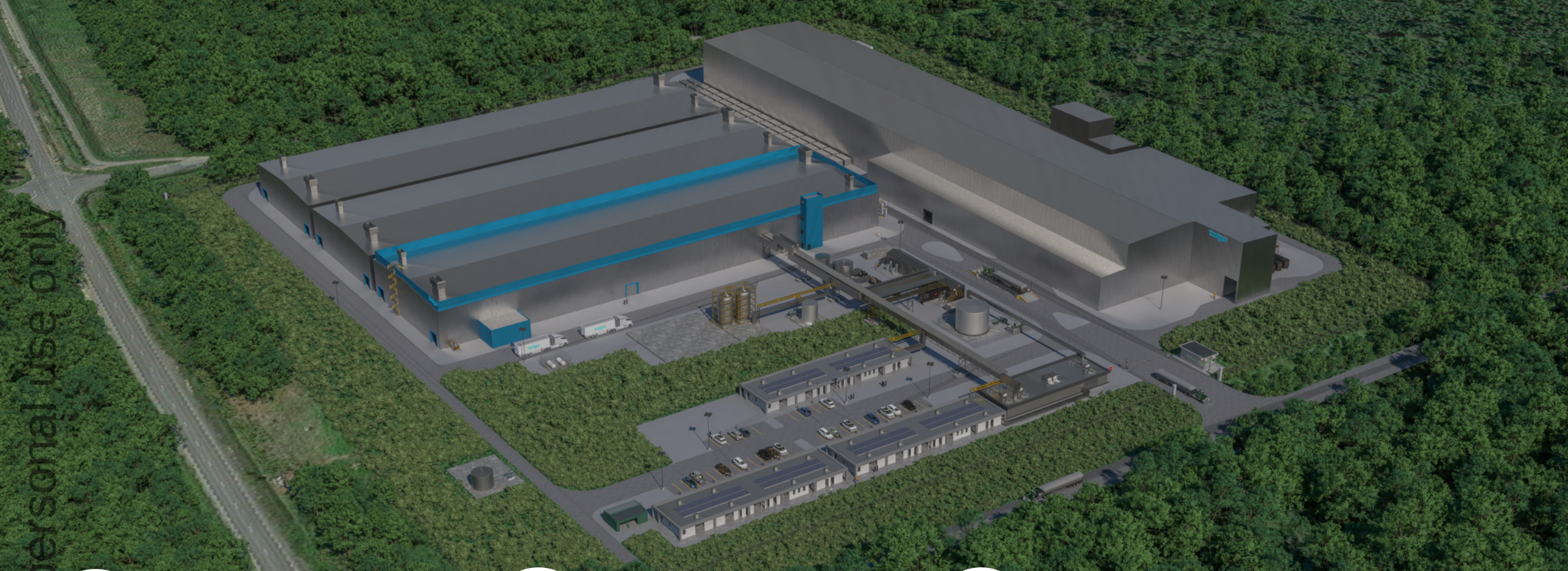
EVA Qualification Plant

Luleå, northern Sweden

- **Producing large scale Talnode®-C samples for battery customer qualification (B-C)**
- **In-house battery lab and quality control**

For personal use only

See: ASX:TLG 31 March 2022.



For personal use only

19,500tpa (16GWh) graphite anode

Using 100% clean hydropower

Permitted and construction ready

Planned commercial anode refinery

Luleå, Sweden

See: ASX:TLG 1 July 2021, 17 July and 12 September 2023. Note: GWh equivalence assumes 1.2kg of graphite anode per 1kWh of battery capacity (Benchmark Minerals Intelligence).

Commercial Anode Refinery

Luleå Industrial Park, Sweden

For personal use only

Construction commenced

Site land purchased

Key site infrastructure progressing

See: ASX:TLG 17 July and 12 September 2023.

talga

Vittangi Anode Project Financing

- Target total debt (60%) and equity (40%)
- Debt financing consortium selection finalised
- European Investment Bank €150 million senior debt funding approved*

Key Finance Partner

European Investment Bank – The EU bank

Key Project Partners

Worley – energy | chemicals | resources

ABB

See: ASX:TLG 20 June and 12 September 2023. * Note: Finalisation of Project debt facilities with the selected banking consortium remains subject to finalisation of approvals, completion of remaining due diligence and execution of definitive debt facility documentation, which are expected to include customary project financing terms and conditions. Drawdowns under the facility would be subject to customary conditions precedent.

