

QUARTERLY ACTIVITIES REVIEW FOR THE PERIOD ENDING 31 DECEMBER 2017

Talga Resources Ltd

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Corporate Information

ASX Codes **TLG, TLGOA**

Shares on issue **202.4m**

Options (listed) **44.9m**

Options (unlisted) **33.5m**

Company Directors

Terry Stinson

Non-Executive Chairman

Mark Thompson

Managing Director

Grant Mooney

Non-Executive Director

Stephen Lowe

Non-Executive Director

Ola Mørkved Rinnan

Non-Executive Director

OVERVIEW

Project and commercial development gains were made by Australian technology minerals company, Talga Resources Ltd (**ASX:TLG**) (“**Talga**” or “**the Company**”) during the quarter. These advances place the Company in a strong position as we start 2018. Along with its international partners and alliances, Talga is developing a vertically integrated European-based graphite and graphene business encompassing R&D, sales and marketing, application technology and a high volume material supply and processing chain. Highlights of the December quarter included:

PRODUCT DEVELOPMENT

- Successful tests of Talga-developed graphene based epoxy resin for coatings market
- Major performance gains in coating tensile strength, abrasion resistance and corrosion rates
- Positive results from new Talga-developed Li-ion battery anode using exfoliated micrographite successfully cycled for >1,200 hours at Warwick Manufacturing Group, UK (“WMG”)
- Talga anode material shows 20% improved battery capacity and efficiency over conventional spherical graphite
- Test results building interest in Talga from existing and potential European and Asian battery supply chain partners

COMMERCIAL DEVELOPMENT

- New Li-ion battery commercial development partnership secured with Japan’s Recruit R&D
- Commenced advanced battery materials joint development projects with key industry partners for European and Asian EV markets
- UK Government awards Talga & industry partners three battery R&D grants totalling A\$5.1 million for the group under the Faraday Challenge program
- Binding commercial and supply agreement signed with Haydale subsequent to end of period
- Talga graphene product and production process developments continue scale up and are on track

PROJECT DEVELOPMENT AND EXPLORATION - COBALT

- High grade cobalt results from Talga’s 100%-owned base metals Ahmavuoma project in Sweden, from re-assaying historic diamond drillcore
- Key new intercept of 73.1m @ 0.16% Co and 0.24% Cu from 33.75m (04AD001), including 22.8m @ 0.34% Co and 0.13% Cu from 54m
- Sampling validates globally significant cobalt grades and widths from near surface including 21.0m @ 0.38% Co, 1.12% Cu and 0.42g/t Au from 60m (04AD001)



PRODUCT DEVELOPMENT

Talphenes – An emerging new solution in the global coatings industry

During the period, Talga reported the success of Talga's graphene enhanced epoxy formulation and dispersion technology – called Talphenes® - for application across large volume epoxy resin products used widely in the global coatings industry. Talga has applied for a patent over the combined chemistry and dispersion technology applied to epoxy coatings.

Key performance gains in the first round of tests included a 160% increase in tensile strength, 80% increase in abrasion resistance, and two orders of magnitude decrease in corrosion rate over zinc-rich epoxy (ASX:TLG 24 Nov 2017).

The Talphenes® graphene product has high strength/weight ratio, impermeability, chemical inertness and high surface area, resulting in higher performing and/or more enviro-friendly polymer matrices when used as an additive. The success is also based on the dispersion technology, where Talga uses a breakthrough proprietary process of chemical functionalisation to evenly disperse the graphene in epoxy resins and enable the graphene to work to its optimum.

From a commercial perspective, the technology has the potential to materially impact the 2.5 million tonne per annum global epoxy market that extends outside coatings to adhesives and carbon fibre-reinforced plastics.

Talga is conducting further tests to optimise its technology in conjunction with independent industry organisations and has also commenced an epoxy composite development program with the respected TWI materials and research group based in Cambridge, UK. The program will see Talga's graphene epoxies benchmarked to commercial products, including high strength additives, in a range of current and emerging thermal and electrical conductivity applications. The aim of the program is to generate prototype material and data for industry consideration and commercial partnerships, initially in aerospace.

