





# Re-establishment of Gorno Zinc Project in Italy

121 Mining Investment London, May 2017

Alexander Burns, Executive Chairman



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## COMPANY HIGHLIGHTS

- Re-establishment of wholly owned Gorno Zinc Project in northern Italy.
- ▶ Gorno is a brownfield zinc project in a historic, mining-friendly jurisdiction.
- Outstanding results from ore sorting & locked cycle metallurgical testwork.
- ► Revised resource estimate (May 2017) DFS reconfiguration now underway.
- ▶ Potential to deliver simpler development plan with reduced upfront capital.
- Ongoing positive dialogue with interested financiers and off-take partners.
- Significant growth potential through high quality exploration portfolio.

# PROJECT PORTFOLIO AND LOCATION MAPS

#### ZINC - Italy

- Gorno
- Predil
- Salafossa

#### BASE METALS - Australia

- Paterson
- McArthur
- Nabberu

#### **URANIUM**

Nyang – Australia





## **BOARD & EXECUTIVE MANAGEMENT TEAM**



#### Alexander Burns - Executive Chairman

- ► Former MD of Sphere Minerals Ltd from 1998-2010 focused on large scale iron ore projects in Mauritania; acquired by Xstrata PLC in Nov 2010 for \$514M cash
- ► Former Chairman of Shield Mining Ltd from 2006-2010 Gold and base metals exploration in Mauritania; acquired by Gryphon Minerals Ltd in 2010 for \$26M scrip.



#### Kim Robinson - Managing Director

Past Executive Chairman of Forrestania Gold NL, Kagara Ltd, Chairman of Carbon Energy and Apex Minerals and Director of Jubilee Mines and part of a team that developed the Bounty and Mt McClure gold mines, Kagara's numerous zinc-copperlead mines in North Queensland; the Wiluna gold mine, Cosmos and Lounge Lizard nickel mines as well as the greenfields discoveries of the Bounty gold deposit, Maggie Hays nickel deposit, Emily Ann nickel deposit, Cosmos nickel deposit and the Lounge Lizard nickel deposit.



#### Marcello Cardaci - Non-Executive Director

- Partner of Gilbert & Tobin's Corporate Advisory Group
- Advises on a range of corporate and commercial matters including public and private equity fund raisings and public and private mergers, acquisitions and divestment



#### **Graeme Collins – Director of Operations**

- ► Former Chief Operating Officer of Kagara Ltd from 1999-2010
- ▶ Developed Mt Garnet Zinc Project; growth from a junior to a \$1.2 billion multi-mine base metals producer
- ► Former General Manager of Operations of Wolfram Camp Mining Pty Ltd to 2014 managed a wolframite mine in Queensland



#### **Stephen Hills – Chief Financial Officer**

- Chartered Accountant with extensive experience in senior finance roles in public companies listed on the ASX and the TSX, the past fourteen years of which have been in mining companies with gold, nickel and copper producing assets
- ► Former Finance Director with Congo based copper producer Tiger Resources Limited from 2010 & former CFO and Company Secretary of Mirabela Nickel Limited where he was involved in the company's listing on TSX and subsequent capital raisings and initial syndicated project financing

# CORPORATE INFORMATION (ASX CODE: EMX)



Capital Structure	
Share Price (as at 9 May 2017)	\$0.021
Shares on Issue	783M
Market Capitalisation	\$16M
Cash as at 31 March 2017	\$2.6M
Unlisted Options (\$0.05 - \$0.24 Exercise Price)	33.7M

Top 10 Shareholders (as at 5 May 2017)					
Shareholder	Million Shares	% of Total			
*Alexander Burns (direct and indirect)	179.8	23.0			
Zero Nominees Pty Ltd	71.1	9.1			
*Marcello Cardaci (indirect)	52.7	6.7			
J P Morgan Nom Aust Ltd	26.0	3.3			
*Kim & Jennifer Robinson (direct & indirect)	20.2	2.6			
SHL Pty Ltd	17.0	2.2			
Jetosea Pty Ltd	15.9	2.0			
BPM Cap Ltd	14.0	1.8			
Inkese Pty Ltd	10.0	1.3			
Dangoor Alfred C & VO	9.6	1.2			
Total Top 10 Shareholders	416.3	53.2			

