



UPDATED INVESTOR PRESENTATION

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Corporate Information

ASX Code **TLG**

Shares on issue **124.6m**

Options (TLGO) **7.75m**

Options (unlisted) **6.25m**

Company Directors

Keith Coughlan

Non-Executive Chairman

Mark Thompson

Managing Director

Grant Mooney

Non-Executive Director

Talga Resources Limited (ASX:TLG) ("Talga" or "the Company") is pleased to provide an updated investor presentation.

The presentation summarises and updates Talga's corporate structure and information specific to the Company's wholly owned Nunasvaara graphene deposit in Sweden. The presentation will be made available on the Company's website www.talgaresources.com

For further information, contact:

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 **ASX Code: TLG**

ABOUT TALGA

Talga Resources Limited (Talga) (ASX: "TLG") is a diversified mineral explorer and developer with a portfolio of 100% owned graphite, iron, copper/gold projects in Sweden and gold projects in Western Australia.

The main focus is development of its unique graphite-graphene deposits of northern Sweden utilising the advantages of ultra-high grade deposits, low cost power, established mining infrastructure and short transport distance to high demand markets in Europe.



Cover; Nunasvaara graphite core sample and graphene schematic.

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Executive Summary



- ▶ Talga Resources Ltd ("Talga") ASX:TLG is developing the **world's highest grade graphite mineral resource**¹, located in the Kiruna mining district of **Sweden**.
- ▶ In recent tests Talga has demonstrated a **world-first ability** to produce **high quality graphene** direct from its **raw** (uncrushed/unpurified) **graphite ore** which provides Talga with **unique economic advantages** compared to global graphene peers.
- ▶ This new **low cost** and **abundant** supply potential is a paradigm shift in the production outlook for bulk graphene, a high-value 'wonder' material with huge growth potential.
- ▶ Talga has defined 7.6 million tonnes source ore to date and is ramping up its low-cost development to focus on becoming a global graphite and graphene supplier with industry leading margins.
- ▶ The Company is transitioning to a sole graphite/graphene focus by divesting non-core assets including iron ore projects in Sweden and gold projects in Australia.
- ▶ Near term potential value catalysts include new upscaling of metallurgical process with **breakthrough graphene option, commercial/sales agreements** and **scoping study utilising dual graphite/graphene production**.

¹ See appendices for details of JORC (2004) resources and www.techmetalsresearch.com for world graphite resources grade comparison.

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Talga Resources Corporate Overview



Board of Directors	
Keith Coughlan	Non-executive Chairman
Mark Thompson	Managing Director
Grant Mooney	Non-executive Director

Capitalisation Summary at 30 June 2014	
ASX:TLG Ordinary Shares	124.6M
ASX:TLGO Options (<i>exp 30 Nov 2015 at 35c</i>)	7.75M
Unlisted Options ¹	6.25M
Cash \$AUD	\$4.3M
Market Capitalisation (<i>undiluted, @ \$0.38</i>)	\$47.3M

Share Price last 12 months ASX:TLG



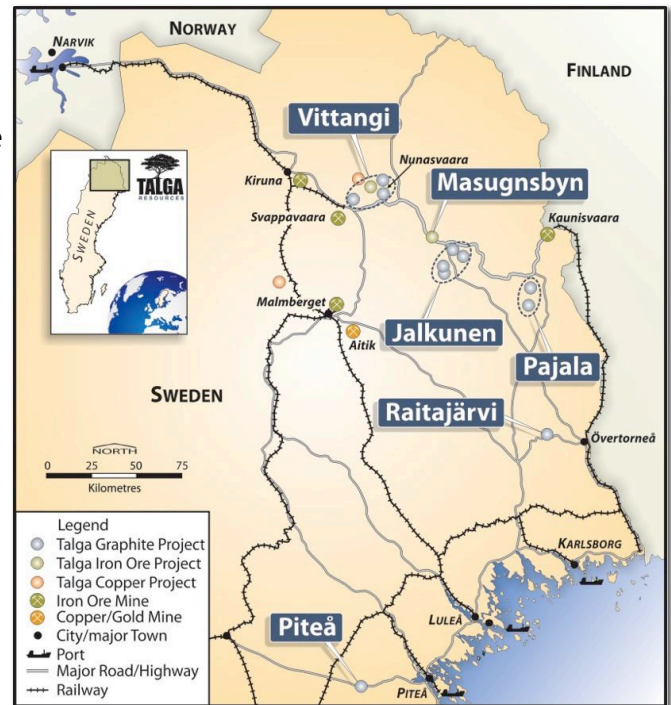
Top Shareholders (+3%)	
Lateral Minerals Pty Ltd (<i>Mark Thompson</i>)	11.4%
Gregorach Pty Ltd	6.2%
Two Tops Pty Ltd	3.8%
Yandal Investments Pty Ltd	3.1%

¹ 2.75m @ 40c director options expiry 30 Nov 2014, 0.5m @ 35c employee options expiry 21 Jul 2015, 0.5m @ 45c employee options expiry 3 Oct 2016, 2.5m @ 54c director options expiry 23 June 2019.