Talga's strategy is to service existing large volume industrial markets by substituting current active ingredients (such as zinc in anti-corrosion coatings, or copper in aircraft lightning strike protection) with lower quantities of lighter weight, non-toxic graphene alternatives.

Figure 1. Sample of Talphenes® graphene enhanced epoxy resin coating showing tensile strength.

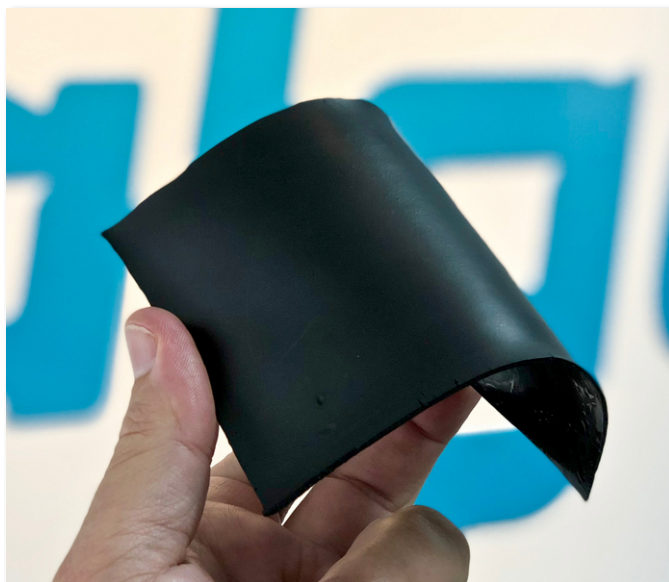


Figure 2. Tensile and elongation testing of Talga graphene epoxy resin under ASTM B882 standard.

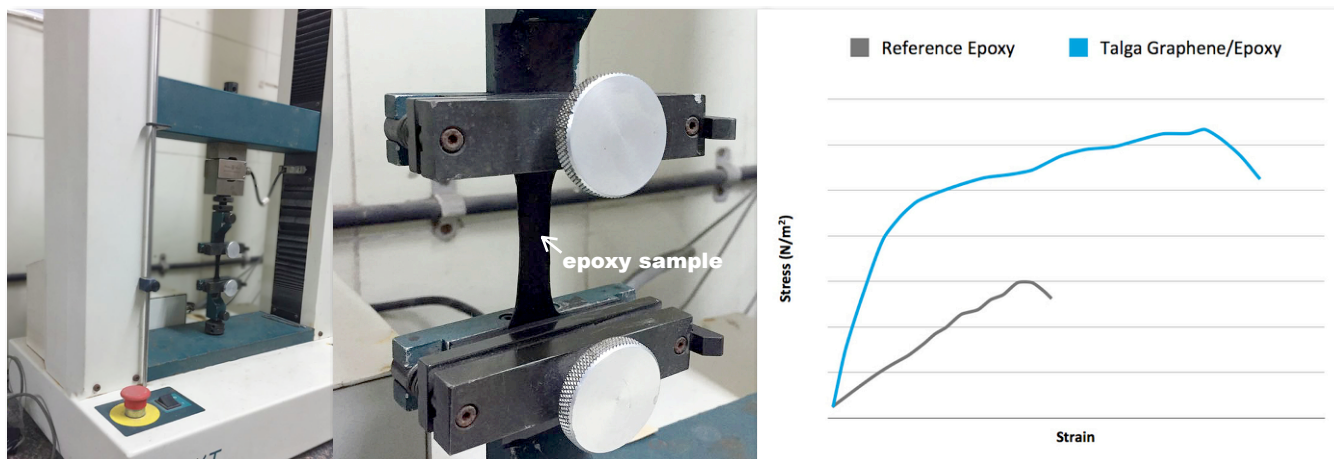
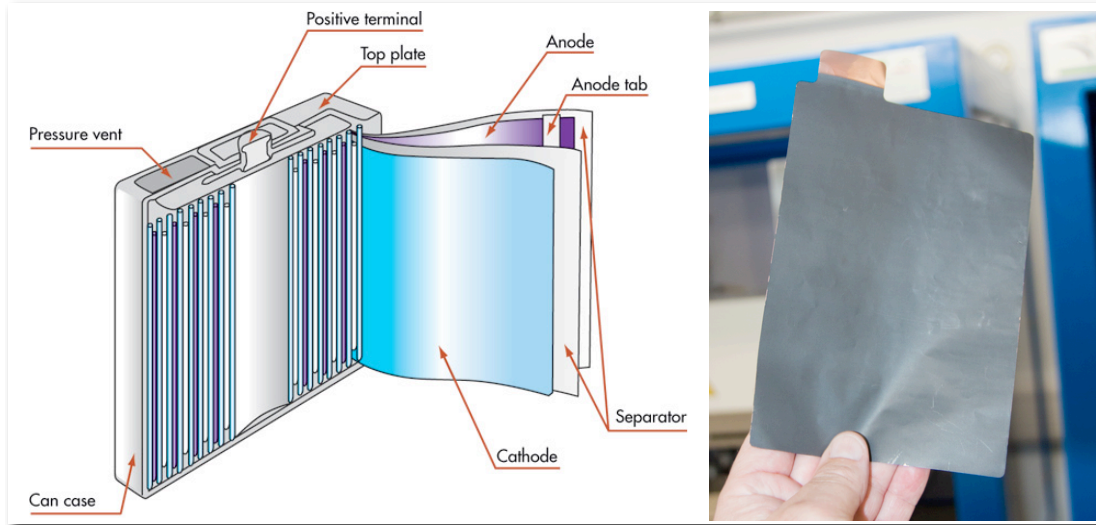


