Talga's battery anode growth ambitions boosted with 54% graphite resource increase

Critical mineral source grows to secure EU Li-ion battery supply chain

- Vittangi Graphite Resource boosted by 54%, adding more than 10 million tonnes to Europe's largest graphite resource, a critical mineral for lithium-ion batteries
- Graphite resource growth is a key pillar in Talga's mine-to-anode strategy and scale-up to become a significant supplier of the world's greenest lithium-ion battery anode
- Further resource update planned for late H2 2022 following recently completed drilling program

Battery and advanced materials company Talga Group Ltd ("**Talga**" or "**the Company**")(**TLG:ASX**) is pleased to announce significant increases in the Company's Swedish natural graphite mineral resources which form a key part of its vertically integrated battery anode business.

The latest update, based on 2021 drilling, brings the Vittangi Graphite Project (JORC 2012) Global Mineral Resource estimate to **30.1 million tonnes of graphite ore at 24.1% Cg**.

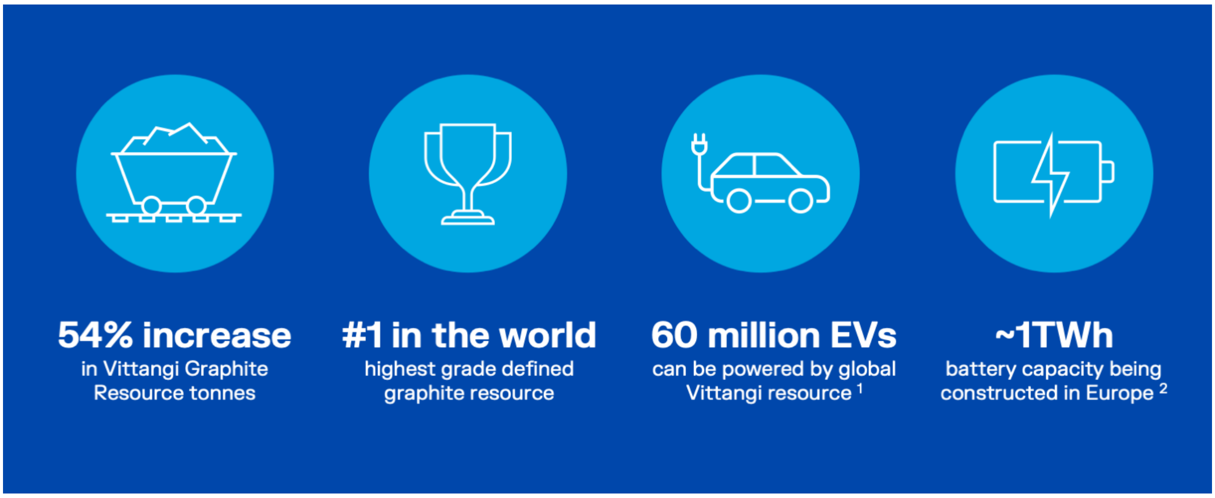
The estimate includes a maiden Mineral Resource for the new Nunasvaara East discovery, the delineation of which continues to support the high continuity of graphite grade between known deposits. **The Vittangi graphite deposits remain open along strike and at depth**, with further drilling planned to underpin continued resource growth.

The Vittangi Project is the largest natural graphite resource in Europe, and the highest grade JORC graphite Mineral Resource publicly filed in the world. The updated Vittangi Mineral Resource, with 7.2Mt of contained natural graphite, could potentially provide Li-ion battery anode material for the production of approximately 60 million electric vehicles[1].

Talga Managing Director, Mark Thompson, commented: *"Currently, there is more than 960GWh[2] of Li-ion battery capacity using graphite anode technology planned in Europe. In boosting our graphite mineral resource, we are also boosting our ability to supply sustainable anode products and setting Talga up to become a major supplier to the world's fastest growing Li-ion battery markets."*

Talga is progressing towards commercial production of its flagship green active anode material, Talnode®-C, having recently opened the first Li-ion battery anode plant in Europe and reaching a crucial milestone in the permitting process for its initial 19,500tpa operation. By further defining the Vittangi deposit, Talga is boosting the expansion potential of its vertically integrated battery anode business to match future market demand.

[1] Calculation assumes 78% contained graphite to anode yield as per Talga DFS (TLG:ASX 1 July 2021) and 1.2kg of graphite anode per 1kWh battery capacity (Benchmark Minerals Intelligence) with 76.5kWh battery pack being average of VW ID.4 1st and Tesla Model 3 Performance. [2] Benchmark Mineral Intelligence, Battery Gigafactory Assessment May 2022



VITTANGI MINERAL RESOURCE UPDATE

Talga is building a vertically integrated graphite anode business in Europe using 100% renewable electricity to produce ultra-low emission coated active anode for greener Li-ion batteries. Production of Talga's flagship anode product, Talnode®-C, will use the unique high-grade natural graphite from the Company's wholly-owned Vittangi Graphite Project ("Vittangi") (Figure 1) in northern Sweden.

To support the Company's future expansion plans Talga has completed recent exploration activities, including resource drilling, at Vittangi, and continues to develop the project through technical and economic feasibility studies.

Mineral Resource Update and Overview

The Vittangi Graphite Mineral Resource update was completed by independent mining consultant SLR Consulting Limited, incorporating 2021 diamond drilling completed at the Vittangi graphite deposits (Figure 2 and 3).

Based on a 10% graphite ("Cg") cut-off grade across the entire project, and constrained within Whittle open pit shells, **the Vittangi Mineral Resource estimate now stands at 30.1 million tonnes ("Mt") at 24.1% Cg for 7.2Mt of contained graphite.** This includes Indicated Resources of 22.6Mt at 24.9% Cg and Inferred Resources of 7.5Mt at 21.8% Cg (see Table 1).

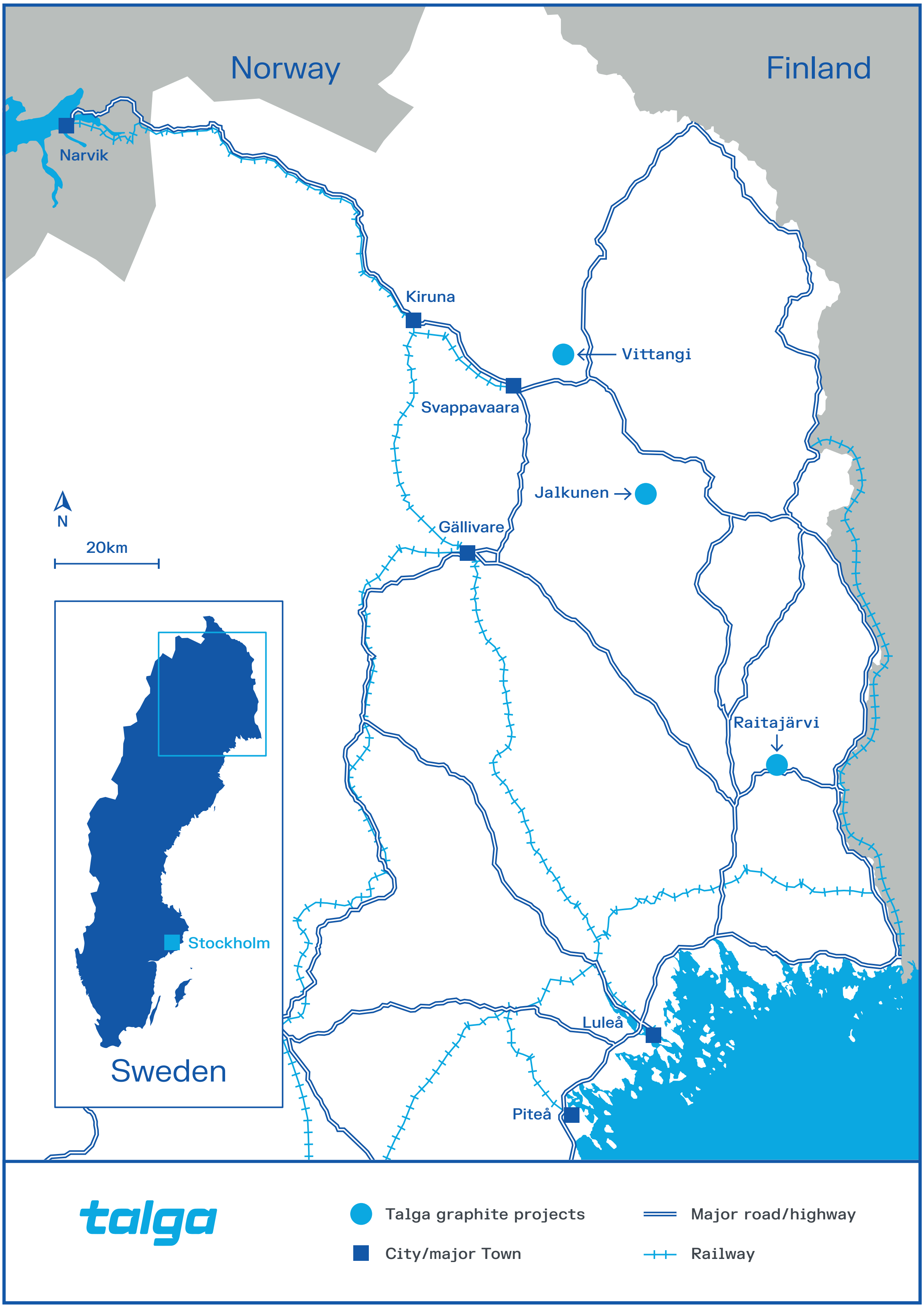
The update represents a 54% increase in total resource tonnes (51% increase in Indicated Resource tonnes and 67% increase in Inferred Resource tonnes) over the previous Vittangi estimate (ASX:TLG 17 September 2020). The update includes a **maiden Mineral Resource estimate for the Nunasvaara East deposit** which stands at 4.4Mt at 23.3% Cg for 1Mt of contained graphite, including Indicated Resources of 3.0Mt at 23.3% Cg and Inferred Resources of 1.4Mt at 23.3% Cg (see Table 1).