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Talga's Graphite Projects

- ▶ **100% ownership** of five graphite projects with multiple deposits offering the **full range of market size specifications**.
- ▶ **Two advanced stage projects in the development pipeline**. These are drilled to **JORC Indicated** status and preliminary **economic studies** are underway;
 - **Nunasvaara** is a microcrystalline flake deposit with the **highest JORC/NI43-101 resource grade in the world¹**. It is located within the **Vittangi** project.
 - **Raitajärvi** is a **coarse flake deposit** with 49% of flake classified large to jumbo size.
- ▶ At an earlier stage of drilling but exceptionally well located and containing **>80% XL-size (jumbo) flake graphite** is the **Piteå** project.



¹ See appendices for details of JORC (2004) resources and www.techmetalsresearch.com for world graphite resources grade comparison.

Established mining district with extensive milling and transport infrastructure





Advantages of Sweden for Mining

- ▶ Ranked **No.1 mining jurisdiction in world** by Fraser Institute 2013-14
- ▶ Corporate tax rate **22%**, Mineral Production tax **0.2%**
- ▶ **Established** bulk commodity **infrastructure** with open access rail, road and ports
- ▶ **Low cost power** from hydroelectricity and nuclear grid
- ▶ Well established **mining province** with **highly skilled** workforce and **support industries**
- ▶ Hosts **world-class mineral deposits** but remains under-explored relative to peers as foreign mineral ownership only allowed since 1992

The 'Aitik' Cu-Au mine, northern Sweden. Owner; Boliden. Milling 36Mt annum ore.

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Logistics Advantages

- ▶ Talga's projects located **proximal** to high quality sealed roads and open-access heavy haulage **railway with direct link to Europe markets**. No shipping required.
- ▶ Major **cost advantage** on delivery compared to shipments from other jurisdictions.
- ▶ EU consumes **20%** of world's natural graphite production, and **imports 95%** of its needs (vast majority from China).
- ▶ EU has classified graphite as a "critical raw material".

Road through Nunasvaara project

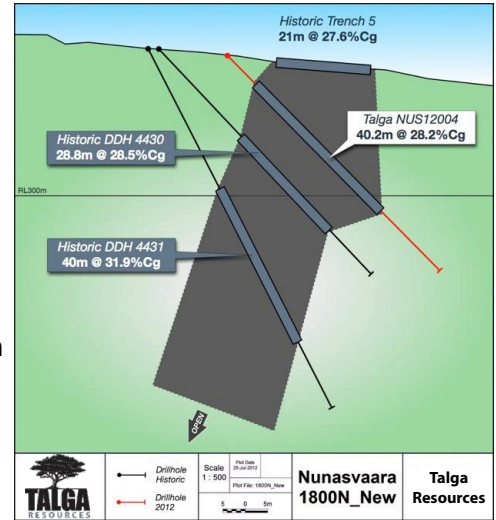
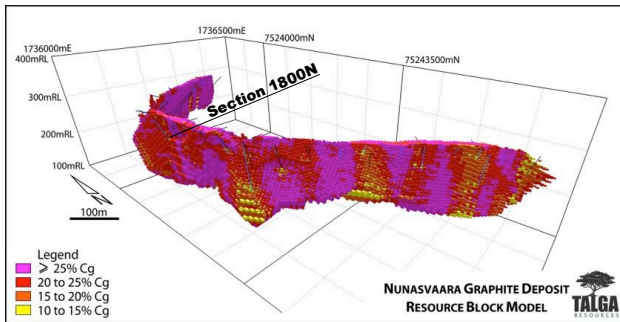


Öresund Bridge road/rail tunnel linking Sweden to mainland Europe

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Vittangi Project - Nunasvaara Graphite

- ▶ World's highest grade JORC/NI43-101 resource¹ of (ASX:TLG 8 Nov 2012) 7.6Mt @ 24.4% graphite ("Cg") (see appendix).
- ▶ Resource mineralisation from surface to 165m depth and remains open. Average true width 20m over 1.2km strike and remains open along strike. Mapped unit >15km in TLG 100% control.
- ▶ Graphite unit hosted within atypically low metamorphic grade volcanic greenstones with potentially unique mineralogy. Robust outcropping high grade resource makes low-cost potential in both ultrafine to fine graphite and bulk graphene market.



