

Talga Evaluates its Cobalt in Sweden

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Corporate Information
 ASX Codes **TLG, TLGOA**
 Shares on issue **181.9m**
 Options (listed) **44.9m**
 Options (unlisted) **26.7m**

Company Directors
Keith Coughlan
 Non-Executive Chairman

Mark Thompson
 Managing Director

Grant Mooney
 Non-Executive Director

Stephen Lowe
 Non-Executive Director

- **Programs commenced to identify and evaluate development options for Talga's 100% owned cobalt-rich IOCG projects located in Northern Sweden**
- **Metallurgical testwork to determine cobalt, gold and copper recovery from Kiskama IOCG deposit is underway**
- **Historic core from 105 Kiskama drillholes to be re-evaluated using modern techniques towards potential future JORC resource**
- **Further sites of known cobalt, copper and gold enrichment across Talga's graphite and iron ore project areas to be assessed – including recent discovery at Lautakoski**

Technology minerals company Talga Resources Ltd ("Talga" or "the Company") (ASX Code: TLG) has commenced activities on the Company's 100% owned cobalt-rich iron oxide copper-gold ("IOCG") projects in north Sweden, and in particular the Kiskama deposit. The activities include metallurgical testwork, sampling and exploration to evaluate the development and commercial options available to Talga.

Given the Company's primary focus has been, and remains, the continued development of its graphite projects, only minimal work has been undertaken to date on its wholly owned cobalt, copper and gold prospects in Sweden. The strategy to now advance these prospects to a commercialisation decision follows Talga's recent positive exploration drill results, industry recognition regarding the critical nature of non-conflict cobalt supplies (particularly for lithium ion ("Li-ion") batteries) and the subsequent price rise of cobalt (Fig 1).

Talga has previously announced positive results regarding the use of its graphite and graphene in Li-ion batteries and continues test work in this area. Cobalt is similarly a vital ingredient in the Li-ion battery supply chain and it would be commercially advantageous for the Company to further explore future significant participation in this sector.

Figure 1 Cobalt price over last 12 months. LME Data.



Cobalt

Cobalt metal is recognised as one of the most critical materials required for the latest generation of high performance Li-ion batteries (Fig 2). The price of cobalt traded on the London Metal Exchange ("LME") has increased over 30% in the last year alone to more than US \$36,000 per tonne.

Many forecasters predict the market will grow strongly amid increasing global demand for Li-ion batteries and growing supply risks within the Democratic Republic of Congo ("DRC"). The DRC hosts 47% of the world's known cobalt resources and many consumers are voicing concerns regarding the ethics of using supplies from "conflict nations" and the reliability of these supply chains.

Figure 2 Cobalt metal sample from refinery.



Evaluation Program

A recent review by Talga has given it confidence that it could unlock significant value from its 100% owned cobalt-rich IOCG projects. Therefore the Company has decided to undertake an elevated and multi-tiered cobalt evaluation campaign across its mineral assets located in northern Sweden.

The campaign will include the following activities:

1. Kiskama project historic core sampling and assaying;
2. Metallurgy to determine cobalt, copper and gold recovery at Kiskama; and
3. Cobalt assessment across other Talga projects.

The evaluation process is expected to be completed in stages over the next quarter.

Talga's Kiskama Project

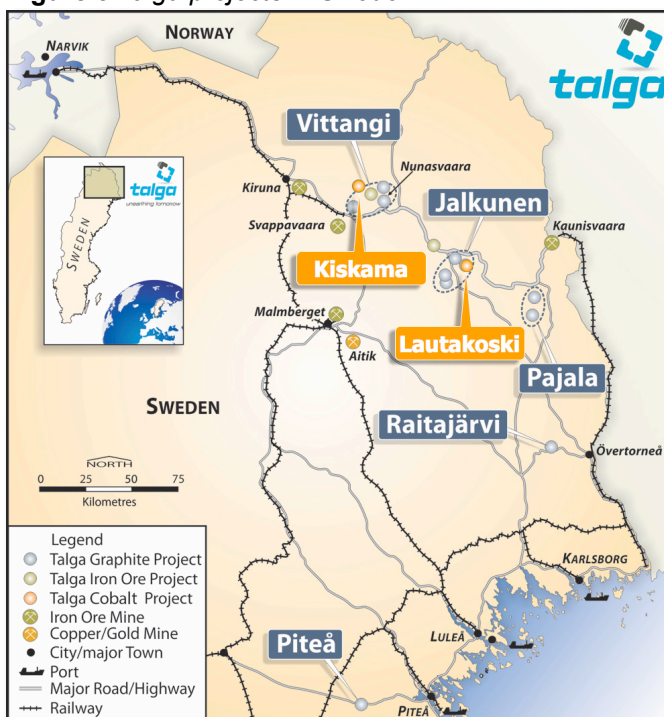
Talga's 100% owned **Kiskama** project contains significant cobalt, copper and gold mineralisation and is situated in the Kiruna mining district which hosts multiple open cut mining operations (Fig 3).