Following the update, Vittangi remains the world's highest grade graphite mineral resource and the largest defined graphite mineral resource in Europe.

The updated Vittangi Graphite Mineral Resource estimate increases **Talga's total Swedish graphite resource inventory to 65.9Mt at 18.6% Cg, containing 12.2Mt of natural graphite** (see Table 3), comprising Indicated Resources of 26Mt at 22.6% Cg and Inferred Resources of 39.9Mt at 16% Cg.

The Vittangi Mineral Resource update includes the successful conversion of some of the Vittangi Graphite Exploration Target (ASX:TLG 20 July 2021). The Exploration Target will be re-calculated over the coming months, taking into consideration the conversion of a portion of the Exploration Target area into Mineral Resources, as well as new geological information gained from drilling during 2021.

Figure 1 Location of Talga's graphite projects in Sweden.



Geology

The geology of the area surrounding Vittangi, hosting the Nunasvaara South-North-East and Niska North-South graphite mineral resources, consists of a Proterozoic-aged greenstone sequence (Vittangi Greenstone Group) of sediments, volcanoclastics and intrusive rocks centred within the Vittangi district of northern Sweden. Stratiform to stratabound graphite mineralisation occurs at Nunasvaara and Niska as two individual, sub-vertical 15-70m wide lithologically continuous. Graphite mineralisation occurs as a very fine-grained, dark-grey to black graphitic rock containing 10-50% Cg as highly-crystalline, ultra-fine flakes. Pyrite, pyrrhotite and trace chalcopyrite may accompany the graphite mineralisation.

The main graphite-bearing strata has been interpreted across five main deposit areas with a total strike length exceeding 5 km. Drillhole intersections have shown the graphite units to be steeply dipping along its entire length, typically between 75° and vertical.

The deposits have also been found to have two distinct orientations, with a distinct change in orientation of approximately 90° occurring within the Nunasvaara South deposit. The southern portion of the Nunasvaara South deposit trends towards 320° and dips steeply (75-85°) to the southwest 230° with a strike length of approximately 800 m. Conversely, an apparent hinge in Nunasvaara South changes the orientation of the northern portion of the deposit towards 055°, dipping steeply (70-80°) to the northwest with a strike length of approximately 500m.

Moving north, the Nunasvaara North, Niska South and Niska North deposits all show a generally consistent strike towards 040°. While all the deposits are also steeply dipping in these areas, some evidence of overturning has been observed. Nunasvaara North is generally vertical or steeply dipping (85°) to the northwest or southeast, Niska South dips steeply (75-85°) to the northwest, and Niska North dips steeply (75-85°) to the southeast. Drilling to-date has intersected the graphite mineralisation to a maximum depth of approximately 200m.

The Swedish Geological Survey (SGU) reported in 2018 “in the Nunasvaara area (Vittangi Greenstone Group), a partly conformable, polydeformed, approximately 2.4km thick greenstone sequence mainly consists of basaltic (tholeiitic) metavolcanic and metavolcaniclastic rocks (amygdaloidal lava, laminated tuff). Intercalated metasedimentary units include graphite-bearing black schist, and pelite. The uppermost part consists of amphibolitic pelite with intercalated metacarbonate layers and rare meta-ironstone, metachert and meta-ultrabasic horizons. Numerous metadoleritic sills occur throughout the package.”

In addition, “Both greenstone successions record the effects of overprinting syn- to late-orogenic tectonothermal events. These include complex, polyphase ductile deformation at Nunasvaara, forming the Nunasvaara dome, peak amphibolite facies metamorphism, metasomatic-hydrothermal alteration and late-stage retrogression and brittle faulting. Locally, these overprinting processes formed metamorphic graphite”.

Sampling and Sub-Sampling Techniques

Historical diamond drill core is known to have been sampled as half core at regular 2m intervals. Similarly, historical trench / channel samples as smaller intervals of rock chips were composited into regular 2m intervals for consistency with drill core.

Talga diamond drill core was sampled as either half or quarter-core at 1m or 2m intervals or to geological boundaries, to maintain consistency with historical sampling where possible. Samples were dried, crushed and pulverised to achieve 85% passing 75µm prior to assaying. The graphite is very homogenous and duplicate analysis indicated no sample bias.

Figure 2 Vittangi Graphite Mineral Resources over 2021 SkyTEM electromagnetic survey and DFS mine infrastructure.

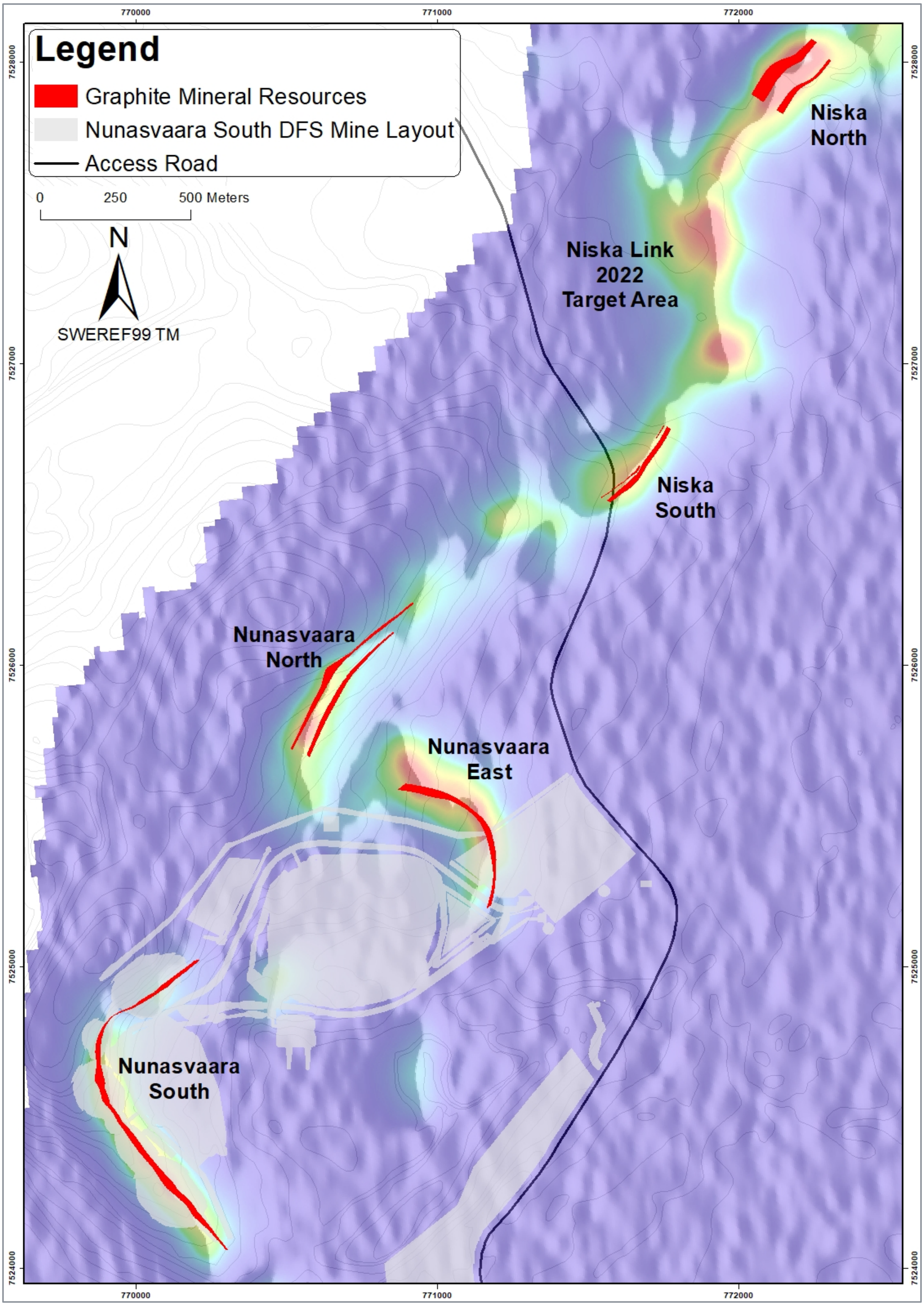
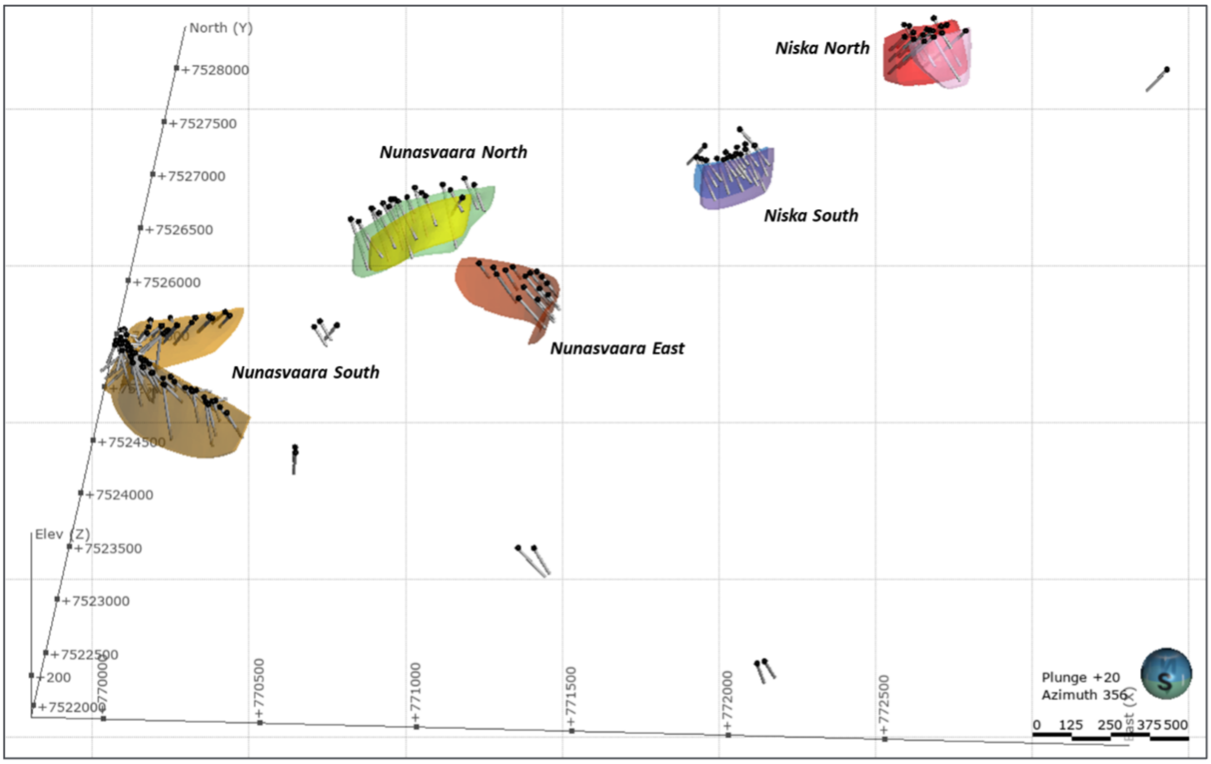