Figure 3. (Left) Schematic of prismatic or “pouch” cell Li-ion battery showing main components including anode and (Right) graphite-based anode for prismatic Li-ion battery at WMG.



Talga’s new anode for Li-ion batteries

Talga reported significant positive test results during the period of a new battery anode made from Talga-sourced feedstock that was successfully cycled for more than 1,200 hours, while retaining 99.5% of its capacity. The anode used a combination of Talga’s graphene/micrographite formula – resulting in higher capacity and efficiency than conventional spherical graphite and previous trial anode materials (ASX:TLG 9 Oct 2017).

The testwork focussed on the use of the Company’s micrographite and graphene nanoplatelet (“GNP”) materials as the active material of lithium-ion battery anodes. The specially formulated anode exhibited outstanding electrochemical performance across a range of key industry measures, including reversible capacity of ~420mAh/g over a 100 cycle average with a coulombic efficiency of 99.9%.

The capacity measure reflects a ~20% increase in capacity performance compared to commercially available graphite anodes (usually around 330mAh/g). This increased battery energy density can be significant as for example it can mean increased range for electric cars or more usage time for an electronic mobile device.

Commenting on product development Talga Managing Director Mark Thompson said; *“The data from our battery material and coatings testwork, utilising our unique Swedish graphite ore source with in-house processing and material technologies, has started to attract industry attention – positioning the Company for more lucrative downstream opportunities in the battery value chain and global coatings industry, in addition to just being a raw material supplier out of Sweden or graphene dispersions from our German pilot plant.*

Importantly Talga’s micrographite and graphene materials are now demonstrating performance and behaviours similar to certain types of synthetic materials - presenting new product and commercialisation opportunities.”

Figure 4. Talga’s Chief Technology Officer Dr Siva Bohm and Manager - Energy Products Dr Sai Shivareddy at the WMG Li-ion battery facility in the UK.



COMMERCIAL DEVELOPMENT

Japanese partnership for joint Li-ion battery collaboration

During the quarter, Talga established a key partnership with the battery technology arm of Japan's Recruit R&D ("Recruit") to jointly develop Li-ion battery materials for markets across Europe and in Asia (ASX:TLG 9 Oct 2017).

The partnership is part of Talga's product strategy to embrace the energy sector as a key, near-term market. The multinational Recruit group employs more than 1,200 scientists and engineers operating with over 400 partner companies and research organisations, with deep expertise across the whole battery supply chain from material specifications to the design and construction of Li-ion battery plants.

