Auroch Signs Deal to Drill Next to Lundin’s Super Giant Neves-Corvo Copper & Zinc Mine in Portugal
- An extension of the renewable energy story -

Auroch Minerals Limited (Auroch or the Company) is excited to announce a new Joint Venture to earn up to 75% of the “Alcoutim Project”, a significant Cu-Zn-Pb-Au-Ag opportunity in south-eastern Portugal located immediately along strike from the supergiant Neves Corvo Mine in the western half of the world famous Iberian Pyrite Belt (IPB).

In addition to being a world class exploration play, the Alcoutim Project builds the Company’s exploration focus on metals that are crucial to the renewable energy markets such as the Company’s Karibib Lithium Project in Namibia and now the Alcoutim Project (copper).

Auroch to spend ~A$1.4 million to earn a 65% interest in the Alcoutim Project. Auroch will also have the right, but not the obligation, to earn a further 10% by spending a further ~A$1.25 million. Further details of the commercial terms can be found in Appendix 1.

Highlights

- The Alcoutim Project is immediately along strike and down plunge from Lundin Mining’s - giant Neves Corvo deposit that has current global resources of (Lundin mining 2016 Resources and Reserves report):
  - Copper zones – 91 Mt @ 2.5% Cu, 1.1% Zn & 116 Moz of Ag @ 43 g/t
  - Zinc Zones – 118 Mt @ 5.9% Zn, 0.3% Cu & 216 Moz Ag @ 57 g/t
- Drilling is scheduled to commence within 10 weeks.
- The IPB is one of the largest and most significant mining districts in the world, and is renowned for its poly-metallic (Cu-Zn dominant) Volcanic Massive Sulphide (VMS) deposits with over eighty (80) known deposits and resources totalling in excess of 1,700 million tons (Mt). It is home to ten (10) Giant deposits (> 100Mt ore) and three (3) Super Giant deposits (> 200Mt ore):
  - Neves Corvo (8 Mt contained Cu + Zn metal);
  - La Zarza (8 Mt contained Cu + Zn metal); and
  - the original Rio Tinto mine (>3 Mt contained Cu + Zn metal).
• The discovery of Neves Corvo was made in 1977 by drilling geophysical targets including gravity, magnetic and EM anomalies. The volcanic host sequence to Neves Corvo continues under younger rocks into the Alcoutim Licence.

• The Alcoutim Project has a trinity of similar geophysical anomalies with coincident magnetic, gravity and EM targets.

• Recent drill intercepts at Semblana - the most recently discovered ore-body (2010) within the Neves Corvo Mine include:
  o PSN44A-1 11.1m @ 14.6% Cu, 1.61% Sn & 133 g/t Ag
  o PSN42 13.6m @ 1.9% Cu, 2.64% Zn, 56 g/t Ag & 1.15 g/t Au
  o PSM46B-1 20.5m @ 6.1% Cu, 4.0% Zn, 110 g/t Ag & 0.23 g/t Au

• Twenty-two (22) geophysical targets, comprising gravity, magnetic and EM anomalies have now been identified at the Alcoutim Project.

• Stage one of exploration program will commence with five (5) diamond drill holes for approximately 5,600m into the highest priority geophysical targets.

• Auroch to spend ~A$1.4 million to earn a 65% interest in the Alcoutim Project. Auroch will also have the right, but not the obligation, to earn a further 10% by spending a further ~A$1.25 million.

• **Auroch in a STRONG FINANCIAL POSITION: A$8.3 million in cash and receivables**

Auroch CEO Dr Andrew Tunks said; “This is one of the most exciting exploration targets I have been involved in. At the Alcoutim Cu-Zn Project, we are directly along strike and down plunge of the Super Giant Neves Corvo mine. Within the licence there are multiple coincident magnetic – gravity – EM anomalies and our plan is to test these with diamond drilling immediately. Drilling is expected to commence in in the second quarter of 2017 and the initial program will continue for approximately six months – each hole will undergo a complete series of down-hole geophysical tests which substantially increases the search radius for massive sulphide and stockwork VMS copper-zinc deposits.