Figure 3 Vittangi Graphite Mineral Resource Domains (Isometric View Looking North).



Sample Analysis Method

Talga drill core was processed by ALS-Chemex in Piteå and Malå, Sweden, for 33 or 48 element analyses via ICP following 4-acid digest and graphitic carbon was analysed via ALS-Chemex method C-IR18 (Graphitic Carbon via Leco) or method C-IR06 (Organic Carbon) for 2012 samples, and method C-IR07 (Total Carbon via spectroscopy). The methods are appropriate for graphite deposit assessment and are considered a total digest and analysis.

For historical drillholes, graphite analysis was undertaken by IR-detector which is industry standard for carbon analysis and as such the method used historically is considered appropriate. Check assaying of several historic core intervals by Talga in 2012 returned analytical results within 0.5% Cg of the historical data, confirming the original assay results.

Drilling Techniques

Vittangi drilling to date has comprised historical diamond core drilling at size WL56 (39mm core diameter) completed by LKAB in 1982 at Nunasvaara South, and recent diamond core drilling at sizes WL66 (50.5mm core diameter), WL76 (57.5mm core diameter), and NQ2 (50.6mm core diameter) completed by Talga in 2012, 2014, 2016, 2019, and 2021. Core recoveries are considered to be high and appropriate for confirming sample representativeness.

In addition to diamond drilling, geological interpretation and grade interpolations have been informed by historical trench / channel sampling completed by LKAB in 1982.

Other Exploration

In addition to drilling, several geophysical surveys have been undertaken across the Vittangi area. This has included ground-based electromagnetic surveys (Slingram) in 2014, 2016 and 2020, but most recently involved an aerial electromagnetic survey (SkyTEM) in 2021 (ASX: 26 October 2021). The survey results (Figure 2) have been used by Talga to corroborate drilling results and inform ongoing exploration within the Vittangi Graphite Project area.

Mining and Metallurgical Methods and Parameters

In 2014, Talga released a Scoping Study which confirmed the eventual economic extraction of the graphite mineralisation (ASX:TLG 9 October 2014). In 2015 and 2016, Talga conducted a trial mining program, with graphite material extracted for process tests and production of Talga graphene, Talphene®, at the Company's test facility in Rudolstadt, Germany.

In 2018, Talga developed and released test results of an active anode material for Li-ion batteries, later trademarked as Talnode®-C (ASX:TLG 15 May 2018). Metallurgical testwork has since focussed on producing a range of Talnode® and Talphene® products via Talga's proprietary processing methods.

In 2019, Talga released a Vittangi Anode Project Pre-Feasibility Study ("PFS"), based solely on the Nunasvaara South Ore Reserve (ASX:TLG 23 May 2019), confirming outstanding project economics of a vertically integrated mine-to-anode operation. The PFS outlined a preferred mining method of drill and blast with mineral processing at an on-site concentrator followed by anode production at the nearby port city of Luleå. In 2021, Talga released a Vittangi Anode Project Detailed Feasibility Study ("DFS"), based on an updated Nunasvaara South Ore Reserve (see Table 2) (ASX:TLG 1 July 2021), confirming the project's ability to produce 19,500 tonnes per annum ("tpa") of Talnode®-C.

In 2020, Talga released a Scoping Study on its Niska expansion underpinned by an underground mining study of the Niska South, Niska North and Nunasvaara North graphite deposits (ASX:TLG 7 December 2020). The positive Scoping Study supports stand-alone production of ~85,000tpa Talnode®-C and ~8,500tpa Talphene® for silicon anodes. This adds to the existing Vittangi Anode Project towards total >100,000tpa anode production by 2025-26, defining path for Talga to become one of the largest Li-ion battery anode producers outside China.

In 2022, Talga successfully commissioned its Electric Vehicle Anode (EVA) qualification plant in northern Sweden (ASX:TLG 31 March 2022). The EVA is Europe's first Li-ion battery anode plant and produces large scale commercial samples of Talga's coated active anode material for battery customer qualification.

Numerous metallurgical testwork has been completed on the Vittangi graphite mineralisation and successful results have been achieved at various large volume scale-ups.

Resource Estimation, Methodology & Assumptions

The Vittangi Mineral Resource estimate was based on all drilling completed as of October 31, 2021, at the Nunasvaara North-South-East and Niska North-South deposit areas. The Effective Date of the Mineral Resource estimate is 12 May 2022.

All data was validated for collar, survey, lithology, and assay accuracy prior to input into Leapfrog™ Geo geological modelling software. Further validation was provided using Leapfrog™ three-dimension (3D) visualisation.