For personal use only

Next Gen Products

Talnode®-Si

Silicon anode

Composite silicon-graphite additive with ~50 wt% silicon to produce high energy density (~1,900 mAhg) drop-in additive

Solves
Energy density, industrial scalable process and competitive cost

Stage
Pilot operating. Engineering and financial feasibility studies under way for commercial plant

Talphite®, Talphene®

Graphene

Products in R&D include conductive additives for cathode, solid-state anodes and recycling of graphite

Solves
Conductivity, CO_2, energy density, lithium-metal issues and environmental regulations

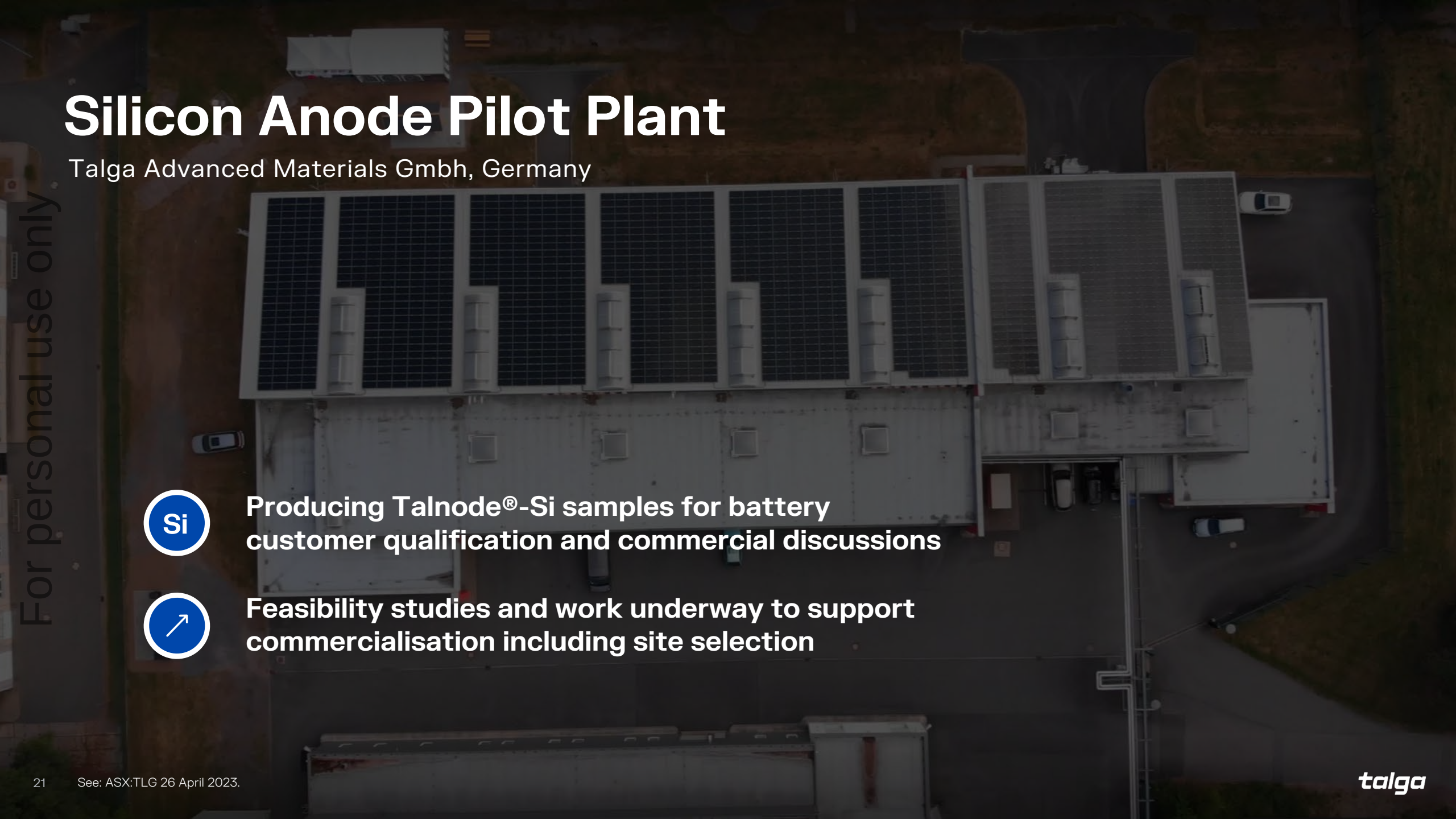
Stage
Lab scale tests and results

For personal use only

See: ASX:TLG 14 December 2022.

