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ABN 63 111 306 533

QUARTERLY REPORT TO SHAREHOLDERS

for the three months ended
30 September 2020

ASX Code - EME

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This report and further information are available on Energy Metals' website at:

www.energymetals.net

HIGHLIGHTS

Bigrlyi JV Project (NT)

Uranium mineralisation model completed for the Anomaly-15 deposit.

Anomaly-4 to Anomaly-7, and Anomaly-15 re-optimised open pit designs completed; other re-optimisation studies underway.

Field programs in the NT remain suspended due to coronavirus travel restrictions.

FINANCIAL

Energy Metals had approximately $16.34M in cash and 209.7M shares on issue at 30 September 2020.

Shuqing Xiao
Managing Director
28 October 2020

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INTRODUCTION

Energy Metals (EME) is a dedicated uranium company with eight exploration projects located in the Northern Territory (NT) and Western Australia covering over 2,700 km² (Figure 1). Most of the projects contain uranium mineralisation discovered by major companies in the 1970s, including the advanced Bigrlyi Project (NT).

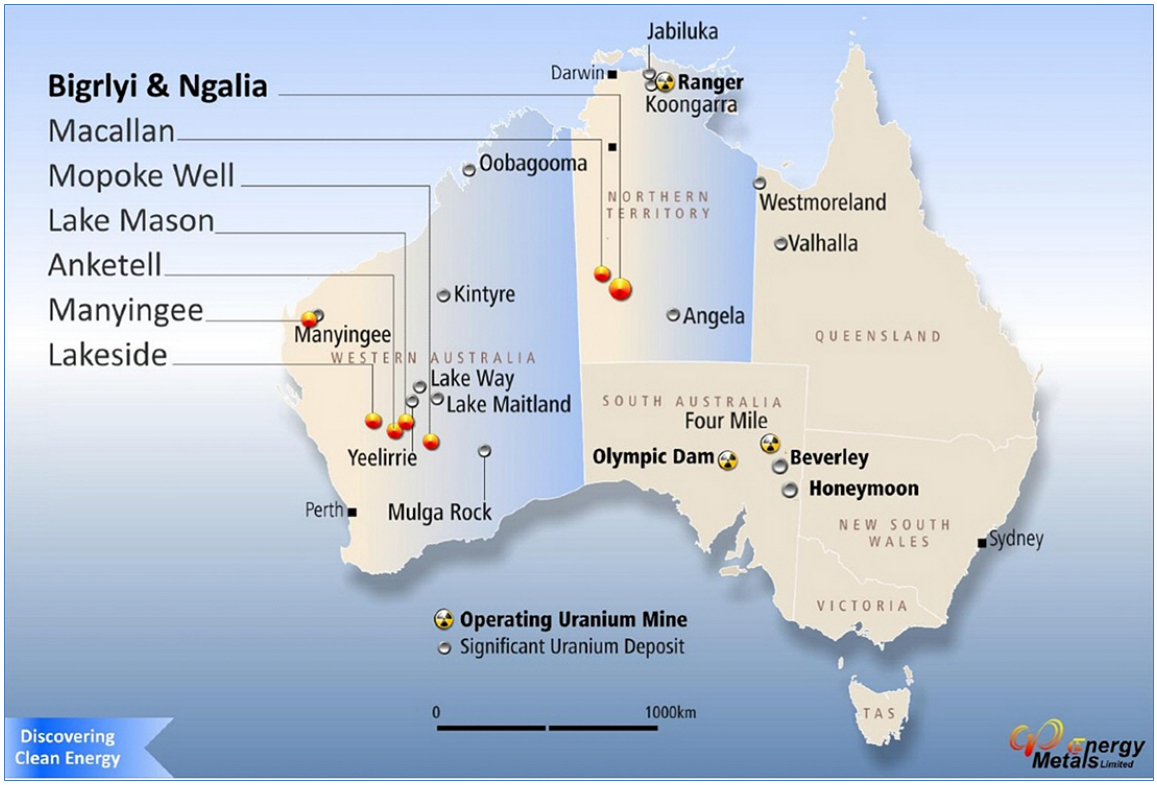


Figure 1 – Location of Energy Metals Projects

Energy Metals is well placed to take advantage of the favourable outlook for uranium as nuclear power continues to play an increasing role in reducing global carbon emissions.