For further information, visit [www.aurochminerals.com](http://www.aurochminerals.com) or contact:

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1 Refer ASX announcement 2nd March 2017
The Iberian Pyrite Belt (IPB) – The Land of the Giants

The **Iberian Pyrite Belt** is an arcuate belt approximately 250km long and 60km wide and hosts a huge quantity of volcanic-hosted massive sulphide (VMS) deposits that were formed during bi-modal (mafic/felsic) submarine volcanism. There are over 100 known deposits within the IPB that variably contain copper, zinc, lead, silver, tin and gold as the main economic metals. A review of the publicly reported resources for the major deposits indicates over 1,800 Mt of ore with contained metal of >15 Mt of Cu, >16 Mt of Zn, >28 Mt of Pb, >26 Moz of Au and >1,300 Moz of Ag.

Importantly all the deposits occur in a stratigraphic interval that is characterised by bi-modal felsic and mafic volcanic rocks. This fundamental control effectively focusses exploration onto these horizons (see figure 1).

Figure 1. The geology of the Iberian Pyrite Belt highlighting the major mines and the location of the Alcoutim Project on the Portugal-Spain border. Note the continuation of the Neves Corvo Volcanics dashed line) into the Alcoutim Licence covered by the younger rocks of the Baixo Alento Group

The IPB is the largest and most important Volcanogenic Massive Sulfide (VMS) metallogenic province in the world (**Figure 2**). Some of its mineral deposits have been known and mined since the Roman times such as the Rio Tinto deposit. In fact, the world’s second largest mining Company **Rio Tinto** was formed by investors in 1873 to mine the ancient copper workings at Rio Tinto in the eastern IPB near Seville in southern Spain! However only after the discovery of the SUPER GIANT orebody of Neves-Corvo deposit (Southern Portugal) in 1977 has the true importance and potential of the IPB in Portugal become fully appreciated.
Figure 2. Contained metal within the world’s major VMS districts. Note that other metals Au, Ag, and Sn can also be important contributors to any individual deposit

Neves Corvo – A SUPER GIANT

Neves Corvo is classified as a Super Giant (>200Mt ore) deposit. It comprises seven discrete orebodies Neves, Corvo, Zambujal, Lombador, Graça, and the recently discovered Monte Branco and Semblana that all vary in geological style in regard to mineralisation style, sulphide content, metal assemblage and grade. (Figures 3 & 4).

The Neves Corvo deposit is owned and operated by Lundin Mining (TSX:LUN $A 5.5B Market Cap) and the most recently reported Mineral Reserve for the copper rich zones was 26Mt @ 2.7% Cu and 35 g/t Ag and for the zinc rich zones was 24Mt @ 7.2% Zn, 1.6% Pb and 67 g/t Ag and additional 50Mt and 83 Mt, respectively, are included in the resource (“Reserves and Resources Statement June 30 2016” - figures do NOT include past production).

Importantly the Neves Corvo orebody is a “blind” deposit meaning it does not outcrop at surface. The discovery of the Neves orebody in 1977 resulted from drill testing gravity anomalies with hole N2 intersecting 53m of massive sulphide mineralisation. Within one year of the Neves discovery the Corvo, Graça and Zambujal orebodies were discovered in step out exploration that focussed on prospective geology and targeting gravity and down-hole EM anomalies.

The discovery and dynamic resource expansion of Neves Corvo is an exemplary exploration success. Auroch has secured underexplored ground immediately along strike with similar geological potential and will employ a similar exploration approach.
Figure 3 Cross sectional view of drill hole results collared from underground drill positions through the copper-rich, massive-sulphide Zambujal orebody of the Neves Corvo Deposit (Source: Eurozinc Mining Corp presentation 2005).

