

## Strategic Technology Metals

**A diversified exploration and development company targeting USA and Australia**

# Disclaimer

## Disclaimer

This presentation contains forward-looking statements that involve subjective judgement and analysis and accordingly, are subject to significant uncertainties and risks, many of which are outside the control of, and are unknown to, Broken Hill Prospecting Ltd ( "BPL"). In such circumstances, the forward-looking statements can be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "seek", "estimate", "believe", "continue" or other similar words.

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## Competent Person Statement

The information in this presentation that relates to exploration results, Mineral Resources and Exploration Targets is based on information compiled by Mr Anthony Johnston, BSc (Hons), who is a Member of the Australian Institute of Mining and Metallurgy and is a full time employee of the Company. Mr Johnston has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 & 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Johnston consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

BPL confirms it is not aware of any new information or data that materially affects the information included in the original market announcement, and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. BPL confirms that the form and context in which the Competent Person's findings presented have not been materially modified from the original market announcement.

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## Strategic Technology Minerals



**Only ASX listed Company with exposure to the US rare earth market**



**Highly experienced team focused on return of shareholder value**



### Commodity Exposure

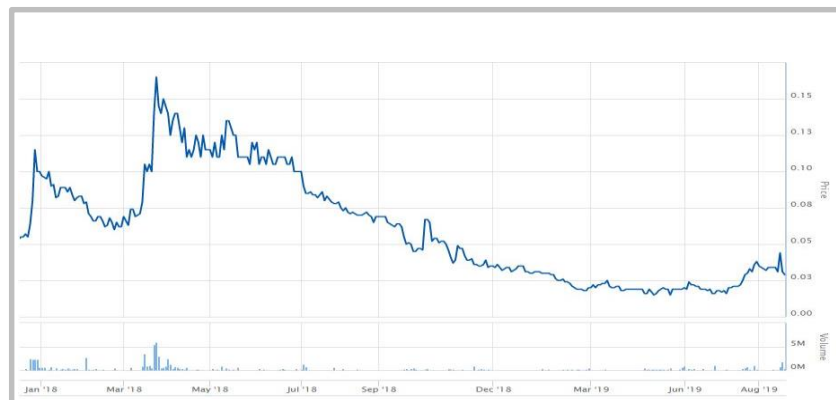
- Rare Earth Elements (Arizona, US)
- Heavy Mineral Sands (Murray Basin, Aust)
- Cobalt, Base & Precious Metals (Broken Hill, Aust)

#### Broken Hill Prospecting Limited ASX : BPL

Ordinary Shares on Issue (listed 2011)	147.8m
Listed Options	46.6m
Top 20 shareholders	53%
Board & Management	35%
Market Cap (undiluted at 3.2 cps)	\$4.7m

#### Board of Directors & Management

Creagh O'Connor AM	Non Executive Chairman
Trangie Johnston	Managing Director & CEO
Geoff Hill	Non Executive Director
Matt Hill	Non Executive Director
Denis Geldard	Non Executive Director
Ian Morgan	Company Secretary



# Summary of Value Drivers

- Advanced rare earth project located in mining friendly jurisdiction with world class infrastructure – potential to be largest in North America
- US Federal & Pentagon mandate/initiatives to secure strategic technology metals for growth sectors - EV and military use
- La Paz ideally located to supply environmentally friendly, sustainable rare earth products to US domestic market
- Field work to commence in October focused on resource upgrade/expansion and advancing metallurgical test work - Strong investor news flow
- Preliminary Economic Assessment due Q2 2019
- Additional upside through portfolio of prospective Australian assets

# La Paz Rare Earth Project

- Large tonnage, bulk deposit comprising high value, light rare earth (LREE) assemblage
- Independent NI 43-101 Report and Resource estimate completed 2011
- Majority of deposit outcrops at surface and only defined to 30m depth (open in all directions).
- Exploration upside/resource growth potential
- No penalty elements such as radioactive thorium/uranium plaguing rare earth projects globally



La Paz Resource Estimate 2011 (NI 43-101)				
	Mt	Grade (%)	Contained REE (kg)	Contained REE (Mlbs)
Inferred	112	0.037	37,586,080	83.3
Indicated	16.2	0.037	5,436,558	12.1
Total	128.2	0.037	43,022,638	95.4

Source: [La Paz Project NI 43-101 Report link](#)