China Uranium Development Company Limited, Energy Metals' largest shareholder (with 66.45% of issued capital), is a wholly owned subsidiary of CGN, a leading company in clean energy and nuclear power technologies in China and world-wide. As of 30 June 2020, the installed capacity of CGN's operating nuclear generating plants was 27,140MWe from 24 nuclear power units with five other power units of 5,780MWe capacity under construction in various locations across China. This unique relationship with CGN gives Energy Metals direct market exposure as well as access to significant capital and places the Company in a very strong position going forward.

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NORTHERN TERRITORY

Bigrlyi Joint Venture (EME 72.39%)

The Bigrlyi Joint Venture comprises 11 granted exploration licences in retention (ELRs), one granted EL, and several applications within the Ngalia Basin, located approximately 350km northwest of Alice Springs. EME operates the Joint Venture in partnership with Northern Territory Uranium Pty Ltd (NTU; a wholly-owned subsidiary of Marenica Energy Ltd, MEY), and with Noble Investments Pty Ltd (NIL), a private investment company that recently acquired the 6.79% interest of previous holder, Southern Cross Exploration NL (SXX).

The Bigrlyi Joint Venture has been the subject of significant exploration activity since 1973, including over 1,040 drill-holes, metallurgical test-work and mining studies focussed on the flagship Bigrlyi deposit, which comprises a number of sub-deposits over a 11km strike length (Figure 2). The Bigrlyi project is characterised by relatively high uranium grades, vanadium credits and excellent metallurgical recoveries. Further information is available in ASX announcements or from Energy Metals' website: www.energymetals.net.

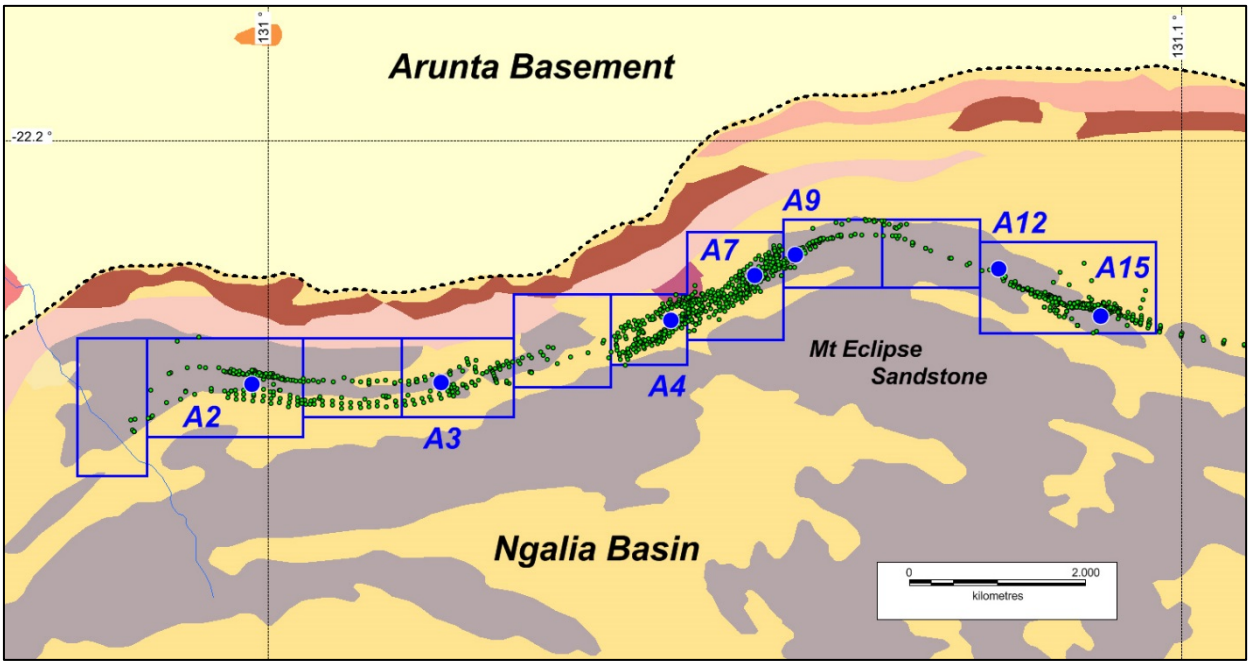


Figure 2 – Bigrlyi Joint Venture project area showing simplified geology (grey = Mt Eclipse Sandstone) with ELR tenement outlines (blue polygons); Anomaly-2 to Anomaly-15 (A2 to A15) sub-deposit locations (blue dots) and exploration drill-hole collars (green dots) are shown.

