

QUARTERLY ACTIVITIES REVIEW FOR THE PERIOD ENDING 31 MARCH 2016

Talga Resources Ltd

ABN 32 138 405 419

1st Floor, 2 Richardson St,
West Perth, WA 6005

T: +61 8 9481 6667

F: +61 8 9322 1935

www.talgaresources.com

Corporate Information

ASX Code **TLG**

Shares on issue **146.3m**

Options (unlisted) **21.3m**

Company Directors

Keith Coughlan

Non-Executive Chairman

Mark Thompson

Managing Director

Grant Mooney

Non-Executive Director

Stephen Lowe

Non-Executive Director

OVERVIEW

Australian advanced materials company, Talga Resources Ltd (**ASX: TLG**) ("**Talga**" or "**the Company**") is pleased to report its activities for the quarter ending 31 March 2016. Preparations for the significant upscaling of the Company's graphite-graphene pilot test facility in Germany dominated the period.

Highlights included:

Commercial and Corporate *Major industry collaborations*

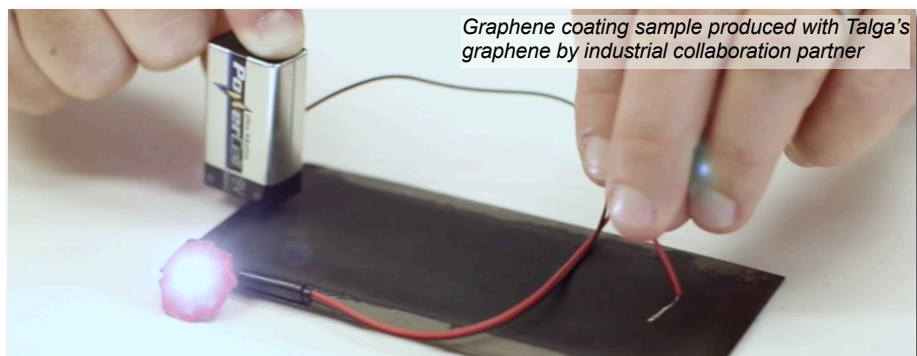
- Testing progressed on Talga's graphene and graphite samples produced using the Company's patent pending process technology;
- Sample supply agreement secured with US-based lithium-ion battery development corporation (post March 31); and
- Marketing expands customer and product commercialisation opportunities.

Project Development *Pilot Test Facility Expansion*

- Significant expansion to pilot test facility in Rudolstadt, Germany with preparations for 30x scale increase; and
- Positive lithium-ion battery test results using Talga micrographite.

Exploration *Exploration priorities sit behind project development*

- Exploration in north Sweden limited to critical path activities;
- Activities on non-core divestment projects limited to maintaining minimum spending commitments; and
- Balance of the \$200,000 option payment received from Beatons Creek Gold Pty Ltd towards divestment of Pilbara gold projects.



Graphene coating sample produced with Talga's graphene by industrial collaboration partner

For personal use only

COMMERCIAL & CORPORATE

Major Industry Collaborations

Talga's activities during the quarter continued towards becoming a globally significant producer of graphene and specialist graphite products. Activities included the scale up of the Company's pilot test facility using Talga's 100% owned patent pending process technology. Further, positive results testing the Company's materials in lithium-ion battery anodes accelerated customer engagement in the energy sector.

Talga's German pilot test facility is primarily an engineering and design platform to further develop Talga's processing technology to 250,000tpa capacity as contemplated in the scoping study (see ASX:TLG 9 Oct 2014). An advantage of this development path is that test output from the pilot facility can be used for product and market development (Fig 1). These activities are planned to be further up-scaled and optimised throughout 2016, with the aim of securing commercial relationships with end-users as Talga's graphene and specialist graphites are validated in end users product tests.

Graphite and Graphene Testing Underway with Global Leaders in Multiple Sectors

During the quarter, Talga entered new collaborative undertakings and advanced those already in existence with the provision of materials for end user testing in products across sectors including energy storage/batteries, conductive cement products, anti-corrosion/conductive/barrier/thermal coatings and inks, and polymer composites (Fig 2).