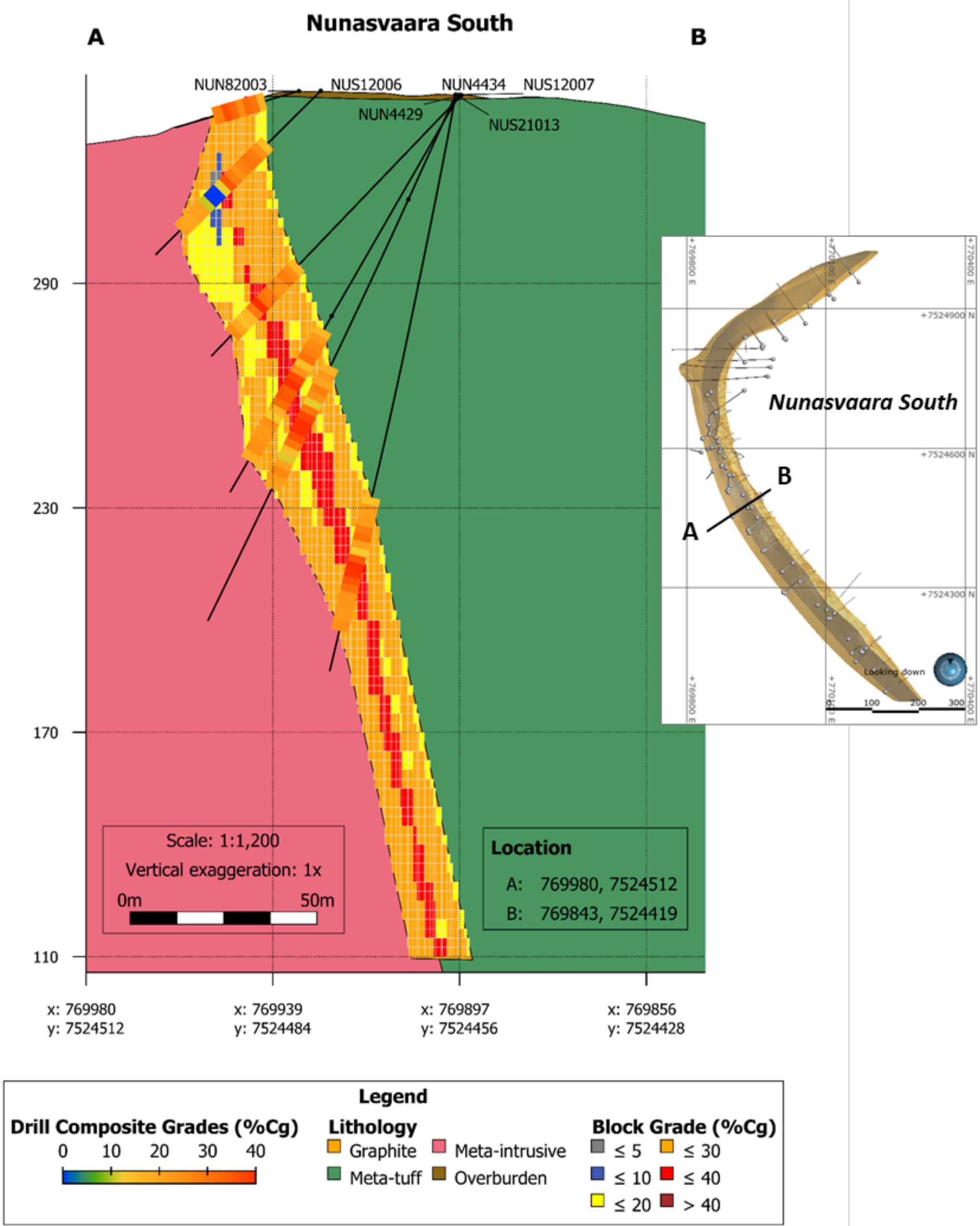
Geological logging and a cut-off grade of 10% Cg was used to domain/wireframe the graphite horizon and a low-grade graphite horizon. This cut-off reflects the natural graphitic carbon content of the graphite geological horizon as interpreted from drill core and analytical data, and closely reflects the calculated economic cut-off.

Internal low- or barren waste rock lithologies – interpreted as transgressive sills of dolerites, diorites and gabbros – which range in thickness from less than 0.2m to over 3m were not domained / wireframed separately and have instead been managed through grade interpolation parameters and treated as internal waste within the Mineral Resource estimate.

The block-model parent block size was 2.5m x 2.5m x 5m with sub-blocks of 1.5m x 1.5m x 2.5m. Block sizes were selected based on a likely Selective Mining Unit (SMU) and anticipated 10m bench heights for an open pit mining operation, although the underground potential was also noted. Individual, unrotated block models were created covering each of the Vittangi deposit areas.

A single-pass estimation strategy was employed using a minimum of one and maximum of five samples for block estimates, limited to a maximum of two samples per drill hole. A second broader pass was employed in selective domains where a small number of peripheral blocks were left un-interpolated. A cross-section through the Nunasvaara South block model showing drill hole composites is illustrated in Figure 4.

Figure 4 Cross Section through the Nunasvaara South Graphite Deposit



Inverse Distance Cubed (ID^3) was used to estimate graphitic carbon using analytical samples composited into 2m intervals within each graphite domain with no grade capping applied. All of the material was classified as fresh with mean in-situ bulk density values applied for each domain after the removal of outliers, averaging 2.64 t/m^3 within graphite domains.

The spatial distribution of drillhole data and samples is deemed appropriate for the style of mineralisation and sufficient to establish confidence in geological and grade continuity. The degree of confidence in continuity is reflected in the classification applied to the Mineral Resource estimate that includes Indicated and Inferred Resources. For the purposes of determining Reasonable Prospects for Eventual Economic Extraction (RPEEE), the Mineral Resource estimate are reported within preliminary pit shells for each deposit area above a cut-off of 10% Cg.

Next Steps

By 2031, Benchmark Mineral Intelligence forecasts demand for coated graphite anode in Europe alone to reach over 1 million tonnes per year[2]. This, along with Talga's increasing number of customers, underscores the need to further upgrade the Vittangi resource.

New 2022 diamond drilling of the Niska Link target area (ASX:TLG 14 April 2022) was completed on 2 May with a total of 36 drillholes for 4,154.8m of diamond core drilling. Detailed geological logging and core sampling has commenced, and assay result flow is expected to start in July. The Company plans to further update the Vittangi Mineral Resource estimation in late 2022, following return of all analytical results.

Further surface diamond drilling targeting the extension of Nunasvaara East towards Nunasvaara North is also planned with a commencement date yet to be established.

The current Vittangi Anode Project is based only on the previously defined DFS production target-constrained Ore Reserve of the Nunasvaara South deposit, with the balance of resources considered as part of an expansion option under the Niska Scoping Study. Following the continued Mineral Resource expansion, a mining options study that will consider unifying all Mineral Resources within the Vittangi Graphite Project towards maximum anode production scale potential is planned for H2 2022.

Authorised for release by the Board of Directors of Talga Group Ltd.

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Table 1 *Total Vittangi Project Graphite Mineral Resources as of 12 May 2022.*

Deposit	Resource Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Indicated	8,058,000	25.2	2,032,000
	Inferred	2,679,000	25.2	675,000
Nunasvaara North	Indicated	4,041,000	27.9	1,128,000
	Inferred	2,166,000	15.3	332,000
Nunasvaara East	Indicated	2,991,000	23.3	698,000
	Inferred	1,401,000	23.3	326,000
Niska North	Indicated	4,744,000	24.0	1,140,000
	Inferred	1,135,000	24.6	279,000
Niska South	Indicated	2,765,000	22.5	623,000
	Inferred	95,000	17.3	16,000
Total	**Indicated**	**22,599,000**	**24.9**	**5,620,000**
	Inferred	**7,476,000**	**21.8**	**1,629,000**
Total	**Indicated & Inferred**	**30,075,000**	**24.1**	**7,249,000**

Notes: *1. All Mineral Resources have been reported in accordance with the 2012 JORC Code reporting guidelines. 2. Mineral Resources are reported within preliminary pit shells and above a cut-off grade of 10% Cg. 3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. 4. Average bulk density is 2.64 t/m^3. 5. Numbers may not add due to rounding.*

Table 2 *Vittangi Project Nunasvaara Probable Ore Reserve Statement.*

Deposit	Reserve Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Probable	2,260,140	24.1	544,693
Total		**2,260,140**	**24.1**	**544,693**

Notes: *1. Due to rounding totals may not reconcile exactly. 2. The Nunasvaara Ore Reserve was disclosed in July 2021 in accordance with the 2012 JORC Code (ASX:TLG 1 July 2021) and is based on the previously disclosed Mineral Resource estimate for Nunasvaara South (ASX: TLG 17 September 2020).*

Table 3 *Talga Total Graphite Mineral Resources.*

Deposit	Resource Category	Tonnage (Mt)	Graphite (% Cg)	Contained Graphite (Mt)
Vittangi	Indicated	22.6	24.9	5.6
	Inferred	7.5	21.8	1.6
Jalkunen	Inferred	31.5	14.9	4.7
Raitajärvi	Indicated	3.4	7.3	0.2
	Inferred	0.9	6.4	0.1
Total	**Indicated & Inferred**	**65.9**	**18.6**	**12.2**

Notes: *1. Due to rounding totals may not reconcile exactly. 2. Mineral Resources are reported at various cut-off grades: Vittangi 10%Cg, Jalkunen 5%Cg and Raitajärvi 5%Cg. 3. Mineral Resources rounded to nearest hundred thousand tonnes. 4. The Jalkunen Project Mineral Resource was disclosed in August 2015 in accordance with the 2012 JORC Code (ASX:TLG 27 August 2015). 5. The Raitajärvi Project Mineral Resource was disclosed in August 2013 in accordance with the 2004 JORC Code (ASX:TLG 26 August 2013).*

Competent Persons Statement

The Vittangi Graphite Mineral Resource estimate has been updated following the incorporation of diamond drilling completed by Talga in 2021. The Company confirms that it is not aware of any other information or data that materially affects the information included in the market announcement.

The information contained in this announcement relates to a Mineral Resource estimate report prepared by Ms Katharine Masun (HBSc Geology, MSc Geology, MSA Spatial Analysis), Consultant Geologist at SLR Consulting (Canada) Limited. Ms Masun is registered as a Professional Geologist in the Provinces of Ontario, Newfoundland and Labrador, and Saskatchewan, Canada, and is a Competent Person as defined by the JORC Code. Ms Masun has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Ms Masun has reviewed and approved the information in this announcement.

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 announcement 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 announcement 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. 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.

About Talga

Talga Group Ltd (ASX:TLG) is building a European battery anode and graphene additives supply chain, to offer advanced materials critical to its customers' innovation and the shift towards a more sustainable world. Vertical integration, including ownership of several high-grade Swedish graphite projects, provides security of supply and creates long-lasting value for stakeholders. Company website: www.talgagroup.com

Forward-Looking Statements & Disclaimer

Statements in this document regarding the Company's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements.