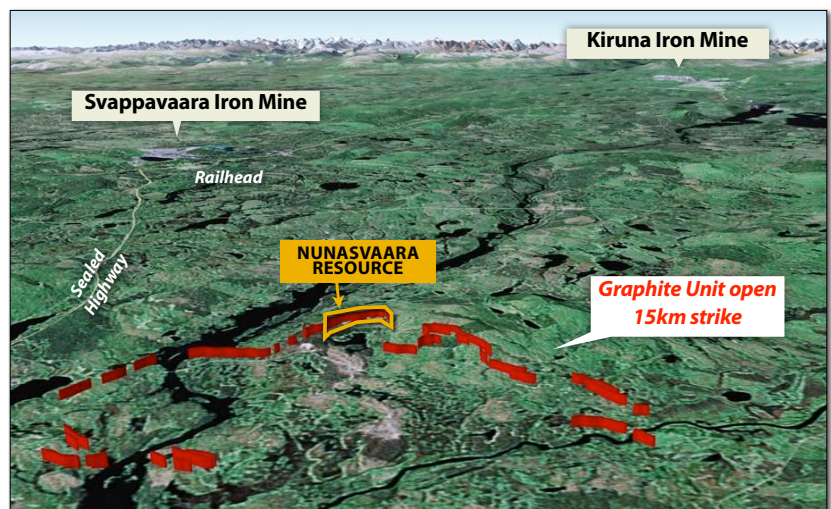
Nunasvaara Mineral Resource¹ (10% Cg lower cut-off grade)

JORC 2004 Classification	Tonnes (Mt)	Grade (%Cg)	Contained Graphite (tonnes)
Indicated	5.6	24.6	1,377,600
Inferred	2.0	24.0	480,000
Total	7.6	24.4	1,857,600

Growth potential and logistics advantages

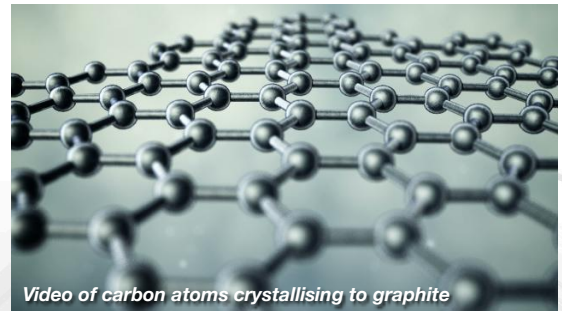


- ▶ Graphite unit outcrops in part and is mapped over at least 15km strike. 100% controlled by TLG.
- ▶ Sampling by Talga of the outcropping unit averaged 26.2% Cg with grades up to 46.7% Cg.
- ▶ Less than 8% of graphite unit drill tested to date.
- ▶ Development advantages of exceptional grade, open-pit bulk mining option, low-cost grid power and nearby road/rail/port options (3km to road, 25km to rail).



What is Natural Graphite?

- ▶ **Graphite** is a crystalline form of carbon that forms in nature when carbon-rich rocks undergo metamorphism (pressure/temperature induced change). It can be synthesised but at very high cost.
- ▶ Graphite (the mineral) consists of parallel sheets of carbon atoms in a hexagonal lattice, which when one or few atoms in thickness, are called **graphene**.
- ▶ Graphite has remarkable **properties** of electrical and thermal conductivity that make it useful for a large range of applications.
- ▶ Natural graphite demand is about **1.1Mt/yr**, a volume similar to Nickel, with total value approximately US\$1B/yr.
- ▶ Graphite is most commonly sold as a concentrate by private contract. Industry prices are surveyed and published by **Industrial Minerals** magazine.
- ▶ Consumption is diverse with significant markets in steel production and refractories (>50%), automotive parts, lubricants and batteries.
- ▶ China and Brazil supply >**80%** world natural graphite.

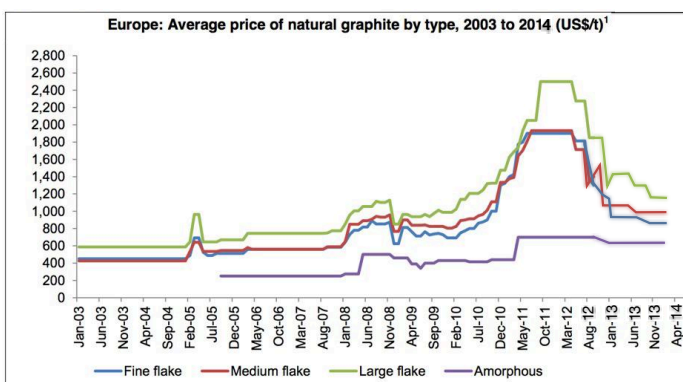


Video of carbon atoms crystallising to graphite



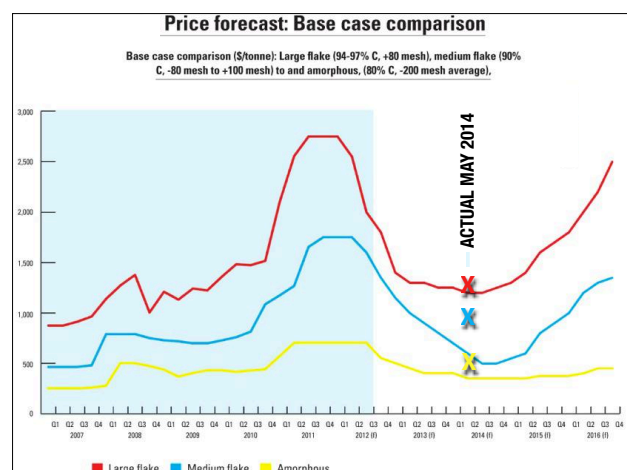
Graphite outcrop at Talga's Nunasvaara project in Sweden.