Figure 4. 3-D block diagram illustration the size and complex shape of the Neves Corvo orebodies (source: http://www.lundinmining.com/i/pdf/Summary_Report_Neves-Corvo.pdf)
Alcoutim Project – Multiple Exploration Targets

The Alcoutim Project covers 576 square kilometres and lies immediately east and down plunge of the Super Giant Neves Corvo deposit in Eastern Portugal (Figures 1 and 5). The licence covers the interpreted down plunge extensions of the highly prospective Neves Corvo trend. Previous geophysical exploration has highlighted twenty-two targets that are characterised by coincident gravity and magnetic anomalies, modelling of the data suggests target depths of 700 to 1000m.

Major gravity highs are shown within the Alcoutim licence in Figure 5, similar anomalies focussed the initial Neves Corvo exploration. A series of small deposits of remobilised copper are present in the south of Neves Corvo which are spatially related to a series of NE-SW trending faults that post-date the VMS mineralisation. Similarly, deposits of remobilised copper are found in the south of the Alcoutim license which were mined in several places such as Cova dos Mouros. It is possible that these small deposits represent remobilised copper from mineralisation at depth and give further evidence to the prospectivity of the main gravity and magnetic anomalies.

Within the licence area there are multiple coincident gravity-magnetic and EM targets that are the focus for the first round of drilling due to commence almost immediately. Importantly the most intense gravity anomalies lie along the Neves Corvo structural trend Figure 5.

Figure 5. Location diagram for Land of Giants Project highlighting major magnetic anomalies and the vital Neves Corvo Trend – Also highlighted are the major gravity anomalies that will be the focus of the initial drill testing. Note the presence of several small oxide copper deposits to the south west of the main gravity targets and the similarity to the situation at Neves Corvo.
Auroch Exploration Program

Phase 1 drilling will comprise five diamond holes that will target five priority geophysical targets with coincident magnetic, gravity and EM anomalies. Down-hole geophysical surveys will be conducted after completion of each borehole which substantially increases the effective search area outside the immediate drill hole and allow for improved targeting on subsequent drilling.

A budget of ~A$1.4 million (Euro 1.1 million) has been agreed in respect of this Phase 1 drilling program that will result in Auroch holding 65% of the Alcoutim Project.

Initially the phase 1 program will target:

1. The source of the EM anomalies – likely sulphide rich volcanic or sedimentary rocks
2. The nature of the massive magnetic anomalies – likely mafic magmatic rocks which could have triggered VMS mineralisation
3. Gravity anomalies which are not directly associated with peak magnetic anomalies
4. Alteration haloes that surround VMS mineralisation – by comparing alteration indices from different holes it is possible to generate vectors towards ore

An early success supporting the potential of the project would be if the drilling intersected sulphide mineralisation. In VMS districts this can be a stockwork of sulphide veins (like at Rio Tinto), disseminated sulphides in black shales (Neves) or the ultimate prize of massive sulphide mineralisation such as at Zambujal (Neves Corvo) and highlighted in Figure 4.

Phase 2 exploration will build on the results from Phase 1, of prime importance will be vectors towards geophysical and geochemical targets that are acquired during the phase 1 exploration. It is expected that drilling will commence in the second quarter of 2017 and importantly all approvals for drill pads, water abstraction and the work itself have already been acquired by the vendor.

Licence Details

The Alcoutim project comprises the MN/PP/008/14 exploration licence granted 23/09/2014 covering 576 km². The licence includes exploration rights for mineral deposits of gold, silver, copper, zinc, lead, tin, tungsten, antimony and associated metals and is valid for three years with a maximum of two one-year extensions. In Portugal, a fifty percent reduction of the total area is mandatory on the first and second renewals.
Exploration in Portugal

Portugal is a modern European country with first class infrastructure, judicial security, transparent mining laws. Known for its tourism and wines Portugal has a Government which sees mining as significant part of its forward looking economic prosperity and welcomes new investors.

Throughout Portugal exploration activity is at a high level considering the relative small extent of the country (92,2000 Km²). Several international companies (Lundin Mining, Almonty Industries, Medgold Resources, Dakota Minerals, Colt Resources & Avrupa Minerals) conduct exploration focus on base and precious metals and more recently lithium.