Kiskama is classified geologically as an iron-oxide copper-gold deposit ("IOCG"), a type of deposit not known in the 1970's when Kiskama was first drilled. IOCG's have since been made famous by the discovery and production from deposits such as **Olympic Dam** and **Ernest Henry** in Australia.

The 1.75-1.89 billion years age deposit (Billström & Martinsson, 2000) is located within a major crustal scale shear zone and consists of disseminated cobalt-bearing pyrite with magnetite and chalcopyrite within an extensive zone of hydrothermal brecciated haematitic andesitic/dacitic host rock (Fig 4).

Although Kiskama is one of Sweden's most significant cobalt deposits, Talga has conducted only minor work since acquiring it in a package from Teck Resources Ltd in 2012, given its primary focus on graphite and graphene at the Company's nearby Vittangi project.

Figure 3 Talga projects in Sweden.



Talga previously released Kiskama project data including drill results from four Talga drillholes confirming the tenor of historical results (ASX:TLG 10 Feb & 7 Nov 2014). Highlights of the drilling included:

- **42m @ 0.10% Co, 0.41% Cu** from 11m depth (Kis77006)
- **33m @ 0.10% Co, 0.56% Cu** from 28m (Kis80017)
- **30m @ 0.12% Co, 0.14% Cu** from 67m (Kis 770001)
- **28m @ 0.11% Co, 0.51% Cu** from 59m (Kis72005)
- **36m @ 0.11% Co, 0.27% Cu, 0.13g/t Au** from 66m (Talga 2014 Kis04)
- **40m @ 0.09% Co, 0.24% Cu, 0.14g/t Au** from 50m (Talga 2014 Kis03)
- **17m @ 0.12% Co, 0.91% Cu** from 34m (Kis80006)

These grades should be considered in the context of current profitable mining operations in this region where there is low cost hydro-electric power supplies, favourable fiscal regimes and established high quality bulk commodity infrastructure. As an example, Boliden AB's nearby Aitik open cut copper-gold mine (located 80km south of Kiskama), is the largest copper-gold mine in Europe and profitably exploits resources of 2,760 Mt @ **0.17% Cu, 0.1g/t Au** (Boliden AB Annual Report 2016). Further, First Quantum's Kevitsa mine in a similar area of the Fennoscandian Shield in nearby Finland currently mines a resource of 238Mt @ **0.41% Cu, 0.30% Ni** and **0.12g/t Au** (First Quantum Annual Report 2015).

Figure 4 Drillcore from Kiskama showing IOCG style mineralisation (KIS04).



1. Sampling and Assaying of Historic Drill Core

Talga recently reviewed historic Kiskama drillcore from the 105 holes drilled by the Swedish Geological Survey ("SGU") in their exploration campaigns spanning 1974-1980. At that time, the SGU discovered cobalt mineralisation in rock and till samples over a ~7km long zone at Kiskama, yet focussed its primary drilling campaign only on a 1km part of the zone in the northern area of the project.

The SGU drilling intercepted multiple iron oxide brecciated and sulphide rich zones from near surface to 120m vertical depth that remain open in all directions, however only selected portions of the drill core were cut and assayed (Fig 5). **Only 28% of the historic core was sampled for cobalt and copper, and less than 2% for gold.**

Talga has reviewed some of the un-tested drillcore and found visible evidence of both sulphide and oxide mineralisation suggesting more extensive widths and grades are present than was identified from the 1980 drilling results. The historical core will now be re-logged and systematically analysed to reveal the full extent of mineralisation.

The results of assaying work will be announced when received and are expected in the second quarter of 2017. Results are expected to assist in calculating a maiden JORC mineral resource estimate in the future.

2. Metallurgy Program on Kiskama

A program of comprehensive metallurgical work has commenced on drill samples from Kiskama to determine potential cobalt, copper and gold recoveries. The metallurgical testwork program is based around flotation concentration with an assessment of magnetic separation on feed and tails streams and application of the patented innovative 'KELL' process technology on the concentrate stream. The program is being undertaken by Perth-based Simulus Laboratories who have extensive experience in providing similar batch and piloting testwork services, including ongoing KELL process testwork. The results of this metallurgical work is expected in the second quarter of 2017.