<sup>\*</sup>Total directors and associates holdings – 252.7M shares (32.3%)

## GORNO ZINC PROJECT HISTORY

- ▶ Historical high-grade zinc mine dating back to Celtic days (2,500 years) established infrastructure incl. underground access to unmined areas with near-term development potential (Colonna Zorzone).
- ▶ 6Mt of sulphide/oxide zinc ore averaging 14.5% Zn+Pb recorded production from Colonna Fortuna deposit since the 1880s. Mineralisation remains open down plunge.
- ▶ Italian multi-national corporation ENI was preparing to commence mining the Colonna Zorzone deposit before closing down its worldwide base metal and uranium operations in the early 1980s.
- ▶ 230km of historical underground development and other infrastructure selectively used by EMX for drilling & other ongoing work deepest historical intersections on Colonna Zorzone at 600RL level.



## GORNO ZINC PROJECT – WORK COMPLETED BY ENERGIA

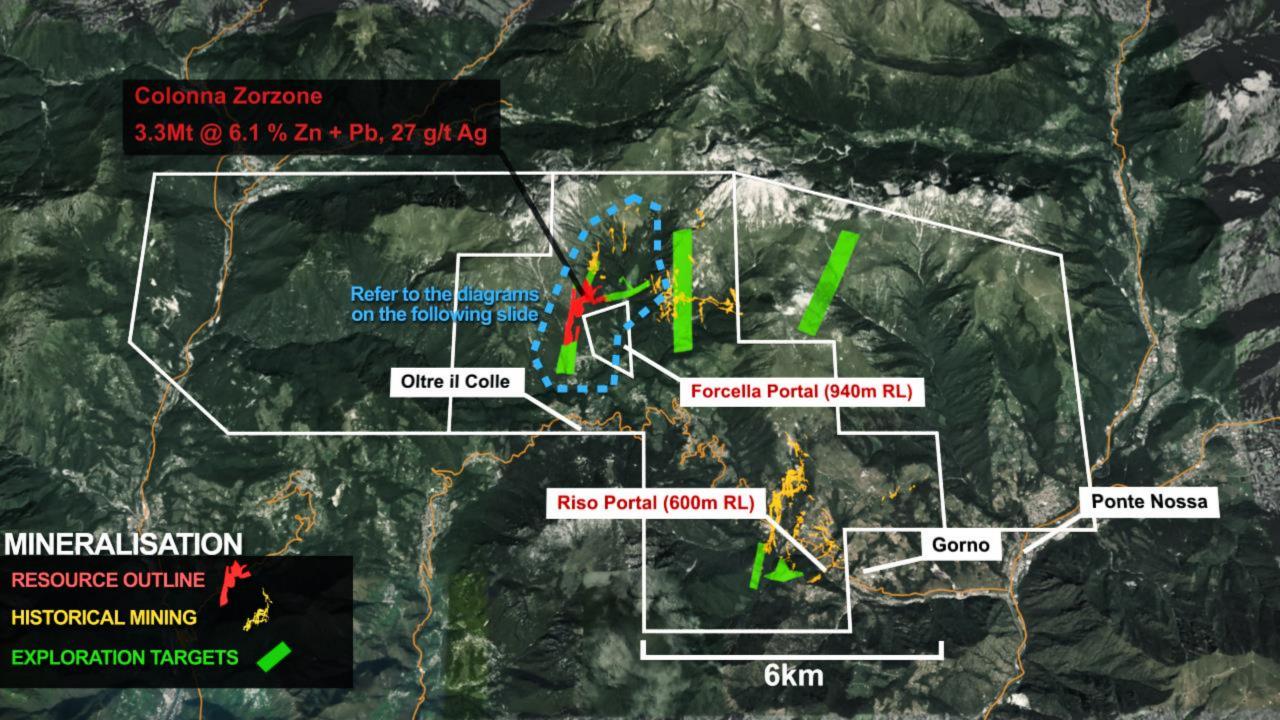
- ▶ 1,560m of underground refurbishment.
- Exploration decline completed at 585m.
- ▶ 165 diamond drill holes underground (17,104m) to complement historic drilling.
- ► Current Resource of 3.3Mt grading 6.1% Zn+Pb, 27g/t Ag 3 May 2017.
- Metallurgical testwork completed.
- Process flowsheet finalised.