Despite this, the country remains largely overlooked and underexplored. The mining of mineral resources in Portugal was initially carried out by the Phoenicians, but was intensely developed by the Romans, so the country has a long tradition in mining.

Portugal has world-class well-developed infrastructure; modern roads, efficient power and communication networks and easily accessible ports and airports and is ranked 26th out of 160 countries by the World Bank in their 2014 Logistics Performance Index. The country has significant and favourable European Union and Portuguese government financial incentive programs, which can be benefited from as the projects advance towards the development and production phases.

Republic of Portugal Facts:

Government: Parliamentary democracy, member of EU
Population: 11 million
Capital: Lisbon (~2.5 million)
GDP Growth: 1.5% (2015)
GDP per Capita: US$ 28,000 (2015)
Corporate Tax: 25%
Royalty on Base Metals: negotiated

Currently operating large mines in Portugal:

- Neves Corvo - Cu, Zn, Ag, Sn, Ag, Au
- Aljustrel – Zn, Cu, Ag
- Panasqueira – W, Sn, Cu
Copper – a forgotten component of the renewable story

With the rush to develop Electric Vehicles (EV) and the market interest in lithium and cobalt as a crucial elements of new battery technology, copper will become an important input into clean green global energy. For example, the average car using a combustion engine requires around 25kg of copper, however an EV vehicle will require around 75kg of copper an increase of 300%.

![Figure 6. Each new generation of cars requires more copper wiring.](image)

Copper is the highest rated thermal and electrical conductor among engineering metals; all power systems utilize copper to generate and transmit energy with maximum efficiency and minimum environmental impact. Because of coppers excellent physical electrical properties there is also predicted to be a significant upswing in electrical infrastructure. For example, wind turbines contain 3-4 tons of copper per megawatt.

**Copper is and will remain an important factor in the future of renewable energy development.**

**Appendix 1 - Key Commercial Terms**

Auroch has entered into a binding agreement with the owners of the Alcoutim Project to acquire up to a 75% interest in the Project by farming into the incorporated joint venture which owns the Project.

The Project is wholly owned by a joint venture company Bolt Resources Pty Ltd (*Bolt*), through which Auroch and the other joint venture participants will hold their interest in the Project.

Subject to satisfaction of certain draw down conditions, Auroch will loan €1,100,000 to Bolt to fund ongoing operations, including an exploration drilling programme (initially for approximately 3,000m of drilling and up to 5,600m of drilling) (*Loan*).

On successful renewal of the prospecting licence which comprises the Project by the Portuguese government, the Loan will be converted into an initial 65% equity interest in Bolt (with €90,000 to be repayable to Auroch on repayment of performance bonds lodged with the Portuguese government in relation to the Project).

If the prospecting licence is not successfully renewed by 31 December 2017, Auroch will have the right to terminate the agreement and the Loan will be repayable within 7 days of such termination.

Auroch will also have the right, but not the obligation to, subscribe for a further 10% of Bolt for a further €960,000, to take its interest in Bolt up to 75%, together with a loan to Bolt of €40,000
for the bond payment due at that time (making it a total payment of €1 million). Funding post the second tranche will be pro rata by the joint venture participants (or subject to dilution).

The joint venture partner for the Alcoutim Project is a member of the Gecko Group of Companies in Namibia. Apart from developing its own projects in the mineral & chemical industry, Gecko focusses on providing services to the mining industry of Namibia by providing exploration drilling, chemical analyses, R&D metallurgical test work, civil engineering and construction, process design and plant construction as well as contract mining.

Disclaimer

Certain statements and information contained in this document are forward-looking statements based on the Company’s future plans, objectives and goals. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Actual results could differ materially depending on risks generally inherent in the ownership and operations of mining properties and the production and sale of associated products. The Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Dr. Andrew Tunks and represents an accurate representation of the available data. Dr. Tunks (Member Australian Institute Geoscientists) is the Company’s Chief Executive Officer and has sufficient experience that is 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 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Dr. Tunks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.