



23 June 2022

## **Leo Lithium Roars to Life**

**Simon Hay**  
***Managing Director***

# DISCLAIMER



## IMPORTANT NOTICE AND DISCLAIMER

This presentation has been prepared by Leo Lithium Limited ("Leo Lithium" or "**Company**"). For the purposes of ASX Listing Rule 15.5, the company confirms that this presentation has been authorised for release to the ASX by the board of directors of Leo Lithium. This presentation and information contained in it is being provided to shareholders and investors for information purposes only. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction and may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Shareholders and investors should undertake their own evaluation of the information and otherwise contact their professional advisers in the event they wish to buy or sell shares. To the extent the information contains any projections the Company has provided the projections based upon the information available to the Company. The Company does not make any representations as to the accuracy or otherwise of that third party information.

This presentation does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.

To the fullest extent permitted by law, Leo Lithium, its related bodies corporate, and each of their officers, employees, agents and advisers expressly disclaim, to the maximum extent permitted by law, all liabilities (however caused, including negligence) in respect of, make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this presentation. No responsibility for any errors or omissions from this presentation arising out of negligence or otherwise is accepted.

## SUMMARY INFORMATION

This presentation contains summary information about Leo Lithium and its subsidiaries and their activities current as at the date of this presentation, unless otherwise indicated. The information in this presentation is of general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Leo Lithium or that would be required in a prospectus or product disclosure statement prepared in accordance with the Corporations Act 2001 (Cth). The historical information in this presentation is, or is based upon, information that has been released to the ASX. This presentation should be read in conjunction with Leo Lithium's other periodic and continuous disclosure announcements lodged with the ASX, which are available at [www.asx.com.au](http://www.asx.com.au). Certain market and industry data used in connection with this presentation may have been obtained from research, surveys or studies conducted by third parties, including industry or general publications. Neither Leo Lithium nor its representatives have independently verified any such market or industry data provided by third parties or industry or general publications.

## ORE RESERVES AND MINERAL RESOURCES REPORTING

The information in this announcement that relates to production targets, Mineral Resources and Ore Reserves is extracted from the Company's replacement prospectus dated 6 May 2022 (Prospectus) which is available at [leolithium.com](http://leolithium.com).

The Company confirms that all material assumptions underpinning the production targets in the Prospectus continue to apply and have not materially changed and it is not aware of any new information or data that materially affects the information included in the Prospectus and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates in the Prospectus continue to apply and have not materially changed.

## ASX RELEASES

Investors are advised that by their nature as visual aids, presentations provide information in summary form. The key information on the company and its projects can be found in the Prospectus.

## FORWARD LOOKING AND CAUTIONARY STATEMENTS

This announcement contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral resources, results of exploration and relations expenses. Persons reading this presentation are cautioned that such statements are only predictions and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of lithium, gold and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information.

These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. Past performance should not be relied upon as being indicative of future performance. The Company disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

# LEO LITHIUM INVESTMENT HIGHLIGHTS

## Development of long life, large scale Goulamina Lithium Project underway



Among the world's largest spodumene projects



Large scale, high grade orebody



Development is underway



Quality product



Social licence to operate



Ganfeng JV partnership, investment and offtake



Exposure to the EV and decarbonisation thematic





1.

## Leo Lithium Overview



# LEADERSHIP TEAM

## Experienced Board & Management



**Alistair Cowden**  
**Chairman**

Experienced mining company founder and builder with 41 years' as a mining executive and geologist in the gold, nickel and copper industry in Australia, Africa, Asia and Europe



**Simon Hay**  
**Managing Director**

30+ years' experience with a track record of value creation. Simon was previously the CEO of Galaxy Resources with his role culminating in the A\$5 billion merger with Orocobre to form Allkem, a leading lithium miner



**Amber Banfield**  
**Non-Executive Director**

20+ years' experience in management positions providing strategy and project development support to energy transition, decarbonisation and sustainability-rated investments



**Rod Baxter**  
**Non-Executive Director**

Highly experienced director and business executive with extensive international and multi-sector experience in the mining and resources, engineering and construction and manufacturing sectors



**Mark Hepburn**  
**Non-executive Director**

28+ years' finance industry experience in stockbroking, corporate funding and business management



**Brendan Borg**  
**Non-executive Director**

20+ years' experience as a geologist specialising in "battery materials" lithium, graphite & cobalt



**Alan Rule**  
**Acting Chief Financial Officer**

24+ years' experience as CFO and Company Secretary in the mining industry in Australia and Africa