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JORC Tables

Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Core samples from diamond drillholes have been taken following geological logging and are therefore based on observed intersection of graphite mineralisation. • Historical diamond drillholes have been sampled as half-core samples taken over 2 m length intervals. • Information on historical costean / channel samples is limited although from historical reports it is understood these were sampled as rock chips over variable length intervals. Results from these intervals were composited into 2 m lengths for comparison to drill core intersections. • Recent diamond drillholes by Talga since 2012 have similarly been sampled as half-core samples taken over regular 1 m or 2 m intervals. Quarter core samples have also been taken as field duplicates. • All sampling of core in holes since 2012 has been undertaken by Talga after detailed geological logging. • No other sampling methods, such as downhole sampling, has been undertaken.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling has been undertaken using diamond coring methods. No reverse circulation, auger, or other drilling methods have been used. • Historical drillholes were completed in 1982 by the exploration company of the organisation for special projects, OSP, on behalf of LKAB and were drilled using WL56 equipment producing core of 39 mm diameter. • Recent drilling completed by Talga since 2012 were drilled by Northdrill Oy of Finland using WL66, WL76 and NQ2 equipment producing core of 50.5 mm, 57.5 mm and 50.6 mm diameter respectively.

Criteria	Explanation	Commentary
		• Core orientations, where taken, were done using a Reflex ACT 3 core orientation instrument. Core orientation was undertaken in drillholes in 2012, 2014, and 2021.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core recovery was not recorded in historical holes at the time. During check assaying of two LKAB holes in 2012 by Talga (NUN4487 and NUN4488), core recovery was logged as a check on historical drilling performance. Recovery was generally lower near surface and in the first 15 m to 20 m, but otherwise averaged 96% and 92% respectively. • No recovery information is available for costeans. • For Talga drillholes, core recoveries were typically recorded by the drillers for each drill run (typically 3 m lengths). The core length recovered for each drill run was recorded and used to calculate core recovery as a percentage of the run length. Instances of core loss was recorded by the drillers in the core box and checked by Talga geologist's during geological logging. • Core recovery information was provided for drilling in 2012, 2014, 2016, and 2021. No core recovery information was available for drilling in 2019. • SLR evaluated core recovery records against grouped lithologies within the geological model which show no bias by domain or graphite content. • Core recovery records demonstrate generally high core recovery across the Project with 91% of intervals having core recovery greater than 90% and 84% greater than 95% recovery. No samples were removed or adjusted in drillhole database to reflect lower than expected core recoveries as these have been attributed to isolated instances rather than a widespread issue of recovery and sample representativeness across the deposits. • No additional measures have been taken to maximise sample recovery.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Historical drillholes and costeans were logged by LKAB at the time. Records available from the time are limited, although historical reports were provided as scanned documents. Simple geological/graphic logs recording lithology/rock type for each interval in drillholes and costeans are available. The reports also include cross sections of drillholes and costeans showing graphite intersections, sample sheets, and laboratory analytical results. No original photographs or other detailed logging records are available, although a small number of historical drill collar and core photos were taken by Talga. • Detailed geological logging has been undertaken by Talga since 2012 and includes logging of lithology (rock types), colour, weathering, alteration, mineralogy, mineralisation, and any structural observations. Detailed descriptions of each logged intervals were also taken. • All Talga drill core has been photographed both wet and dry.

Criteria	Explanation	Commentary

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• Samples were taken over regular 2 m intervals and analysed as half-core samples. Sampling information for costeans is limited although from historical reports it is understood samples were taken as rock chips Similarly, sample preparation procedures used historically are unknown. No QA/QC sampling exists for historical drillholes or costeans.
		• All Talga drill core was first logged, and samples marked at the SGU (Swedish Geological Survey) logging facility, also in Malå, Sweden by Talga geologists. Core was subsequently sent to ALS Global in Malå, Sweden, where core was cut, and samples taken as half-core. Samples are taken over regular 1 m or 2 m intervals for consistency.
		• Considering the fine-grained nature and style of the graphite mineralisation, samples taken as half-core over these standard interval lengths are deemed to be of an appropriate size to maintain sample representativeness.
		• Sample preparation since 2012 was undertaken by the appointed accredited laboratory, thereby following standard practices for creating homogenous samples for analysis and reducing the possibility of sample biases or contamination. Samples were finely crushed with 70% passing <2 mm then reduced in a splitter whereby a reject sample and a 250 g sample produced. The 250 g sample is then pulverised with 85% passing <75 microns which completely homogenises the sample. A sub-sample of pulp is taken for digestion in a four-acid digest, total graphitic carbon (Cg) and fire assay for gold. Samples with high carbon content were pre-roasted to 700°C prior to analysis for gold.
		• Check assaying of two historical LKAB drillholes (NUN4487 and NUN4488) showed 0.3-0.4% Cg variation to historical analytical data. Relative differences were found to be 1.5% and 8.6% in the two re-analysed drillholes.
		• QA/QC programmes implemented by Talga since 2012 includes the insertion of field duplicates (taken as quarter core samples), Certified Reference Material (CRMs)/standards, and blanks. Additional laboratory pulp duplicates, internal CRMs, and laboratory blanks were also inserted by ALS The following insertion rates have been achieved for each sample type.
		  o Pulp Duplicates (ALS): 6-13%
		  o Field Duplicates (Talga): 2-4%
		  o CRMs (Talga): 3-5%
		  o Blanks (ALS): 3-17%
		  o Blanks (Talga): 2-4%
		• For each drilling programme implemented by Talga, overall insertion rates were between 16% and 33%. This is higher than the typically expected 10-20%.
		• Evaluation of QA/QC data by SLR has shown that duplicates and blanks generally performed as expected with the exception of isolated outliers. CRMs were also generally found to perform within the expected limits with a limited number of failures beyond acceptable limits.

Criteria	Explanation	Commentary

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*
		• Historical drillhole samples were analysed for sulphur and trace elements at LKAB's laboratory in Malmberget. The exact analytical method (whether partial or total) is not known. Carbon was analysed using an Infrared (IR) detector at SSAB's laboratory in Luleå.
		• No opinion can be provided regarding sulphur or trace element analytical methods. Carbon analysis by IR detector remains a recognised, industry standard analytical method, and while the type of detector used is unknown, SLR consider the method to be appropriate.
		• The accreditation status of the LKAB and SSAB laboratories at the time of analysis is not known although it is expected that standard practices for the time would have been adopted. Check assays taken by Talga and analysed by SGS in 2012 showed reasonable replication of historical grades.
		• Analysis for 2012, 2014, 2016, 2019 and 2021 drillholes has included the following:
		  ○ Cg by Leco furnace. Samples are digested in 50% HCl acid, then filtered, washed, and dried before being roasted at 425°C. Residues are analysed for carbon by high temperature Leco furnace with IR detector (IR06 for organic carbon in 2012, IR07 spectroscopy for total carbon, and IR18 spectroscopy for Cg for 2014 onwards).
		  ○ Multi-element analysis by four-acid digestion (48-element, except for in 2016 which was 33-element) with inductively coupled plasma (ICP) optical/atomic emission spectrometry (OES/AES) or ICP mass spectrometry (MS) finish (ME-MS61). Four-acid digest is deemed to be appropriate for achieving near-complete digestion.
		  ○ Whole rock analysis by ICP-AES (ME-ICP06)
		  ○ Gold analysis using a 25 g sample with an atomic absorption (AA) finish. Samples with a high carbon content were pre-roasted to 700°C.
		  ○ PGM analysis including 30g fire assay ICP for Au, Pt, Pd
		• No geophysical or handheld analytical equipment has been used as the basis for analytical results.
		• Internal QA/QC samples were introduced by the laboratory (ALS) including pulp duplicates, internal CRMs, and blanks.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage*	• Check assaying of two historical LKAB drillholes (NUN4487 and NUN4488) showed 0.3-0.4% Cg variation to historical analytical data. Relative differences were found to be 1.5% and 8.6% in the two re-analysed drillholes. • Limited twin drilling has been completed by Talga in instances of hole re-drilling. NUN16005 was drilled approximately 1 m from NUN16004 which failed at shallow depths. The failed hole was not sampled for analysis, however, lithological logging in both holes