Collaboration with US-based Lithium-ion Battery Development Company

Talga entered into a sample supply agreement during the quarter with a US-based lithium-ion battery developer, under which Talga will provide micrographite and graphene for performance testing in its emerging battery technology. Results will be shared by both parties. The agreement, following meetings held in the USA last year, was reached after due diligence was conducted by the developer on recent test data of Talga's materials in lithium-ion anodes (see ASX:TLG 17 Feb 2016).

Tata Collaboration Agreement

Talga signed a formal Collaboration Agreement to supply Tata Steel UK Limited ("Tata") with graphene and graphite (see ASX:TLG 9 Nov 2015) whereupon Talga and Tata will explore commercial opportunities across processing and product applications.

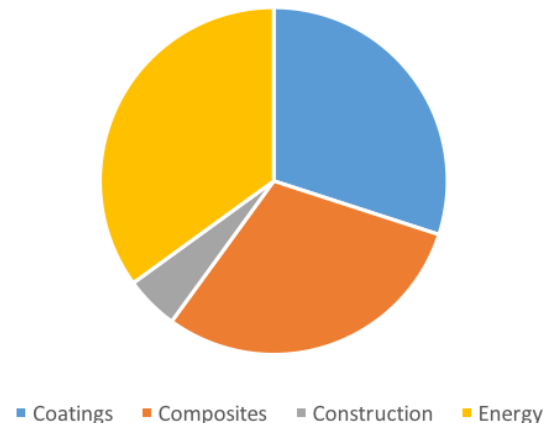
The initial program is focussing on graphene use in anti-corrosion coatings and conductive, formable, barrier and thermal coatings. Work by Tata scientists and others has demonstrated graphene incorporated in coating systems can provide a host of performance advantages and economic benefits. The coatings sector consumes more than 40 million tonnes of raw materials per annum world wide (in which a multitude of graphitic carbons are used, for example alkaline battery casings).

Tata has recently announced a move to sell its UK steel operations. It is yet to be determined what, if any impact this may have on Tata and Talga's graphene collaboration, however the Company notes this represents only part of Tata's interest in Talga's graphene and graphite materials across the group.

Figure 1. Talga staff and collaboration partner viewing the Rudolstadt pilot test facility



Figure 2. Chart illustrating markets where industry is currently testing samples of Talga graphene and graphite materials.



Investor and Commercial Relations Activities

During the quarter, Talga’s senior management presented at numerous industry and investor events in Europe and Australia, including a meeting of ‘DECHEMA’ in Frankfurt (Society for Chemical Engineering and Biotechnology - Germany). Other presentations were delivered at the Australian Graphite Conference in Perth and subsequent to the period, the 121 Mining Investment Conference in London.

PROJECT DEVELOPMENT

German Pilot Test Facility Expansion

During the quarter development goals were significantly progressed with test-work activities utilising raw graphite ore feedstock from the trial mining program in Sweden continuing at Talga’s pilot test facility in Rudolstadt, Germany. Talga expanded its German based team to prepare for the significantly increased scale of Phase 2 processing capacity.

Additional Processing Scale

Talga initially contemplated three stages of development as the pilot test processing facility evolved with increasing scale and automation (Phase 1, 2 and 3). Phase 1 consisted of a single 10kg feed exfoliation cell and several larger 50kg feed cells that had been designed and constructed for Phase 2.

The Phase 2 cells have semi-continuous feed capability and are fed with electrodes cut directly from the multi-tonne ore blocks stored at Rudolstadt from the prior trial mining in Sweden (Fig 3). Wet commissioning of the Phase 2 cells is underway and equipment for the following recovery circuit is being constructed for delivery through the April-June period.

The commissioning of the Phase 2 cells is a significant step in that they test the first semi-continuous feed exfoliation cells to date; a vital part of potential industrial scale production of graphene and a significant operational milestone for the Company.