**Nathan Bartrop**  
**Company Secretary**

Corporate governance professional with 10+ years' experience in ASX Listing Rules compliance, corporate advisory and corporate governance

# GOULAMINA HIGHLIGHTS

Long life, large scale, open pit project with development underway

1	Globally significant project 	<b>Goulamina expected to be amongst the world's largest spodumene projects</b> Forecast annual spodumene concentrate production of 506ktpa increasing up to 831ktpa under Stage 2 <sup>1</sup>
2	Large scale, high grade orebody 	<b>Amongst the largest global hard rock lithium Mineral Resource</b> Mineral Resource of 108 Mt at 1.45% Li <sub>2</sub> O and Ore Reserve of 52Mt at 1.51% Li <sub>2</sub> O (100% basis)
3	Development substantially funded 	<b>One of a limited number of lithium development projects globally which are substantially funded</b> US\$130 million in equity funding already received from Ganfeng and US\$40 - \$64 million in debt expected
4	Quality product 	<b>High quality concentrate with test work validating 6% Li<sub>2</sub>O grade spodumene concentrate</b> Successfully converted Goulamina's spodumene concentrate to battery grade lithium hydroxide
5	Social licence to operate 	<b>Social licence to operate in Mali</b> Relationships with the Malian government and local communities
6	World-class partner 	<b>Project being developed in 50/50 partnership with Ganfeng</b> Providing funding, offtake and operational support to de-risk development
7	Decarbonisation thematic 	<b>Exposure to the electric vehicle and decarbonisation thematics</b> Providing critical metals for a clean energy future

1. Based on first 5 years of steady state Stage 2 production.

# GOULAMINA: A TIER 1 LITHIUM DEVELOPMENT



Updated Definitive Feasibility Study<sup>1</sup> detailed a Stage 2 expansion from 2.3Mtpa to 4.0Mtpa



**US\$2.9 billion**

**Post-tax real NPV<sub>8%</sub> on a 100% basis<sup>3</sup>  
for Stage 2**

Based on spodumene price of  
US\$1,250/tonne for the first 5 years and  
US\$900/tonne thereafter



**80%**

**Recovery**

Test work has resulted in 80% recovery,  
whole of ore flotation



**US\$312/t**

**Cash cost (FOB, LOM, dry)**

Expected competitive cash cost for  
robust cash flow throughout the lithium  
cycle (Stage 2)



**831ktpa<sup>2</sup>**

**6% concentrate production  
(dry, 100% basis)**

Stage 2 expansion places Goulamina as a  
leading spodumene producer



**83%**

**Post-tax ungeared real IRR on a  
project basis (Stage 2)**

Satisfies JV condition and led to  
positive FID for Stage 1 in January 2022

Note: All metrics on a 100% project basis. 1. Refer to Prospectus for further information; 2. Dry tonnes; based on Stage 2 steady state production (first 5 years); 3. Leo Lithium is expected to hold 45% of the Goulamina Lithium Project after accounting for Ganfeng's share and the State of Mali's 10% free-carried interest. The State of Mali has the option to subscribe for an additional 10% at fair market value via the Lithium du Mali SA option. As at the date of this presentation, the State of Mali is yet to acquire its initial 10% free carried interest in Lithium du Mali SA. It is not currently known whether the State of Mali will exercise its rights under the Lithium du Mali SA option. Note: If Stage 1 is technical and commercially proven, Leo Lithium plans to commence Stage 2.

# GOULAMINA LITHIUM PROJECT KEY METRICS

Leading industry experts engaged on the Updated DFS

## Updated DFS Key Metrics (100% project basis)

<b>Ownership</b>	Leo Lithium (45%), Ganfeng (45%), State of Mali (10%) <sup>1</sup>
<b>Mineral Resource</b>	108.5Mt at 1.45% Li <sub>2</sub> O
<b>Mine Life</b>	21 years minimum
<b>Ore Reserves (Proven &amp; Probable)</b>	52Mt at 1.51% Li <sub>2</sub> O
<b>Life of Mine Production (concentrate)</b>	15.6Mt
<b>Spodumene Concentrate Production (Stage 1)</b>	506ktpa
<b>Spodumene Concentrate Production (Stage 2)</b>	831ktpa <sup>2</sup>
<b>Average Spodumene Concentrate Production</b>	726ktpa
<b>Concentrate Specifications</b>	6% Li <sub>2</sub> O, <0.6% Fe <sub>2</sub> O <sub>3</sub> , low mica
<b>Annual Mine Throughput</b>	2.3Mt (Stage 1) rising to 4.0Mt (Stage 2)
<b>Pre-tax NPV<sub>8%</sub> (Stage 1 &amp; 2)</b>	US\$4.0 billion (A\$5.6 billion)
<b>Pre-tax IRR (Stage 1 &amp; 2)</b>	98%
<b>Post-tax NPV<sub>8%</sub> (Stage 1 &amp; 2)</b>	US\$2.9 billion (A\$4.1 billion)
<b>Post-tax IRR (Stage 1 &amp; 2)</b>	83%
<b>Capital Cost (Stage 1)</b>	US\$255 million
<b>Capital Cost (Stage 2, incremental)</b>	US\$70 million
<b>Cash Costs (Life Of Mine, FOB, Stage 2)</b>	US\$312 per tonne concentrate
<b>AISC (Life of Mine, FOB, Stage 2)</b>	US\$365 per tonne concentrate
<b>Spodumene pricing (US\$/t, real)</b>	US\$1,250/t for first 5-years, US\$900/t long term