Criteria	Explanation	Commentary
	(physical and electronic) protocols. • *Discuss any adjustment to assay data.*	show consistent intersection and interpretation of graphite mineralisation. Elsewhere, scissor holes drilled in close proximity from opposite sides of the graphite mineralisation at Niska North have allowed for comparison, and recent drilling in 2021 in Nunasvaara South are also in close proximity to existing holes although are not direct twins. • All spatial and geological data relating to drillholes is stored in Excel spreadsheets by Talga. Data entry has been by manual input and validation. Numerous versions of spreadsheets and databases exist for the Project that have been created at different stages of Talga's ownership, and by different people. Most files were found to corroborate one another, although several instances of conflicting data, discrepancies and duplicate data between versions were found. • In Q4 2021, Talga appointed an independent database management company, Perth-based Rock Solid Data Limited (Rock Solid), to compile all geological and analytical data from first principles. However, this was not available at the time of geological modelling by SLR and instead SLR combined the most robust versions of drillhole data available and validated the databases prior to modelling. In some cases, this involved re-creating and compiling data from first principles. SLR has since completed spot checks against the MSAccess database compiled by Rock Solid and found no material issues. • No adjustments have been made to assay data. A small number of 0% Cg grade results were inserted into unsampled intervals within costeans where intervals were logged as graphite but not analysed.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Historical drillhole collars were initially surveyed in an unknown local coordinate system. During initial exploration by Talga in 2012, historical holes were re-surveyed using a Digital GPS unit. 2014 and 2016 holes were surveyed by handheld GPS with an accuracy of ±1 m. Planned drilling azimuths were set using handheld compass with azimuths and inclinations then recorded by downhole surveying. • Talga drillholes were surveyed downhole using either a Reflex EZTrac or Devico Deviflex Gyro instrument at regular intervals. • The grid system used by Talga for all spatial data in the Swedish Coordinate system SWEREF99 TM. In some cases, historical coordinates were transformed from Swedish Grid RT90 into SWEREF99 TM by Talga. • Topographic control was initial established by GPS. All drillhole collars have since been registered onto a topography surface obtained by LiDAR survey obtained by Talga. Differences between GPS collar elevations and the LiDAR dataset was evaluated by SLR and no material discrepancies for drillholes used for Mineral Resource estimation were found.

Criteria	Explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drillhole spacings vary by deposit area but are typically between 50 m and 150 m along strike and 25 m to 125 m down dip. More closely spaced drilling down to approximately 25 m along strike has been completed in Nunasvaara South and Niska South. • The spatial distribution of drillhole data and samples is deemed appropriate for the style of mineralisation and sufficient to establish confidence in geological and grade continuity. The degree of confidence in continuity is reflected in the classification applied to the Mineral Resource estimate that includes Indicated and Inferred Resources. • Grade estimation is based on samples composited into 2 m intervals within each mineralised domain. Residual lengths <0.5 m are distributed among the remaining composite intervals and as such composite lengths are not strictly fixed.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All drillholes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • No sample biases due to orientation have been identified.
Sample security	• *The measures taken to ensure sample security.*	• Sample security measures for historical drillholes and costeans are not known. • Sample security and chain of custody for Talga drillholes is managed by the Company. Core is stored in a secure core storage facility, and samples were transported to the laboratory by courier, accompanied by sample submission sheets.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• In compiling the primary spatial and geological data for the deposit, SLR has conducted a review from first principles of the data made available. Individual database issues or discrepancies were identified and resolve in consultation with Talga. • No other external audits or review of core logging or sample techniques have been undertaken to support this Mineral Resource estimate.

Section 2 Reporting of Exploration Results

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Vittangi Project is located within exploration licence areas held by Talga, namely the Nunasvaara nr 2 and Vittangi nr 2 licences. Licences are owned by Talga through the Company's Swedish subsidiary Talga AB. • According to information available from the local mining authority, Bergsstaten, the expiry dates of the two exploration licence areas are 05-02-2023 (Nunasvaara nr 2) and 26-08-2021 (Vittangi nr 2). Regarding the expiry dates, due to pending decisions from the Mining Inspectorate on Talga's applications for exploitation concessions (which were submitted during the validity period) both exploration licences remain valid throughout the application period until a decision has been made. At this time, Talga will be required to apply for a new licence for the areas that fall outside of the exploitation concession areas. This new application will involve Talga submitting a proposed licence area and coordinates with an associated justification / motivation for the application. It is anticipated that a new licence application and associated fees payable under the Mining Act will be made once Talga has been informed of the outcome of the exploitation concession applications. • The licences owned by the Company and are located within areas which carry various environmental classifications, including for wetlands and forestry land. The area is also used for winter seasonal grazing by local indigenous Sami reindeer herders. For future development, Talga will be required to apply for the necessary concessions and provide compensation commensurate with the existing land classifications. • Other environmental areas include the Natura 2000 registered Torne River, located approximately 1 km to the south of the Nunasvaara South deposit, and the Vittangi River, located approximately 1 km north of the Niska North deposit. • No Mineral Resources have been estimated within the Natura 2000 areas of the Torne and Vittangi rivers.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was initially undertaken during the early 1900's by a number of private entities and the Swedish Geological Survey (SGU). In the early 1980's, LKAB conducted diamond drilling and test mining at the Nunasvaara South deposit; the source of historical diamond drilling and costean data used by SLR. • More recent investigations include by Anglo American and Teck Cominco for copper and base metals, although this is understood to have been undertaken across the wider Vittangi area. • Talga's exploration commenced in 2012, with subsequent drilling programmes completed in 2014, 2016, 2019, and 2021.

Criteria	Explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation at Nunasvaara South and Nunasvaara North comprises two sub-vertical, continuous lithological units of very fine grained, dark grey to black graphite containing ~10% Cg to 50% Cg, ranging in thickness from ~five metres to 70 m. The graphitic units are regionally extensive over many kilometres and are interpreted to have originated as early accumulation of organic compounds occupying a large and flat-lying, freshwater sedimentary basin of early Proterozoic age (1.8 billion years, Ga). • Subsequent deformation, possibly related to domal and/or plunging folded intrusive volcanics have metamorphosed and rotated the graphite units to their current sub-vertical position as identified by exploration drilling. Lithological units within the Project area are variably folded and faulted, dipping steeply (80-90°) predominantly to the northwest but also the southeast. • The basin is now characterised as a sequence of sediments, volcaniclastics, and intrusive rocks. The hangingwall is comprised of mafic volcanoclastics and tuffaceous units and the footwall to the mineralisation is a mafic intrusive (dolerite-gabbro). • The majority of the graphite at Vittangi is very fine grained, highly crystalline and very high grade. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drillhole locations used by SLR for this Mineral Resource estimate are shown in the figures throughout the Mineral Resource Report. Due to the advanced nature of exploration of the Vittangi Project, this information has not been repeated here. • The material change to drill hole information since the previous estimate is the incorporation of diamond drilling completed by Talga in 2021. This included infill and expansion drilling at the existing known Vittangi deposits and included the delineation of the Nunasvaara East area for which an initial (maiden) Mineral Resource estimate has been made. The results of exploration drilling results from 2021 have been publicly reported separately by Talga.

Criteria	Explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Mineral Resources have been estimated using a 10% Cg cut-off. • No grade capping has been applied to the assay data or composites as this is not considered appropriate for the style of mineralisation, being based on a graphite-bearing schist lithology. • Other than compositing of sample intervals into 2 m composite lengths for grade estimation, no other aggregation methods have been required due to the regular sample lengths. • No metal equivalents have been used in the reporting on Mineral Resources.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• All drillholes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • Drillholes have been drilled at 40-80° inclination, with the graphite mineralisation being approximately sub or near vertical (80°).
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps, cross sections, photographs, and tabulations have been included throughout the Mineral Resource Report and have not been repeated here.

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Criteria	Explanation	Commentary
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The Mineral Resource Report provides details of graphite mineralisation, low and high grades, and grade distribution within the deposits thereby providing balanced reporting.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• In addition to exploration drilling, geophysical surveying comprising electromagnetics has been flown across the Vittangi Project area. The surveys have been successful in identifying the existence of graphite mineralisation across each of the Vittangi deposits as delineated by drilling. The results have also been recently used to inform drillhole planning for 2022 exploration currently being undertaken by Talga. Appropriate plans of the geophysical results are included in the Mineral Resource Report. • Trial mining has been undertaken by Talga in 2015-2016 at Nunasvaara South (SWEREF99 TM 7524299 E, 770088 N). An approximate 5 kt bulk sample was taken using dimension stone circular saw and diamond wire methods. This material was subsequently used for metallurgical testing to identify potential graphene products from the Vittangi Graphite deposits. Other pilot testing for Li-ion battery anode product potential has since been undertaken. • Trial mining has also been undertaken by Talga in 2021 at Niska South (SWEREF99 TM 7526576 E, 771626 N) and will continue in 2022. In total, a 25 kt bulk sample is planned to be extracted using drill and blast methods. The purpose is to trial drill and blast methods, to test potential environmental impacts and mitigation measures for noise, dust and water, to test the robustness of the hydrogeological model and water treatment. Talga also plans to run large-scale metallurgical pilot tests, which will feed through to a large-scale anode plant (currently operating in Luleå, Sweden) for customer qualification samples. • Metallurgical testing has been completed by Talga with a focus on developing anode material for lithium-ion (Li-ion) batteries. This testing has predominantly been based to date on the bulk sample material collected at Nunasvaara South in 2015-2016. • In 2015 and 2016, graphite ore material extracted for process tests and production of Talga graphene, Talphene®, at the Company's test facility in Rudolstadt, Germany. • In 2018, Talga developed and released test results of an active anode material for Li-ion batteries, later trademarked as Talnode®-C (ASX:TLG 15 May 2018). Metallurgical testwork has since focussed on producing a range of Talnode® and Talphene® products via Talga's proprietary processing methods. • Metallurgical testing has concluded the graphite to be high-grade, with high conductivity and high graphite crystallinity. It has also been shown to have an extremely

