

Annual General Meeting 2023

Shuqing Xiao
Managing Director

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Information in this presentation relating to exploration results, data and cut off grades is based on information compiled by Dr Wayne Taylor. Dr Taylor is a member of the AIG. Dr Taylor is a full time employee of Energy Metals. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the “Australian 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.

All amounts in A\$ unless stated otherwise.

Australia's Uranium

Bigrlyi & Ngalia

Macallan

Mopoke Well

Lake Mason

Anketell

Manyingee

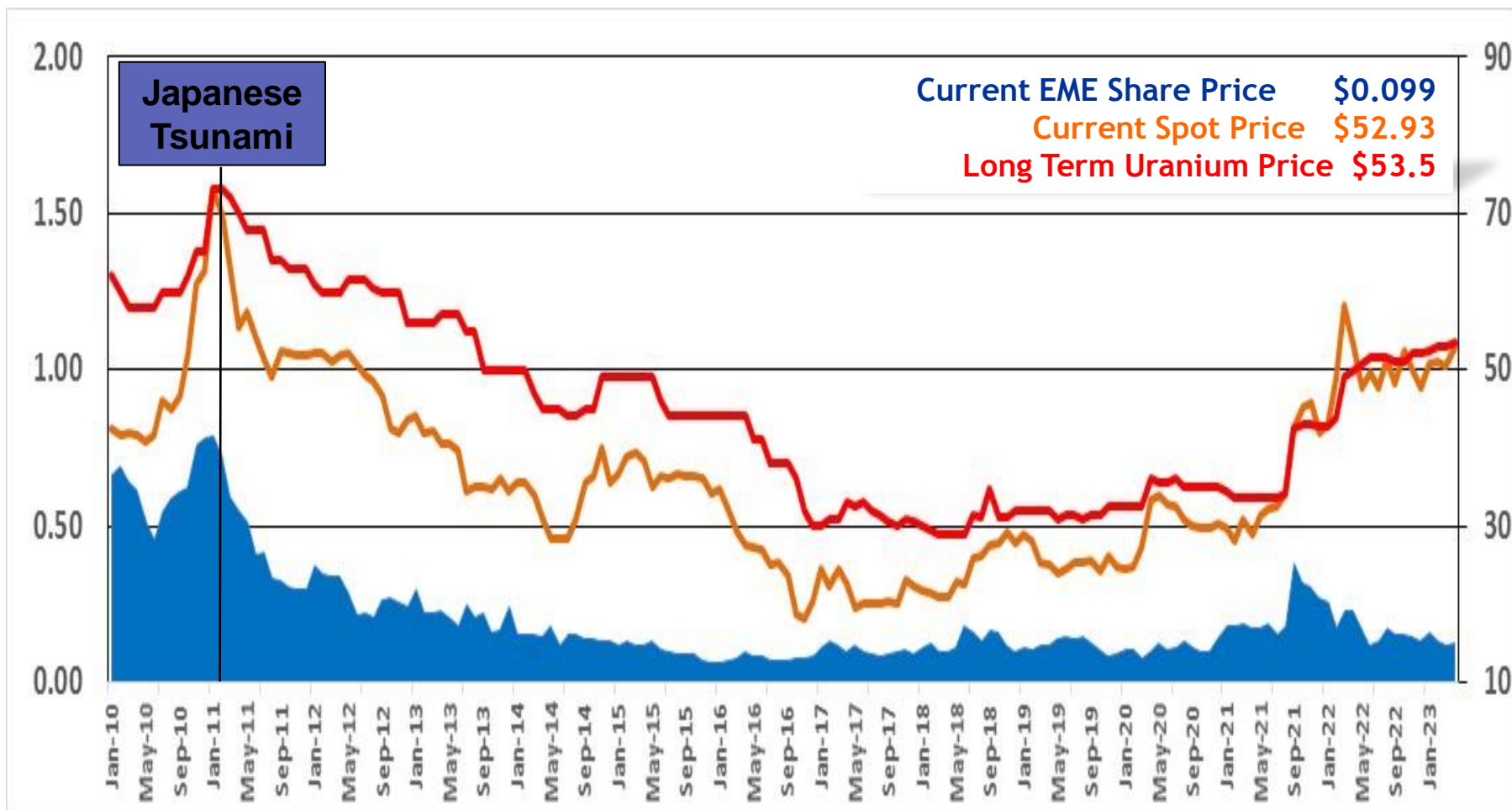
Lakeside



EME Share Price vs U3O8 Price from 2010

EME Share
Price Au\$

Uranium Price
US\$/lb U₃O₈



EME Capital Structure & Corporate Information

Issues shares & cash on hand

Shares on Issue	209.7M
Shareholders*	719
Cash & Bank (31 Dec 2022)	\$14.08M

* As at 13 April 2023

Major Shareholders

China Uranium Development Co.*	139.3M	66.45%
Ningbo Weisheng Dingxuan Equity	26.5M	12.66%
Jindalee Resources	10.9M	5.19%

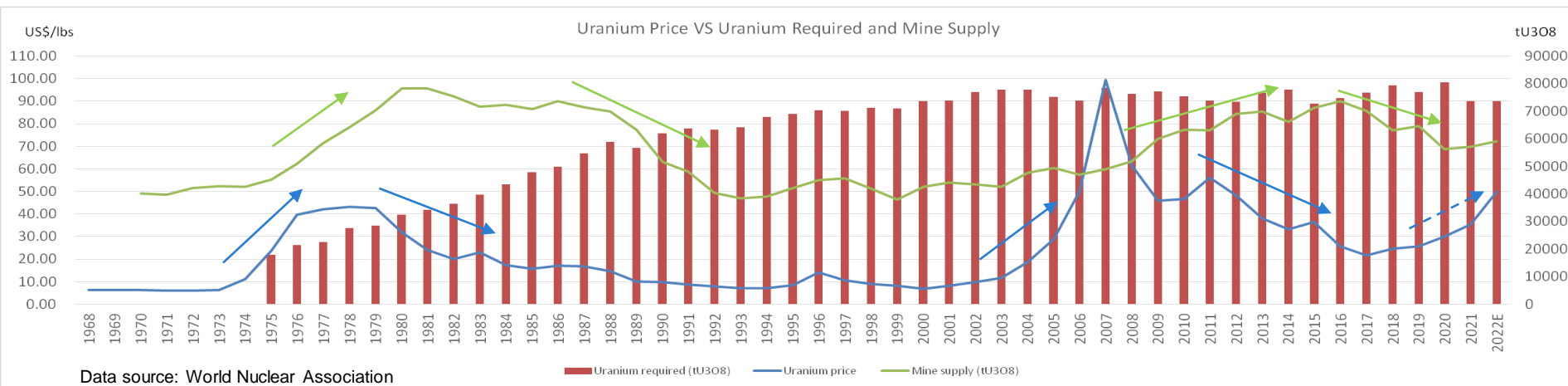
* A subsidiary of CGN Uranium Resources Company Ltd

Directors & Management

- Mr Yusheng Cai (Non-Executive Chairman)
- Mr Shuqing Xiao (Managing Director)
- Mr Lindsay Dudfield (Non-Executive Director)
- Ms Jan Macpherson (Non-Executive Director)
- Mr Jun Zhou (Non-Executive Director)
- Mr Zhe Gao (Non-Executive Director)
- Mr Zhe Xu (Non-Executive Director)
- Ms Xuekun Li (Company Secretary)
- Dr Wayne Taylor (Exploration Manager)

