## talga

## **Talga Group Ltd**

Macquarie Critical Minerals Forum 28 June 2023

**ASX:TLG** 



## 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.

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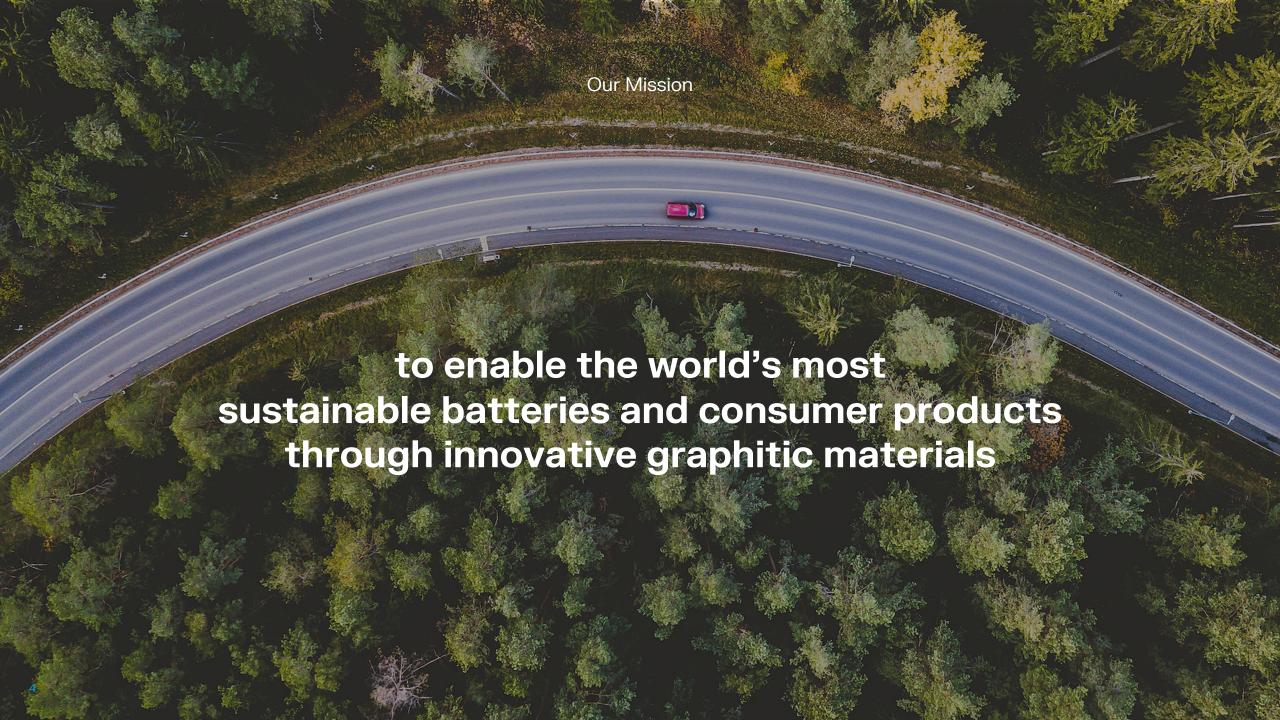
# Talga Group

Battery material developer and supplier with 100% owned mineral resources in Sweden and integrated processing-to-product technology

Talga is differentiated by:

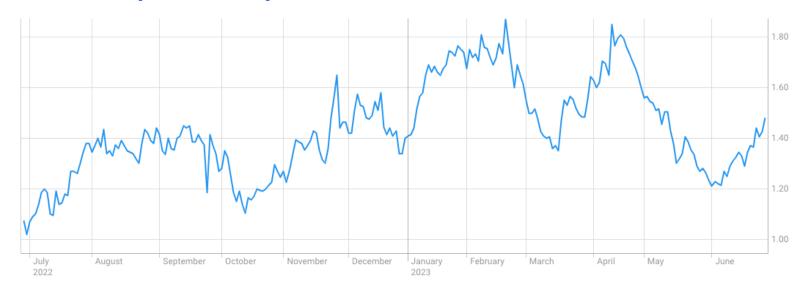
- Advanced stage fully vertically integrated graphite anode project
- Low-emission battery materials are cleaner and greener than incumbents
- Strong in-house expertise and IP
- Strategic location in Europe proximal to customer battery Gigafactories
- Scalable silicon anode production potential