The historic Karins uranium deposit (Figure 3) is part of the Bigrlyi Joint Venture and a JORC-compliant resource estimate was released to the ASX in 2015. In 2015 a maiden JORC (2012) resource estimate was announced for the historic Sundberg deposit, which is part of the Bigrlyi Joint Venture, and a satellite of the larger Walbiri deposit (Figure 3).

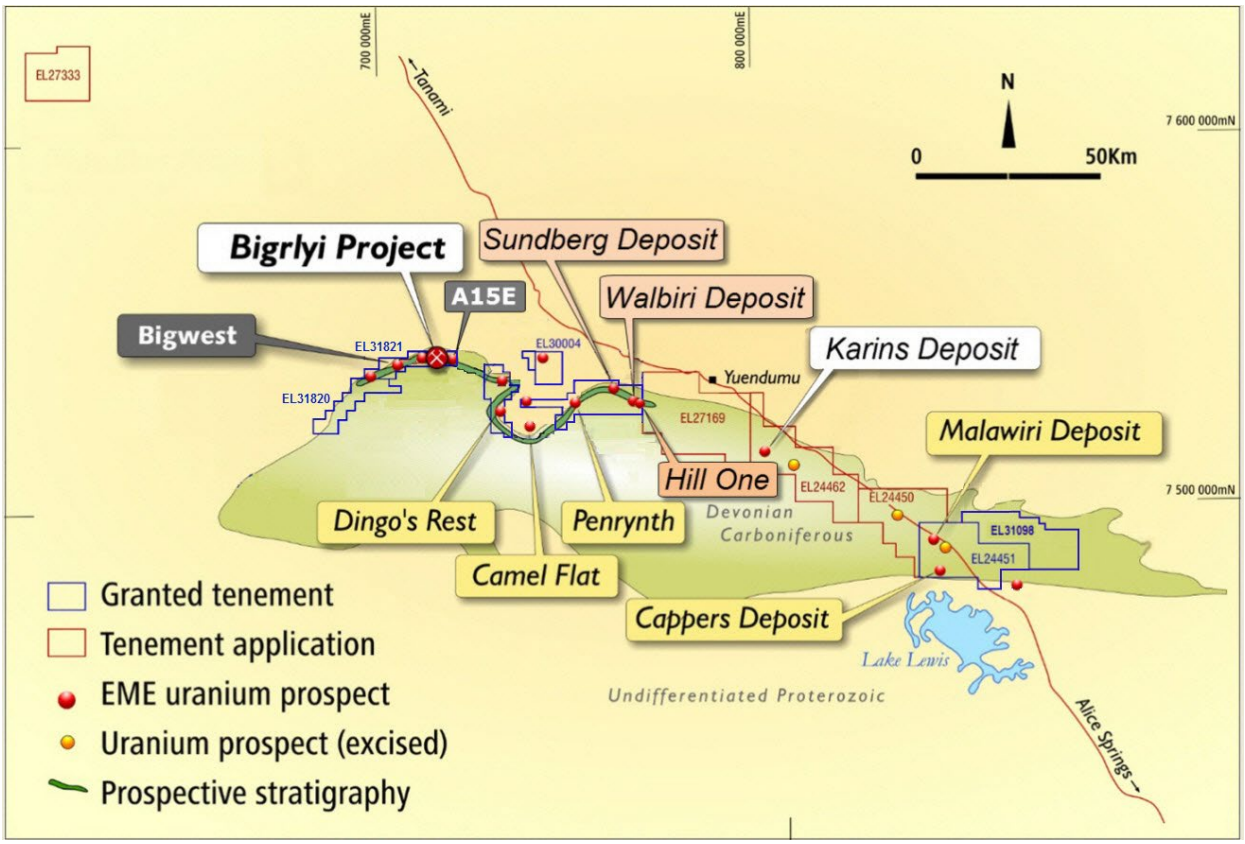


Figure 3 – Uranium deposits, occurrences and exploration target areas in the Ngalia Basin

Walbiri Joint Venture (EME 77.12%)

ELR45 covers part of the historical Walbiri deposit and part of the Hill One satellite deposit (Figure 3). The project is a joint venture with NTU, with EME as the operator. Energy Metals holds a 77.12% beneficial interest in the JV. A JORC (2012) mineral resource estimate was announced for the Walbiri deposit in 2015 confirming Walbiri as the second largest sandstone-hosted deposit in the Ngalia Basin after Bigrlyi. Last quarter, a partial relinquishment of 20% of the area of ELR45 was approved by NT Government following a prospectivity review late last year.