Uranium Market Review – Uranium Price

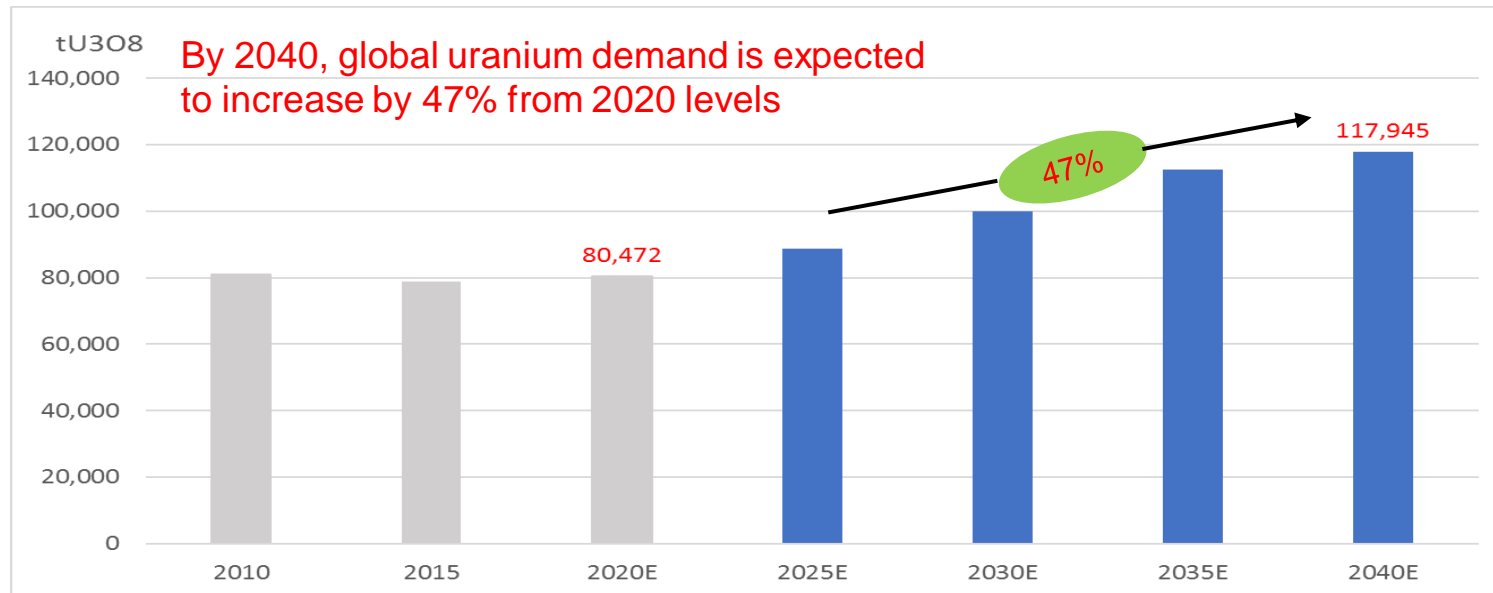
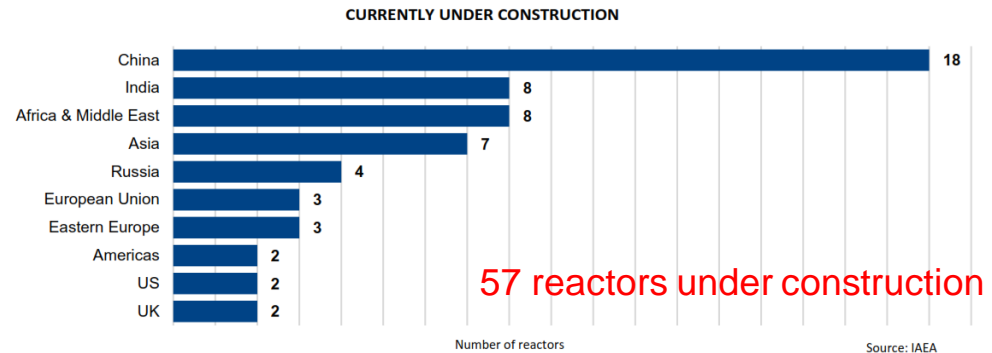
Uranium price has entered the upward cycle while mine supply is in the transition from the downward cycle to the upward cycle



Uranium Market Review - Uranium Demand

Stable and strong demand from nuclear reactors

- Uranium consumption has returned to pre-2011 levels.
- More reactors to be built in Asia and the Middle East with 57 reactors under construction and more planned reactors.
- Uranium requirements expected to continue to grow. It is expected that China will approve 10 new reactors each year from 2022 with 10 new reactors approved in 2022.

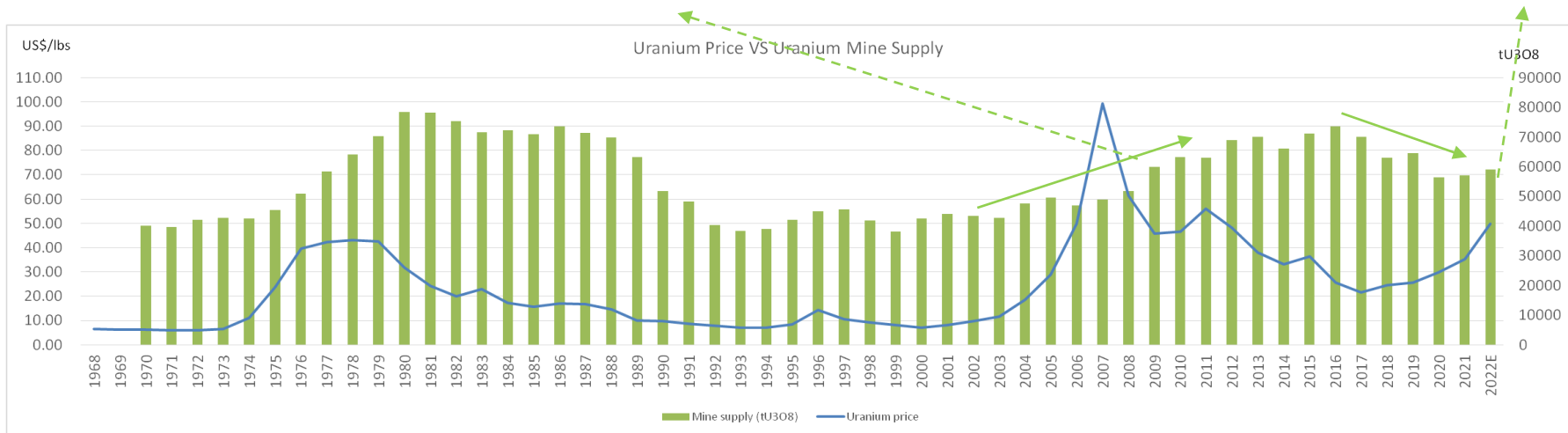
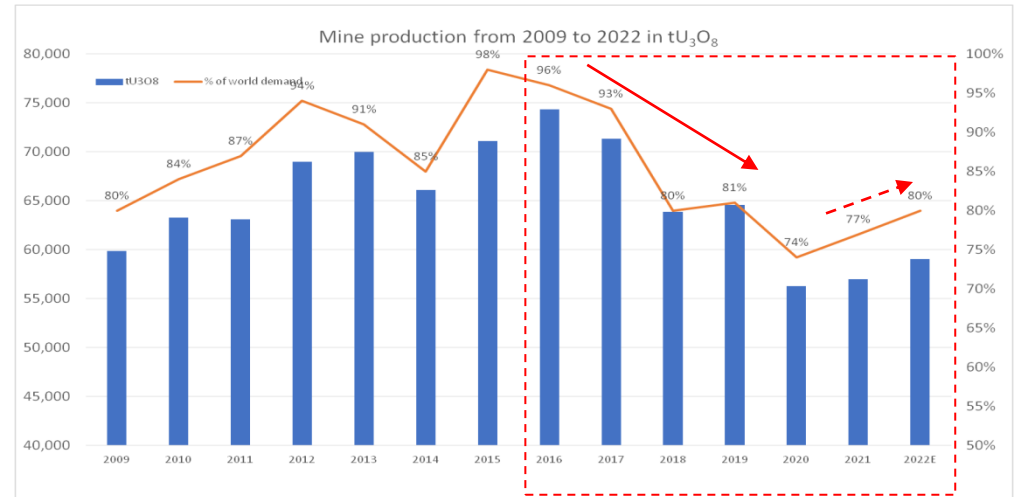