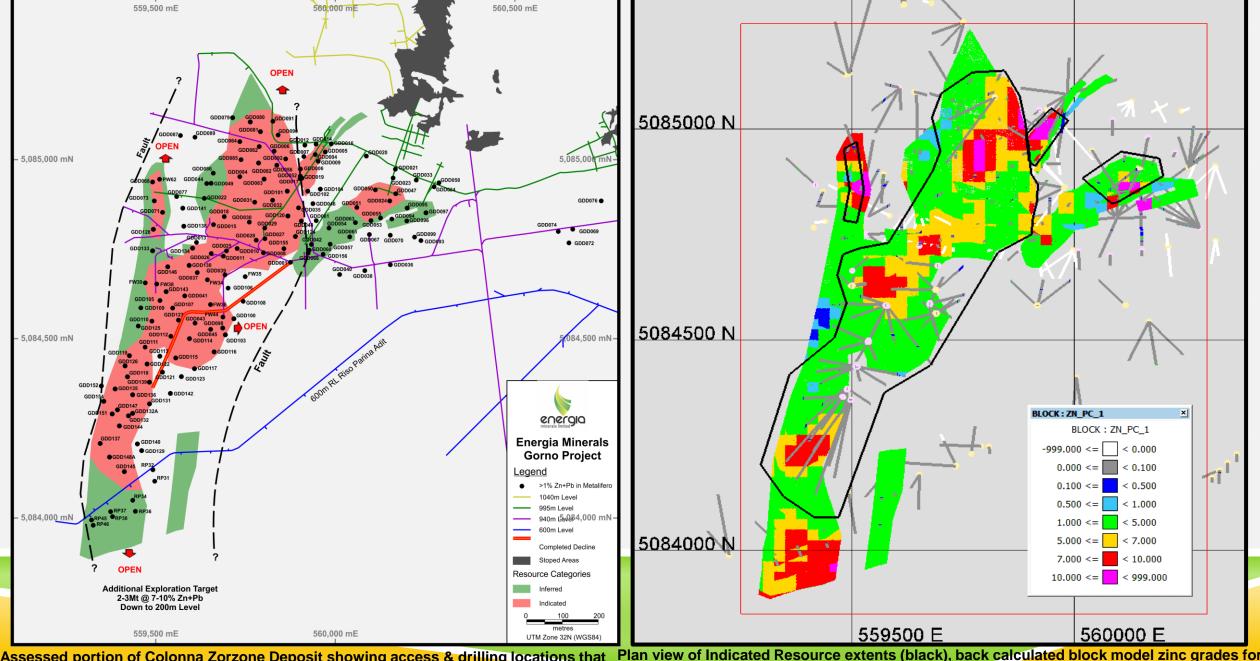


## EXCELLENT RESULTS FROM METALLURGICAL TESTWORK

- ► Ore Sorting 55% rejection for +93% recovery of zinc, lead & silver from sulphides.
- ▶ Based on 85% sulphide/15% oxide upgraded feed from the underground Ore Sorters the processing plant will produce:
  - ▶ Blended lead sulphide/oxide conc. grading 58% Pb, 558g/t Ag & 4.2% Zn
  - ▶ Blended zinc sulphide/oxide conc. grading 59% Zn, 0.7% Fe & 1.2% Pb
  - With low impurity levels
- ▶ Overall recovery assuming 96% recovery through Ore Sorters estimated at 87% Zn, 80% Pb & 62% Ag (assuming no Ag payable in Zn conc.).
- Overall recovery for material that by-passes Ore Sorters increases to 92% Zn, 83% Pb & 65% Ag.