Malawiri Joint Venture (EME 76.03%)

ELR41 covers the historical Malawiri deposit. The project is a joint venture with NTU, with EME as the operator. Energy Metals holds a 76.03% beneficial interest in the JV and NTU holds a 23.97% interest. EME advanced the Malawiri project to JORC-compliant resource status with release of a mineral resource estimate on 14 December 2017.

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JV Activities (September 2020 Quarter)

Energy Metals is committed to improving the economics of its flagship Bigrlyi project and last year initiated a program to enhance the value of vanadium as a by-product commodity. At the time of writing the vanadium price is approx. $US 6/lb V_2O_5, which is near the long-term average vanadium price; this compares with the current uranium spot price of $US29/lb U_3O_8.

Retention Licence Amalgamation. During the quarter an application was lodged with the Mineral Titles division of NT DITT to amalgamate the ten ELRs (ELR46 to ELR55) that cover the Bigrlyi deposit. The purpose of the amalgamation is to reduce unnecessary duplication in administration and tenement management costs. The application is expected to be approved next quarter.

Bigrlyi Mineralisation Modelling. Late last year, a new vanadium mineralisation model together with an updated Exploration Target for vanadium was announced for the Bigrlyi deposit (refer ASX release of 4 December 2019). Earlier in the year the mineralisation model for uranium along the Anomaly-4 to Anomaly-9 trend was updated, and this quarter, an updated uranium mineralisation model for the Anomaly-15 deposit was completed. This program is on-going and the results will form the basis for planned resource estimation, pit design and economic model updates.

Pit Design Re-optimisation. A program to re-optimise the pit design for the Anomaly-4 to Anomaly-7 corridor and for the Anomaly-15 sub-deposit progressed during the quarter. The aim of the study is to improve open-pittable resources, which is expected to have a positive impact on project economics. Previous open pit designs did not utilise all available geotechnical information and a part of this program includes an on-going update of the geotechnical database.