Data source: World Nuclear Association

Uranium Market Review - Mine Supply

Uranium supply cycles lagged behind uranium price cycles

- The upward supply cycle continued until 2013 following Fukushima in 2011
- The change of supply cycle from the upward to downward happened in 2016.
- Now the supply is in transition from the downward cycle to the upward cycle.



Data source: World Nuclear Association

Uranium Market Review - Mine Supply

Global Supply Cuts

Production curtailments have removed an estimated 77.6mlbs U_3O_8 from the market since 2014.

North America

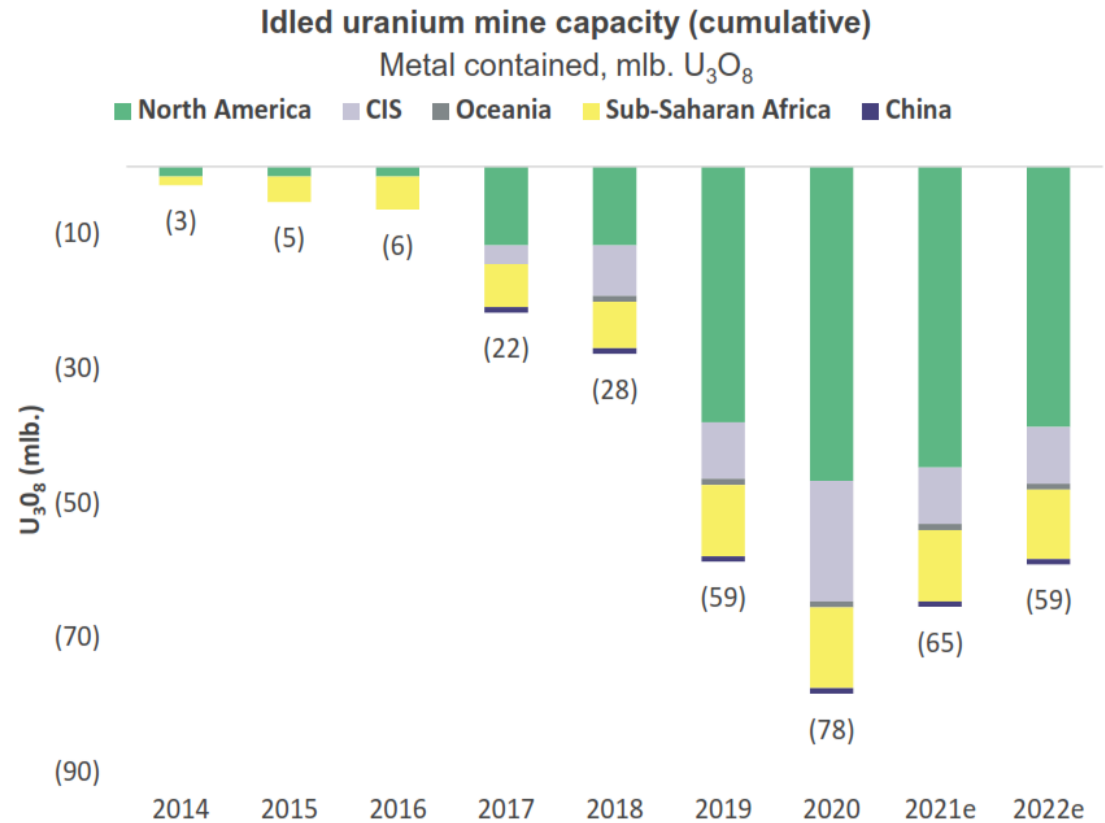
- Cameco has removed about 30mlbs from the market

Kazakhstan (CIS)

- Kazatomprom has limited its uranium production to 80% of its nameplate capacity since 2018
- Supply curtailment is expected to continue through 2023

Africa

- Paladin idled its Langer Heinrich operation
- Orano lowered the output of both of its mines in 2016

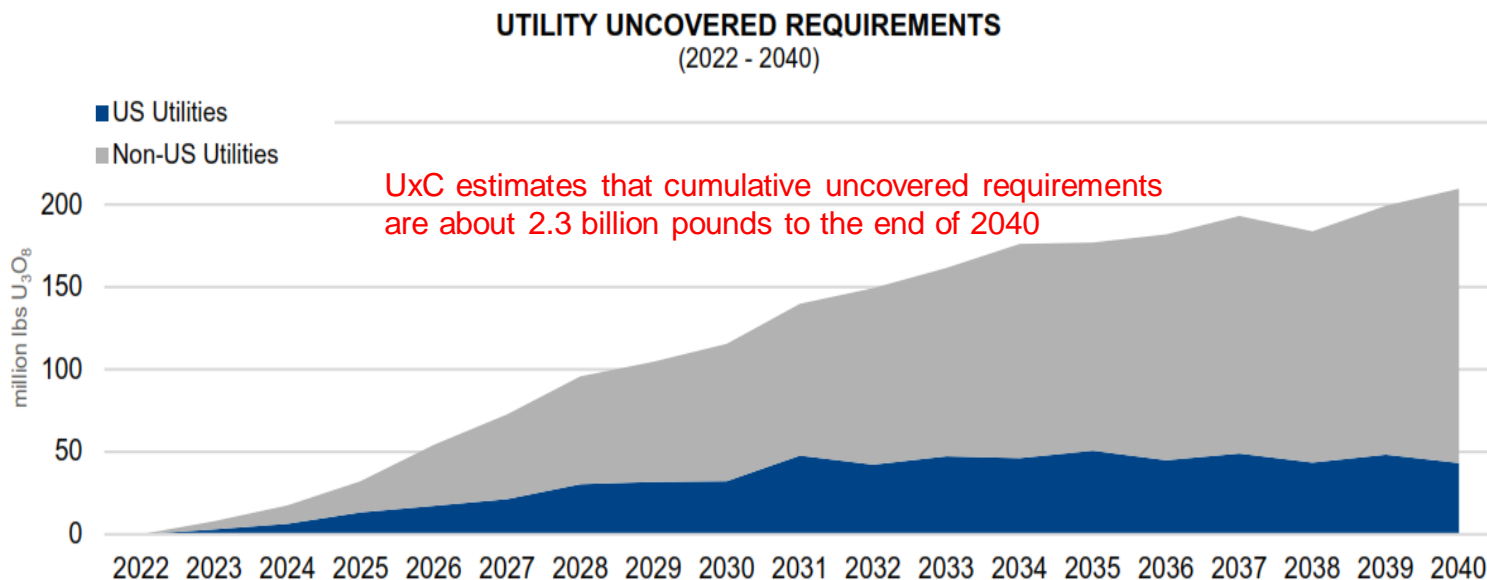


Data source: Public information of uranium companies

Uranium Market Outlook

Another uranium price upward cycle is ongoing

- Uranium requirements will grow steadily with cumulative uncovered requirements of about 2.3 billion pounds U₃O₈ to the end of 2040.
- Uranium supply is transitioning from the downward cycle to the upward cycle.
- The uranium price will continue to rise as the upward supply cycle progresses with the increase in uranium requirements from nuclear reactors.