# La Paz Rare Earth Project

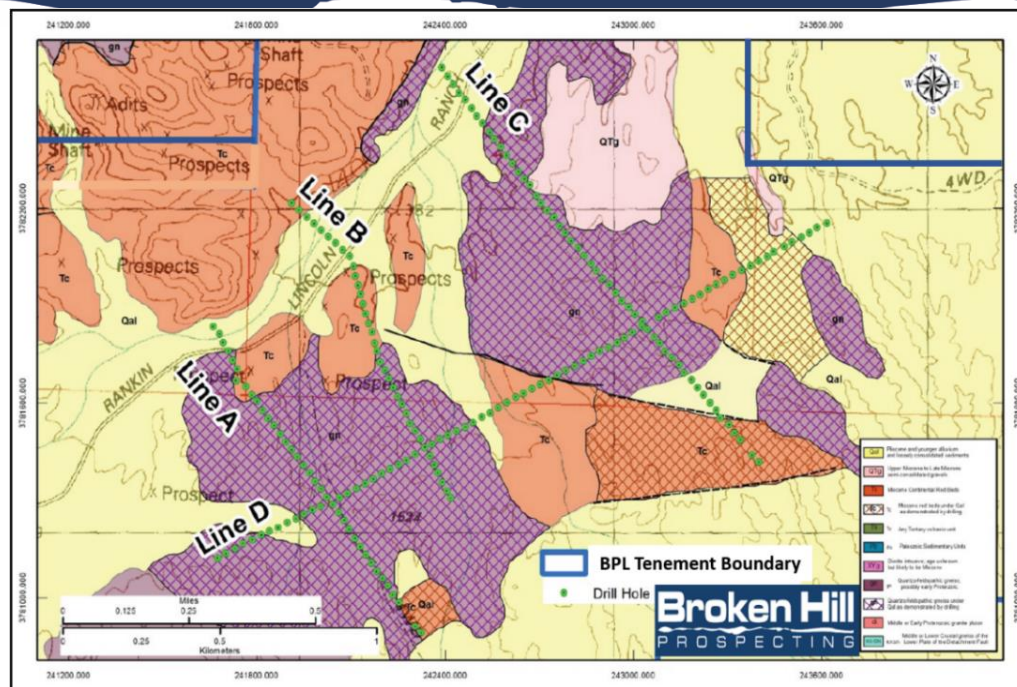
Preliminary metallurgical test work (2010-2012) includes:

- QEMSCAN, XRD, Electron Microprobe Analysis (SGS, Vancouver)
- Concentration studies demonstrated excellent separation (up to 70%) of high value, LREE-rich allanite (Saskatchewan Research Council, SRC)
- Successful leaching of concentrate via  $\text{H}_2\text{SO}_4$  acid roast-dilute  $\text{H}_2\text{SO}_4$  solution leach method (SRC)
- Current TREO assemblage split:

81% LREE, 19% HREE

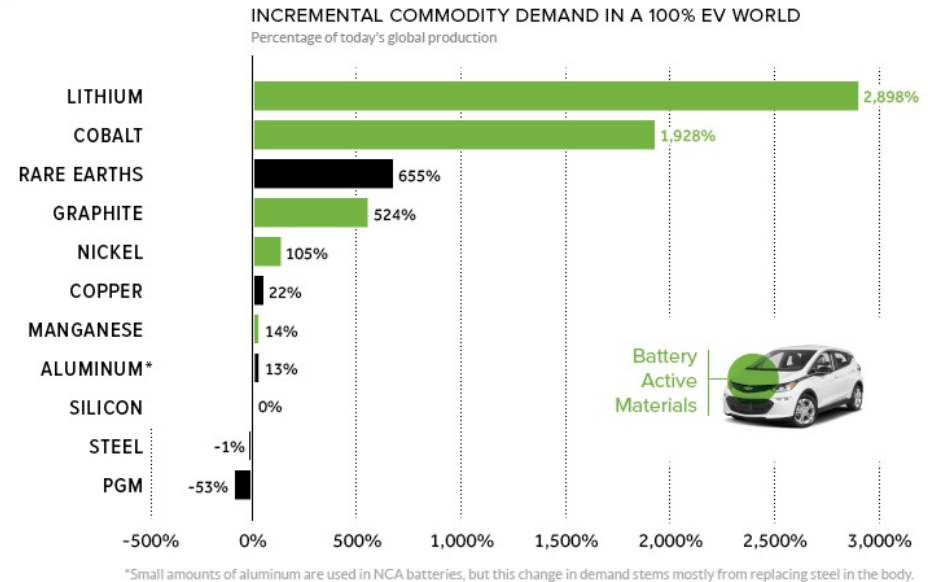
Excellent local infrastructure:

- Electricity, water, gas within 7kms
- Skilled local workforce and network of transport routes
- Ranked 8/83 Fraser Institute