*Coarse spodumene blades*

Cautionary Statement: The production inventory and forecast financial information referred to in the Stage 2 case comprises Proven Ore Reserves (9.9%), Probable Ore Reserves (53.6%) and Inferred Mineral Resources (36.5%). The Inferred Mineral Resource included in the inventory is 30 million tonnes at 1.3% Li<sub>2</sub>O. The Inferred Mineral Resource has been scheduled on a preliminary basis with all Inferred material mined after the Ore Reserves. The Inferred Mineral Resource does not have a material effect on the technical and economic viability of the Project. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Note: All dollar figures are in real terms.

1. The State of Mali is free-carried on its first 10%, with an option to subscribe for an additional 10% at Fair Market Value. The State of Mali has yet to acquire its initial 10% free carried interest in LMSA. It is not currently known whether the State of Mali will take-up this right for the additional 10%; 2. Based on Stage 2 steady state production (first 5 years).



# WORLD CLASS PARTNER

Ganfeng has secured 50% of Goulamina Stage 1 offtake, and up to 100% on debt provision

## Ganfeng Overview



Chinese lithium chemical producer,  
market capitalisation of ~US\$24 billion



World number one lithium chemical  
producer by production capacity



Supplier to major tier 1 lithium battery  
producers and OEMs



Large supplier network in China with  
purchasing power



Diversified upstream lithium portfolio  
with 9 investments/offtake projects

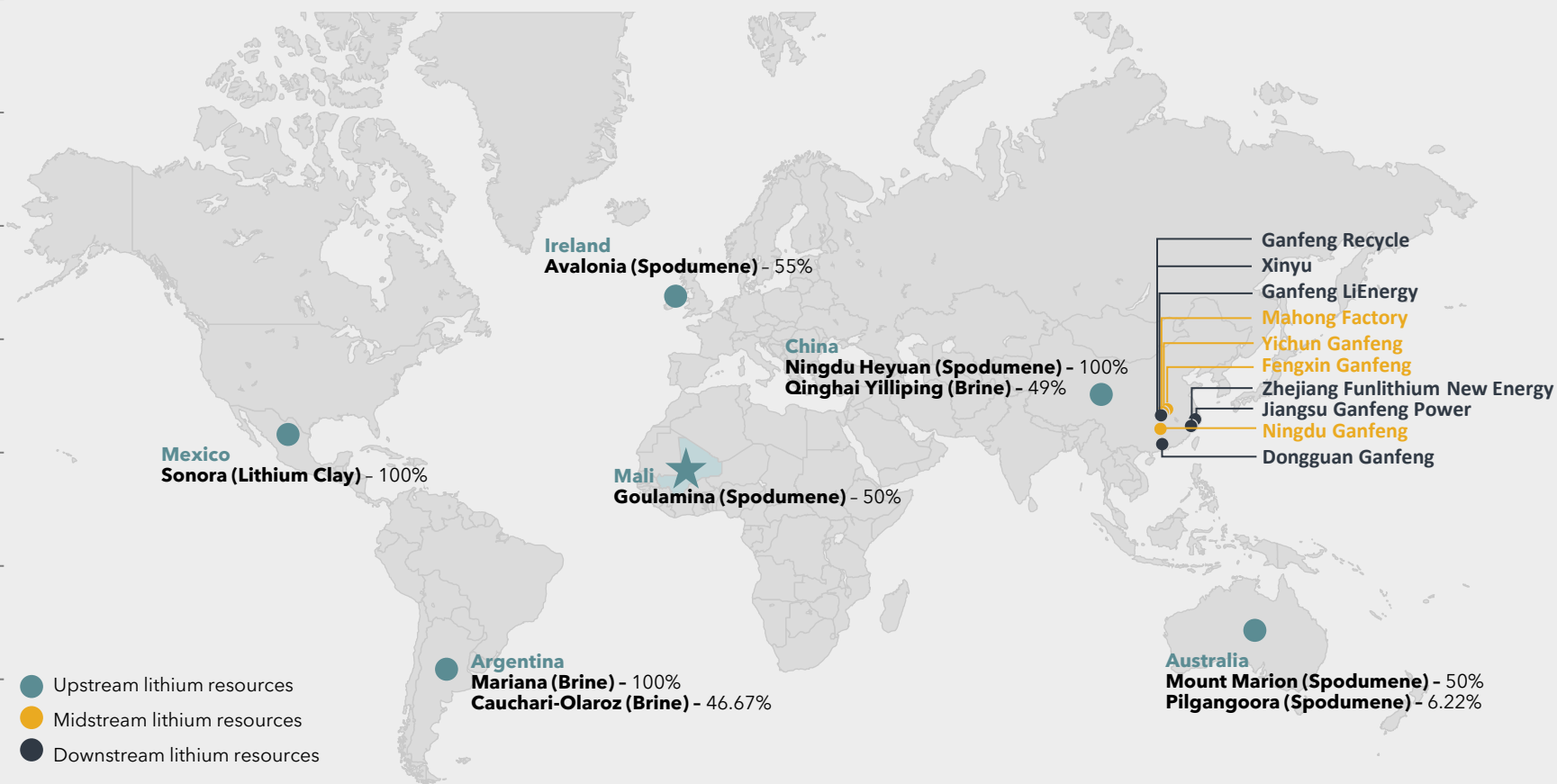


Targeting 300ktpa LCE supply capacity  
by 2025



Proven track record supporting and  
investing in lithium operations

## Ganfeng's Global Lithium Operations



# GANFENG JV FORMALISED

## US\$130 million equity funding received

- **Funds totalling US\$130 million have been received** by Mali Lithium BV (**Goulamina JV**) from Ganfeng
  - Firefinch and Ganfeng each hold a 50% interest in the Goulamina JV
  - Firefinch and Ganfeng will hold 45% each in the Goulamina Lithium Project (post the State of Mali's 10% free carried interest)<sup>1</sup>
- **Leo Lithium to be the operator** of the Goulamina Lithium Project