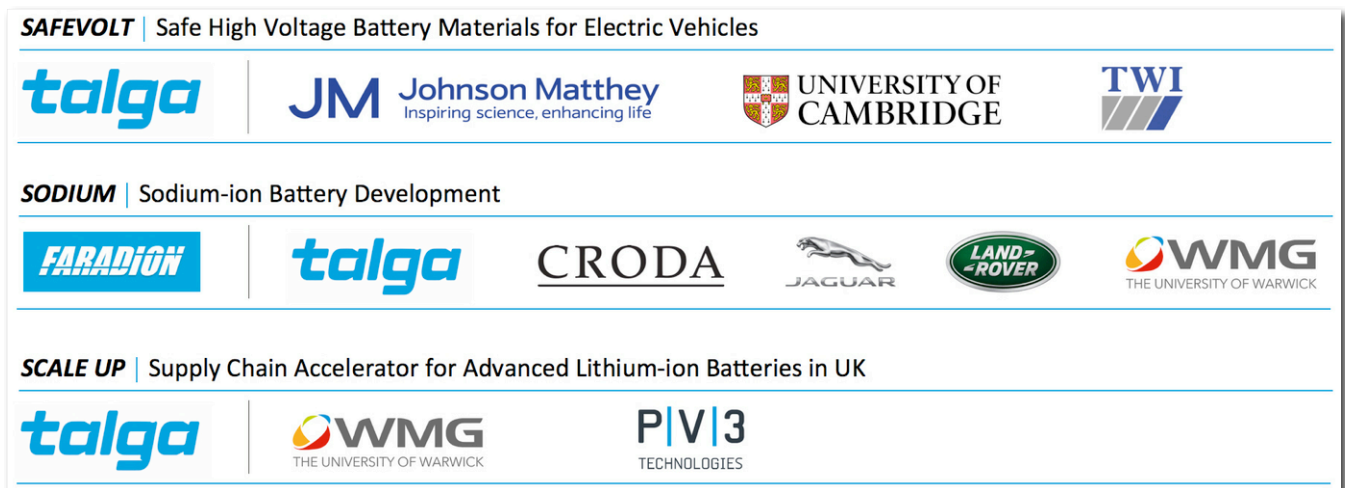
The Talga-Recruit program is being led by battery technology pioneer, Dr Claudio Capiglia, who has extensive experience working in Japan and South Korea, including roles as Senior Scientist in the solid-state battery technology project for Toyota.

Talga will particularly benefit from Recruit's extensive links into the Asian battery materials supply chain and support for Talga to become a qualified supplier for graphitic materials and additives. In turn, Talga's raw material supply and its own graphitic carbon technology offer Recruit's clients a European source of advanced battery materials.

Through 2018, Talga and Recruit will undertake advanced development of Vittangi project Li-ion battery graphite to deliver a full technical end-user level specification of the new battery anodes. This includes investigation of the most advanced value-added processing opportunities.

The objective is to develop a value-added anode product with performance advantages to enter into a commercial agreement with a major customer in the battery/energy storage market.

Figure 5. Talga's successful Faraday Battery Challenge programs and partners.



UK Government backs Talga battery strategy with triple grant success

The December quarter saw Talga and its partners (global automotive and battery material companies along with leading universities in battery technology) granted a group total of A\$5.1 million in R&D funds for three 'Faraday Challenge' proposals (ASX:TLG 5 Dec 2017).

The Faraday Challenge is a £246 million funding pool dedicated to automotive electrification and to ensure the UK is at the forefront of battery research, development and scale up of facilities to help create a new supply chain for large-scale domestic battery production.

Talga's projects cover:

1. Safe High Voltage EV battery materials – led by Talga together with Johnson Matthey, Cambridge University and TWI;
2. Sodium-ion batteries for automotive power applications – led by Faradion together with Talga, Jaguar Land Rover, WMG and Croda; and
3. Supply Chain Accelerator for Li-ion Electrode materials in UK – led by Talga together with PV3 and WMG.

Talga will receive a 70% rebate against its eligible costs, including salaries, consumables, equipment and contractor expenses in a research schedule spanning up to 24 months. The grants provide up to ~A\$1.0 million against a ~A\$1.5 million Talga budget for this testwork over the first 12 month period.

The grants in real terms largely underwrite Talga's battery development budget for the next few years while enabling the Company to partner with brand names in the battery value chain, access state-of-the-art facilities, innovative local technology and overseas material companies. First work under the grant umbrella has commenced towards the program official start in Feb 2018.

