

# Building a World-Class Graphite Project

2015 AGM Managing Director's Presentation LINCOLN MINERALS LIMITED

ASX: LML

www.lincolnminerals.com.au

Kookaburra Gully Trench 4 12m @ 20.5% graphitic carbon

## **Corporate Snapshot**

LINCOLN MINERALS

- A focused emerging graphite producer with key projects on SA's Eyre Peninsula – a proven world-class flake graphite province
- Mining lease application being processed by SA Government for the flagship Kookaburra Gully Graphite Project, 35km north of Port Lincoln, South Australia
- Targeting maiden graphite production and sales of high purity (>94% TGC) concentrate in 2016-17



97.8% TGC coarse flake graphite concentrate from Kookaburra Gully

ASX Code	LML
Market Capitalisation	A\$10.5 million
Shares on issue	268.4 million
52 Week range	0.03 – 0.06 cents
Cash at 30 September 2015	A\$0.44 million
Debt	NIL

Sale of Barns Estate property (December 2015) ensures funding available for next 6-9 months

#### **Board Snapshot**

Non-Executive Chairman - Mr Jin Yubo Managing Director - Dr Allan John Parker Non-Executive Director - Mr Eddie Lung Yiu Pang

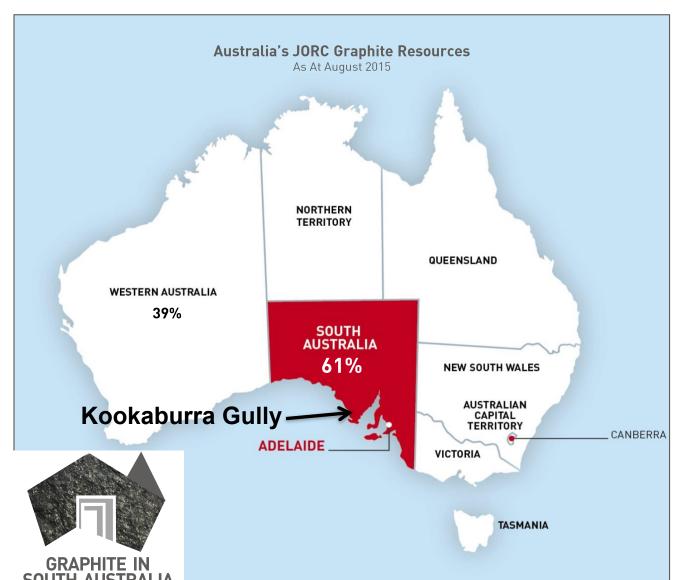
#### **Investment Case**



- Focused graphite developer with Australia's highest quality graphite deposit
- Flagship assets ideally located in close proximity to necessary infrastructure
- Flagship Kookaburra Gully Graphite Project
  - Very high-grade deposit ranked in the world's top 10 highest graphite grade resources
  - High purity levels of up to 98% TGC easily produced by conventional flotation
  - Substantial resource located in recognised mining friendly jurisdiction
- Near-term production 2016-17
  - Mining Lease in early 2016 (subject to government approvals)
  - Low capital investment and estimated operating costs
- Additional high grade graphite resource at historic Koppio Graphite Mine and upside at Kookaburra Extended and Gum Flat
- PACE program for drilling large Kookaburra Extended graphite target in early 2016
- Direct exposure to graphite and graphite market opportunity
  - Foundation shareholder in international graphite trading platform headquartered in one of world's most active graphite trading ports

## **World Class Graphite Assets**





South Australia is home to 61% of Australia's JORC graphite resources including Lincoln's world-class Kookaburra Gully deposit

SA's Eyre Peninsula is highly prospective for further world-class discoveries

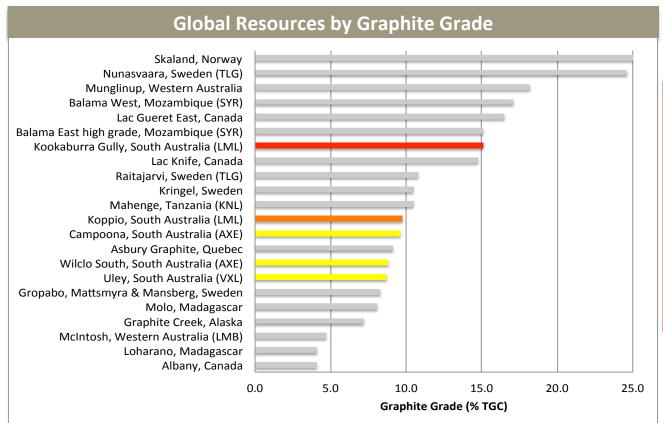
South Australia – ranked in top 20 as world's most attractive destination for mining investment by Fraser Institute

## Kookaburra Gully High-grade high-quality graphite resource



Flake graphite JORC Mineral Resource:

- 2.2 Mt Indicated and Inferred at 15.1% TGC (5% TGC cutoff)
- or 3.16 Mt Indicated and Inferred at 11.5% TGC (2% TGC cutoff)



"Kookaburra Gully is within the Top 10 global resources based on graphite grade and is capable of delivering nearterm production at low cost."