- **Debt facility expected to be made available to the Goulamina JV by early July 2022**
  - Ganfeng will either procure up to US\$64 million in external debt, or provide US\$40 million of debt itself
  - Ganfeng motivated to complete the debt facility as this will provide Ganfeng with 100% offtake



**Corporate restructuring to facilitate JV**



**Ganfeng US\$130m investment received by Firefinch**



**Targeting documentation on the Ganfeng debt facility**

**Early H1 2022**

1. The State of Mali is free-carried on its first 10%, with an option to subscribe for an additional 10% at Fair Market Value. The State of Mali has yet to acquire its initial 10% free carried interest in LMSA. It is not currently known whether the State of Mali will take-up this right for the additional 10%.

# GOULAMINA PROJECT STATUS

## Proceeding with early-stage engineering and drilling programmes

- **Procurement of long lead items**
  - Ball mill tender completed and issued to vendors
- **Site works have started**
  - Earthworks contractor mobilised to site
  - Site clearing and road upgrades well advanced
  - Construction of first camp building in progress
- **Sterilisation drilling of the waste rock facility complete**
  - Pegmatites encountered in numerous holes
  - Follow-up holes on best hits completed; assays pending
- **Extensive drilling program for 2022 underway**
  - Infill drilling, resource upgrade and extension along strike
- **Socialisation with local communities well advanced**
- **Recruiting of Perth corporate and Mali project teams underway**







**Drilling at Goulamina**



**Meeting with Goulamina village elders**



**Site works launching ceremony**



**Goulamina drill core**




**Leo Lithium MD Simon Hay with His Excellency Lamine Seydou TRAORE, Minister of Mines**



# LEO LITHIUM

**A pure play lithium development company new to the ASX**

**Bringing the world class Goulamina Lithium Project into production**

1	Among the world's largest spodumene projects	✓
2	Large scale, high grade orebody	
3	Development is underway	
4	Quality product, SC6	★★★
5	Social licence to operate	
6	Ganfeng JV partnership, investment and offtake	
7	Exposure to the EV and decarbonisation themes	