## Corporate Overview

## **ASX:TLG (12 months)**



## ASX 300 since 20 Mar 2023. Research coverage conducted by:











## **CAPITAL STRUCTURE**

Market Capitalisation: \$531.9M

Listed Shares: 360.6M

Unlisted Options: 12.4M (1)

Cash as at 31 March 2023: \$51.6M

## **MAJOR SHAREHOLDERS**

Kinetic Investment Partners 4.7%

Mark Thompson – M. Director 4.0%

Pentwater Capital Management 3.6%

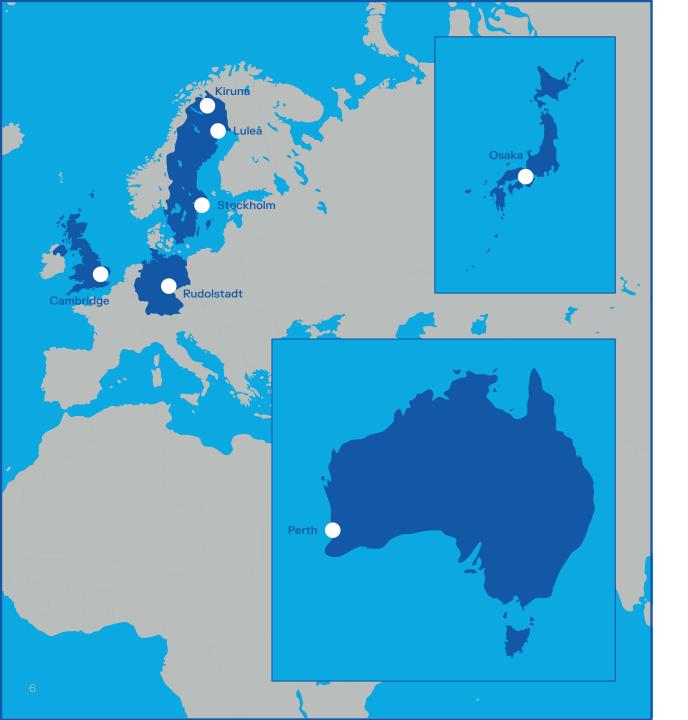
UBS AG (Private Banking) 3.2%

Ellerston Capital 1.7%

Yandal Investments 1.7%

Total number of shareholders 12,059





## Talga Operations

Perth, Australia

Group head office

Luleå & Kiruna, Sweden

Anode production and graphite deposits

Stockholm, Sweden

European corporate office

Cambridge, UK

Product and R&D technology centre

Rudolstadt, Germany

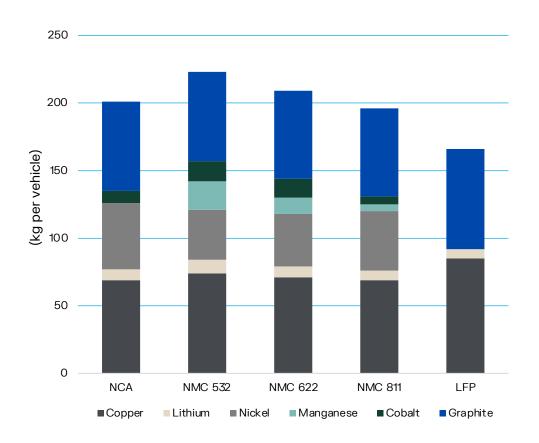
Production process pilot facility and EU customer network