Assessed portion of Colonna Zorzone Deposit showing access & drilling locations that were used together with historical data to estimate the revised Indicated & Inferred Resources

Plan view of Indicated Resource extents (black), back calculated block model zinc grades for all mineralised domains using 1% Zn cut-off grade (green through magenta coloured blocks). All estimates outside the outlines comprise the Inferred Resource requiring further definition.

## RESOURCE AND EXPLORATION TARGET

- ► High grade Mississippi Valley Type (MVT) deposit
- Combined Indicated and Inferred Resource of 3.3Mt grading 4.8%Zn, 1.3%Pb and 27g/t Ag using a 1.0% Zinc cut-off grade
- Indicated Resource 2.0Mt grading 4.9% Zn, 1.3% Pb, 31g/t Ag Inferred Resource 1.4Mt grading 4.6% Zn, 1.2% Pb, 21g/t Ag
- ► Additional high quality Exploration Target of **7-11Mt grading 7-10% Zn + Pb**\*

\*This Exploration Target is conceptual in nature and has been generated by extending the known resource and including prospects that have been drilled and/or partially developed by ENI subsidiary SAMIM during the 1970's. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if future exploration will result in the estimation of a Mineral Resource. Energia plans to commence testing these targets during 2017/2018, using a combination of mapping, face sampling and drilling.







## FAST-TRACK PROJECT DEVELOPMENT STRATEGY

Accelerated development of Gorno Zinc Mine is assisted by:

- Granted mining concession
- > Strong regional and local support
- > Low capital costs given historical operations
- Minimal groundwater
- Well-established concentrate haulage routes
- > Excellent metallurgical characteristics
- > Local contracting and mining expertise
- Strengthening market conditions for Zinc

## SUMMARY AND INVESTMENT HIGHLIGHTS

- Experienced Board and management team;
- ▶ 100% ownership of Gorno Zinc Project in **low-risk**, **historical mining location** in Italy;
- ► Finalising revised DFS based on updated current Resource Estimate and extensive database;
- ▶ **Significant exploration upside** (Zorzone, Fortuna extensions & other accessible targets);
- Zinc exploration portfolio in Italy (Salafossa/Predil historic mining operations) & Australia;
- Strong Zinc market outlook with current supply crunch following closure of large mines;
- Ongoing support for project from local authorities.

# **APPENDIX**

## STRONG ZINC MARKET FUNDAMENTALS

- ▶ Zinc market forecast to be in deficit through to at least 2019.
- ▶ Total zinc stocks have declined for each of the last four years.
- ► LME stockpiles at 12 year lows.
- ► Additional 3.0 3.5Mt of zinc needed for the next 5 years to meet forecast demand & balance current deficit.
- ► Century and Lisheen mine closures has recently removed 600-700kt per year.
- ▶ Reduced production resulting in tight concentrate supply & reduced treatment charges.
- ► Average industry C1 production costs expected to peak in 2018 and stabilise above US\$0.60/lb underpinning higher prices.
- Zinc market fundamentals remain strong and continue to improve.