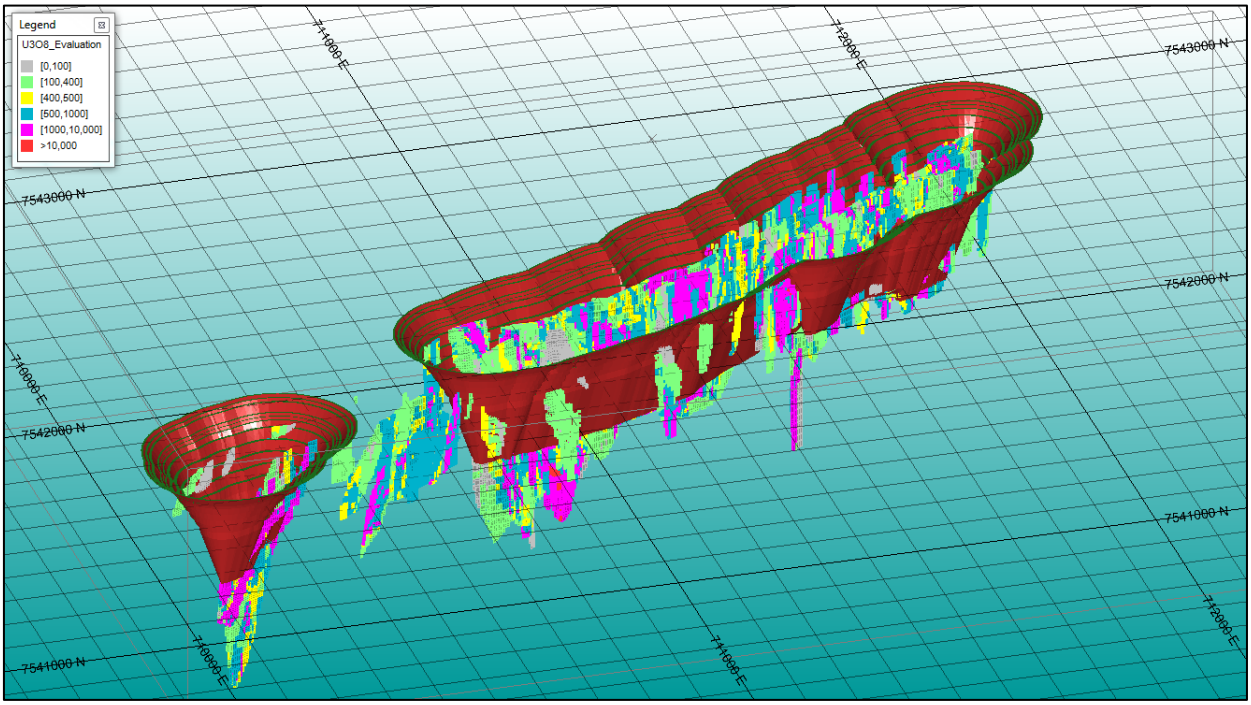


Figure 4 - A4 to A7 sub-deposit corridor re-optimised open pit design in relation to the U_3O_8 mineralisation model. Highest grades are shown in the purple to red colours.

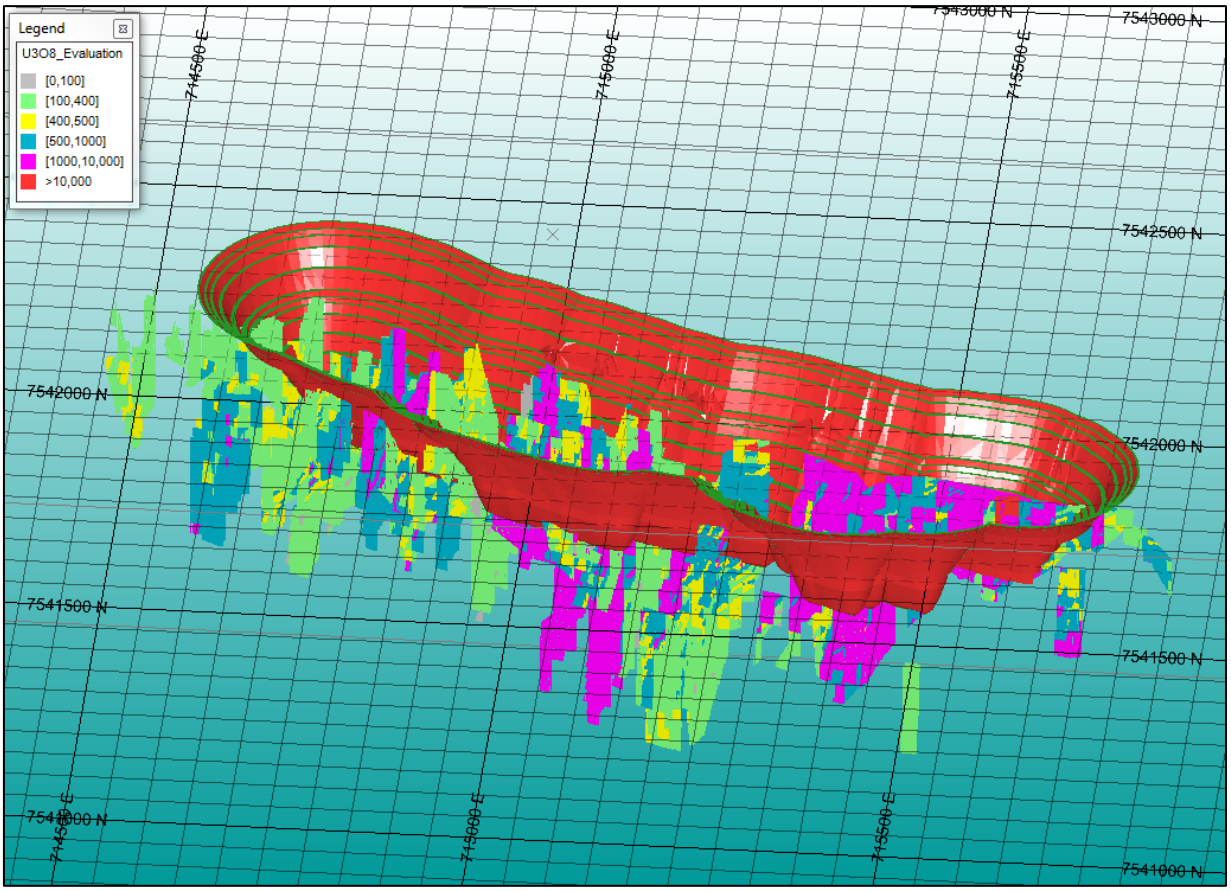


Figure 5 – A15 sub-deposit re-optimised open pit design in relation to the U_3O_8 mineralisation model. Highest grades are shown in the purple to red colours.