Osaka, Japan & Hong Kong

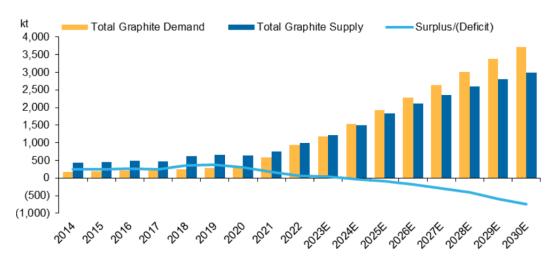
Commercial offices and product development



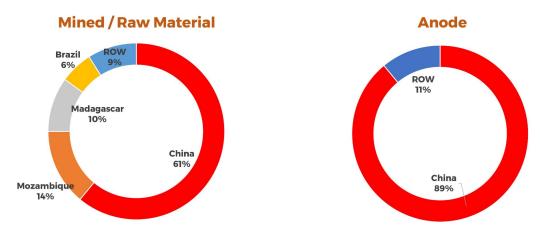
# Graphite is anode of Li-ion batteries



## China Supply Dominant



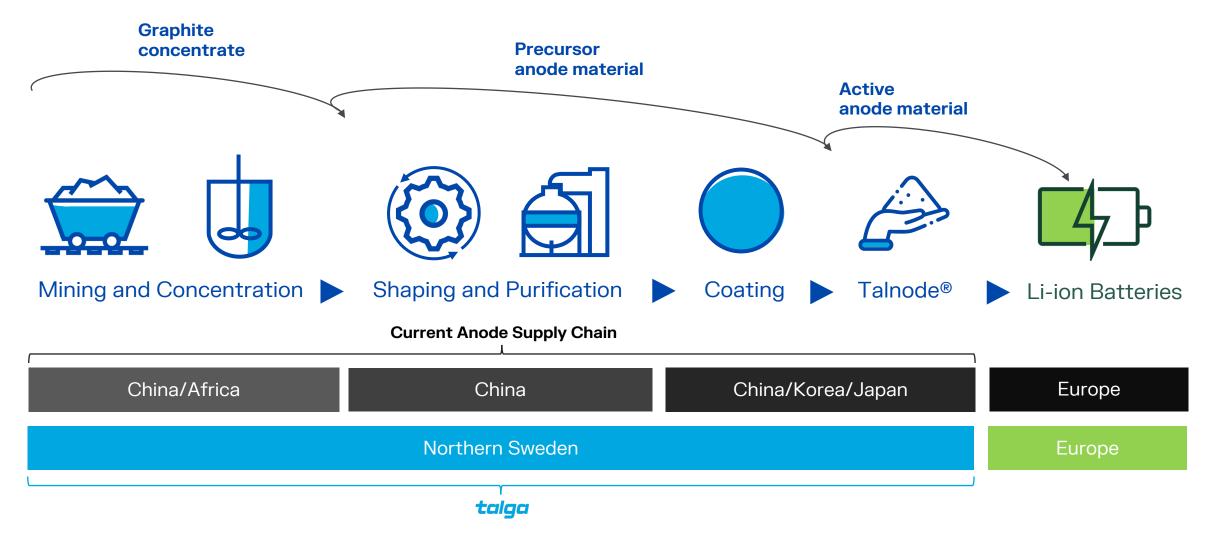
Market deficit forecast beginning in 2025E, Macquarie Research