TGC = Total Graphitic Carbon

## **Graphite Market Fundamentals**

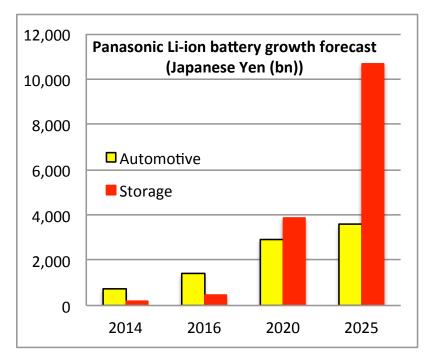


#### **BATTERY & ENERGY STORAGE COMMERCIALISATION**

- Graphite is a key input in the manufacture of lithium-ion batteries
- Batteries widely used in electric vehicles, smart phones, portable computer devices and more – battery backup for solar powered homes and grid-scale solar power storage and power generation

#### WIDESPREAD INDUSTRIAL APPLICATIONS

 Graphite is used in pencils, dry lubricants, steelmaking, pebble-bed nuclear reactors, solar energy, reinforcements in plastics and much more

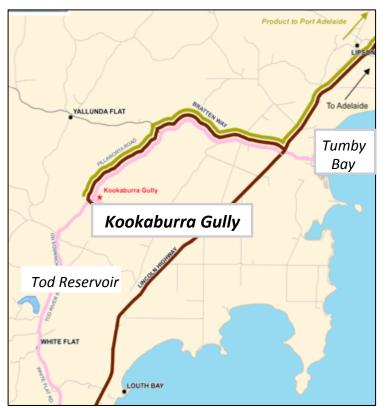


Automotive battery demand to grow by at least 15%

Storage battery demand to grow by 75% from 2017

### Kookaburra Gully – Low Impact Mine Plan

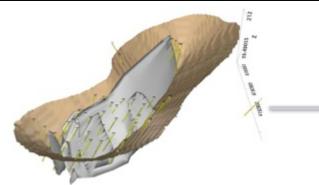




- Small open pit & process plant (cf Uley Graphite
   Mine) = small environmental footprint (103 Ha)
- Process 250,000 tonnes per annum (tpa) ore
- Produce up to 40,000tpa of high grade (93-98% TGC) graphite concentrate

#### Realisable infrastructure solutions

- Water pipeline from Tod Reservoir (10 km) + mains water for final product cleaning
- Power onsite generation and/or grid (ca. 5km from 33 kV transmission line) (2-4 MW)
- Transport to Port Lincoln (35km) in bulka bags or in containers to Port Adelaide for shipping







**Lincoln Minerals Limited** 

**Emerging Graphite Producer** 

## **Kookaburra Gully Mining Lease Application**

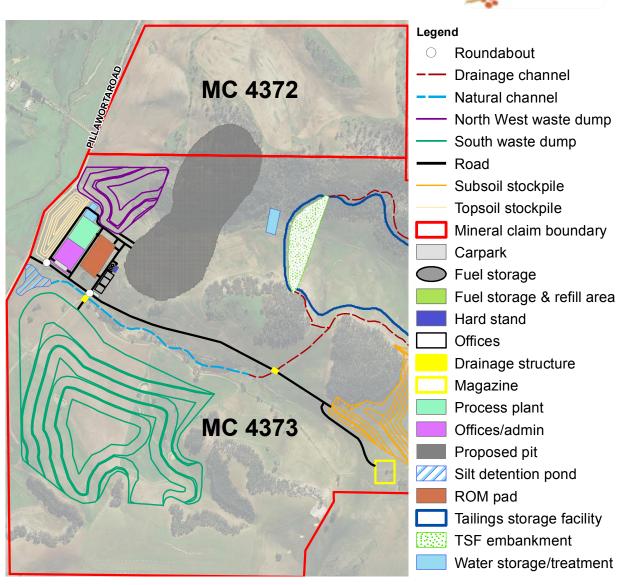


#### **Progress**

- Mineral Claims registered
   November 2014
- MLP lodged February 2015
- EPBC Referral lodged April 2015
- Revised MLP lodged May 2015
- Government & public assessment period – September-October 2015
- Response document in preparation – to be lodged December 2015