Source: UxC estimates - December 31, 2022

Strong Shareholder Support – CGN URC

CGN Uranium Resources Co., Ltd (CGN-URC) is a wholly owned subsidiary of CGN, the largest nuclear utility in China

As of the end of December 2022



x26



29.38GW



53%
domestically

Units in operation: remains No.1 domestically, enters top 3 globally



x7



8.38GW



35%
domestically

Units under construction: the largest nuclear power builder

Professional nuclear power
operation services

Overhaul

Spare parts

Operation
preparation

Training

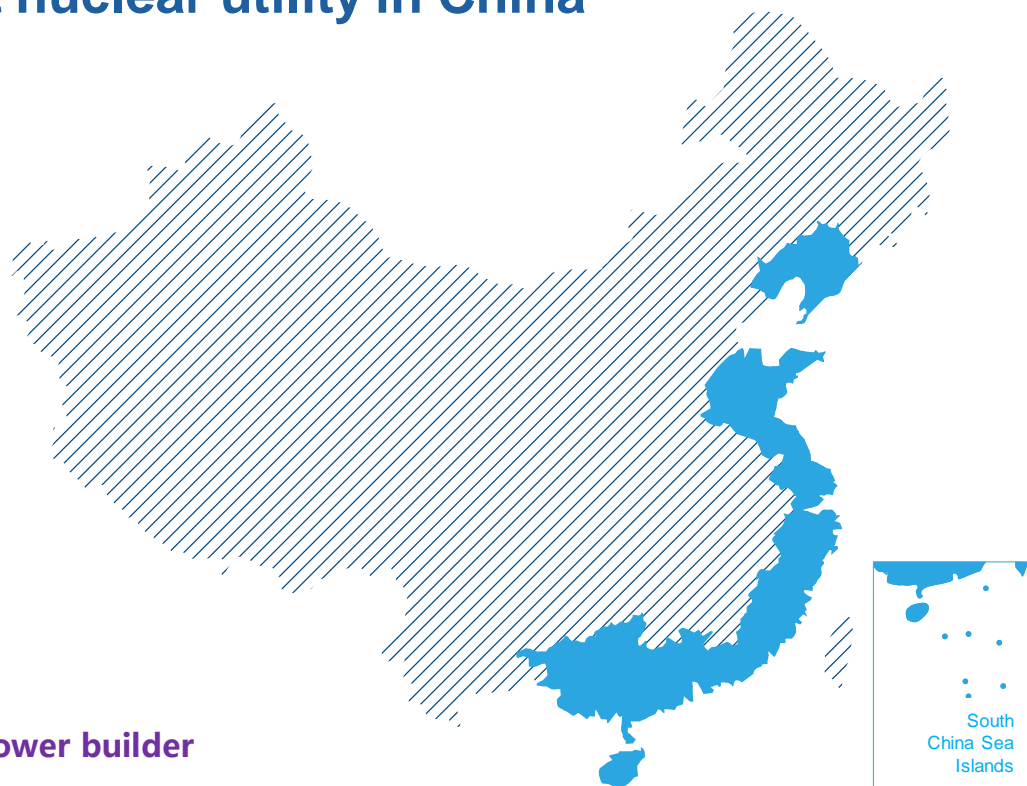
Specialized nuclear power engineering
construction general contracting services