Figures 4 and 5 show preliminary open pit designs optimised for maximum resource recovery within available geotechnical constraints. The potentially mineable uranium resource from these pits amounts to approximately 7.2kt U_3O_8 at the 400ppm cut-off level. This represents an increase in surface-mineable uranium resources of more than 40% compared with the 2011 Pre-feasibility study. The pit optimisation and related work will continue into 2021.

Publication of Bigrlyi Deposit Model Article. A scientific article outlining important features of the Bigrlyi deposit, including a new deposit model, was published in the on-line journal *Minerals* in October. The article can be downloaded from the following link:

https://www.mdpi.com/2075-163X/10/10/896/pdf

Field Program Suspension. This year's field exploration and camp maintenance programs remain suspended indefinitely due to coronavirus land access restrictions and state border closures. At this stage it is unknown when field activities will be able to resume.

Ngalia Regional Project (EME 100%)

The Ngalia Regional project comprises twelve 100% owned exploration licences, applications and exploration licences in retention located in the Ngalia Basin, between 180km and 350km northwest of Alice Springs in the Northern Territory (Figure 3). The tenements are contiguous and enclose the Bigrlyi project as well as containing a number of uranium occurrences, including part of the historic Walbiri deposit and the Cappers deposit.

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Nine of the twelve Ngalia Regional exploration licences have been granted; the three remaining applications (ELs 24450, 24462 and 27169) are located on Aboriginal Freehold (ALRA) land and Energy Metals is negotiating access agreements with the Traditional Owners through the Central Land Council (CLC) (Figure 3).

A number of high priority targets have been identified on the 100% owned tenements and Energy Metals is undertaking a program of systematic evaluation of these prospects, some of which were originally discovered in the 1970s. In February 2014, EME announced maiden resource estimates for the Bigwest, Anomaly-15 East and Camel Flat satellite deposits and, in October 2015, EME announced inferred JORC resources for the historical Walbiri, Sundberg and Hill One deposits (Figure 3).

Activities (September 2020 Quarter)

A prospectivity and tenement review was completed late last year and the recommended tenement changes, including partial relinquishments on EME's eastern Ngalia Basin tenure (EL24451 and EL31098), were completed and approved last quarter. All statutory obligations have now been met.

No other activities this quarter.

Macallan (EME 100%)

The Macallan project comprises a single exploration licence application (ELA27333), located 460 km NW of Alice Springs and 140 km from Bigrlyi. The tenement covers a strong 3km-wide bullseye radiometric anomaly. The Macallan anomaly lies within the Wildcat Palaeovalley, an ancient valley system that drains into Lake Mackay to the southwest. The Macallan anomaly most likely represents a surficial accumulation of uranium minerals associated with the Wildcat palaeodrainage system, although other explanations are possible.

ELA27333 lies on land under Aboriginal Freehold title and access is subject to negotiation with the Traditional Owners and the CLC. The negotiation period has been extended until October 2021 and the CLC are currently reviewing EME's comments on a draft exploration agreement.

WESTERN AUSTRALIA

Manyingee (EME 100%)

The Manyingee project comprises retention licence application R08/3, underlying tenement E08/1480 and exploration licence application E08/2856, which are located 85 km south of Onslow. The project is located adjacent to mining leases containing Paladin Energy's Manyingee resource, a stacked series of buried, palaeochannel-hosted, roll-front uranium deposits. In November 2016 EME announced an initial JORC (2012) Mineral Resource Estimate for the Manyingee East uranium deposit, which is located up-channel of Paladin's Manyingee deposit.

Law firm Gilbert+Tobin were appointed in 2019 to assist Energy Metals with landholder objections to grant of the Manyingee title applications. Matters progressed during the quarter;

however, the Warden's Court hearing has been postponed while various legal matters are considered.