Mining Lease offer early 2016

(subject to Govt approvals)



## **Kookaburra Gully Robust Project Economics**



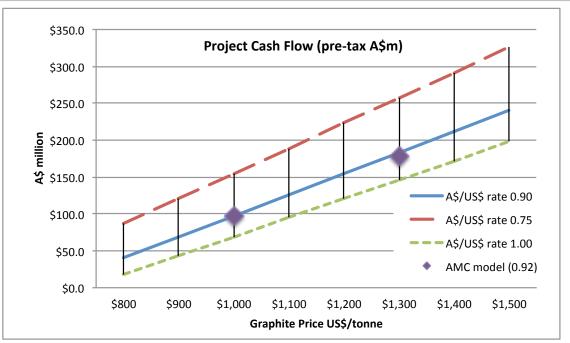
#### Low capital investment less than \$50 million and competitive cash operating costs

			Production				
Scenario	Graphite Price (A\$/t conc)	Life (yrs)	Plant feed	Feed %TGC	Concentrate	Conc %TGC	Operating Cost (\$/t conc)
Low revenue	\$1,077	6.2	1.55 Mt	15.7	233 kt	94.0	\$630
High revenue	\$1,382	7.2	1.80 Mt	15.4	256 kt	97.0	\$704

AMC Conceptual Mine Plan (based on 2012-13 prices)

2015 graphite price range for Kookaburra Gully concentrate (A\$/US\$ = 0.75):
A\$1,000 to A\$ 1,500 /tonne

South Australia offers a competitive graphite royalty scheme – 2% for the first 5 years, 3.5% therafter



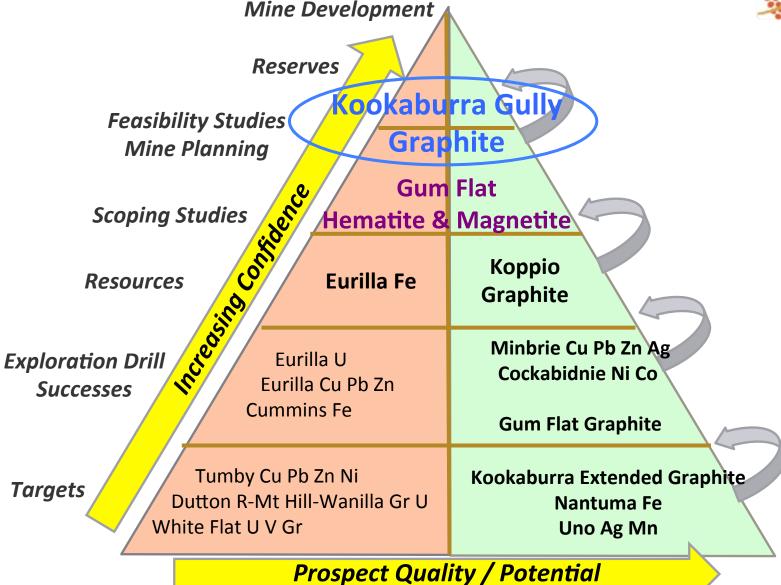
## **Upside – world-class graphite potential**



Project	Current Status	2015- 2016		
KOOKABURRA GULLY	<ul> <li>Indicated &amp; Inferred JORC Mineral Resource</li> <li>2.2 Mt @ 15.1% TGC</li> <li>Scoping studies completed</li> <li>Mineral Claims pegged</li> <li>Mining Lease Application submitted Feb 2015</li> </ul>	<ul> <li>Pilot plant metallurgical studies</li> <li>Customer and market development</li> <li>Obtain ML &amp; approval to mine</li> <li>Develop &amp; commission mine &amp; process plant in 2016-17</li> </ul>		
KOPPIO GRAPHITE MINE	<ul> <li>Historic mine</li> <li>1.85 Mt @ 9.8% TGC</li> <li>High grade mineralization up to 43% TGC over 500m strike length</li> </ul>	<ul> <li>Reconnaissance drilling 2014</li> <li>JORC Resource July 2015</li> <li>Metallurgical testing 2016-17</li> </ul>		
KOOKABURRA GULLY EXTENDED (Immediate target)	<ul><li>EM survey completed</li><li>4.5km long EM anomaly</li><li>Approval to drill received</li></ul>	<ul> <li>Drilling &amp; JORC Resource 2016</li> <li>Large exploration target</li> <li>2015 PACE program grant</li> </ul>		
GUM FLAT-SLEAFORD (Long-term target)	Adjacent Uley Graphite Mine	<ul> <li>Exploration targeted 2016-17</li> </ul>		