Graphite prices exceeding historic and forecast trends.



Source: Industrial Minerals
Notes: 1-CIF European port FCL

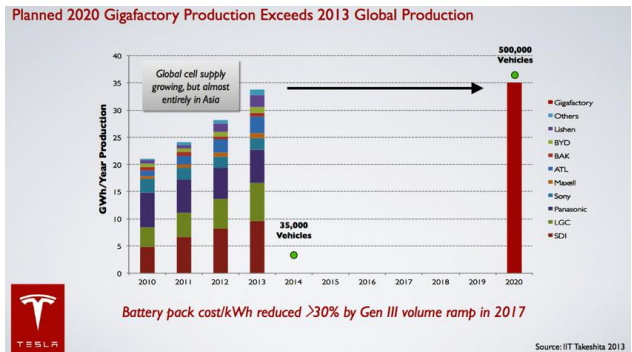
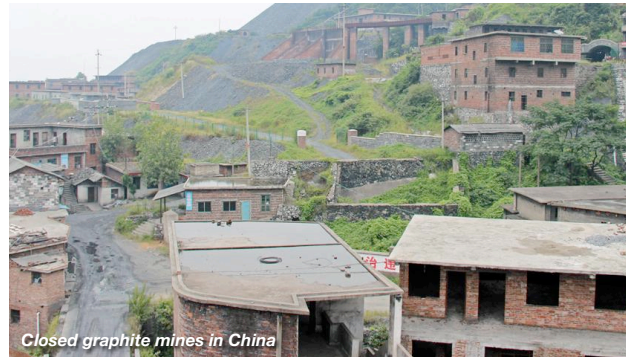
Graphite prices now steady, with flake 50% higher and amorphous 100% higher than long term averages.



Prices have exceeded forecasts since end of 2012 and base case prices are trending to surprise on upside. See appendix for further price/market data.

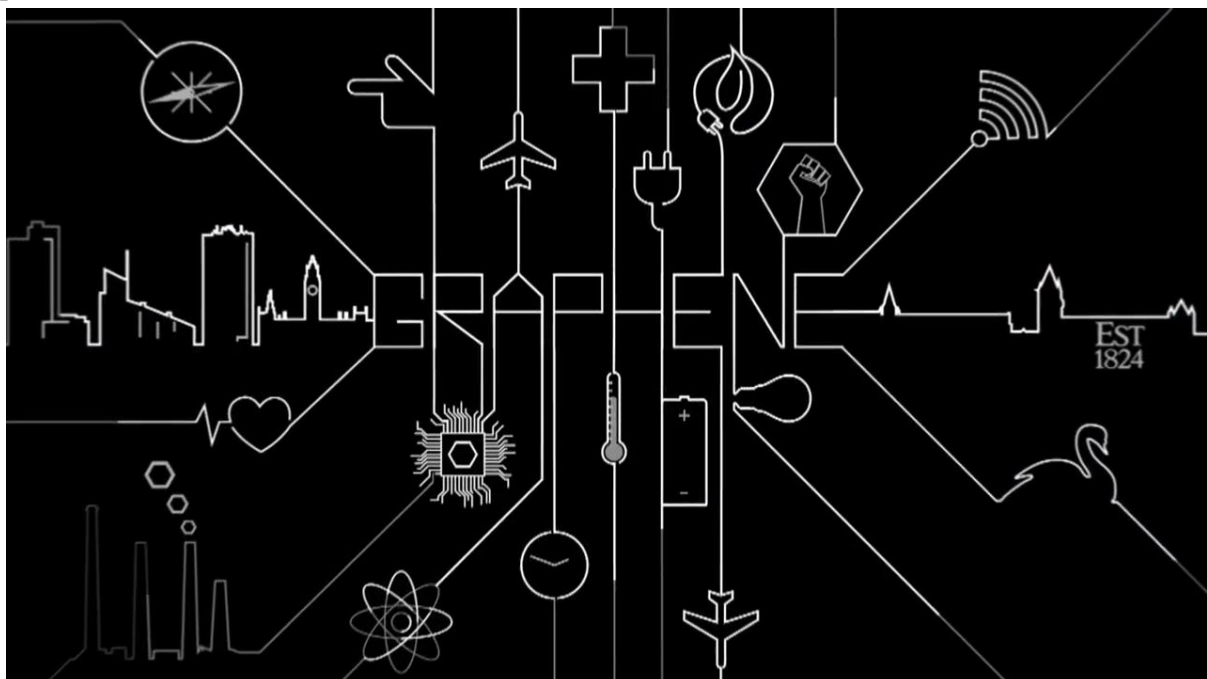
Graphite Drivers

- ▶ **China** has maturing operations with rapidly **declining production** profiles but **rising costs**. Additional **government consolidation** and **crackdown on environmental pollution** has **shut** significant amount of graphite production. Graphite declared **critical strategic mineral** in UK, EU and USA.
- ▶ Graphite is a **significant component** of many types of **battery**, particularly Li-ion which contain **10x more graphite than lithium** in battery anode. Electric vehicles can use up to **100kg graphite per vehicle** in batteries.
- ▶ **Rapid growth** taking place in EV's causing shortages. **Tesla** recently announced plans for a **US\$5B Li-ion battery 'gigafactory'** that alone will require the graphite equivalent to 6 new mines. Other manufacturers may compound shortage.
- ▶ Outlook is for decreasing supply while new applications create **new markets**; with pivotal roles in **energy transport, storage and performance**.