Silicon Anode Pilot Plant

Talga Advanced Materials Gmbh, Germany



Producing Talnode®-Si samples for battery customer qualification and commercial discussions

Feasibility studies and work underway to support commercialisation including site selection

For personal use only

See: ASX:TLG 26 April 2023.

talga

New supply chains of critical minerals in Europe are underway, enhancing sustainability of battery materials

For personal use only

For personal use only

Talga

Corporate overview

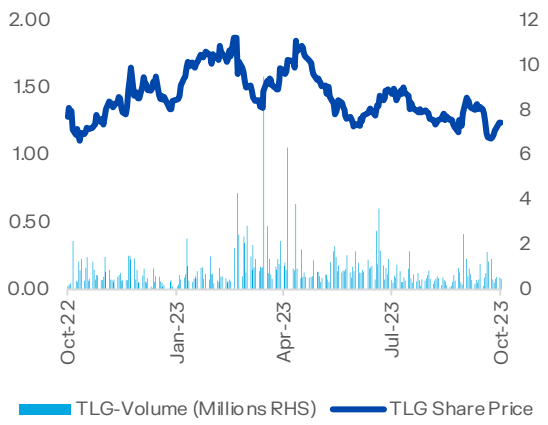
Capital Structure	
Market Capitalisation	$391.4M
Listed Shares	360.7M
Unlisted Options	13.4M[1]
Cash as at 30 June 2023	$38.6M

Major shareholders	
Kinetic Investment Partners	4.7%
Mark Thompson – M Director	4.0%
Pentwater Capital Management	3.6%
UBS AG (Private Banking)	3.2%
Ellerston Capital	1.7%
Yandal Investments	1.7%

Talga entered the ASX 300 on 20 March 2023, with research coverage by the following brokers:

MACQUARIE
UBS
EUROZ HARTLEYS
PETRA CAPITAL
BELL POTTER
LONGSPUR CAPITAL

Share price performance (LTM)



Note: Market capitalisation as at 23 October 2023, shareholder register as at 10 April 2023.
(1) Unlisted options include performance rights subject to vesting conditions.

For personal use only

talga

Sweden

Talga AB & Talga Battery Metals AB
Södra Kungsgatan 5B
972 35 Luleå, Sweden
t: +46 (0) 10-303 71 00
e: kontakt@talga.se

Stockholm Office
Standvägen 7A
114 56 Stockholm, Sweden
e: kontakt@talga.se

Australia

Talga Group Ltd
Suite 3.03, Level 3
46 Colin Street
West Perth, Western Australia 6005
t: +61 8 9481 6667
e: info@talgagroup.com

United Kingdom

Talga Technologies Limited
Conqueror House
Chivers Way
Histon, Cambridge, CB24 9ZR, England
t: +44 1223 420416
e: info.uk@talgagroup.com

Germany

Talga Advanced Materials GmbH
Prof.-Hermann-Klare-Str. 25
07407 Rudolstadt, Germany
t: +49 3672 4766930
e: info.de@talgagroup.com

Experienced Board and Management Team

Strong technological and operational leadership with on the ground European presence

For personal use only

Board of Directors

Terry Stinson
Non-Executive Chairman

Over 35 years' Executive and Non-Executive Director experience, working for global innovation companies. Formerly the CEO and Managing Director of Orbital Corporation, VP for Global Fuel Systems at Siemens AG and CEO of Synerject. Currently the Non-Executive Chairman of Carnegie Clean Energy Limited and Non-Executive Director of Aurora Labs.

Mark Thompson
Managing Director & Founder

Over 30 years' global experience in the mineral industry including resource project development, technology and management. Founded Talga in 2009 and listed the company on the Australia Securities Exchange in mid 2010. A member of the Australian Institute of Geoscientists and the Society of Economic Geologists.