Flake graphite in 2023, Benchmark Mineral Intelligence



## Talga: strong, integrated supply chain in Europe

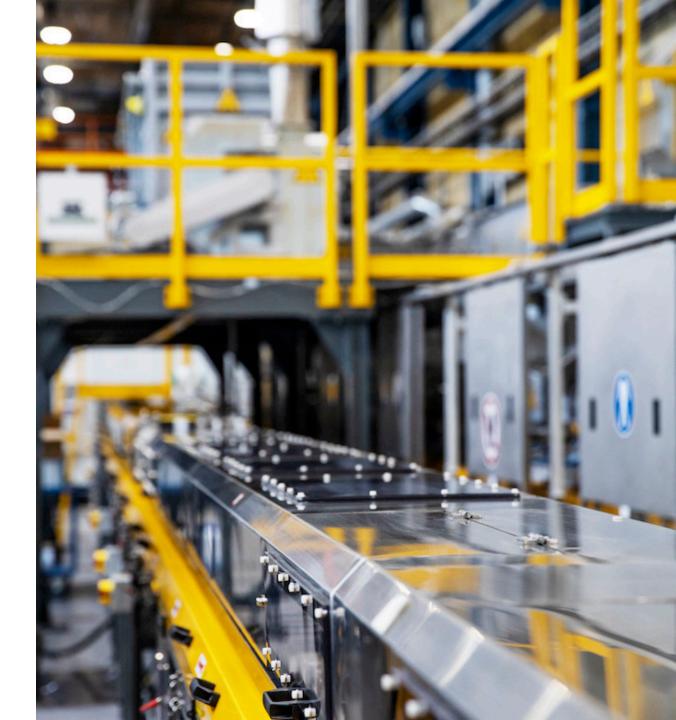




# First coated graphite anode plant in Europe

### Electric Vehicle Anode (EVA) Plant, Sweden

- ✔ Producing large-scale coated natural graphite anode, Talnode®-C, for auto OEM battery customer qualifications (A-C sample)
- Proprietary ore-to-coated shaped purified graphite (CSPG) technology
- ✓ In-house Battery and Powder Laboratory
- ✓ ISO 14001:2015 certified for Environmental and Social Management System
- Operational and quality control capability readied for commercial production







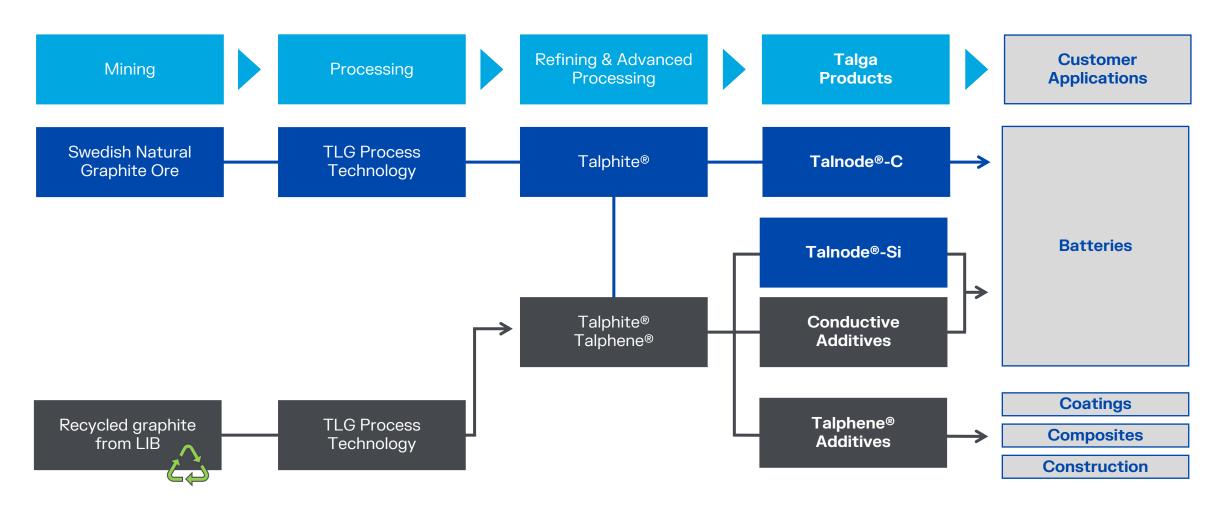






# Talga Technology and Products Map

Diverse range of battery and advanced materials produced from graphite sources





# Vittangi Anode Project

Advanced stage fully vertically integrated graphite mine and refinery in Sweden to produce 19,500tpa active anode material