### GORNO ZINC PROJECT – MINERAL RESOURCE STATEMENT

#### **May 2017 OK Estimate**

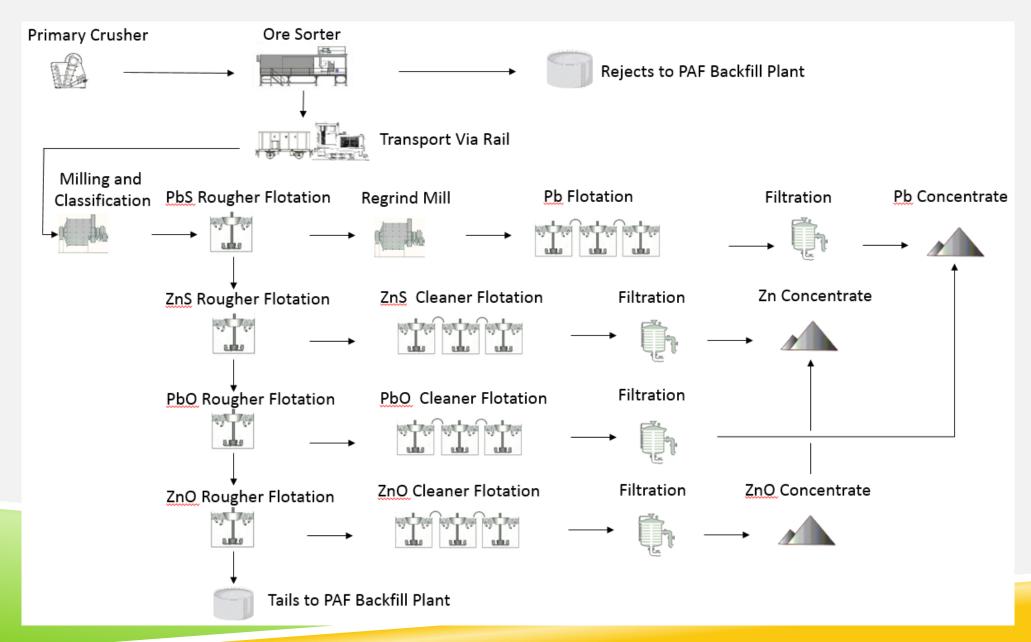
Reported using various Zinc cut-off grades

**Subdivided by JORC Code 2012 Resource Categories using ROUNDED figures** 

Category	Cut-off Tonn Grade (Zn %) (Mt	Tannaa	Total Zinc		Total Lead		Silver	
		(Mt)	Grade (%)	Metal (Kt)	Grade (%)	Metal (Kt)	Grade (ppm)	Metal (Moz)
Indicated	1	2.0	4.9	97	1.3	26	31	2.0
	2	1.8	5.2	95	1.4	25	32	1.9
	3	1.5	5.8	87	1.5	23	35	1.7
	4	1.2	6.4	76	1.7	20	38	1.5
Inferred	1	1.4	4.6	62	1.2	17	21	0.9
	2	1.1	5.2	59	1.4	16	22	8.0
	3	0.9	5.9	54	1.6	15	25	0.7
	4	0.7	6.8	45	1.8	12	28	0.6
Indicated + Inferred	1	3.3	4.8	160	1.3	42	27	2.9
	2	3.0	5.2	154	1.4	41	28	2.7
	3	2.4	5.8	141	1.6	38	31	2.4
	4	1.9	6.5	121	1.7	32	34	2.0

May 2017 Mineral Resource grade tonnage data using a range of total zinc cut-off grades (note: totals may contain rounding errors)

# CONCEPTUAL FLOW DIAGRAM



# WORK PERMIT CHRONOLOGY

30/03/2015	Comunità Montana Valle Brembana landscape approval no. 8/15
15/05/2015	Parco delle Orobie Bergamasche landscape approval 1859
15/05/2015	Parco delle Orobie Bergamasche Impact Assessment
18/05/2015	Municipality of Oltre il Colle, decision making conference
24/06/2015	Regione Lombardia decree no. 5279
14/07/2015	Regione Lombardia approved service order no. T1.2015.0036807
08/10/2015	Regione Lombardia Decree no. 8245
20/11/2015	Municipality of Oltre il Colle, authorisation no. 5729
25/01/2016	Regione Lombardia Decree no. 855
16/02/2016	Regione Lombardia approved service order no. T1.2016.0007831
13/05/2016	Regione Lombardia decree no. 4230
16/05/2016	Regione Lombardia approved service order no. T1.2016.0023996