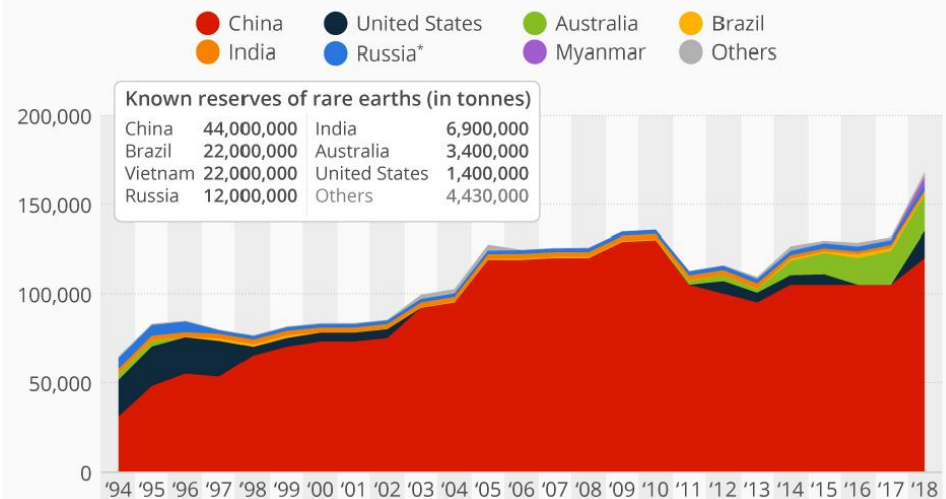
# The Rare Earth Market

- Pressure on China's processing dominance (80%) due to environmental damage and supply restrictions
- US mandate to secure alternate supplies of critical strategic technology minerals
- Electric Vehicle (EV) boom to drive demand of key LREE (Nd & Pr) in magnet production



Source: UBS

Global mine production of rare earths (in tonnes)