Criteria	Explanation	Commentary
		narrow flake size distribution with high anode yield. It is expected that mined ore will initially be beneficiated into a graphite concentrate (through crushing, grinding, and flotation), followed by purification and coating at a dedicated anode plant to produce an anode product (Talnode®-C) with a final 99.95% Cg content. Metallurgical testing and anode pilot plant testing has determined that approximately 80% of the graphite from Vittangi mined material coverts into Talnode®-C product. • Bulk density testing has been taken by Talga using core from diamond drillholes. In total, 728 density measurements are available across the deposits. The majority of density measurements were made using the Archimedes method, with some densities also being determined by ALS laboratory. • There are no material deleterious elements within the deposits which affect metallurgical recoveries or product value.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• At the time of preparation of this Mineral Resource estimate, Talga has commenced additional drilling at the Vittangi Project. The programme included 36 holes for 4,154.8 m of diamond drilling located along strike between the Niska North and Niska South deposits. • Talga is planning an extension to this programme to test the link between the Nunasvaara East and Nunasvaara North deposits. It is anticipated that this will be undertaken from Q3 2022. • Diagrams highlighting the areas targeted by 2022 exploration and future areas of potential are included in the Mineral Resource Report.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All data was made available by Talga in a secure virtual data room. • All spatial and geological data relating to drillholes is stored in Excel spreadsheets by Talga. Data entry has been by manual input and validation. • SLR combined the most robust versions of drillhole data available and validated the databases prior to modelling. In some cases, this involved re-creating and compiling data from first principles. • Databases were subsequently validated by SLR through a combination of manual and automated checks. This included spot checks against original laboratory certificates and geological logs, and by re-creating databases from first principles using original sources. Automated checks and 3D visual validation using Leapfrog modelling software to identify overlapping intervals, missing intervals, and typographical errors were also completed. SLR maintained a record of all discrepancies along with the any subsequent corrections made in consultation with Talga. • Overall, SLR is satisfied that the databases used for Mineral Resource estimation are sufficiently robust and are representative of the originally collected data. • Due to discrepancies between historic survey records for the costeans and the recently acquired LiDAR topography data, SLR modified the original costean surveys to prevent logging and analytical data sitting above the topography and being ignored during estimation as a result. • Analytical results were checks for anomalies between grade and geological logging, and between graphitic and total carbon. No material anomalies were identified. • Drillhole intervals logged as graphite but for which no analytical data was available has been treated as null, thereby being ignored during grade estimation. Those logged as other non-graphitic lithologies were assigned a 0% Cg grades. A small number of intervals from costeans logged as graphite but not sampled were also assigned 0% Cg grades. This was considered the more appropriate, conservative approach in absence of any additional historical records.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit by the Competent Person has not been undertaken at this time, however, members of the SLR team have been involved in the Project since 2018 and have previously conducted site visits to the Vittangi Project. • Talga's Project Geologist also visited the SLR team during the geological modelling phase to provide input into geological interpretations and to assist in data validation. • Mr John Walker, Technical Director Mining Advisory at SLR, conducted a site visit in September 2018. The purpose of the site visit was to oversee the exploration activities at Nunasvaara South. Mr Walker subsequently acted as Competent Person for Ore Reserve estimation (based on the previous Mineral Resource estimate) for the Nunasvaara South deposit in 2021. Mr. Xander Gwynn,

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Criteria	Explanation	Commentary
		Principal Geotechnical Engineer at SLR, conducted a site visit in November 2021. The purpose of the site visit was to review geotechnical drilling and logging procedures for geotechnical drillholes completed by Talga at Nunasvaara South in 2021. The visit involved visiting the project area, Talga's logging and core storage facilities, holding technical discussing with Talga, overseeing geotechnical logging and sampling.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The interpretation of graphite mineralisation at the Vittangi Project is based on geological logging whereby graphite is constrained to a graphite schist lithology that is distinct from the surrounding host/ waste rock lithologies. The graphite has been interpreted to have originally accumulated as a horizonal stratiform unit which has been subsequently metamorphosed, deformed, and rotated into its current geometry. • Geological logging of graphite has been confirmed through laboratory analysis of samples taken within the graphite schist lithology. Analytical results have been used to define several graphite domains / wireframes within each deposit area, and these wireframes have been used as hard boundaries during grade estimation. The graphite domains can be broadly separated into High Grade (HG) and Low Grade (LG) domains. HG domains exist within all known deposit areas including Nunasvaara South, East, and North, and Niska North and South. LG domains have been interpreted in footwall at Nunasvaara North and Niska North, and in the hangingwall at Niska South. • Analysis of samples has confirmed the graphite to have a clearly distinct grade in comparison to the surrounding host rock and a natural grade cut-off of approximately 10% can be visualised consistently within all deposit areas. • Given the lithologically controlled nature of the mineralisation, drilling completed to-date has shown the deposit to be highly laterally continuous in comparison to other styles of mineralisation. • Based on drilling and supporting geophysical surveying, confidence in the overall geological interpretation of the graphite is deemed to be high. • Uncertainty in the geological interpretation exists with regards to potential cross-cutting or transgressive sills which have been intersected within the graphite schist. These intersections appear as alternative lithologies (including dolerites and diorites) which exhibit negligible or barren Cg grades. The intervals vary in thickness from approximately 20 cm up to several metres thick and have been shown to be laterally discontinuous within the graphite schist; interpreted to have been boudinaged during deformation of the deposit post-deposition. SLR has not considered it appropriate to create solid domains / wireframes for these intersections and has instead sought to manage them through the adopted grade interpolation parameters. With further infill drilling it may be possible to refine the interpretation of these units or create solid domains in areas where their lateral continuity can be more confidently defined.

Criteria	Explanation	Commentary
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The graphite mineralisation of the resources at Vittangi comprises two sub-vertical, continuous lithological units ranging in thickness from ~15 m to 70 m. • The main graphitic bearing strata has been interpreted across five main deposit areas with a total strike length exceeding 5 km. The deposits have also been found to have two distinct orientations, with a distinct change in orientation of approximately 90° occurring within the Nunasvaara South deposit. The southern portion of the Nunasvaara South deposit trends towards 320° and dips steeply (75-85°) to the southwest 230° with a strike length of approximately 800 m. Conversely, an apparent hinge in Nunasvaara South changes the orientation of the northern portion of the deposit towards 055°, dipping steeply (70-80°) to the northwest with a strike length of approximately 500 m. Moving north, the Nunasvaara North, Niska South and Niska North deposits all show a generally consistent strike towards 040°. While all the deposits are also steeply dipping in these areas, some evidence of overturning has been observed. Nunasvaara North is generally vertical or steeply dipping (85°) to the northwest or southeast, Niska South dips steeply (75-85°) to the northwest, and Niska North dips steeply (75-85°) to the southeast. • Drilling to-date has intersected the graphite mineralisation to a maximum true depth of approximately 200 m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g.*	• The Vittangi Project is host to five separate deposit areas defined to date, through a combination of exploration drilling and geophysical surveying. Within each deposit area, geological logging and assaying of drill core has informed the interpretation of graphite-bearing schists from which wireframes / domains have been constructed for the purposes of constraining the Mineral Resource estimation to within the graphite -bearing lithologies. • Domains were constrained by approximate maximum extrapolation distances of approximately 80 m beyond the nearest drillholes. • Interburden (cross-cutting sills) have not been modelled as separate wireframes / domains and are instead interpreted as being laterally discontinuous. These cross-cutting lithologies with associated low graphite grades were instead controlled during grade estimation and should therefore be considered internal dilution included in the Mineral Resource estimate. • The geological model and Mineral Resource estimate was undertaken using Leapfrog Geo and Leapfrog Edge software packages. • Based on statistical evaluation of the analytical results and the style of mineralisation, high-grade capping has not been considered necessary prior to Mineral Resource estimation. • Block modelling is based on parent block sizes of 2.5 m x 2.5 m x 5 m and sub blocked to 1.5 m x 1.5 m x 2.5 m, based on a Selective Mining Unit (SMU) and anticipated 10 m bench heights for open pit mining. • All block models for each of the deposit areas are unrotated.