# WORK COMPLETED BY ENERGIA CA' PASÌ ACCESS ROAD







Municipality of Oltre il Colle, authorisation no. 5729 dated 20/11/2015

# WORK COMPLETED BY ENERGIA CA' PASÌ SITE OFFICES







Regione Lombardia decree no. 845 dated 06/02/2015

# WORK COMPLETED BY ENERGIA CA' PASÌ ACCESS TUNNEL







Regione Lombardia decree no. 5279 dated 24/06/2015

# WORK COMPLETED BY ENERGIA CA' PASÌ ACCESS ROAD







Parco delle Orobie Bergamasche landscape approval 1859 dated 15/05/2015

Comunità Montana Valle Brembana landscape approval no. 8/15 dated 30/03/2015

# WORK COMPLETED BY ENERGIA CA' PASÌ BRIDGE







Parco delle Orobie Bergamasche Impact Assessment dated 15/05/2015

Municipality of Oltre il Colle, decision making conference dated 18/05/2015

# WORK COMPLETED BY ENERGIA FORCELLA TUNNEL







Regione Lombardia decree no. 5279 dated 24/06/2015

Regione Lombardia decree no. 4230 dated 13/05/2016 for the future work program

Regione Lombardia approved service order no. T1.2015.0036807 dated 14/07/2015

# WORK COMPLETED BY ENERGIA EXPLORATION DECLINE







Regione Lombardia Decree no. 8245 dated 08/10/2015

Regione Lombardia Decree no. 855 dated 25/01/2016

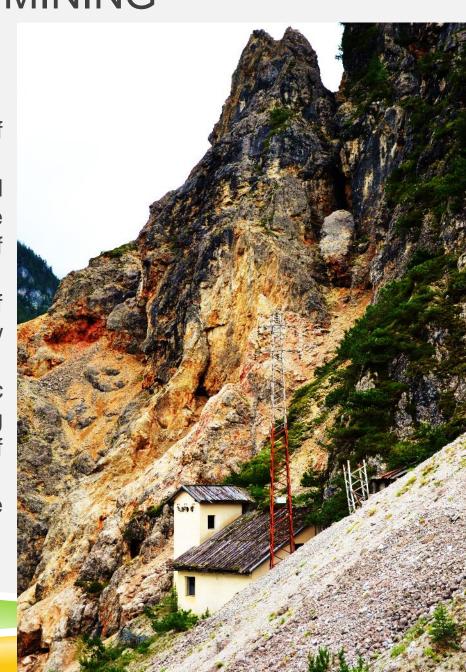
Regione Lombardia approved service order no. T1.2016.0007831 dated 16/02/2016

Regione Lombardia approved service order no. T1.2016.0023996 dated 16/05/2016

# OTHER EXPLORATION PROJECTS

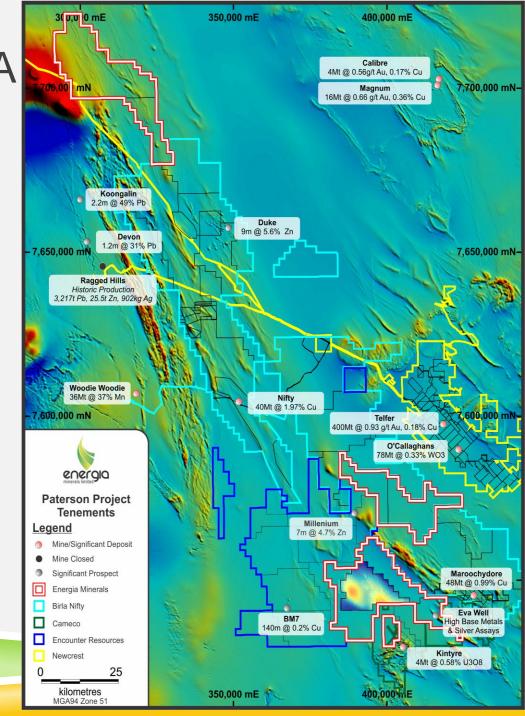
# SALAFOSSA & PREDIL FORMER ZINC MINING OPERATIONS