Engineering
design

Engineering
procurement

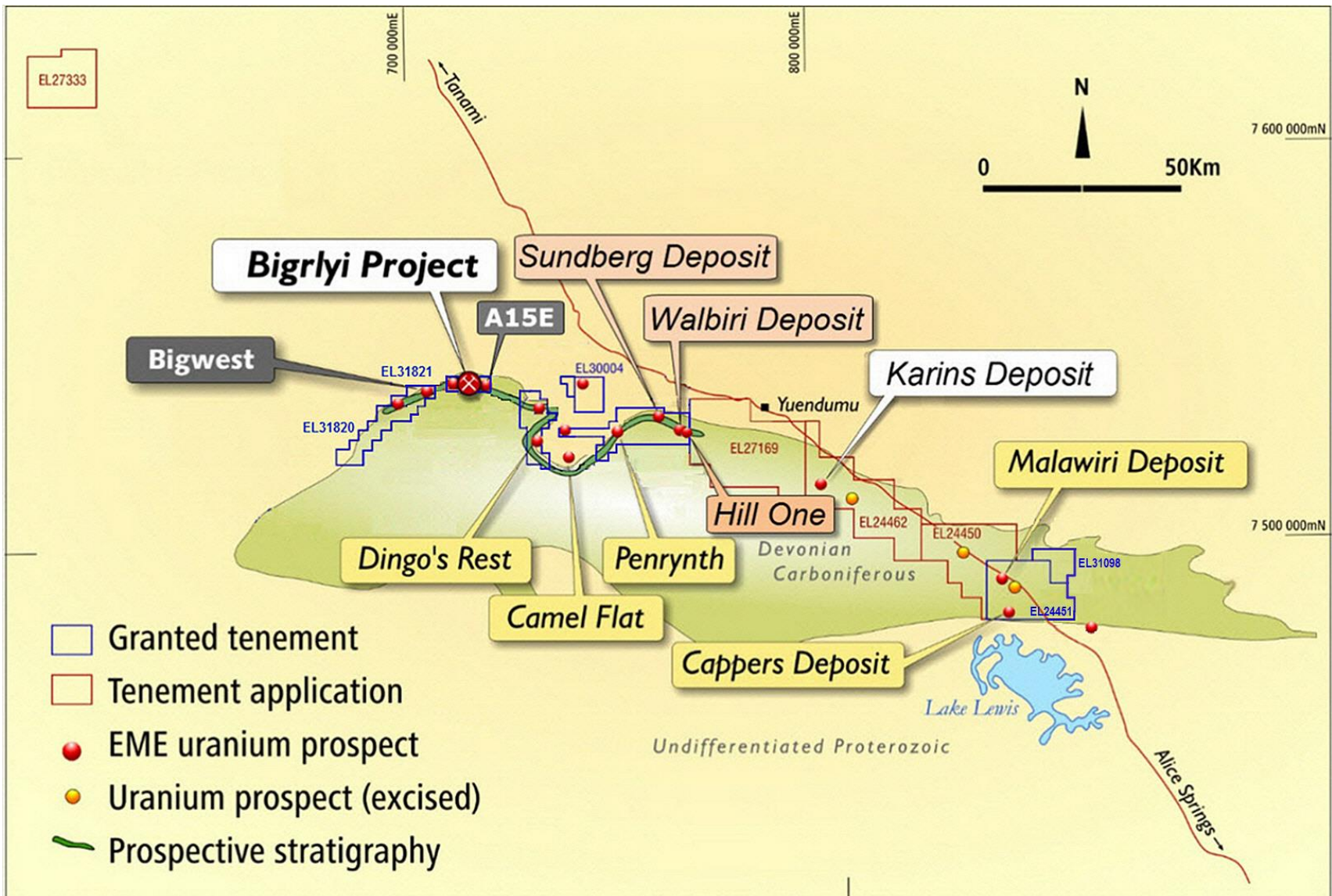
Construction
management

Commissioning



South
China Sea
Islands

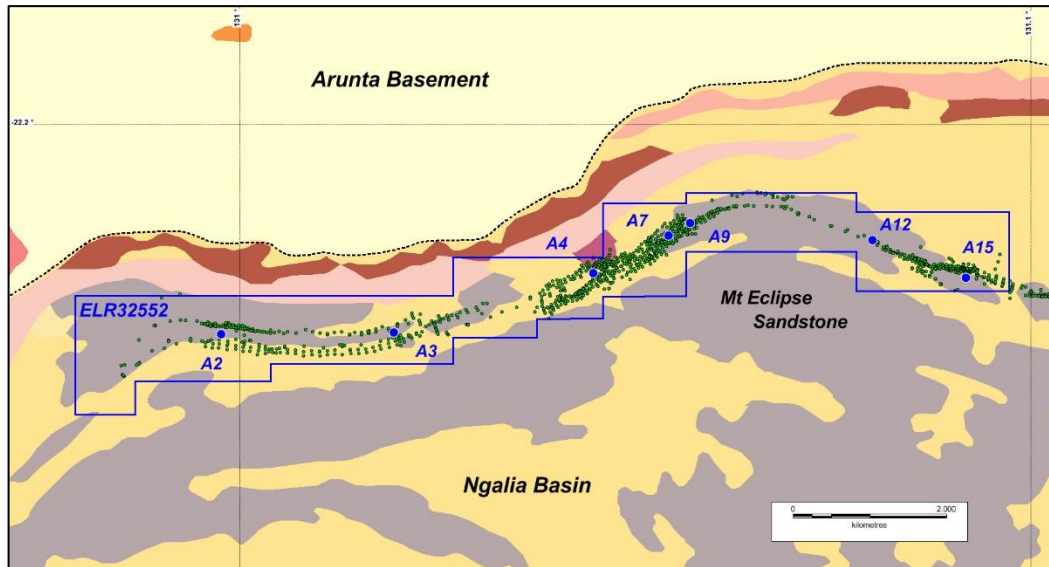
Northern Territory projects



NORTHERN TERRITORY PROJECTS

Northern Territory Projects – Bigrlyi JV

Bigrlyi Joint Venture (EME 72.39%, NTU 20.82% and Noble 6.79%)



- EME's flagship project is the sandstone-hosted Bigrlyi Uranium-Vanadium Deposit.
- A prefeasibility study was completed in 2011 with key parts being progressively updated.
- Development work was suspended in 2012.
- Recent work has significantly expanded the vanadium exploration target.
- EME's Bigrlyi Project well positioned to take advantage of recent positive sentiment in the uranium market and a return to spot prices near or above \$US50/lb U_3O_8 .

Bigrlyi Mineral Resource Estimate at a 500ppm U_3O_8 cut-off (2011)

Resource Category	Tonnes (millions)	U_3O_8 (ppm)	V_2O_5 (ppm)	U_3O_8 (t)	V_2O_5 (t)	U_3O_8 (Mlb)	V_2O_5 (Mlb)
Indicated	4.7	1,366	1,303	6,360	6,060	14.0	13.4
Inferred	2.8	1,144	1,022	3,210	2,870	7.1	6.3
Total	7.5	1,283	1,197	9,570	8,930	21.1	19.7

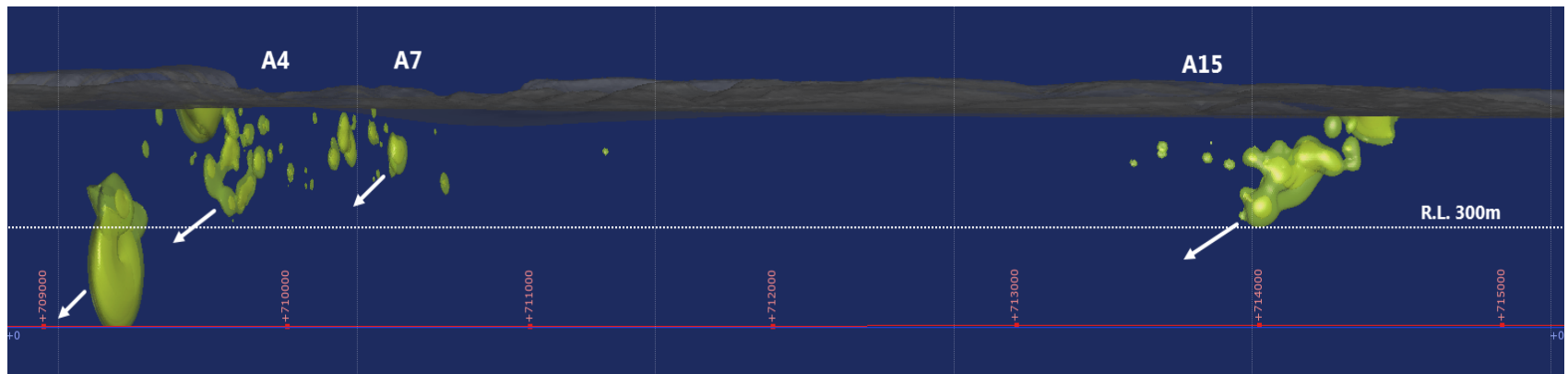
Note: EME confirms that it is not aware of any new information or data that materially affects the above Bigrlyi Mineral Resource Estimate.

Bigirlyi Project: Potential for Resource Expansion

Past work has shown that the economics of the Bigirlyi project can be significantly improved by (a) an increase in the resource base, (b) an increase in feed grade to the plant, and (c) removal of acid-consuming gangue.