Criteria	Explanation	Commentary

	sulphur for acid mine drainage characterisation).
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• The block models fully enclose the mineralised domains and pit shells used to constrain the Mineral Resource estimate.
		• Variography of Cg was undertaken using all available two metre composite samples in two principal orientations to represent the two major orientations of the Vittangi Project i.e., NW-SE for Nunasvaara South (southern limb) and NE-SW for Nunasvaara South (northern limb), Nunasvaara North and East, Niska North, and South. Variography was used to inform Mineral Resource classifications only.
		• Grade interpolation for Cg was done by Inverse Distance Cubed (ID^3) using variable orientation and a single pass estimation strategy. A second broader pass was employed in selective domains where a small number of peripheral blocks remained un-interpolated.
		• Interpolation was restricted by the mineralised wireframe models, which were used as hard boundaries to prevent the use of composite samples outside of the domain to interpolate block grades.
		• The first pass used an X and Y search distance of 180 m, and a Z search distance of 10 m. The second pass used an X and Y search distance of 270 m, and a Z search distance of 15 m.
		• A minimum of one and maximum of five samples were used for block estimates, limited to 2 samples per drillhole.
		• Identical interpolation parameters were used in all mineralised domains.
		• Comparison to previous estimate:
		  ○ The 2020 Mineral Resource estimation the Vittangi Deposit in the combined Nunasvaara and Niska areas included 15 million tonnes classified as Indicated at an average Cg grade of 25.7% and 4.5 million tonnes classified as Inferred at an average Cg grade of 18.3%.
		  ○ 2020 Mineral Resources were not constrained inside a pit shell.
		  ○ The increase in the tonnage of both Indicated and Inferred Mineral Resources is attributed to the inclusion of additional drilling that expanded existing domains and delineated several new domains. The minor variation in the Cg grade is also attributed to these factors in addition to the modification of classification boundaries.
		• The Vittangi Project has no history of operations and therefore no product records or reconciliation data exists.
		• SLR validated the block model by visual inspection, volumetric comparison, and statistical comparison of block grades to assay and composite grade. Visual comparison on vertical sections and plan views, and a series of swath plots indicate good overall correlation between the block grade estimates and supporting composite grades in SLR's opinion.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural*	• The Mineral Resource estimate is estimated on a natural moisture basis.

Criteria	Explanation	Commentary
	moisture, and the method of determination of the moisture content.	
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Due to the style of mineralisation, analytical results to-date have demonstrated a natural Cg cut-off of approximately 10%. This has been used to construct solid domains / wireframes for the graphite mineralisation within each deposit area. • Due to the small quantity of graphite material below the cut-off, there is not expected to be a significant change to the estimate by using a lower cut-off, except in Low Grade domains. • A cut-off for Ore Reserve estimation has previously been calculated at 12.34% Cg. However, SLR is of the opinion that this is conservative for defining reasonable prospects for a Mineral Resource estimate. Instead, SLR consider a 10% Cg cut-off is appropriate on the basis that (i) it is closely aligned with the natural Cg concentrations observed within the deposit, (ii) there is the potential for achieving a higher long term concentrate price based on marketing information provided by Talga, (iii) optimisation of the Project has not been fully completed at this stage, including processing and mining method options studies for the different deposit areas. • The preliminary pit optimisations undertaken by SLR to determine Reasonable Prospects for Eventual Economic Extraction (RPEEE) demonstrates that a large majority of the graphite material within the block model is economic. Nevertheless, the pit shells have been used to constrain the estimate which primarily results in the removal of Inferred Resource material in the Low Grade graphite domain at Niska North. This constraint been retained for the final Mineral Resource estimate due to potential alternative mining methods in this area.

Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of*	• SLR has assumed that the Vittangi Project deposits will be amenable to open pit mining methods. This is based on feasibility-level studies undertaken for the Nunasvaara South deposit whereby open pit geotechnical studies have been completed. While other early-stage evaluations have been previously completed for the Niska deposits and show a combination of open pit and underground mining may be more appropriate, SLR consider that further study work is required to optimise the mining methods.
		• For determining RPEEE, SLR conducted preliminary pit optimisations for each of the five deposit areas assuming the following parameters, in addition to proprietary ore related cost and process recovery inputs provided by Talga. The resultant pits have been used by SLR to constrain the Mineral Resource estimate.
		  ○ Price: $4,000/t purified graphite product (99.92% Cg)
		  ○ Bench heights: 10 m based on Nunasvaara South feasibility-level studies
		  ○ Overall Slope Angle: 45° based on Nunasvaara South feasibility-level studies and geotechnical investigations

Criteria	Explanation	Commentary
	the basis of the mining assumptions made.	• No mining recovery or dilution factors have been applied to the Mineral Resource estimate. Internal dilution from cross-cutting sills is included in the grade and tonnage estimates. • Based on the updated Mineral Resource estimate by SLR, Talga plans to undertake feasibility level studies on the Vittangi Project to optimise the potential mining method, mine design, and extraction rates from each deposit. This is expected to involve evaluation of alternative mining methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical testing has concluded the graphite to be high-grade, with high conductivity and high graphite crystallinity. It has also been shown to have an extremely narrow flake size distribution with high anode yield. It is expected that mined ore will initially be beneficiated into a graphite concentrate (through crushing, grinding, and flotation), followed by purification and coating at a dedicated anode plant to produce an anode product (Talnode®-C) with a final 99.95% Cg content. Metallurgical testing and anode pilot plant testing has determined that approximately 80% of the graphite from Vittangi mined material is recovered (coverts) into Talnode®-C product.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported.*	• The licences owned by the Company and are located within areas which carry various environmental classifications, including for wetlands and forestry land. The area is also used for winter seasonal grazing by local indigenous Sami reindeer herders. For future development, Talga will be required to apply for the necessary concessions and provide compensation commensurate with the existing land classifications. • Stakeholder engagement has been undertaken since commencement of exploration in 2012 and all trial mining and exploration activities completed by Talga have received the necessary permits and stakeholder permissions to proceed. • Other environmental areas include the Natura 2000 registered Torne River, located approximately 1 km to the south of the Nunasvaara South deposit, and the Vittangi River, located approximately 1 km north of the Niska North deposit. • No Mineral Resources have been estimated within the Natura 2000 areas of the Torne and Vittangi rivers. • The Swedish Geological Survey has demarcated the Vittangi Project as a mineral deposit of national interest (Riksintressen Mineral). Under the Swedish Environmental Code, this demarcation may ensure that other activities

Criteria	Explanation	Commentary
	Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	which could significantly impact mineral exploitation could be prevented. • An Environmental Impact Assessment has been completed and the Environmental Permit application was submitted to Swedish authorities in May 2020. A subsequent application for a Natura 2000 permit has been submitted to the relevant agency. These assessments are intended to ensure environmental and social issues are integrated into ongoing study and project development work. • Additional Reindeer Herding Impact Assessments have been advanced and are being completed and Talga continues to develop its Stakeholder Engagement Plans.

Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*
	• *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*
		• Bulk density testing has been taken by Talga using core from diamond drillholes. In total, 728 density measurements are available across the deposits. The majority of density measurements were made using the Archimedes method, with some densities also being determined by ALS laboratory.
		• Density values have been assigned by domain using the mean of samples after discarding outliers.
		• The hangingwall metatuffs and footwall metavolcanics have been assigned density values of 2.94 g/cm^3 and 2.89 g/cm^3, respectively. Overburden has been assigned a density of 1.7 g/cm^3.
		• Densities (g/cm^3) applied to graphite domains include:
		  o High Grade (Nunasvaara South, North, and Niska South): 2.61
		  o High Grade (Niska North): 2.71
		  o High Grade (Nunasvaara East): 2.62
		  o Low Grade (Nunasvaara North, Niska North and South): 2.75

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
		• The Mineral Resource estimate has been classified into Indicated and Inferred Mineral Resource categories, in accordance with the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
		• A range of criteria has been considered in determining the final Resource classifications, including:
		  o Confidence and uncertainty in geological interpretations
		  o 3D continuity of mineralisation, including the robustness of average Cg grades
		  o Data quantity and quality
		  o Drill hole spacing, both in the along strike and down-dip directions
		  o Geostatistical evaluation, including variography
		• Indicated Resources has been defined using a nominal 80 m drillhole spacing where supported by intersections

Criteria	Explanation	Commentary
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	along strike and down dip. Inferred Resources have been defined by overall geological continuity and the extent of wider spaced drillholes. The final Mineral Resource classifications reflect the degree of confidence in the geological and grade continuity in the view of the Competent Person. • Block model validation indicates that the final block estimate is a reasonable representation of the input drillhole data.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• In addition to the data validation undertaken by SLR throughout the geological modelling process, the final Mineral Resource estimate and block model has been subject to an internal Peer Review process adopted by SLR to ensure a robust estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Calculated accuracy in the Mineral Resource estimate is not explicitly stated. Block estimation of grades has been undertaken using the Inverse Distance Cubed method. This method has been selected as it has been considered the most appropriate and reasonable representation of graphite concentrations with each graphite domain / wireframe. This includes the best representation of low-grade graphite or barren/waste intervals within the graphite domains that could not be reliably interpreted or delineated as separate domains. Other means of estimation, including Ordinary Kriging (OK) have been tested and dismissed by SLR. • Variography in two major orientations– representing the two major orientations of the Vittangi Project – and downhole has been evaluated by SLR. The results were used to inform Mineral Resource classifications but not used to inform an alternative block estimation approach (i.e., OK). • The accuracy and precision of data used in the Mineral Resource estimate primarily based on that achieved by the analytical laboratory ALS Global. The results provided by ALS have been evaluated through the implementation of QA/QC programmes, and it can be concluded that the overall accuracy and reliability of the data is suitable for Mineral Resource estimation. • The relative confidence level in the Mineral Resource estimate is reflected in the Mineral Resource classifications assigned including Indicated and Inferred Resources. The Indicated Resources should be used for future technical and economic evaluation, for example the estimation of Ore Reserves. • A source of potential uncertainty in the estimate is the interpretation of internal waste lithologies and the extent to which these units may be more, or less laterally continuous throughout the deposit. Additional infill drilling will be required where drillhole spacings are wider to further refine these interpretations. • No production data exists for the deposit.