Figure 5 Drill section across Kiskama deposit showing zonation of cobalt and copper-gold mineralisation in historic and (2014) drilling.

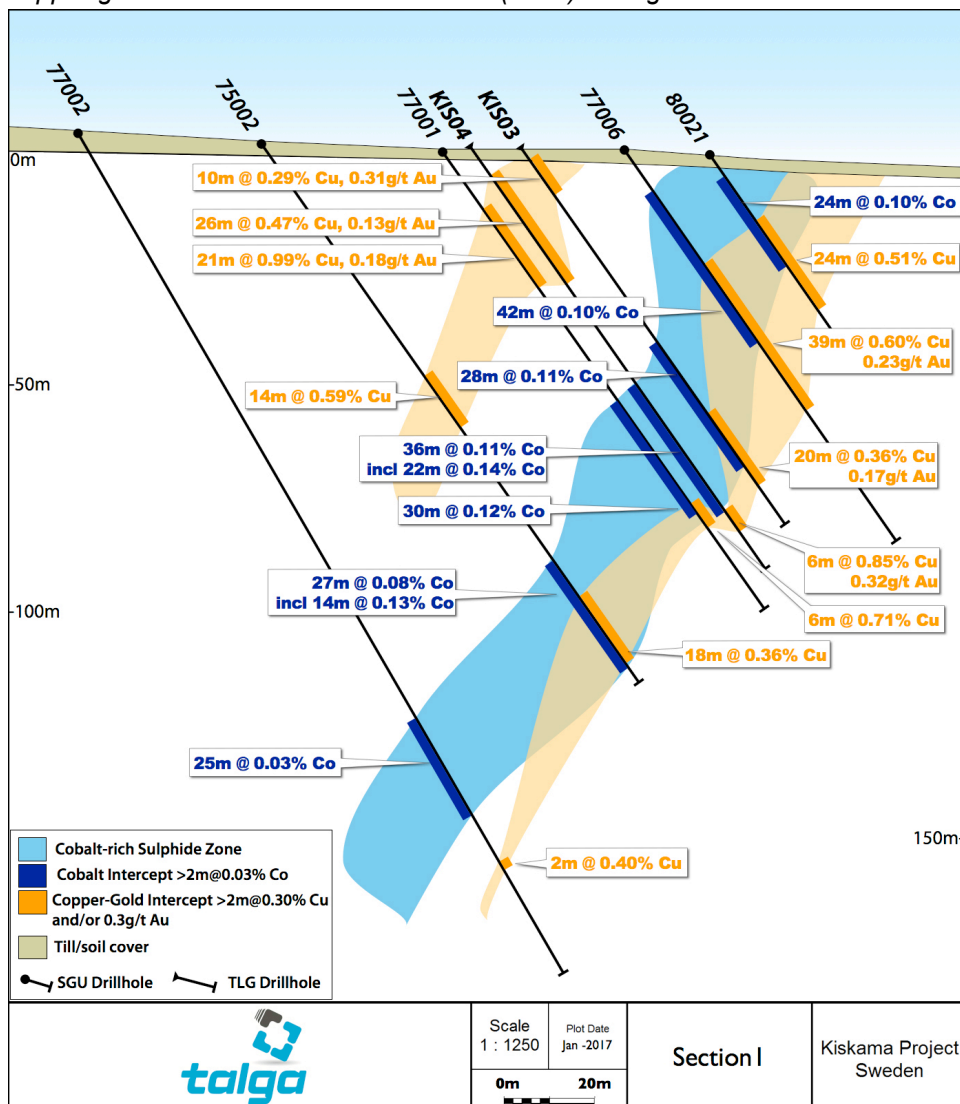


Figure 6 Locations of Kiskama and Lautakoski IOCG projects.