Grant Mooney
Non-Executive Director

Strong corporate advisory background with extensive experience in equity capital markets, corporate governance and M&A transactions. A member of the Institute of Chartered Accountants in Australia. Currently a Non-Executive Director of several ASX listed companies.

Steve Lowe
Non-Executive Director

Strong business management and taxation background with more than 20 years' experience consulting to corporate and high wealth clients. A member of the Australian Institute of Company Directors.

Ola Rinnan
Non-Executive Director

Extensive commercialisation and leadership experience across the energy, banking and finance sectors. Has held numerous board positions for European listed companies and financial institutions including Non-Executive Directorships in Smedvig group companies and DFCU Bank.

Key Management Personnel and Technical Leadership

Per-Erik Lindvall
Talga AB Chairman

A well-known business leader in northern Sweden with a long standing background in the Swedish mining industry including as former Vice President of LKAB. Per-Erik also holds several board assignments and has for many years been a driving force in creating a new, sustainable industrial cluster in northern Sweden.

Melissa Roberts
Chief Financial Officer

Over 20 years' experience in the global resources industry across corporate and commercial roles, most recently with global mineral sands and rare earths producer Iluka Resources. Prior to this, Melissa worked with a range of European energy companies after commencing her career with Australian listed company, Wesfarmers.

Martin Phillips
Chief Operating Officer & European CEO

Experienced commercial and project manager with over 25 years of global metals and mining sector experience. Previous positions include engineering and management roles in battery recycling programs and smelting innovations at MIM's Mt Isa and UK operations. Mr Phillips was former Commercial Manager of Iluka Resources Ltd.

Dean Scarparolo
Company Secretary

A wealth of experience in developing and managing finance departments of ASX listed resource companies. A member of CPA Australia with over 25 years in roles spanning exploration, development and operations across Australia, Africa and Europe.

Technical and Environmental Leadership Team

Decades of experience across battery and advanced material sciences, and environmental management

For personal use only

Scientific and environmental leadership

Dr Anna Motta
Head of Talga Technologies and Advanced Materials

A chemist with over 20 years of expertise in carbon nanomaterials and extensive experience in managing R&D programs. Heads up Talga's technologies and advanced materials unit focusing on the development of next generation products.

Formerly the manager of several research programs at Cambridge Graphene Centre with particular focus on industry partnerships and technology transfer. Previous positions include science and management roles at the National Research Centre of Finland and the University of Cambridge.

Nishida Tatsuya
Chief Scientific Advisor
Battery technologies

Mr Tatsuya holds more than one hundred patents listed in China, Japan, Korea, the US and EU.

His distinguished career includes the foundational work of commercialising graphite anodes and over 20 years' experience in commercial anode and battery technologies with world leading Japanese battery anode company Hitachi Chemical (now part of the Showa Denko Group).

Dr Karanveer S. Aneja
Senior Scientist
Materials

Dr. Karanveer S. Aneja is a Senior Scientist at Talga Technologies Limited, based in Cambridge UK, and overlooks Talga's composite and coating product development activities. Dr Aneja has a background in Metallurgical Engineering and Material Science with a specialisation Corrosion Science. He was awarded the "Prime Minister's Fellowship" for his doctoral research at IIT Bombay, the highest and most prestigious fellowship in India.

Dr Aneja's work at Talga involves developing graphene functionalities for use in large volume applications such as protective coatings and has resulted in 5 graphene product patent applications. He has also co-authored several scientific papers on use of graphene in protective coatings.

Peter French
Environmental & Community Manager

Experienced environmental professional with 25 years' experience in the mining and industrial sector.
Responsible for managing permitting, environmental and social performance functions for Talga's Sweden operations.

Previously worked as an independent consultant to a range of mining operations and has spent the most of the past 15 years managing permitting processes for mining and industrial sites, often in a seconded capacity. Earlier positions include mine rehabilitation roles within the mineral sands industry.