During the period Talga installed additional Phase 1 cells modified to process larger volumes in up to 200 litres of electrolyte each. This will result in the Rudolstadt pilot facility expanding process capacity to 365kg of graphite ore at a time - or greater than 30x scale of Phase 1 operating in February 2016.

Positive Lithium-ion Battery Test Results

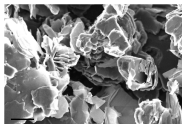
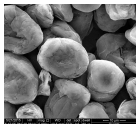
As a result of recent positive test results using Talga graphite in lithium-ion battery anodes (see ASX:TLG 17 Feb 2016 and Fig 4) and follow-up interest from industry participants, the Company is now conducting further test-work and investigating commercialisation opportunities within the energy market (in addition to coatings, construction and composites).

Applications within the energy market can be classified into two broad sectors, energy production (e.g. fuel cells, solar panels) and energy storage (e.g. solid state, flow batteries and thermal storage). Within these sectors a large number of technologies rely on graphitic carbon for electrical or thermal conductivity, and in more recent times graphene has been scientifically demonstrated to offer improvements in these fields.

Figure 3. Blocks of mined ore cut into 50kg electrodes for feeding exfoliation cells, pilot test facility Rudolstadt.



Figure 4. Diagram highlighting process steps reduced in Talga process compared to industry standard graphite for ~360mAh/g lithium-ion battery anode.

Talga Graphite	Spheronised Graphite
Talga Processing Steps	Peer Processing Steps
Exfoliate	Crush
↓	Grind Stages
Concentrator single stage	Flotation stages
↓	Micronisation
	Purification (chemical/thermal)
	Shaping (spheronisation)
	Coating
Mix binder and dispersant	Mix binder and dispersant
	
Battery average capacity ~360 mAh/g	Battery average capacity ~360 mAh/g

New programs testing Talga materials in lithium-ion batteries have commenced at the Centre for Advanced Electronics Dresden, Germany ("CAED") and the Energy Innovation Centre - University of Warwick, United Kingdom ("EIC").

The EIC program will comprise larger scale tests of Talga graphite in the main types of lithium-ion anode chemistries used by industry. In parallel, the CAED program will explore fundamental aspects of Talga's raw material that may lead to lower cost production of lithium-ion and other types of battery, including those requiring graphene-silicon anodes.

EXPLORATION

Exploration Priorities Sit Behind Project Development

Exploration has been limited to only those critical path activities required for future graphite mining in north Sweden and to maintain projects targeted for divestment in Sweden and Australia.

Environmental surveys continued to record data for full-scale exploitation permitting of the Vittangi graphite project in Sweden. As part of the permitting process, the Nunasvaara resource data is being reviewed for updating to Australia's JORC 2012 standard from the current JORC 2004 status.

In Sweden, joint venture and divestment opportunities are being investigated for the Kiskama Cobalt-Copper-Gold Project and the Vittangi and Masugnsbyn Iron Projects.

In Australia surface exploration (Lag and MMI geochemical sampling) was undertaken during the period on the Bullfinch gold project in the Yilgarn region of Western Australia. Minor new gold anomalies were returned.

During the quarter, Beatons Creek Gold Pty Ltd ("Beatons") requested an extension of the period to exercise its option to purchase any or all of Talga's three Pilbara based gold assets (ASX:TLG 10 Aug 2015). With the balance of \$150,000 received during the March 2016 period, Talga has now received \$250,000 from Beatons and Beatons can exercise its extended option (and trigger the individual purchase of the projects) by August 2017. The purchase price for each of the three projects is \$250,000, for a total \$750,000.

TENEMENT INTERESTS

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

For further information, please contact:

Talga Resources Ltd.