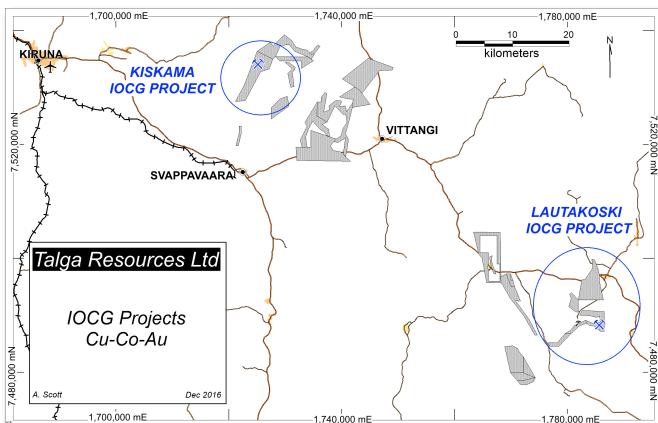
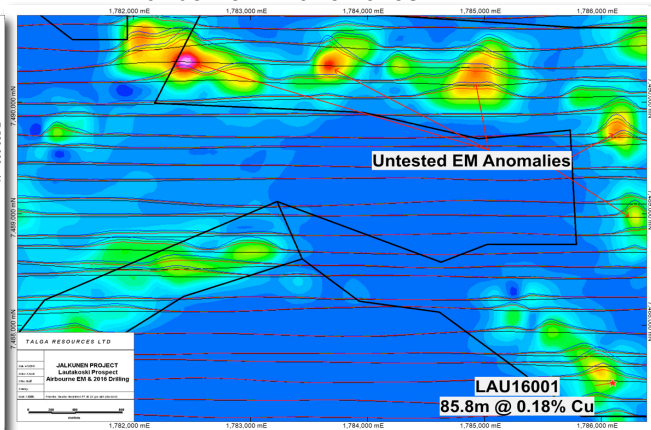


Figure 7 Location of Lautakoski drillhole and airborne EM anomalies.



3. Assessment of Cobalt Across Other Talga Projects

In addition to the work planned for the Kiskama project, an assessment has commenced of known cobalt enrichments on Talga's existing high grade graphite and iron ore project areas in northern Sweden. Initial review of the data supports the Jalkunen project being split into a distinct and separate cobalt-rich IOCG project area now defined as the Lautakoski IOCG project (see Fig 6).

Multiple cobalt occurrences have previously been identified from historical outcrop, till and drill sampling on Talga's projects, often co-incident with copper, gold and iron mineralisation. Cobalt is also reported from historic rock and drill sampling of intrusive-style disseminated bodies with anomalous molybdenum, tellurium and tungsten. All historic information of cobalt occurrences is being compiled and assessed into new exploration prospectivity models.

This work will also include a further assessment of the new copper-cobalt discovery announced by Talga last month at part of the Jalkunen graphite project southeast of Kiskama (see ASX 6 Dec 2016). There, a single maiden or 'wildcat' exploration diamond drillhole (LAU16001 to 101m depth) drilled into one of numerous electromagnetic ("EM") conductors under shallow cover at the Lautakoski prospect, intercepted a zone of brecciated semi-massive sulphides with broad zones of copper, with co-incident cobalt and gold mineralisation.

The hole terminated in IOCG-style alteration with elevated and increasing grades toward the end of hole. Talga is compiling geological, geophysical and geochemical data for the area alongside this discovery to analyse, with the aim of identifying additional targets to the existing EM conductors already awaiting testing (Fig 7).

Talga Managing Director, Mr Mark Thompson:

"The cobalt intercepts to date at our Kiskama project in Sweden are highly encouraging in the context of established infrastructure, hydro-electric power, road and rail transport and nearby smelters. The presence of significant copper and gold, along with the cobalt, only enhances its potential.

The advanced status of Kiskama also underpins our confidence in the new cobalt-rich IOCG targets identified at Lautakoski, where there is significant potential following our remarkable first-pass drill results last month.

It is expected that the planned metallurgical test work, together with new sampling and assay activities will identify a number of commercialisation options for Talga's cobalt prospects."

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

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No New Information

To the extent that announcement contains references to prior exploration results, 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.

Forward-Looking Statements

This ASX release has been prepared by Talga Resources Limited. This document contains background information about Talga Resources Limited and its related entities current at the date of this announcement. This is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this announcement. This announcement is for information purposes only. Neither this document nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. This announcement may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply in their own jurisdiction. A failure to do so may result in a violation of securities laws in such jurisdiction. This document does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this representation are not intended to represent recommendations of particular investments to particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.

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Competent Person's Statement

The information in this document that relates to exploration results is based on information compiled by Amanda Scott, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been 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). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

About Talga

Talga Resources Ltd ("Talga") (ASX: TLG) is a technology minerals company enabling stronger, lighter and faster products for the coatings, battery, concrete and carbon composites markets using graphene and graphite. Talga has significant advantages owing to 100% owned unique high grade deposits in Sweden, a pilot test facility in Germany and in-house product IP. Advanced testing is underway with a range of corporations including industrial conglomerate Tata, UK listed Haydale and German based Jena Batteries.