JORC Graphite Reserve and Resources

For personal use only

Ore Reserve [3, 5]	Tonnes	Graphite (% Cg)
Nunasvaara (JORC 2012)	**2,260,140**	**24.1**
Probable	2,260,140	24.1

Mineral Resources [1, 2, 4, 6, 7, 8]	Tonnes	Graphite (% Cg)
Vittangi (JORC 2012)	**35,020,000**	**23.8**
Indicated	26,691,000	24.3
Inferred	8,329,000	22.1
Jalkunen (JORC 2012)	**31,500,000**	**14.9**
Inferred	31,500,000	14.9
Raitajärvi (JORC 2004)	**4,300,000**	**7.1**
Indicated	3,400,000	7.3
Inferred	900,000	6.4
Total Mineral Resources	**70,820,000**	**18.8**

Note:

1. Mineral resources are inclusive of ore reserves.
2. Mineral Resources are reported at various cut off grades: Vittangi 12.5% Cg, Jalkunen 5% Cg and Raitajärvi 5% Cg.
3. Ore Reserve is reported at a cut off grade of 12% Cg.
4. Errors may exist due to rounding.

See: ASX:TLG (5) 1 July 2021, (6) 6 October 2023, (7) 27 August 2015 and (8) 26 August 2013.

JORC Exploration Target

2021 Exploration Target Vittangi Graphite Project		
Vittangi (JORC 2012)	**Low**	**High**
Tonnage Range	170Mt	200Mt
Grade Range	20% Cg	30% Cg

Note that the potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Talga completed new ground electromagnetic geophysical ("EM") surveys of graphite targets at Vittangi following the 2020 upgrade of the Vittangi graphite resource. The EM survey results have been reviewed in combination with prior Talga geochemical samples collected from the surface within the conductors, which averaged 26.2% graphite ("Cg") (ASX:TLG 15 Nov 2012). Modelling of this data in conjunction with positive outcomes of the Niska underground mining scoping study have enabled a revised JORC-compliant Exploration Target estimate totalling 170-200Mt at 20-30% Cg at Vittangi (ASX:TLG 20 Jul 2021). This is a significant increase from the previous 26-46Mt at 20-30% Cg (ASX:TLG 17 Sep 2020). The majority of this estimate is proximal along strike and down dip from Talga's existing Vittangi JORC (2012) graphite resources of 30.1Mt @ 24.1% Cg. Additional targets are located along the mapped graphite units around the greater Nunasvaara Dome area.

New rounds of diamond core drilling commenced at Vittangi in mid-2021. The staged 69 hole diamond drilling program totalling ~8,000m tested parts of the JORC Exploration Target as down-dip extensions of the current JORC Resources as well as shallow subcrop targets between Nunasvaara North and Niska South. Reviews of JORC Exploration Targets will be undertaken where significant changes are indicated by continued exploration.

See Talga's ASX announcement dated 20 July 2021 for further information.

For personal use only

For personal use only

Competent Person Statements

The Vittangi Mineral Resource estimate was first reported in the Company's announcement dated 6 October 2023 titled 'Talga boosts Swedish battery graphite'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Nunasvaara Ore Reserve statement was first reported in the Company's announcement dated 1 July 2021 titled 'Robust Vittangi Anode Project DFS'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Reserve estimate in the previous market announcement continue to apply and have not materially changed.

The Jalkunen Mineral Resource estimate was first reported in the Company's announcement dated 27 August 2015 titled 'Talga Trebles Total Graphite Resource to Global Scale'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Raitajärvi Mineral Resource estimate was first reported in the Company's announcement dated 26 August 2013 titled '500% Increase to 307,300 Tonnes Contained Graphite in New Resource Upgrade for Talga's Swedish Project'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Company first reported the production targets and forecast financial information referred to in this presentation in accordance with Listing Rules 5.16 and 5.17 in its announcements titled 'Robust Vittangi Anode Project DFS' dated 1 July 2021 and 'Positive Niska Scoping Study Outlines Pathway to Globally Significant Battery Anode Production' dated 7 December 2020. The Company confirms that all material assumptions underpinning those production targets and forecast financial information derived from those production targets continue to apply and have not materially changed.

The Information in this presentation that relates to prior exploration results for the Vittangi Graphite Project is extracted from ASX announcements available to view on the Company's website at www.talgagroup.com, with information on the exploration target first released to ASX on 20 July 2021. The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in the relevant original market announcements. The Company confirms that the form and context in which the Competent Person and Qualified Person's findings are presented have not been materially modified from the relevant original market announcements.