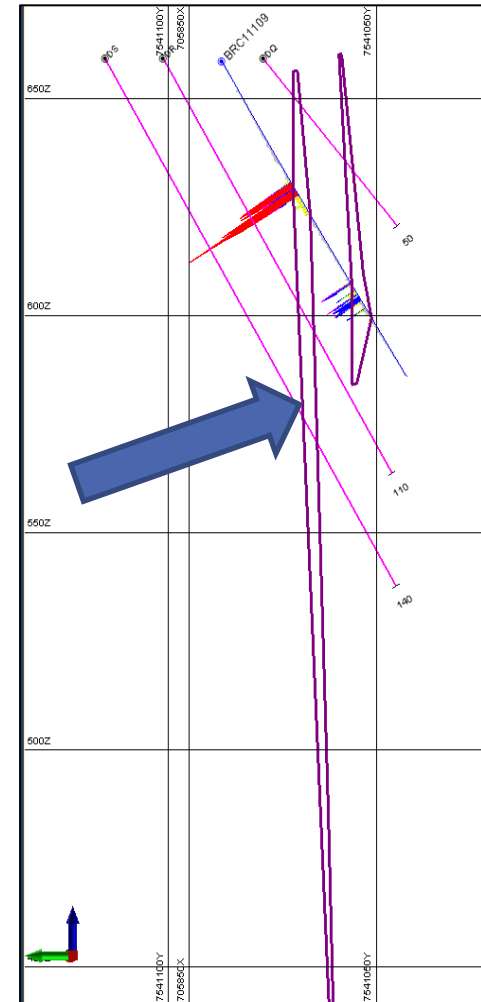
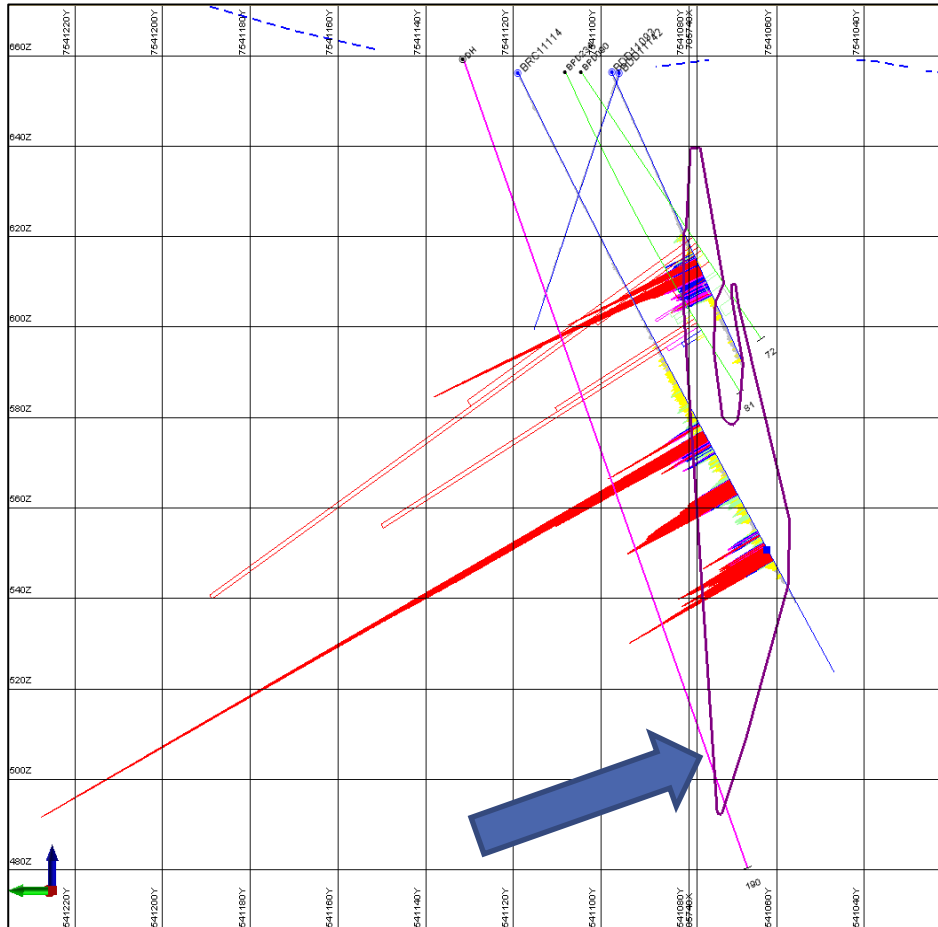
A review of the potential for resource expansion at depth was undertaken with positive results:

- Mineralisation is completely open at depths (>300m) below modelled pit shells and down-plunge of existing ore bodies.
- Limited previous deep drilling encountered some high grade intercepts particularly at A4 including: 21m at 1,392 ppm U₃O₈ in hole BRD11166 at 352m vertical depth and 4m at 6,662 ppm U₃O₈ in hole BRD11051 at 458m vertical depth.



Bigirlyi Project: Potential for Resource Expansion

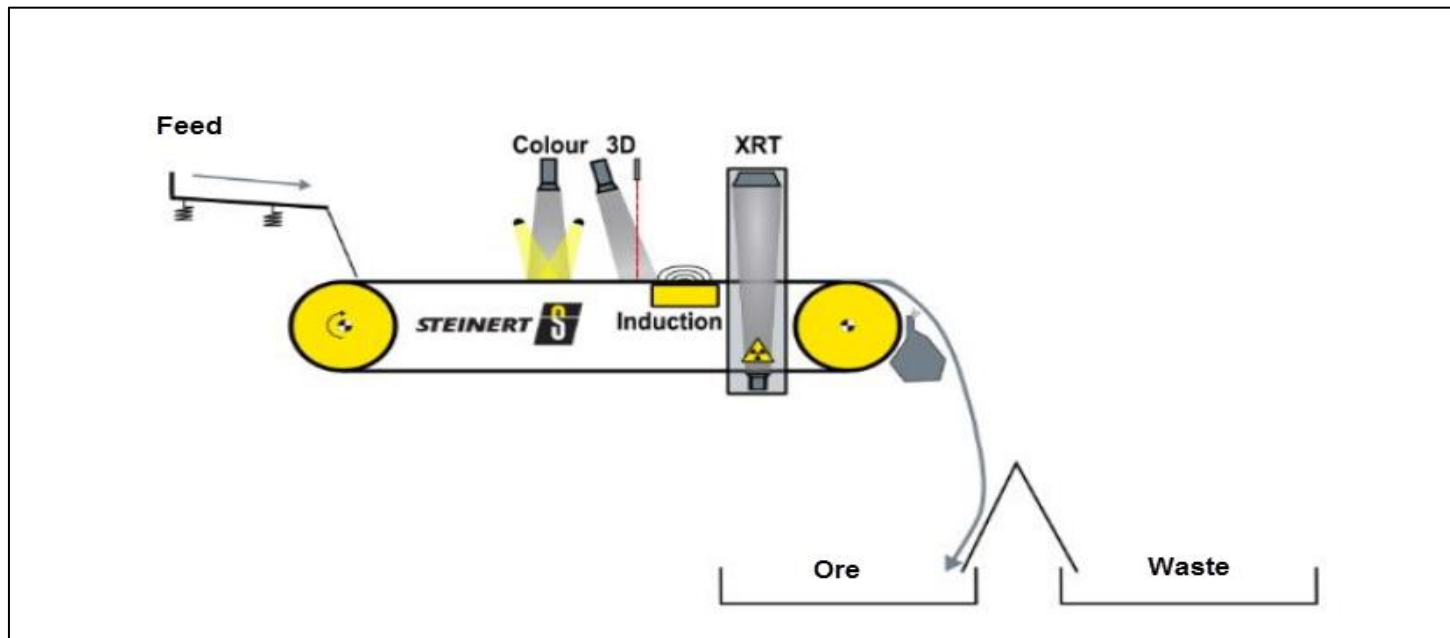
At the A2 ore bodies potential has been identified for resource expansion to maximum open-pittable depths beneath existing high-grade intercepts.



Bigirlyi Project: Potential to Improve Project Economics

Investigation of new ore-sorting technologies (Optical & XRT sorting)

- **U UPGRADE.** For uranium recoveries set to approx. 70% of the starting U₃O₈ content, upgrade factors for high-carbonate and low-carbonate ores 3.8x (0.34% U₃O₈ upgraded to 1.28%) and 1.8x (0.16% U₃O₈ upgraded to 0.28%), respectively, were achieved.
- **V UPGRADE.** The corresponding vanadium upgrade factors were 5.5x (0.15% V₂O₅ upgraded to 0.82%) and 2.0x (0.30% V₂O₅ upgraded to 0.60%) for high-carbonate and low-carbonate ores, respectively.