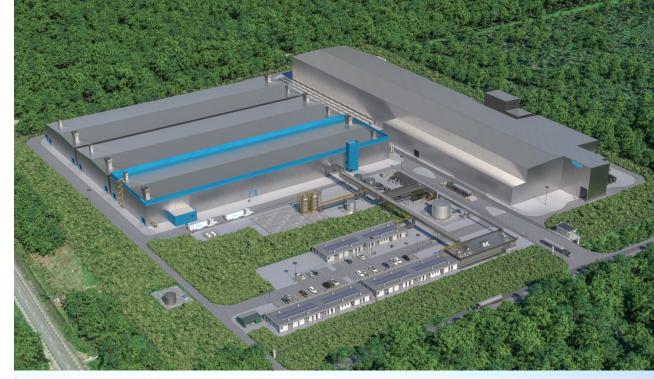
- Outstanding low-emission production enabled by high grade ore with uniquely suited small flake size, advanced Talga process technology and 100% hydropower
- Anode operation in Luleå Industrial Park is close to customers and has direct road and rail access to all mainland Europe
- Hitachi-ABB (Scope1-3) LCA shows production of 1kg Talnode®-C emits 1.47kg CO<sub>2</sub>-eq (~20x lower than incumbent EV battery imports)



# Commercial anode refinery

19,500tpa anode production facility planned for new Luleå Industrial Park alongside LKAB, SSAB, H2 Green Steel and others

- Building and Environmental permits granted, with execution order allowing commencement of construction groundworks Q3 2023
- >25Kt graphite ore stockpiles available for commissioning and early-stage production
- Land cleared and 40MW/annum power allocated
- Industrial park infrastructure under construction







# Vittangi graphite mine

- Environment and Natura 2000 permit granted. Permits include:
  - Mining and processing of 120,000tpa graphite ore to 2070
  - Waste rock and tailings storage and remediation
  - Water treatment and discharge
- Culmination of sustained multi-year technical, environmental and social surveys/studies
- Appeals of the permit are being assessed by appeals court under statutory process



"We no longer back fossil fuel projects and will devote 50% of our investments to climate action and sustainability by 2025."

European Investment Bank at a glance, February 2023

## Project financing

## EIB approve €150 million senior debt funding, subject to final documentation

- Remaining debt financing package being finalised with credit approval commitments expected from Lenders over next quarter
- Terms Sheet and Financial Model supported by independent bank due diligence reports:
  - technical and environmental
  - anode and graphite market
  - financial and legal with Senior Lender Counsel appointed for financiers
- Financing strategy targets 60% project debt and 40% equity (which can include state aid and strategic partnerships)



## Anode offtakes

## Talnode®-C supply agreements to support Vittangi project financing include;

**ACC** (co-owned by Mercedes-Benz, Stellantis, and Saft) non-binding offtake term sheet for:

- ➤ Supply of 60,000 tonnes of Talnode®-C over initial 5-year term starting 2026
- Expected to include supply of ramp up volumes

**Verkor** (supplier to Renault)

- ➤ LOI sets out non-binding terms to supply Talnode®-C over a 4- to 8-year period
- Progressing execution of binding term sheet

Agreements also being advanced with other major battery makers and OEMs





## **EU Momentum**

EU Green Deal and interaction with the US Inflation Reduction Act driving new actions to establish local battery supply chains

- ✔ Recent policy initiatives:

  - ✓ Net-Zero Industry Act, 16 March
  - ✔ Proposed Sovereignty Fund, 16 March
  - → Battery regulation, 14 June
- ✓ Owing to strong green credentials Talga continues to be recognised as a key driver of net zero action in Europe