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Graphene; The buzz out of Manchester

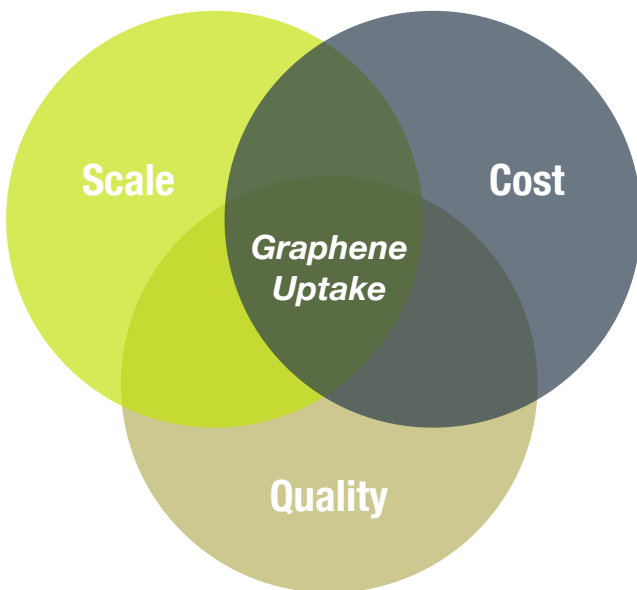


Video: Courtesy The University of Manchester

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Graphene has a Supply Side Problem

Pace of graphene uptake & commercialisation is hampered by current limitations of production scale and cost more than quality.



Main factors delaying uptake of graphene platelets into ordinary products include:

- ▶ Lack of **scale**: most production methods are not scalable to the **large quantities** required to guarantee supply and expand uptake
- ▶ High **costs**: platelets are still vastly **expensive** compared to most material inputs.
- ▶ **Quality**: most lower cost scalable production methods have reduced quality that **limit** applications/markets.
- ▶ **Scale** and **Cost** are **main constraints** as they have most physical limitations but **Quality** can be manipulated to a degree.

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The Graphite Ore Problem

Graphite ore-to-graphene requires multi-stage expensive processes

- ▶ The problem with scalable natural graphite sources though is they require **multiple stages** of crushing, milling and flotation to form a **concentrate** for **further stages** of **purification** commonly involving oxidation and reduction, sonication, electrode forming etc to reach graphene stage. The **multiple stages** increase **costs** and can decrease **quality** of the graphene.
- ▶ Other simple processes have either such **low yields** (eg, 'Blender' method) or require **high purity** (expensive) **source material** they are **not commercial** or **cannot** generate significantly **lower cost** of graphene supply.
- ▶ *As graphite ores already contain 'natural graphene' an ultra-low cost path considering energy and commerciality is a single stage process where raw graphite ore can be processed to graphene without multiple steps.*



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The Breakthrough

In Feb 2014 Talga announced exceptional results from testing a 1-step scalable method on the Nunasvaara graphite deposit, Sweden.

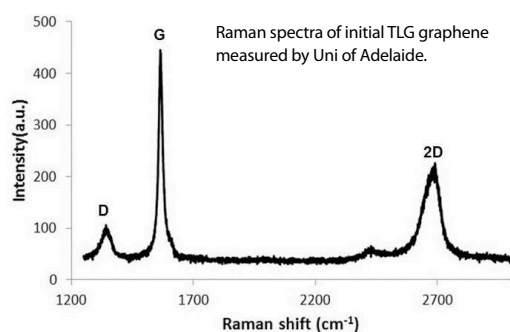
- ▶ The Nunasvaara graphite deposit is the **world's highest grade graphite** mineral resource¹ **compliant** to JORC or NI43-101 standards and is **located** in the Kiruna mining district of **Sweden**.
- ▶ Testwork this year demonstrated a **1-step** processing methodology applied **directly** to raw ore liberates **mono-to-few layered graphene platelets** with **consistent morphology**.
- ▶ The ore is abundant, homogenous and as there is none of the usual crushing, grinding or purification stages required; **ultra-low graphene production cost**.



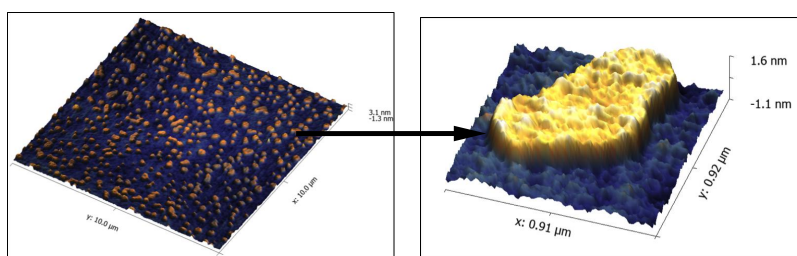
¹ See appendices for details of JORC (2004) resources and www.techmetalsresearch.com for world graphite resources grade comparison.