- ► Applications over two historical zinc-lead mines in the far north-east of Italy, ~400km by road from Gorno Zinc Project.
- ▶ Salafossa is located north of the town of San Pietro di Cadore and within 7km of the Austrian border and produced 10.95Mt of sulphide ore grading 5.0% zinc and 1.0% lead at an average production rate of approximately 500,000tpa over 22 years:
  - Production was from a single flat-lying deposit with dimensions of 750m by 200m and up to 30m wide which facilitated mining by low cost, large scale open stoping.
- ▶ **Predil** is estimated to have produced 30Mt of ore grading 5.0% zinc and 1.2% lead (1.9Mt of contained Zn+Pb) and was producing approximately 50,000tpa of zinc and lead concentrates at the time of its closure:
  - Concentrates were transported to Gorno and treated through the Ponte Nossa Refinery which still operates today.
  - Deposit is reported to remain open at depth.



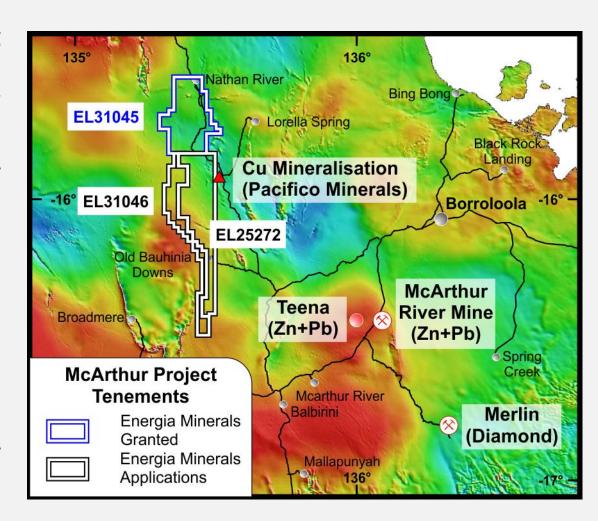
# PATERSON PROJECT – AUSTRALIA

- Strategic initiative in the emerging Paterson Province in the Eastern Pilbara region of Western Australia
- ► Nine granted tenements totalling 1,616km² prospective for base metals and uranium
- ► Area contains several world-class deposits Telfer (Au), Nifty (Cu) and Kintyre (U)
- ▶ Recent zinc discovery (70m @ 2.3% zinc) and cobalt-copper (9m @ 1% cobalt, 1.5% copper) on adjacent tenements by Encounter Resources
- Gravity Survey planned in western part of E45/2886 to identify potential drill targets



## MCARTHUR PROJECT – AUSTRALIA

- ▶ One granted tenement and two tenement applications totalling 1,245km² covering the western margin of the McArthur Basin in the Northern Territory over a 100km strike length
- ▶ Barney Creek Formation (hosts Glencore's McArthur River Mine and Teck/Rox Teena zinc deposit) dips to the west at shallow depth beneath EMX's tenements
- ► Area contains numerous small historical mines with recorded grab samples of up to 41% Cu, 668g/t Ag
- ► Historical intersections reported of 8.3m @ 2.66% Pb, 18g/t Ag & 6m @ 0.27% Pb from very limited drilling
- Pacifico Minerals' Coppermine Creek copper discovery (4m @ 4% Cu) is located 3km to the east



## COMPLIANCE STATEMENTS

Information in this presentation that relates to Exploration Targets and Exploration Results is based on information prepared by Mr Kim Robinson who is a Competent Person and Member of the Australian Institute of Geoscientists. Mr Robinson is a full-time employee of Energia Minerals Limited. Mr Robinson has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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". Mr Robinson consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to Mineral Resources is based on, and fairly represents, the Mineral Resources and information and supporting documentation extracted from the report, which was prepared by Mr James Ridley as Competent Person in compliance with the JORC Code (2012 edition) and released to ASX by the Company on 3 May 2017. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. All material assumptions and technical parameters underpinning the Mineral Resource estimates in that previous release continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