Bigirlyi Project: Potential to Improve Project Economics

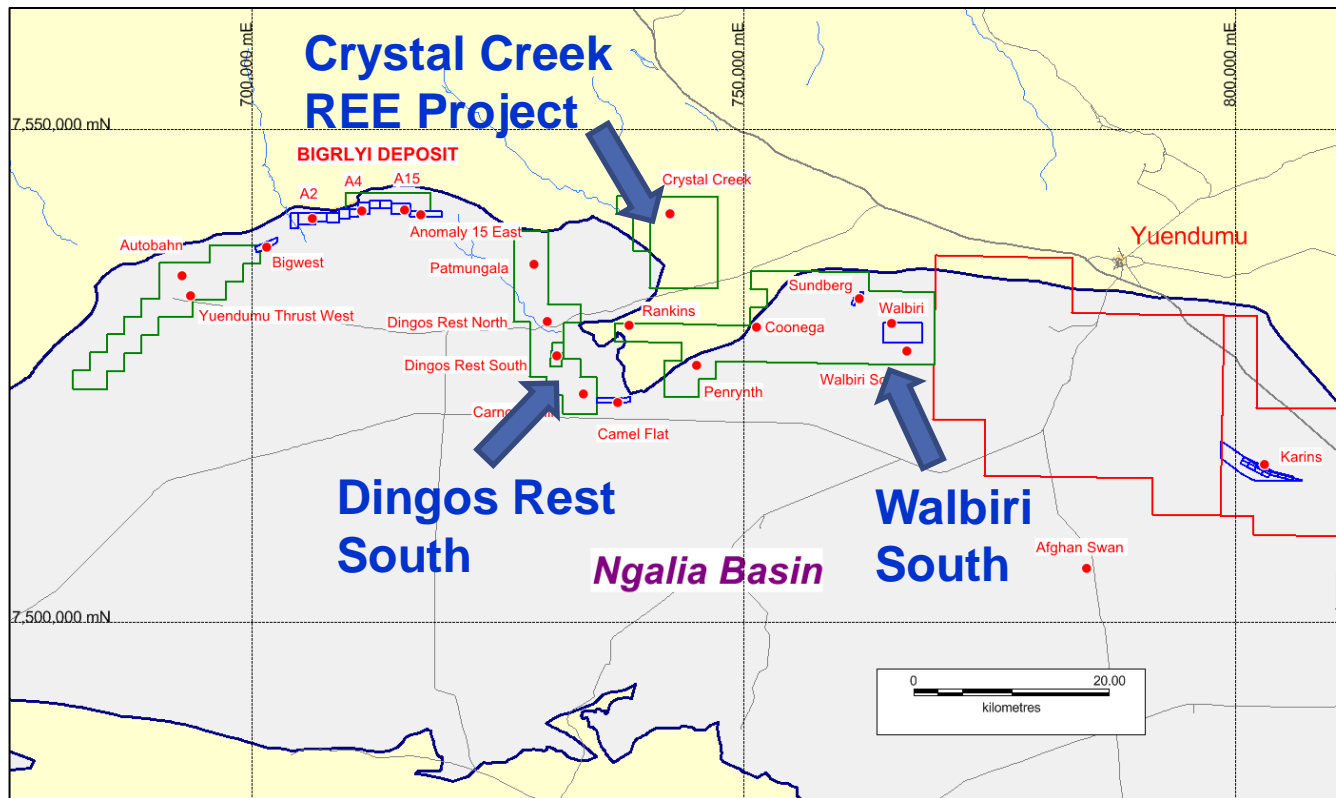
Metallurgical carbonate rejection test-work at ANSTO

- Reverse floatation tests delivered positive results.
- For high-carbonate ore, 78.8% of carbonate was rejected for a mass rejection of only 16%, U₃O₈ grade increased by a factor of 1.17x, and indicative acid consumption was reduced from 137 kg/t to 30 kg/t.
- For low-carbonate ore 53.9% of the carbonate was rejected for a mass rejection of only 3.9% and indicative acid consumption was reduced from 35 to 15 kg/t.

Sample	Sodium Oleate Addition (kg/t)	Sample	U ₃ O ₈ (%)	Carbonate (wt%)	Calculated Acid Consumption (kg/t)	% Mass Rejected	% Carbonate Rejected	% U Rejected
Low Carbonate	5.6	Feed	0.148	2.2	35	3.9	53.9	3.5
		Tail	0.156	0.9	15			
High Carbonate	7.3	Feed	0.274	8.4	137	15.8	78.8	7.9
		Tail	0.320	1.9	30			

Ngalia Regional Projects

- Twelve Uranium exploration targets have been identified & await drill-testing
- Rare-Earth Element Potential identified at the Crystal Creek prospect



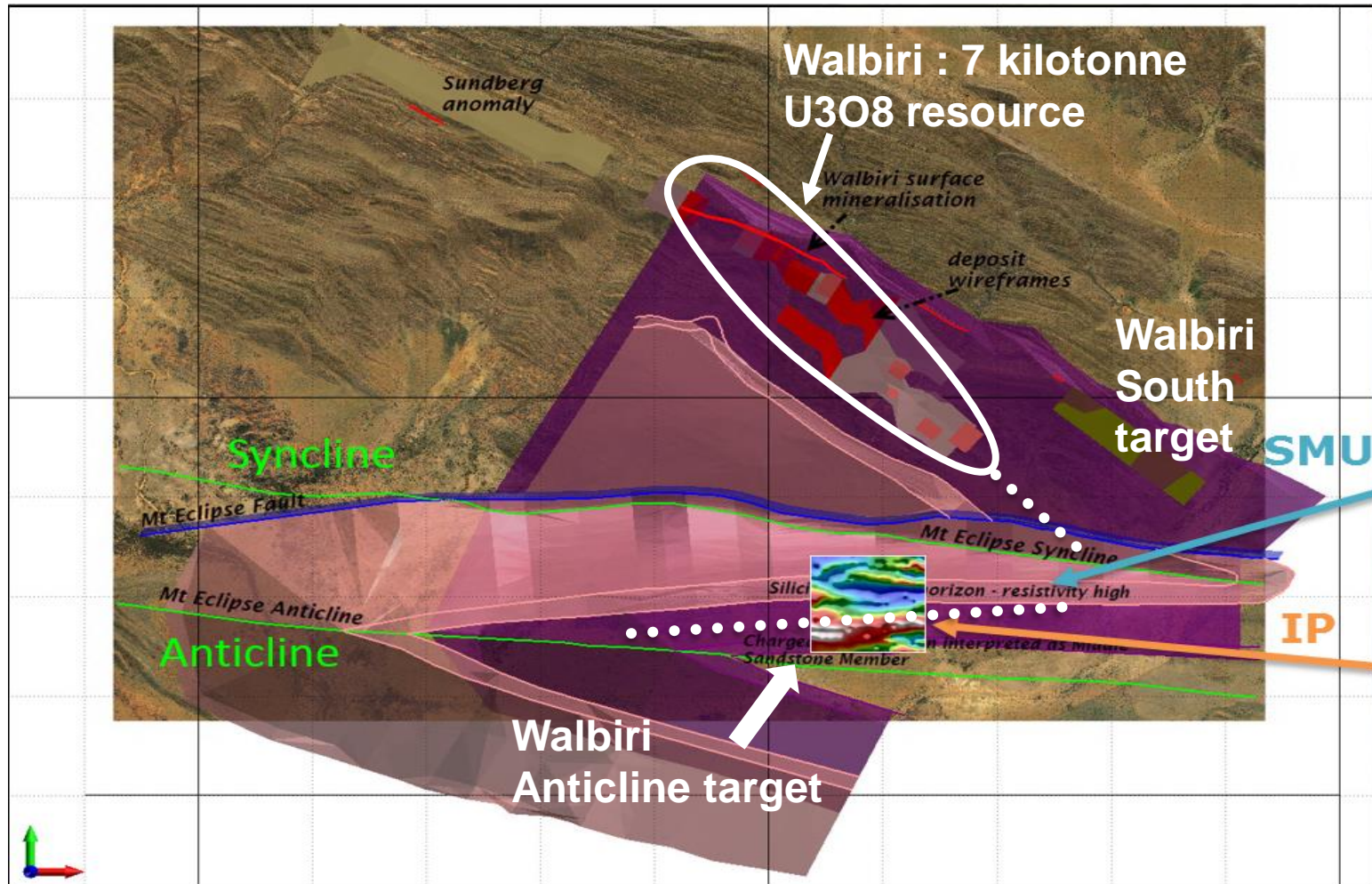
- Walbiri South/Anticline*
- Penrynth *
- Carnotite Hill *
- Autobahn *
- Dingos Rest South *
- Cappers area palaeochannels (off map to the east)
- Patmungala *
- Dingos Rest North *
- Yuendumu Thrust West
- Crystal Creek
- Coonega
- Rankins