# Silicon anode pilot commissioned

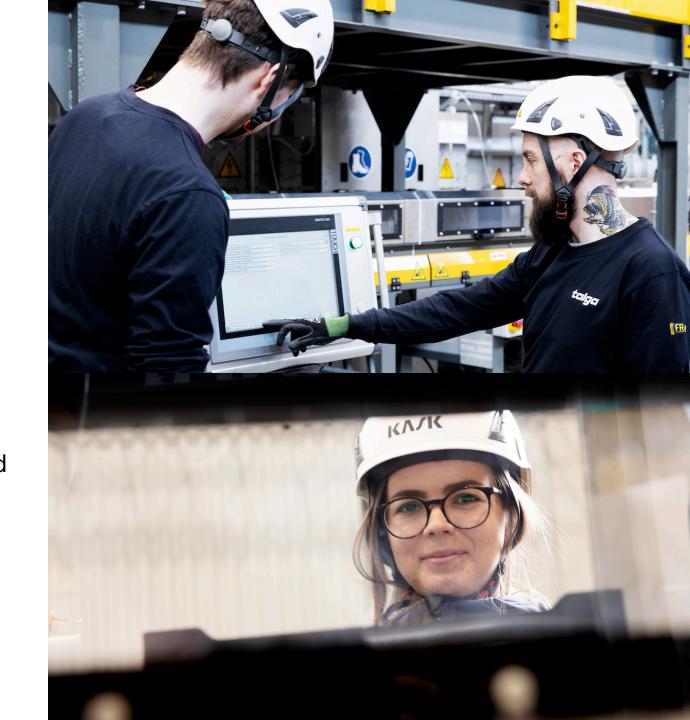
## New Talnode®-Si pilot line commissioned and providing customer qualification samples

- Talnode®-Si is a composite silicon-graphenegraphite anode that has successfully scaled from lab in UK to pilot plant in Germany
- Designed as a "drop-in" energy booster additive, Talnode®-Si contains ~50 wt% silicon
- Fast-tracking resulting from positive customer results. Potential commercial sites shortlisted
- Test work underway on using recycled (used) battery graphite in silicon anode composite structure to expand potential growth trajectory



# Building operational readiness

- Key appointments completed across global group, including Project Director for Vittangi Anode Project construction in Sweden. More than 70 full time Group staff
- Luleå refinery early works underway including commencement of anode equipment procurement and detailed engineering
- In-house battery lab and equipment expanded and LEAN quality management implementation underway
- IP strategy advances to >60 individual applications in 14 active families





# Upcoming milestones

- Refinery environmental permit appeal period closing. Commence refinery construction groundworks Q3 2023
- Vittangi mine appeals assessment
- Project financing debt finalisation and approvals
- Talnode®-C offtake agreements finalisation and customer growth
- Talnode®-Si silicon anode qualification and commercial agreements to support global development plans
- Exploration growth and resource development to fit expanding customer battery demand roadmaps



www.talgagroup.com







**ASX:TLG** 

## Experienced Board and Management Team

Strong technological and operational leadership with on the ground European presence



### **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 Syneriect, 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 Fellow of the Taxation Institute of Australia and 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 Smedvia group companies and DFCU Bank.





**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 producer Iluka Resources. Melissa ioined lluka in 2009 and held a range of senior roles within the business in Commercial. Investor Relations, Business Development and Information Technology.



**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.

## JORC Graphite Reserve and Resources

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)	36,853,000	23.1
Indicated	27,814,000	23.8
Inferred	9,039,000	21.2
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	72,700,000	18.6

Note:

- 1. Mineral resources are inclusive of ore reserves.
- 2. Mineral Resources are reported at various cut off grades: Vittangi 11% 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.



## 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.



## Competent Person Statements

The Vittangi Mineral Resource estimate was first reported in the Company's announcement dated 3 April 2023 titled 'Successful exploration grows Talga's Swedish natural graphite resource'. 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.