Source: USGS

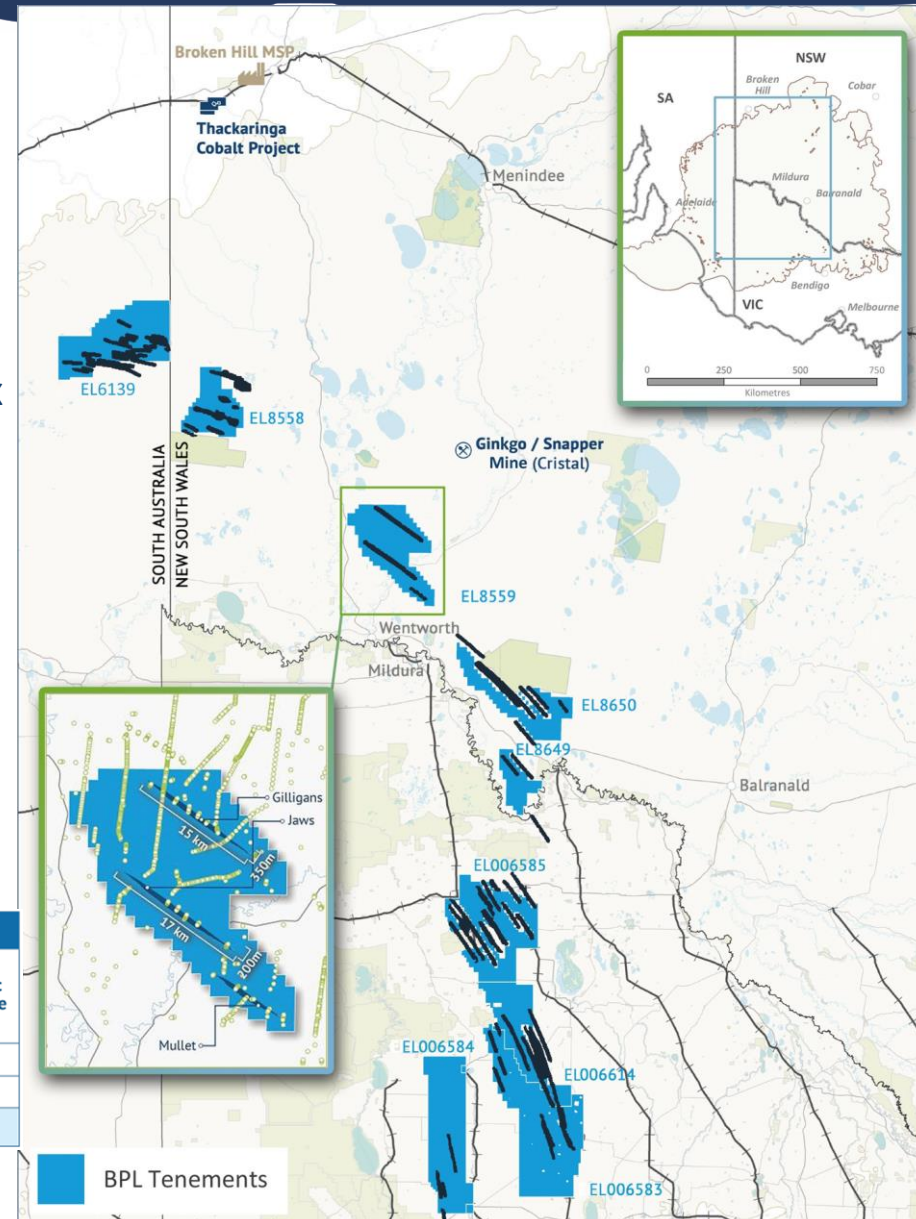


# Murray Basin Heavy Mineral Sands Portfolio

- Entire Murray Basin Data Compilation & prospectivity analysis provides BPL with largest tenement portfolio in Basin
- Focus on high-grade, low-tonnage, shallow deposits with high value mineral assemblage
- Innovative development via low capex/low opex mobile, modular mining technology
- Potential to develop and operate multiple operations across a broader project area
- High quality infrastructure – work force and transportation networks
- \$100m exploration expenditure compiled
- 60,000 drill holes, 2M metres drilled

Summary of Mineral Resources							HM Assemblage				
Mineral Resource Category	Deposit	Material (Mt)	In Situ HM (Mt)	HM (%)	Clay (%)	Oversize (%)	Ilmenite (%)	Zircon (%)	Rutile (%)	Magnetic Leucoxene (%)	Non-Magnetic Leucoxene (%)
Inferred	Jaws	63	1.2	1.9	5	1	10	10	29	22	1
Inferred	Gilligans	50	0.8	1.6	2	2	8	9	23	20	2
Total		113	2.0	1.8	3	1	10	10	26	21	2

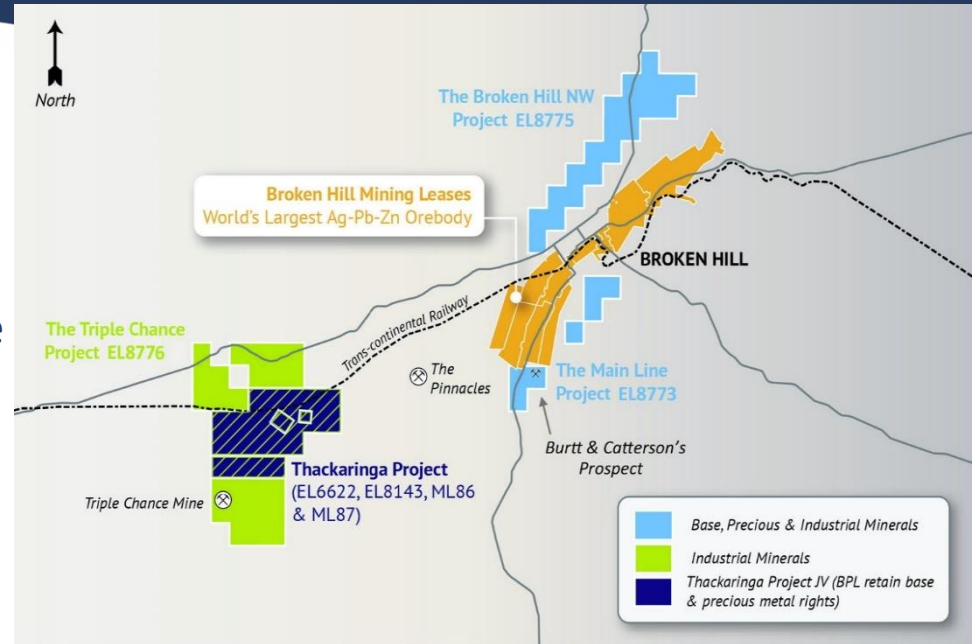
Source: [Jaws and Gilligan Resource Link](#)





# World Class Broken Hill Region

- Strategic portfolio including base, precious and industrial minerals
- Numerous high quality, under-explored prospects, with excellent Broken Hill style base metal potential
- 2018-2019 field season affected by ongoing severe drought conditions



## Thackaringa Cobalt Project JV (TJV) with Cobalt Blue (ASX:COB)

- BPL have 30% beneficial & 100% legal interest in Thackaringa
- BPL will receive 2% net smelter return royalty on all future production
- Retention of all base & precious metals with multiple advanced prospects
- Recent milestones delivered by COB incl. PFS (June 2018) & Resource Upgrade (April 2019)
- First class infrastructure, pro-mining local community and supportive Government