Graphene products and process scale-up

During the reporting period Talga delivered both graphene products as dispersions into joint development programs and other graphitic materials, along the path to larger scale programs. Successful meetings were held with major partners in Germany, and the Company is highly encouraged by the developments to date and potential applications stemming from the new products.

Subsequent to the period, the Company announced a binding commercial and supply agreement with UK based Haydale Limited (AIM:HAYD) targeting the conductive ink market in Asia (ASX:TLG 17 Jan 2018). Further commercial relationships were developed during the period and Talga's graphene materials are currently being tested by numerous multi-national companies spanning all targeted product sectors.

Construction of the expanded Phase 3 test facility in Germany is on track. The larger platform, new-generation exfoliation cells and auxiliary equipment have been installed for wet commissioning to commence in the first quarter of 2018 and be operational into the second quarter. Recent tests of Rudolstadt micrographite production material has exceeded 99.9% C purity, qualifying for use in higher quality battery applications.

PROJECT DEVELOPMENT AND EXPLORATION

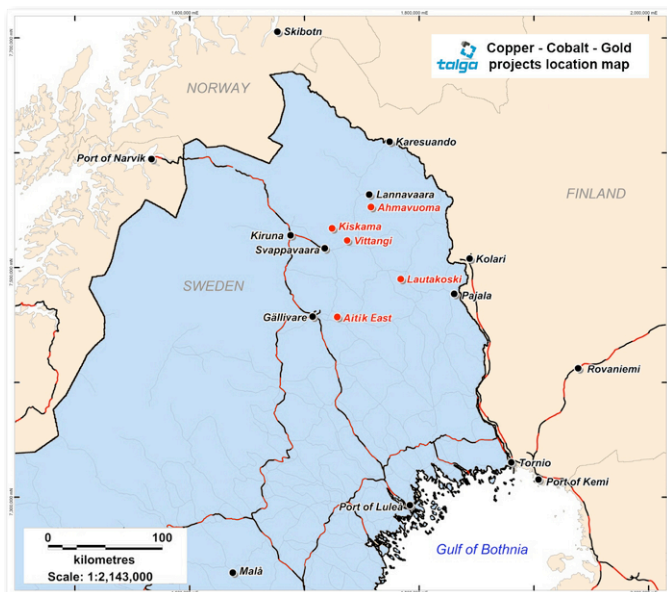
Cobalt Prospects Advanced in Sweden

While advancement in graphite and graphene materials are the key Talga driver, the Company continues to maintain all its mineral assets and provides value opportunities through ongoing exploration. In particular, the Company's base metal deposits in Sweden have significant potential as a future supply of cobalt for the fast growing battery market.

During the period under review, high grade cobalt results were reported from re-assaying of historic diamond drillcore and previously un-assayed zones from Talga's 100%-owned Ahmavuoma project (ASX:TLG 5 Oct 2017).

Key new intercepts included 73.1m @ 0.16% Co and 0.24% Cu from 33.75m (04AD001), including 22.8m @ 0.34% Co and 0.13% Cu from 54m.

Figure 6. Location of Talga's copper-cobalt-gold projects in north Sweden.