## **Other Projects**





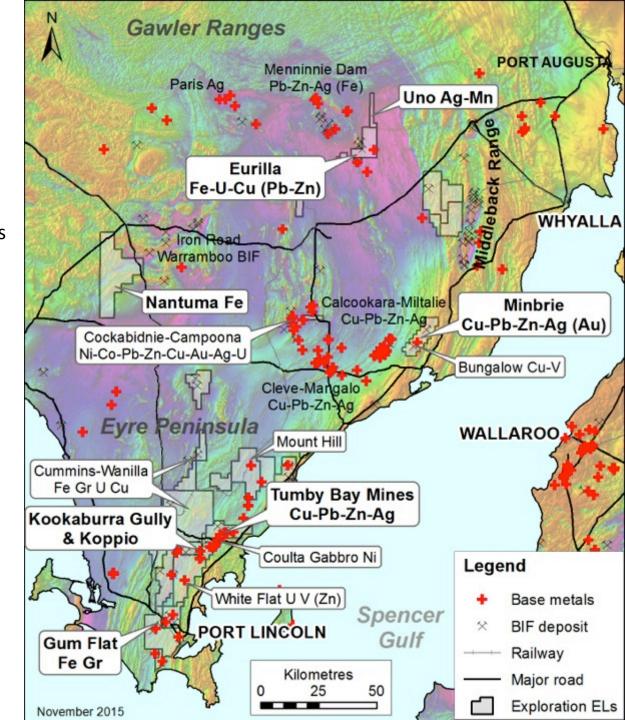


#### **Base metal potential**

- Historical mining on Eyre
   Peninsula for copper, lead and silver goes back to the mid-1800s
  - Tumby Bay region
  - Minbrie-Cleve-Cockabidnie region
- Significant new discoveries include Menninnie Dam (leadzinc), Paris (silver) and Minbrie (copper-lead-zinc)
- Proven copper-lead-zinc, uranium, nickel-cobalt, vanadium, manganese & silver

Lincoln Minerals has several strategic copper targets for exploration in 2016

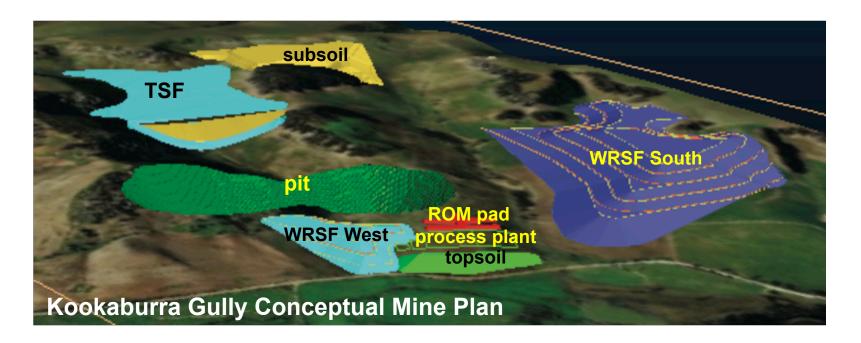
**Lincoln Minerals Limited** 



## **Summary**



- Focused graphite company with Australia's highest quality graphite deposit
- Flagship Kookaburra Gully Graphite Project
  - Very high-grade deposit ranked in the world's top 10 highest graphite grade resources
  - High purity levels of up to 98% TGC easily produced by conventional flotation
  - Located in close proximity to necessary infrastructure
  - Substantial resource in recognised mining friendly jurisdiction
- Near-term production 2016-17
  - Mining Lease in early 2016 (subject to government approvals)
  - Low capital investment and estimated operating costs
- Direct exposure to graphite and graphite market opportunity
  - Foundation shareholder in international graphite trading platform headquartered in one of world's most active graphite trading ports
- PACE program for drilling large Kookaburra Extended graphite target in early 2016
- Ongoing exploration program for copper, gold, nickel, iron ore





## THANKYOU

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## **Important Notice**



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#### **Forward-Looking Statements**

This presentation contains forward looking statements concerning the Kookaburra Gully Graphite Project. Statements concerning Mineral Resources, mine plans and project economics may be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-looking statements are not statements of historical fact, and actual events and results may differ materially from those described in the statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on AGL's and LML's beliefs, opinions and estimates as of the date the statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Data and amounts shown in this presentation relating to capital costs, operating costs, graphite prices and project timelines are based on consultant reports and internally generated estimates and are best estimates only. Accordingly, AGL and LML cannot guarantee the accuracy and/or completeness of the figures or data included in the presentation. All dollar amounts are in Australian dollars unless otherwise stated.