# Appendix A

## Supporting Information

# PROCESSING AND TESTWORK UPDATE

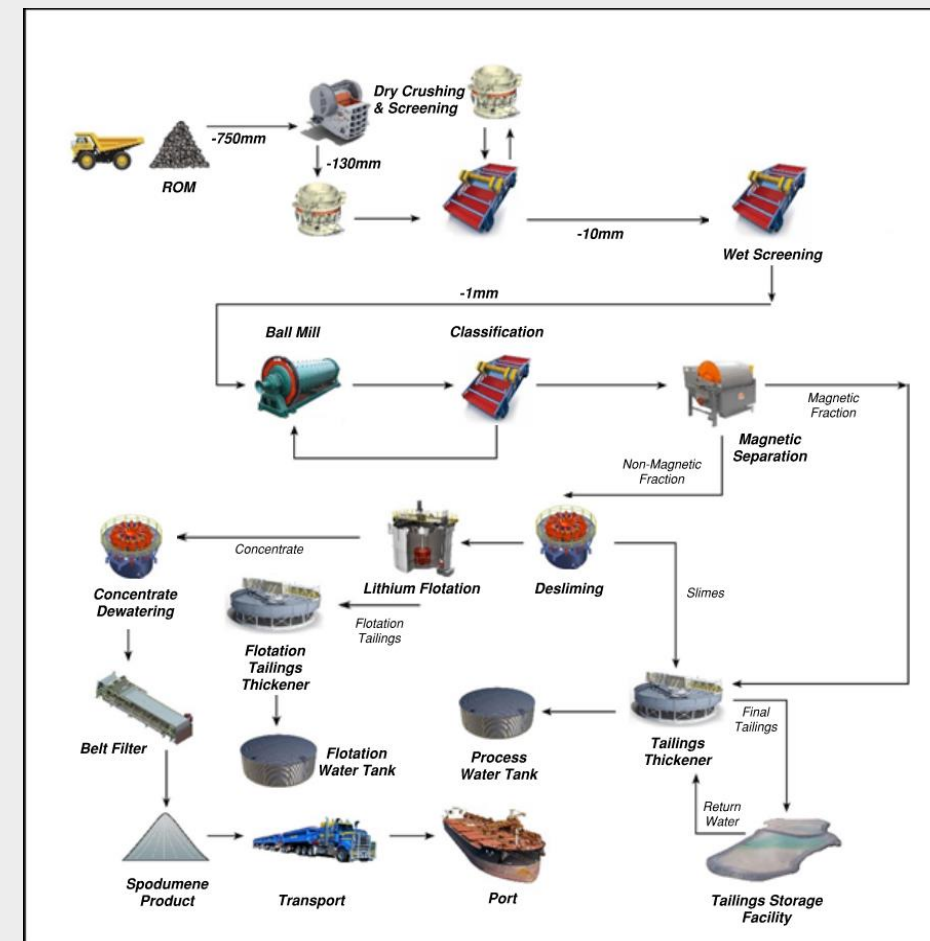
Spodumene successfully converted into battery grade lithium hydroxide (min 99.5% Li<sub>2</sub>O)

- Revised process flowsheet to facilitate an increase in plant throughput from 2.3Mtpa to 4.0Mtpa with key updates being:
  - **Three-stage conventional crushing circuit** replaces two-stage crushing circuit and High-Pressure Grinding Roll crusher
  - **Stack Sizer screens added to circuit**, replacing hydrocyclones
  - **Magnetic separation circuit modified** to a Ganfeng proven flowsheet
- Testwork program indicated **increased recoveries to 80%**

## Goulamina Process Plant Layout



## Simplified Process Flow Design





# GOULAMINA RESOURCE AND RESERVE

Mineral Resource of 108Mt at 1.45% Li<sub>2</sub>O and Ore Reserve of 52Mt at 1.51% Li<sub>2</sub>O

## Goulamina Mineral Resource Estimate

Classification	Tonnes (m)	Grade Li <sub>2</sub> O (%)	Contained Tonnes Li <sub>2</sub> O
Measured	8.4	1.57	133,000
Indicated	56.2	1.48	832,000
Inferred	43.9	1.38	606,000
<b>Total</b>	<b>108.5</b>	<b>1.45</b>	<b>1,570,000</b>

## Goulamina Open Pit Ore Reserve Estimate

Proven	8.1	1.55	125,000
Probable	44.0	1.50	660,000
<b>Total</b>	<b>52.0</b>	<b>1.51</b>	<b>785,000</b>







**For more information**

Simon Hay

Managing Director

[info@leolithium.com](mailto:info@leolithium.com)

+61 8 6149 6100

**[leolithium.com](http://leolithium.com)**