Note * = sacred site clearances in place

Significant potential to increase the overall U_3O_8 resource base in proximity to Bigrlyi and Walbiri – Walbiri South and Walbiri Anticline are the Priority Targets.

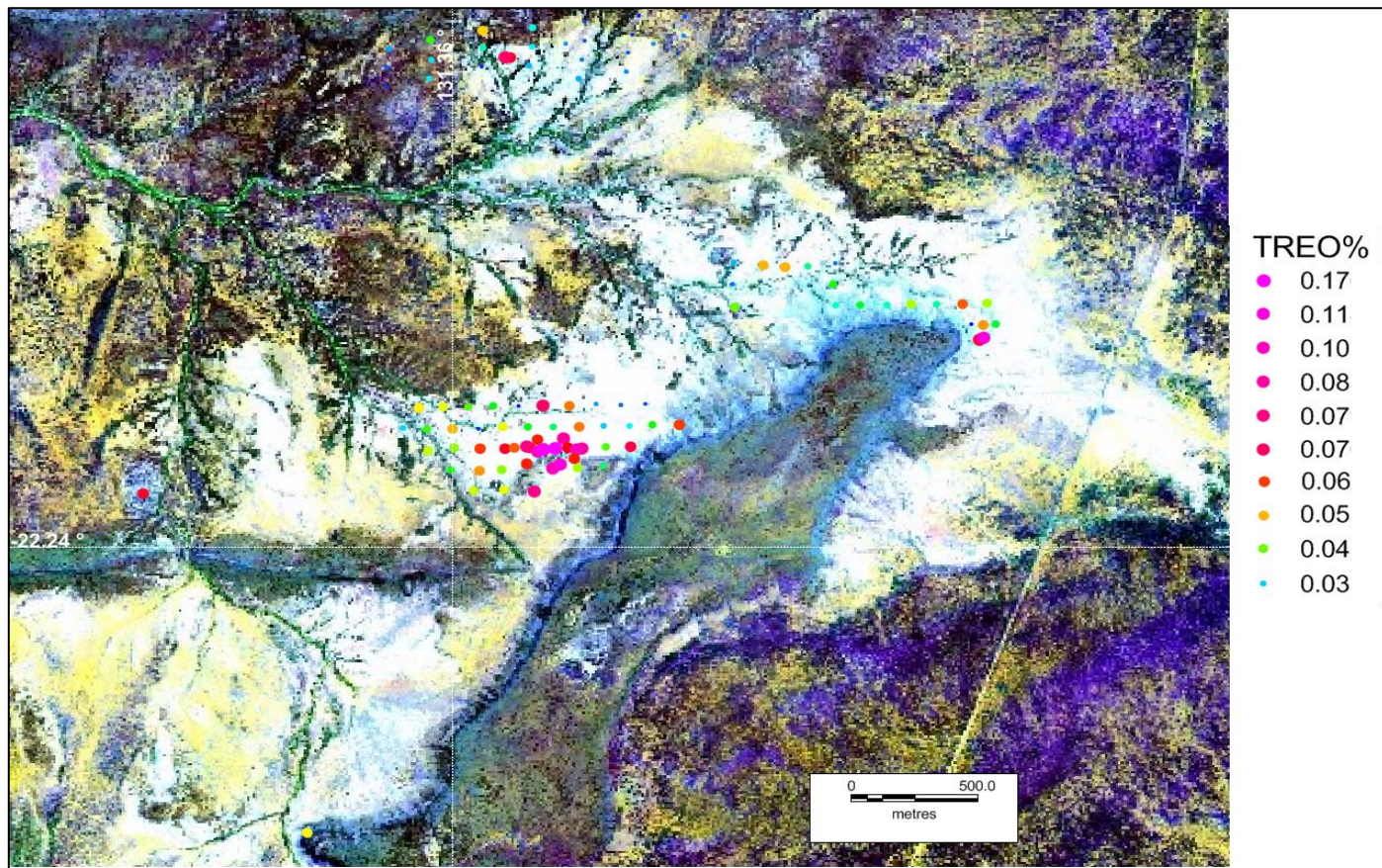
Ngalia Regional Projects

- Walbiri South & Anticline targets – target beds traced around folded strata.
- Initial drill testing planned for 2023.



Crystal Creek REE-in-Regolith Project

- Surface sampling has expanded the previously defined anomalous REE footprint at Crystal Creek.
- Total REE oxide (TREO) grades in clay-rich regolith up to 0.17% reported.
- 2023: follow-up metallurgical test-work, mineralogy and initial drill testing.



Soil sampling results at the Crystal Creek prospect showing anomalous REE-in-soils (red/pink colours).



Plans for 2023

Northern Territory Projects:

- Field work and site visits have resumed.
- Review underway for proposal to update of the Bigrlyi uranium and vanadium mineral resource estimates to JORC 2012 standard.
- Initial drilling programs will be conducted to test Dingos Rest South, Walbiri South and Crystal Creek exploration targets.
- Metallurgical and mineralogical test-work underway on samples from the Crystal Creek Rare-Earths Project.

WA Projects:

- Exploration activities suspended.

ASX:EME

Thank you !

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Web: www.energymetals.net



Competent Persons' Statement

The information in this report relating to mineral resource estimates for the Bigirlyi Deposit is based on information compiled by Arnold van der Heyden BSc, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr van der Heyden has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr van der Heyden is a full time employee of Helman & Schofield and takes responsibility for the resource estimation. Mr van der Heyden has sufficient experience relevant to the assessment of this style of mineralisation 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 (2004)”. Mr van der Heyden consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The Mineral Resource estimate for the Bigirlyi Deposit was originally compiled and announced utilising parameters from the 2004 JORC Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. This information was prepared and first disclosed to the ASX on 28 June 2011 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.

Information in this presentation relating to exploration results, data and cut-off grades is based on information compiled by Dr Wayne Taylor, MAIG. Dr Taylor is a full time employee of Energy Metals. Dr Taylor has sufficient experience which 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 “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.