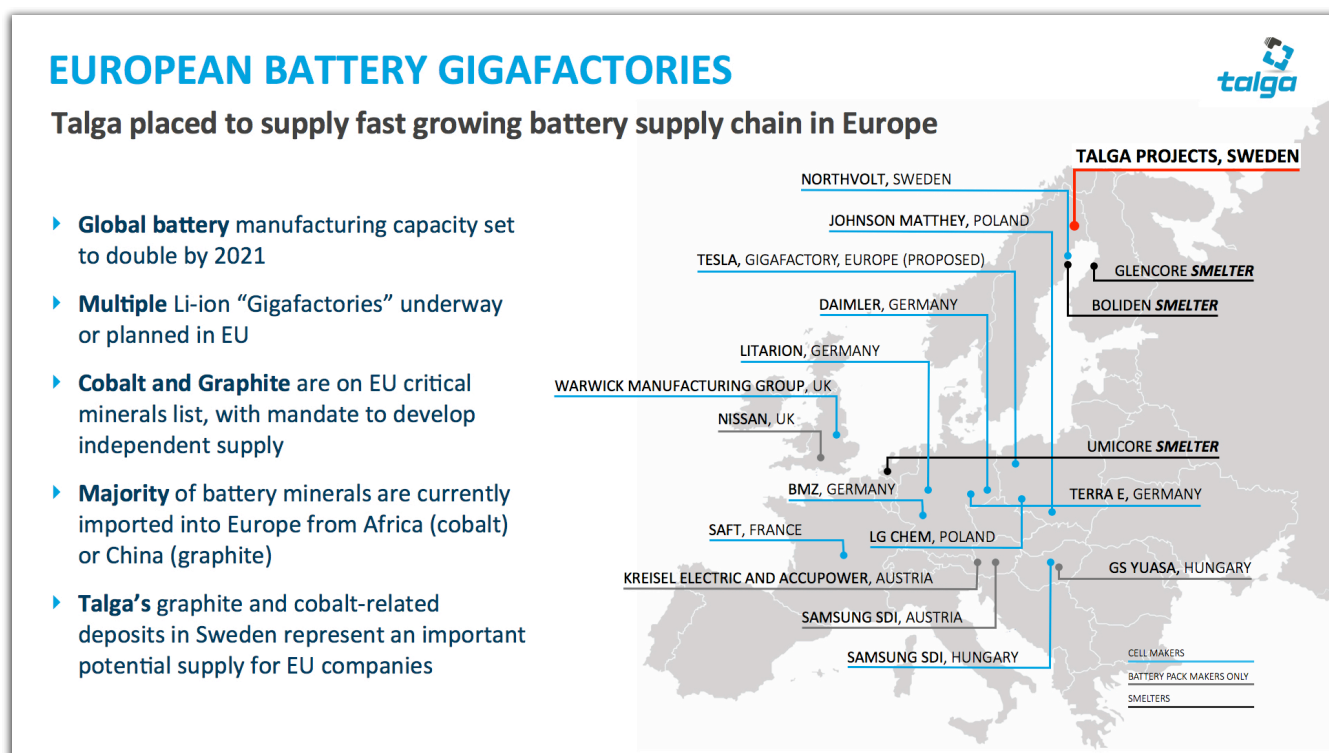
Overall, the sampling confirmed significant wide, high grade historic cobalt results from near surface with high grades of copper and gold by-products, such as 21m @ 0.38% Co, 1.12% Cu and 0.42g/t Au from 60m from hole 04AD001. In addition to the confirmation of historic results the work extended the known mineralised zones, increasing the prospectivity and potential of Ahmavuoma.

Next Steps

Drill core samples from Ahmavuoma will undergo further mineralogical testwork, including preliminary metallurgy, to determine potential cobalt, copper and gold recoveries.

Many electromagnetic conductors and other targets remain to be tested at Ahmavuoma, similarly with the Company’s other base mineral projects Kiskama, Lautakoski and East Aitik. Mineralisation at each project remains open and further work, including drilling or resource development, will be considered as part of the Company’s cobalt strategy (see Corporate section below).

Figure 7. Talga’s location in emerging European Li-ion battery supply chain.



Other Projects

In Sweden the Company relinquished several non-core tenements as part of its ongoing project rationalisation. Some surface rock samples from the East Aitik project were collected during the period and, along with drill sample results from the Lautakoski project, are awaiting final analysis and are expected in February. Statutory work and site surveys as part of long term planning and permitting is ongoing for the Vittangi graphite project.

Gold Project Divestment

During the quarter Talga received funds from Torque Metals Pty Ltd pursuant to the option and sale agreement (expiring 31 March 2018) over the Bullfinch gold project located in Western Australia.

Tenement Interests

As required by ASX listing rule 5.3.3, refer to Appendix 1 for details of Talga’s interests in mining tenements held by the Company. No new joint ventures or farm-in/farm-out activity occurred during the quarter.

CORPORATE

Largest shareholder

Talga's largest shareholder, Smedvig GP Ltd, lodged a substantial shareholder notice during the period. The change related to beneficial ownerships as a result of internal restructuring within the Group, and Smedvig's investment in Talga remains unchanged at 12.6%.

Cobalt Assets

The Company has received approaches from a wide range of interested parties to buy all or part of the Swedish cobalt-copper-gold assets. None of the offers are advanced enough to be considered material at this point. The Company is also working with several market-side capital groups to consider other options to best realise maximum value from the assets, and expects to provide further details of its cobalt strategy in the next quarter.