#### **Competent Person's Statement**

Information in this presentation that relates to exploration activity, mineral resources and results was compiled by Dr A J Parker who is a Member of the Australasian Institute of Geoscientists. Dr. Parker is Managing Director of and has shares in Lincoln Minerals Limited. He has sufficient experience relevant to the styles of mineralisation and to the activities which are being presented to qualify as a Competent Person as defined by the JORC code, 2012. Dr. Parker consents to the release of the information compiled in this presentation in the form and context in which it appears.



## **Appendix**

This presentation has been prepared by Lincoln Minerals Limited ("LML") as an aid to a spoken explanation. The information contained in this presentation is based on a number of public statements, Quarterly Reports and ASX releases made by LML:

#### References

- Lincoln Minerals, 2013. Updated Graphite Mineral Resources for Lincoln's world-class
   Kookaburra Gully project in South Australia's Eyre Peninsula. Lincoln Minerals Limited, ASX
   Announcement 19 December 2013.
- Lincoln Minerals, 2015. Maiden graphite resource for second Lincoln deposit in SA's Eyre Peninsula lifts total inventory by >50% in this world-class province. Lincoln Minerals limited, ASX Announcement 13 July 2015.
- Australian Graphite Limited, 2015. Community Information Update No.4, Kookaburra Gully Graphite Mine, Mining Lease Proposal. Lincoln Minerals Limited website, September 2015
- Lincoln Minerals, 2015. 2014-2015 Annual Report. Lincoln Minerals Limited October 2015.

Information extracted from previously published reports identified in this report is available to view on the Company's website www.lincolnminerals.com.au. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements 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. 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 announcements.



### **Kookaburra Gully Mineral Resource**

Table 1. Kookaburra Gully Mineral Resource at a nominal 5% TGC lower cut-off grade

Mineral Resource Classification	Tonnage (Mt)	Average Grade (% TGC)  Contained Graphite (tonnes)		Density (g/cc)
Indicated	1.47	13.9	204,352	2.57
Inferred	0.73	17.3	127,425	2.52
TOTAL (>5% TGC)	2.20	15.1	331,778	2.55

Mt = million tonnes TGC = Total Graphitic Carbon

Table 2. Kookaburra Gully Mineral Resource at a nominal 2% TGC lower cut-off grade

Mineral Resource Classification	Tonnage (Mt)	o I Granni		Density (g/cc)
Indicated	2.10	10.6	223,349	2.56
Inferred	1.13	12.2	137,370	2.52
TOTAL (>2% TGC)	3.23	11.2	360,719	2.54

Mt = million tonnes TGC = Total Graphitic Carbon

#### Reference

Lincoln Minerals, 2013. Updated Mineral Resources and Metallurgy for Lincoln's world-class Kookaburra Gully project in South Australia's Eyre Peninsula. *Lincoln Minerals Limited, ASX Announcement* December 2013.



#### **Koppio Mineral Resource**

Table 2. Total combined Mineral Resources for Koppio and Kookaburra Gully

Mineral Resource Classification	Cutoff Grade (% TGC)	Tonnage (Mt)	Average Grade (% TGC)	Contained Graphite (tonnes)	Density (g/cc)	
Корріо						
High-grade Core (Domain 1) – Inferred	5%	1.85	9.76	180,733	2.67	
Low-grade Halo (Domain 2) – Inferred	2%	1.21	3.18	38,560	2.80	
Kookaburra Gully						
High-grade Core (Domain 1) - Indicated	5%	1.45	13.74	199,193	2.56	
Low-grade Halo (Domain 2) — Indicated	2%	0.62	3.04	18,984	2.54	
High-grade Core (Domain 1) – Inferred	5%	0.73	16.17	117,964	2.50	
Low-grade Halo (Domain 2) – Inferred	2%	0.40	2.91	11,538	2.54	
TOTAL (>2% TGC)		6.26	9.05	566,972	2.63	

Mt = million tonnes TGC = Total Graphitic Carbon

#### Reference:

Lincoln Minerals, 2015. Maiden graphite resource for second Lincoln deposit in SA's Eyre Peninsula lifts total inventory by >50% in this world-class province. *Lincoln Minerals limited, ASX Announcement* 13 July 2015.