Quality and Consistency

- ▶ The highly homogenous nature of the raw ore source provides a consistency in the morphology and quality of graphene produced.
- ▶ Some characters of size and quality can be modified and optimised to a degree in the production process.
- ▶ Measurements demonstrate a few layered graphene (range 1-5 layers) of low D/G and D/2D ratio; a high quality result for such low cost and bulk scale production from raw ore. High potential for further optimisation and additional functionalisation.

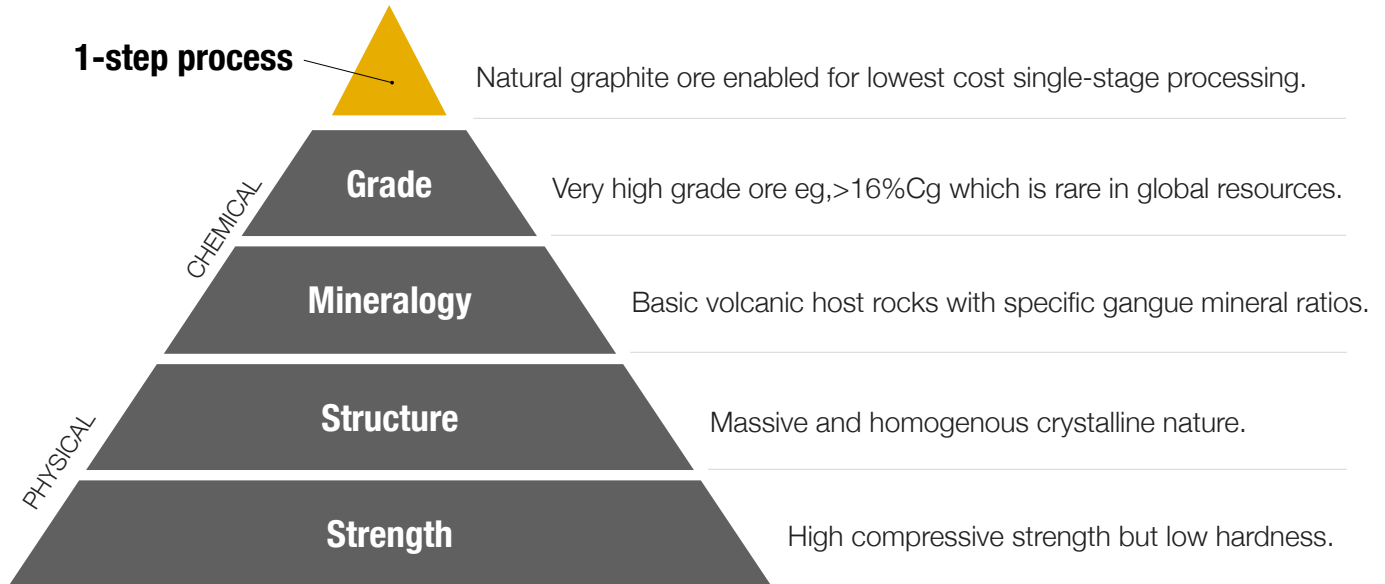


Atomic force microscopy image of initial Nunasvaara graphene platelet size, distribution and morphology.



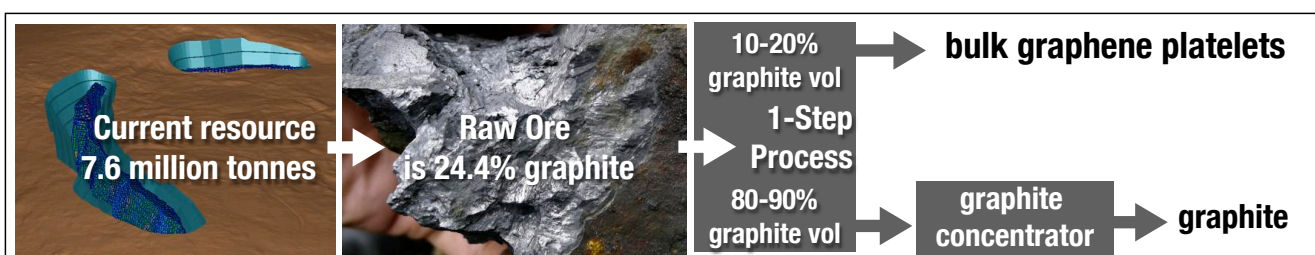
It's the Ore

To enable the lowest cost production pathway multiple naturally unique physio-chemical factors are required.



Paradigm Shift to Lower Cost

- ▶ Because of the **unique** characteristics of Nunasvaara **ore deposit**, both graphite and graphene platelets can be liberated from the ore in a **single step** process. This means no expensive **multiple stage processing** or purification stages that impart complexity and costs.
- ▶ The graphene is a **byproduct** of the graphite processing, so very low cost.
- ▶ This shows strong potential for Talga to enjoy a **vastly different production and capital cost** structure **compared** to **other** producers globally, and represents a paradigm shift in the production outlook for **bulk graphene cost and scale**.