Financial

Talga closed the December quarter with A\$13.99 million cash-in-bank, and still holds 180,115 shares in TSX Venture Exchange-listed Novo Resources Corp (TSX-V:NVO). The Company currently has 202.4 million quoted ordinary shares and at the close of the ASX on Tuesday 30 January 2018, was capitalised at A\$136 million.

Next Quarter

- Accelerated graphene commercialisation process through expansion of European operations and creation of UK based sales and marketing unit.
- Increased focus on battery materials with support of joint UK R&D funding projects.
- Construction of expanded Phase 3 graphene test facility in Germany is on track for commissioning in Q1 2018.

For further information, visit www.talgaresources.com or contact:

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About Talga

Talga Resources Ltd ("Talga") (ASX:TLG) is a technology minerals company enabling stronger, lighter and more functional graphene and graphite enhanced products for the multi-billion dollar global coatings, battery, construction and carbon composites markets. Talga has significant advantages owing to 100% owned unique high grade conductive graphite deposits in Sweden, a test processing facility in Germany and in-house product development and technology. Advanced product testing is underway with a range of international corporations including industrial conglomerate Chemetall (part of BASF), Heidelberg Cement, Haydale, Zinergy and Jena Batteries amongst others.

No New Information

To the extent that announcement contains references to prior technical information, exploration results and mineral resources; these have been cross referenced to previous market announcements made by the Company. These had been disclosed to JORC 2012 standard. Unless explicitly stated, no new information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements that assumptions and technical parameters underpinning the relevant market announcement continue to apply and have not materially changed.

APPENDIX 1

Tenement Holdings

Project/Location	Tenements	Interest at end of quarter	Acquired during quarter	Disposed during quarter
Ahmavuoma Project Norrbotten County, Sweden	Ahmavuoma nr 3	100%		
	Ahmavuoma nr 4	100%		
	Ahmavuoma nr 5	100%		
Aitik East Project Norrbotten County, Sweden	Suorravaara 2	100%	100%	
	Suorravaara 3	100%	100%	
	Suorravaara 4	100%	100%	
Jalkunen Project Norrbotten County, Sweden	Jalkunen nr 1	100%		
	Jalkunen nr 2	100%		
	Jalkunen nr 3	100%		
	Kursuvaara	100%		
	Nybrännan nr 1	100%		
	Nybrännan nr 2	100%		
Tiankijoki nr 1	100%			
Kiskama Project Norrbotten County, Sweden	Kiskama nr 1	100%		
Lautakoski Project Norrbotten County, Sweden	Jukkasvaara nr 2	100%		
	Lautakoski nr 1	100%		
	Lautakoski nr 2	100%		
	Lautakoski nr 3	100%		
	Lautakoski nr 4	100%		
	Piipiönjoki nr 1	100%		
	Suinavaara nr 1	100%		
	Suinavaara nr 2	100%		
	Suinavaara nr 3	100%		
Suinavaara nr 4	100%			
Masugnsbyn Project Norrbotten County, Sweden	Masugnsbyn nr 1	0%		100%
	Masugnsbyn nr 101	100%	100%	
Pajala Project Norrbotten County, Sweden	Lehtosölkä nr 3	100%		
	Liviövaara nr 2	100%		
Piteå Project Norrbotten County, Sweden	Gråliden nr 2	100%		
	Önusträsket nr 2	100%		
Raitajärvi Project Norrbotten County, Sweden	Raitajärvi nr 5	100%		
Vittangi Project Norrbotten County, Sweden	Maltosrova nr 2	100%		
	Maltosrova nr 3	100%		
	Mörttjärn nr 1	100%		
	Nunasvaara nr 2	100%		
	Vathanvaara nr 1	0%		100%
	Vathanvaara nr 101	100%	100%	
	Vittangi nr 2	100%		
	Vittangi nr 3	100%		
Vittangi nr 4	100%			
Bullfinch Project Western Australia	E77/2139	100%		
	E77/2221	100%		
	E77/2222	100%		
	E77/2251	100%		
	E77/2350	100%		
	P77/4106	100%		