

ABN 63 111 306 533

QUARTERLY REPORT TO SHAREHOLDERS

for the three months ended 30 June 2021

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)

Ore beneficiation and carbonate rejection study initiated.

Field work temporarily suspended due to Covid-19 assessed risk.

FINANCIAL

Energy Metals had approximately \$15.71M in cash and 209.7M shares on issue at 30 June 2021.

存树青

Shuqing Xiao Managing Director 26 July 2021

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 and associated vanadium mineralisation discovered by major companies in the 1970s, including the advanced Bigrlyi Project (NT).

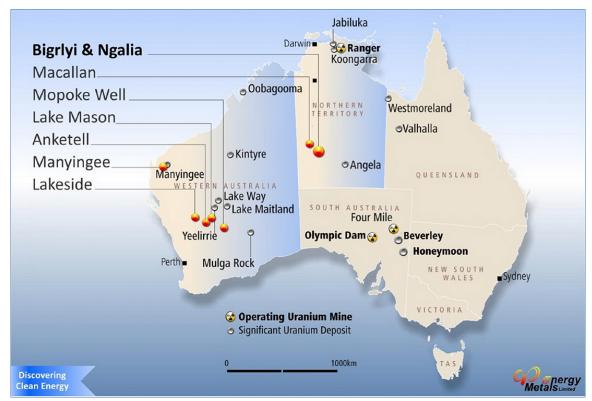


Figure 1 – Location of Energy Metals Projects

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 31 December 2020, the installed capacity of CGN's operating nuclear generating plants was 27,140MWe from 24 nuclear power units with seven other power units of 8,210MWe 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.

Market Update. At the time of writing the uranium spot price is \$US 32.50/lb U_3O_8 , up over 35% since early 2020, and the vanadium price has risen to \$US 9.30/lb V_2O_5 , about 25% above long-term averages. On the supply side, several of the world's largest uranium mines have ceased production (Australia's Ranger mine and Niger's Cominak mine). These mines provided around 6% of global uranium production in 2019, although this is likely to be offset by the restart of Cameco's Cigar Lake uranium mine in Saskatchewan in coming months. Nevertheless, the fundamentals appear increasingly appealing for the uranium sector with medium and long-term supply deficits predicted. Market analysts believe nuclear energy utilities will have to act this

year to cover a shortage of long-term uranium contacts from 2023.

Around the world, nuclear energy is recognised as an essential element of the clean energy mix and a fundamental component of the 'decarbonisation' policies of world economies. New technology based on small modular nuclear reactors (SMRs), which can be substituted for decommissioned coal-fired plants, are expected to become a significant source of additional demand in the near future. A recent study by the US's Idaho National Laboratory predicts significant future market growth for SMRs of 5-20 MWe capacity, so-called 'microreactors', which could be deployed in off-grid, remote or island sites, where energy supplies may be unreliable. Market research analysts predict a rally in uranium prices over the next few years to reach approximately US\$50/lb by 2024.

NORTHERN TERRITORY

Bigrlyi Joint Venture (EME 72.39%)

The Bigrlyi Joint Venture comprises two 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 Elevate Uranium Ltd, EL8), and with Noble Investments Pty Ltd (NIL), a private investment company that holds a 6.79% interest.

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 on ELR32552 (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.

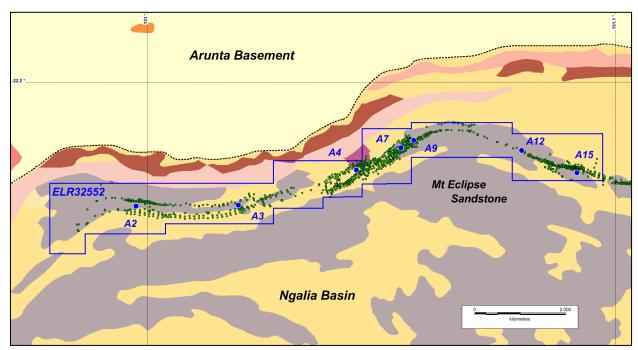


Figure 2 – Bigrlyi Joint Venture project area showing simplified geology (grey = Mt Eclipse Sandstone) with the outline of amalgamated ELR 32552 shown in blue; Anomaly-2 to Anomaly-15 (A2 to A15) sub-deposit locations (blue dots) and exploration drill-hole collars (green dots) are shown.

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).