Graphene Market?

Paradigm shift in scale of production required

- ▶ While the media is excited by future 'hi-tech' applications the main driver of near term graphene commoditisation may be **additives**.
- ▶ Small amounts of graphene platelets (0.05-2%) added to common bulk materials² can impart **exponential** increases in strength e.g. **cement** (global consumption 3,300Mt/ann), and **aluminium** (50Mt) allowing less material/lighter builds. Similar additions of graphene to **steel** (1,606Mt) can impart anti-corrosion properties and **plastics** (288Mt) can become conductive.
- ▶ If **0.5%** by weight average graphene was added across these materials now, it requires **26 Mt graphene per annum**. Not many production processes are capable of addressing this scale.

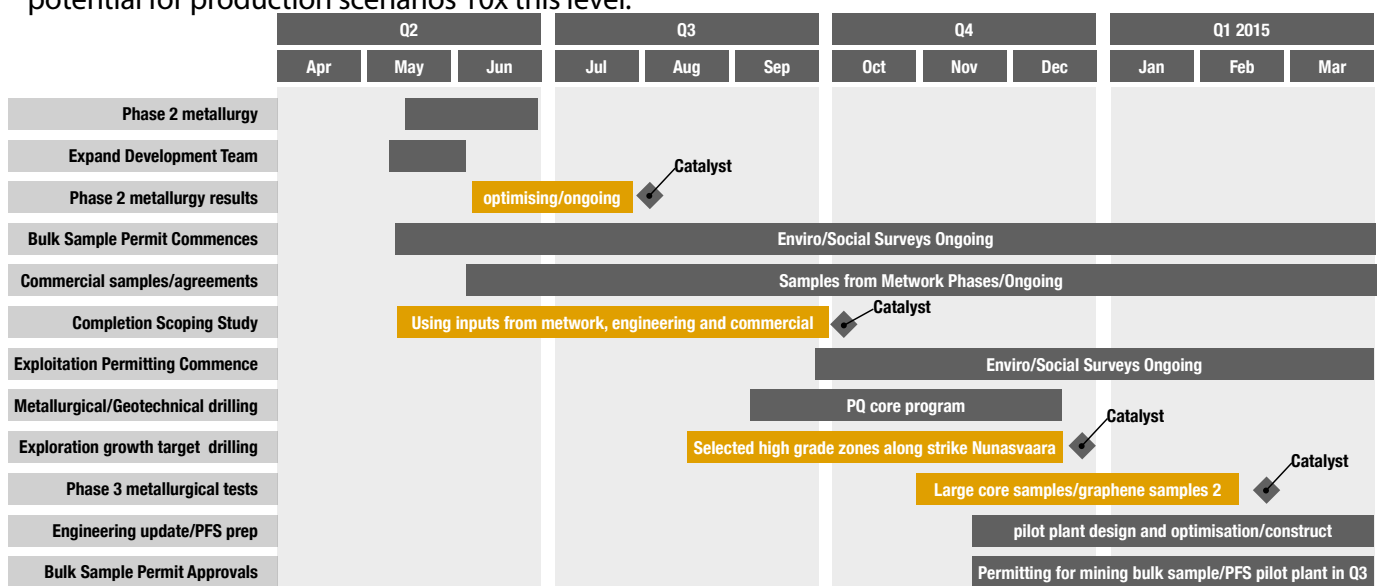
Global consumption of potential graphene additive materials



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Nunasvaara - summary 12 month development plan

- ▶ Process pathway has been demonstrated at benchtop scale and **upscaling tests** are **underway** to design a **5 tonne/hr pilot plant** to be operational in north Sweden **Jul-Sep 2015**. The pilot plant will be designed to supply 100-200 tonnes graphene samples over few year test period. A scoping study underway will include potential for production scenarios 10x this level.



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Summary



- ▶ In recent tests Talga has demonstrated **ability** to produce **high quality graphene** direct from its **raw** (uncrushed/unpurified) **graphite ore** which provides Talga with **unique economic advantages** compared to global graphene peers.
- ▶ This new **low cost** and **abundant** supply potential is a paradigm shift in the production outlook for bulk graphene, and will be able to 'commoditise' supply into everyday applications.
- ▶ Talga has defined 7.6 million tonnes source ore to date and is ramping up its **low-cost development** strategy to focus on becoming a **global graphene** supplier with industry leading **margins**.
- ▶ The current development stages underway include **upscaling** the metallurgical process and completing a **scoping study** (Q3 2014), commercial agreement/customer development (ongoing) and permitting a trial mine/pilot plant for operation mid-2015.



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Talga's Graphite Development Advantages

- ▶ **Highest grade** JORC/NI43-101 graphite resource in world.
- ▶ World-first single step **graphite/graphene** production option.
- ▶ **Low cost** capex and bottom of production cost curve expected.
- ▶ **Advanced stage** PEAS underway; further major drilling not required.
- ▶ Massive **growth profile**; dominant land position on drilled EU graphite deposits.
- ▶ **Located** on road and rail routes to major markets, in highly ranked **low-risk** mining and corporate jurisdiction, Sweden.