Other Deposits - Mopoke Well, Lakeside, Anketell, Lake Mason (all EME 100%)

These four projects are surficial uranium deposits associated with calcrete or calcretised sediments related to ancient drainage and/or lacustrine systems. All projects are located on granted retention licences and mineral resource estimates under the JORC 2004 or 2012 codes have previously been announced for each deposit. Under present uranium market conditions, the deposits are not economic, however, the market is expected to show improvement in the next 4-5 years and Energy Metals will continue to monitor the situation with a view to re-starting exploration and development activities in line with the prevailing uranium price.

There was no activity during the period.

CORPORATE

Energy Metals remains in a strong financial position with approximately $16.34 million in cash and bank deposits at the end of the quarter, forming a solid resource for ongoing exploration and project development.

As disclosed under item 6.1 in the Appendix 5B, Energy Metals paid $60,000 in total during the quarter to related parties and their associates. The payments represented amounts paid to the directors, including salaries, non-executive director's fee and consulting fees.

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Table 3: Tenement Information as required by listing rule 5.3.3

TENEMENT*	PROJECT	LOCATION	INTEREST	CHANGE IN QUARTER
Northern Territory				
EL24451	Ngalia Regional	Napperby	100%	-
EL31098	Ngalia Regional	Napperby	100%	-
EL31820	Ngalia Regional	Mt Doreen	100%	-
EL31821	Ngalia Regional	Mt Doreen	100%	-
EL32113	Ngalia Regional	Mt Doreen	100%	-
ELR31754	Ngalia Regional	Mt Doreen	100%	-
ELR31755	Ngalia Regional	Mt Doreen	100%	-
ELR31756	Ngalia Regional	Mt Doreen	100%	-
ELRA32552	Bigrlyi Joint Venture	Mt Doreen	72.39%	**Application for Amalgamated Title**
ELR46	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR47	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR48	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR49	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR50	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR51	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR52	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR53	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR54	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR55	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR41	Malawiri Joint Venture	Napperby	76.03%	-
ELR45	Walbiri Joint Venture	Mt Doreen	77.12%	-
EL30004	Ngalia Regional	Mt Doreen	100%	-
ELA27169	Ngalia Regional	Yuendumu	100%	-
EL30144	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELR31319	Bigrlyi Joint Venture	Mt Doreen	72.39%	-
ELA24462	Ngalia Regional	Yuendumu	100%	-
ELA24450	Ngalia Regional	Yuendumu	100%	-
ELA27333	Macallan	Tanami	100%	-
MCSA318-328	Bigrlyi Joint Venture	Yuendumu	72.39%	-
MLNA1952	Bigrlyi Joint Venture	Yuendumu	72.39%	-
Western Australia				
E08/1480	Manyingee	Yanrey	100%	-
E08/2856	Manyingee	Yanrey	100%	-
R08/3	Manyingee	Yanrey	100%	-
R21/1	Lakeside	Cue	100%	-
R29/1	Mopoke Well	Leonora	100%	-
R57/2	Lake Mason	Sandstone	100%	-
R58/2	Anketell	Sandstone	100%	-

* EL = Exploration Licence (NT); ELA = Exploration Licence Application (NT); ELR = Exploration Licence in Retention (NT); ELRA = Exploration Licence in Retention Application (NT); MCSA = Mineral Claim (Southern) Application (NT); MLNA = Mineral Lease (Northern) Application (NT); E = Exploration Licence (WA); R = Retention Licence (WA).

Competent Persons Statement

Information in this report relating to exploration results, data and cut-off grades is based on information compiled by Dr Wayne Taylor and Mr Lindsay Dudfield. Mr Dudfield is a member of the AusIMM and the AIG. Dr Taylor is a member of the AIG and is a full time employee of Energy Metals; Mr Dudfield is a consultant to Energy Metals. They both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor and Mr Dudfield both consent to the inclusion of the information in the report in the form and context in which it appears.

The information discussed in this report relating to mineralisation modelling, exploration targets and metallurgical test-work results is based on information compiled by Dr Wayne Taylor and Mr Daniel Jordan. Dr Taylor and Mr Jordan are both members of the Australian Institute of Geoscientists (MAIG) and full-time employees of Energy Metals Ltd. They both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor and Mr Jordan both consent to the inclusion of the information in the report in the form and context in which it appears.

This report references mineral resource estimates and/or related information that 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.

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