Mark Thompson

Managing Director

Tel +61 (08) 9481 6667

Email admin@talgaresources.com

Competent Person's Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled and reviewed by Mr Simon Coxhell, a consultant to the Company and a member of the Australian Institute of Mining and Metallurgy and Mr Mark Thompson, who is an employee of the Company and a member of the Australian Institute of Geoscientists. Mr Thompson and Mr Coxhell have 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 and Mr Coxhell consent 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. 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.

TABLE 1
Tenement Holdings

Project/Location	Tenements	Interest at end of quarter	Acquired during quarter	Disposed during quarter
Jalkunen Project Norrbotten County, Sweden	Jalkunen nr 1 Jalkunen nr 2 Jalkunen nr 3 Kursuvaara Lautakoski nr 1 Lautakoski nr 2 Lautakoski nr 3 Nybrännan nr 1 Nybrännan nr 2 Suinavaara nr 1 Suinavaara nr 2 Tiankijoki nr 1	100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%		
Kiskama Project Norrbotten County, Sweden	Kiskama nr 1	100%		
Masugnsbyn Project Norrbotten County, Sweden	Masugnsbyn nr 1 Masugnsbyn nr 2	100% 100%		
Pajala Project Norrbotten County, Sweden	Lehtosölkä nr 3 Liviövaara nr 2	100% 100%		
Piteå Project Norrbotten County, Sweden	Gråtiden nr 2 Önusträsket nr 2	100% 100%		
Raitajärvi Project Norrbotten County, Sweden	Raitajärvi nr 5 Raitajärvi nr 6	100% 100%		
Vittangi Project Norrbotten County, Sweden	Maltosrova nr 2 Maltosrova nr 3 Mörttjärn nr 1 Nunasvaara nr 2 Vathanvaara nr 1 Vittangi nr 2 Vittangi nr 3 Vittangi nr 4	100% 100% 100% 100% 100% 100% 100% 100%		
Bullfinch Project Western Australia	E77/2139 E77/2221 E77/2222 E77/2251 P77/4106	100% 100% 100% 100% 100%		
Mosquito Creek Project Western Australia	P46/1634 P46/1636 P46/1638 P46/1666 P46/1667 P46/1668 P46/1800 E46/1035	100% 100% 100% 100% 100% 100% 100% 100%		

TABLE 1 (continued)
Tenement Holdings

Project/Location	Tenements	Interest at end of quarter	Acquired during quarter	Disposed during quarter
Talga Talga Project Western Australia	M45/618	100%		
	P45/2689	100%		
	P45/2690	100%		
	P45/2691	100%		
	P45/2746	100%		
	P45/2747	100%		
Warrawoona Project Western Australia	P45/2774	100%		
	E45/3381	100%		
	P45/2661	100%		
	P45/2662	100%		
	P45/2781	100%		

APPENDIX 1

Graphite Resources

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

JORC 2004 Classification	Tonnes	Grade %graphite
Indicated	5,600,000	24.6
Inferred	2,000,000	24.0
Total	7,600,000	24.4

Raitajärvi Mineral Resource¹ (5% Cg lower cut-off)

JORC 2004 Classification	Tonnes	Grade %graphite
Indicated	3,400,000	7.3
Inferred	900,000	6.4
Total	4,300,000	7.1

Jalkunen Mineral Resource (10% Cg lower cut-off)

JORC 2012 Classification	Tonnes	Grade %graphite
Inferred	31,500,000	14.9

APPENDIX 2

Iron Resources¹

Deposit	Tonnes	Grade %Fe	JORC 2004 Classification
Vathanvaara	51,200,000	36.0	Inferred Resource
Kuusi Nunasvaara	46,100,000	28.7	Inferred Resource
Mänty Vathanvaara	16,300,000	31.0	Inferred Resource
Sorvivuoma	5,500,000	38.3	Inferred Resource
Jänkkä	4,500,000	33.0	Inferred Resource
Masugnsbyn	87,000,000	28.3	Indicated Resource
Masugnsbyn	25,000,000	29.5	Inferred Resource
Total	235,600,000	30.7	

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.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

Talga Resources Ltd

ABN

32 138 405 419

Quarter ended ("current quarter")