To get further information or register interest contact:

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 **ASX: TLG**

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Appendices

Talga Asset Structure and JORC (2004) Resources*

1 Note: This information was prepared and first disclosed under the JORC code 2004. It has not been updated since to comply with the JORC code 2012 on the basis that the information has not materially changed since it was last reported. The Company is not aware of any new information or data that materially affects the information included in the previous announcement and that all of the previous assumptions and technical parameters underpinning the estimates in the previous announcement have not materially changed.



TALGA RESOURCES LTD

100%

Talga Mining Pty Ltd

100%

Swedish Branch

100%

100%

GRAPHITE

Nunasvaara Graphite Mineral Resource @ 10% Cg lower cut-off Nov 2012

Classification	Tonnes (Mt)	Graphite (%Cg)
Indicated	5.6	24.6
Inferred	2.0	24.0
Total	7.6	24.4

Raitajärvi Graphite Mineral Resource @ 5% Cg lower cut-off Aug 2013

Classification	Tonnes (Mt)	Graphite (%Cg)
Indicated	3.4	7.3
Inferred	0.9	6.4
Total	4.3	7.1

IRON

Iron Mineral Resources @ 20% Fe lower cut-off July 2013

Deposit	Tonnes (Mt)	Grade %Fe	JORC Category
Vathanvaara	51.2	36.0	Inferred Resource
Kuusi Nunasvaara	46.1	28.7	Inferred Resource
Mänty Vathanvaara	16.3	31.0	Inferred Resource
Sorvivuoma	5.5	38.3	Inferred Resource
Jänkkä	4.5	33.0	Inferred Resource
Masugnsbyn	87.0	28.3	Indicated Resource
Masugnsbyn	25.0	29.5	Inferred Resource
Total	235.6	30.7	

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Appendices

Graphite size classification.

Trade Name	microns	US Mesh Size
Amorphous/Ultrafine	<10	na
Amorphous/Fine	10-75	-200
Small	75-150	200-100
Medium	150-180	100-80
Large	180-300	80-50
XL/Jumbo	>300	50+

Source: Industrial Minerals Natural Graphite Report 2012 cross referencing various sources. Many terms are proprietary or mixed use; there are few if any industry standards in naming principles.

Common natural graphite concentrate product sizes, grades and prices

Size (microns)	Size US Mesh	Purity % C	Quote US \$/tonne
300+	50+	94-97	>1700
180-300	80-50	94-97	1275
		90	1125
150-180	100-80	94-97	1100
		90	950
		85-87	750
75-150	200-100	94-97	900
		90	775
-75	-200	80-85	525

Source: Industrial Minerals Magazine Mar 2014.

Most prices FCL, CIF European Port.

Note: Prices averaged from low-high range and selected as common commercial products where natural graphite sold as concentrate. Many specialty grades with much higher prices are traded but do not represent the bulk of market demand.

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References & Qualified Persons

1 Resource Note: All Talga owned resources referred to in this report are based on information prepared and first disclosed under the JORC code 2004. They have not been updated since to comply with the JORC code 2012 on the basis that the information has not materially changed since it was last reported. The Company is not aware of any new information or data that materially affects the information included in the previous announcement and that all of the previous assumptions and technical parameters underpinning the estimates in the previous announcement have not materially changed.

2 Research references

Graphene in concrete "Materials Genome for Graphene-Cement Nanocomposites for Infrastructure Applications"; Hunain Alkhateb et al Department of Civil Engineering, University of Mississippi USA plus see <http://www.monash.edu.au/assets/pdf/industry/graphene-oxide-reinforced-concrete.pdf>

Graphene in aluminium "Reinforcement with graphene nanosheets in aluminum matrix composites" Wang, J et al (2012). Scripta Materialia, 66 (8).

Graphene in plastics "Graphene Nanoplatelets: A Multi-functional Nanomaterial Additive for Polymers and Composites" (2013) Lawrence T. Drzal, Chief Scientist XG Sciences, Inc. Professor, Chem Engin and Materials Science Michigan State University

Graphene on iron/steel "Hybrid nanocomposite coatings for corrosion protection of low carbon steel: A substrate-integrated and scalable active-passive approach," (2011) G.K. Rout et al, J. Mater. Res., 26, 837-44 and see <http://www.steeltimesint.com/news/view/tata-partners-with-epsrc-to-develop-graphene-coated-steels>.

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled and reviewed by Mr Mark Thompson, who is a member of the Australian Institute of Geoscientists. Mr Thompson, an employee of the Company, has sufficient experience which is relevant to the activity which is being undertaken to qualify as a "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code"). Mr Thompson consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Resource Estimation is based on information compiled and reviewed by Mr Simon Coxhell of CoxsRocks Pty Ltd. Mr Coxhell is a consultant to the Company and a member of the Australian Institute of Mining and Metallurgy. Mr Coxhell has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code"). Mr Coxhell consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.