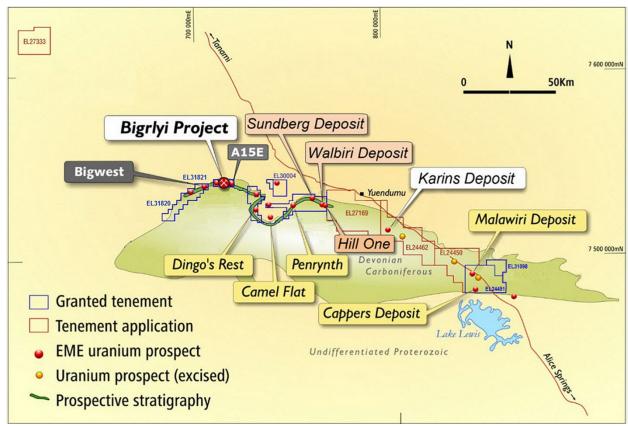


Figure 3 – Uranium deposits, occurrences and exploration target areas in the Ngalia Basin

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 year, a partial relinquishment of 20% of the area of ELR45 was approved by NT Government following a prospectivity review.

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.

JV Activities (June 2021 Quarter)

Recent exploration work has focussed on the re-optimisation of various aspects of the Bigrlyi Project 2011 Prefeasibility Study (PFS). This work is aimed at enabling key components of the project to be re-started in a timely manner once the uranium market recovers. The work is also designed to increase the level of confidence in geological, mining, processing and economic aspects of the project. In addition to uranium, the Bigrlyi deposit contains a target resource of vanadium of approximately 44,000 tonnes V_2O_5 within a mineralised envelope that is more than three times the size of the present uranium resource volume (refer to the ASX release of December 2019 and the caveats therein). Energy Metals is committed to improving the economics of its flagship Bigrlyi project and a program to enhance the value of vanadium as a by-product commodity is on-going.

Field Program 2021. A field visit to site took place in April but because of the on-going Covid-19 situation affecting much of Australia, field activities have currently been suspended due to assessed travel-related risk.

Ore Beneficiation Study. A program of ore beneficiation test-work is currently in the final stages of planning with the dual aims of upgrading run-of-mine uranium and vanadium grades, and the rejection of carbonate gangue to reduce acid consumption. A successful program would have a positive impact on project economics. Energy Metals is encouraged by recent positive ore beneficiation test results from the Kayelekera and Angela uranium deposits, which are both sandstone-hosted uranium deposits similar in style to the Bigrlyi deposit (refer to ASX: LOT Lotus Resources Ltd announcement of 05 July 2021 and ASX: EL8 Elevate Uranium Ltd announcement of 29 October 2020).

Deep uranium potential study. In order to expand the future resource base of the project, a review of the uranium potential in the deeper, poorly-tested part of the Bigrlyi deposit, below about 250m depth, is in progress.

Karins Deposit Historical Tenements. During the quarter Energy Metals was advised by the Minerals Titles division of NT DITT that eleven historical Mineral Claim applications (MCS318 to 328) that partly cover the Karins deposit, would be refused by the Minister because the titles are not compliant with the current Minerals Titles Act and no suitable replacement title exists that would allow them to be progressed to grant. DITT will refund the original application fees. The Karins deposit remains covered by historical ML application MLNA1952, and the surrounding ground is under application by Energy Metals (ELA24462), so there is no title or ownership risk resulting from this refusal.

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.

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 (June 2021 Quarter)

Field work visits were conducted in April but no other exploration activities were undertaken this quarter, except for routine Government compliance.

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 was appointed in 2019 to assist Energy Metals with landholder objections to grant of the Manyingee title applications. No significant progress was made this quarter while the outcome of various, related legal matters is awaited.

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.

The renewal of the Lake Mason licence was approved by DMIRS this quarter; Retention Licence renewal notifications for the Anketell and Mopoke Well projects are pending.

CORPORATE

Energy Metals remains in a strong financial position with approximately \$15.71 million in cash and bank deposits at the end of the quarter, forming a solid resource for ongoing exploration and project development.

ANNUAL GENERAL MEETING

Energy Metals' Annual General Meeting was held on 28 May 2021 at the Company's office. All resolutions were carried by poll (refer to ASX announcement of 28 May 2021).

As disclosed under item 6.1 in the Appendix 5B, Energy Metals paid \$73,000 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.

Table 1: Tenement Information as required by listing rule 5.3.3

TENEMENT*	PROJECT	LOCATION	INTEREST	CHANGE IN QUARTER
	Nor	thern 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%	-
ELR32552	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%	Historical Non-Compliant Applications Refused
MLNA1952	Bigrlyi Joint Venture	Yuendumu	72.39%	-
	We	stern 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. Dr Taylor is a member of the Australian Institute of Geoscientists (MAIG) and a full-time employee of Energy Metals Ltd. He has 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 consents 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.