31 March 2016

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (9 Months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration and evaluation	(83)	(716)
(b) development ¹	(566)	(1,368)
(c) trial mining ²	-	(658)
(d) administration	(521)	(1,676)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	26	74
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other:	-	-
R&D Rebate	-	-
Net operating cash flows	(1,144)	(4,344)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	(181)	(331)
1.9 Proceeds from sale of:		
(a) prospects	150	250
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other – misc	-	-
Other – security bond payment	(30)	(48)
Net investing cash flows	(61)	(129)
1.13 Total operating and investing cash flows (carried forward)	(1,205)	(4,473)

+ See chapter 19 for defined terms.

For personal use only

1.13	Total operating and investing cash flows (brought forward)	(1,205)	(4,473)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares/options	-	2,775
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other – Share issue costs	-	(151)
	Net financing cash flows	-	2,624
	Net increase (decrease) in cash held	(1,205)	(1,849)
1.20	Cash at beginning of quarter/year to date	5,029	5,673
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter ³	3,824	3,824

Notes

¹ Development includes costs towards the pilot plant and processing facility operations and research & development in Germany.

² Trial mining in Sweden.

³ Subsequent to 31 March 2016, a further \$519,000 Australian R&D cash rebate was received in April 2016.

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	135
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Amount included under 1.23 includes director's remuneration.

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

N/A

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

N/A

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	Nil	Nil
3.2	Credit standby arrangements	Nil	Nil

+ See chapter 19 for defined terms.

Estimated cash outflows for next quarter ¹

		\$A'000
4.1	Exploration and evaluation ²	410
4.2	Development ³	520
4.3	Trial mining ⁴	-
4.4	Administration	510
Total		1,440

Note

¹ Next quarter cash outflows will be offset by \$519,000 Australian R&D cash rebate received in April 2016.

² Exploration and evaluation includes costs towards the exploitation licence application in Sweden.

³ Development includes costs towards the pilot plant and processing facility operations and research & development in Germany.

⁴ Trial mining in Sweden.

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	246	1,451
5.2 Deposits at call	3,578	3,578
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	3,824	5,029

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	Nil			
6.2 Interests in mining tenements acquired or increased	Nil			

+ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (cents)	Amount paid up per security (cents)
7.1 Preference⁺securities <i>(description)</i>	-	-		
7.2 Changes during quarter	-	-		
7.3 +Ordinary securities	146,284,060	146,284,060		
7.4 Changes during quarter				
(a) Increases through issues	-	-		
<i>Conversion of options</i>	-	-		
<i>Share placement</i>	-	-		
(b) Decreases through returns of capital, buy-backs	-	-		
7.5 +Convertible debt securities <i>(description)</i>	-	-		
7.6 Changes during quarter	-	-		
7.7 Options <i>(description and conversion factor)</i>			<i>Exercise price</i>	<i>Expiry date</i>
	500,000	-	45 cents	3 October 2016
	2,000,000	-	52 cents	31 December 2016
	2,000,000	-	52 cents	31 December 2016
	2,000,000	-	60 cents	31 December 2016
	2,000,000	-	65 cents	31 December 2016
	2,400,000	-	60 cents	4 October 2018
	4,500,000	-	60 cents	4 October 2018
	2,500,000	-	54 cents	23 June 2019
	1,400,000	-	54 cents	20 August 2019
	1,000,000	-	54 cents	26 March 2020
	1,000,000	-	54 cents	17 December 2020
7.8 Issued during quarter	-	-		
7.9 Exercised during quarter	-	-		
7.10 Expired/Lapsed during quarter	-	-		
7.11 Debentures <i>(totals only)</i>	-	-		
7.12 Unsecured notes <i>(totals only)</i>	-	-		

+ See chapter 19 for defined terms.

For personal use only

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.



Dean Scarparolo
Company Secretary

Date: 29 April 2016

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

== == == == ==

+ See chapter 19 for defined terms.

For personal use only