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## Leo Lithium (LLL) – On the road to being a large-scale producer

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### LLL (\$0.56, mkt cap \$553M)

- LLL listed on the ASX in June 2022 following a \$100M IPO at \$0.70/share, combined with in-specie distribution associated with its demerger from Firefinch (FFX). LLL's major asset is the Goulamina lithium project in Mali, West Africa, which it is developing with its joint venture partner Ganfeng. The company is headquartered in Perth, WA, and has 1,198M shares and 8M options on issue, with FFX being a substantial shareholder (17.6%), its shares escrowed until June 2024.

### Goulamina – Tier 1 large-scale undeveloped spodumene deposit

- **Goulamina's JORC Resources are 109Mt @ 1.45% Li<sub>2</sub>O for 1.57Mt contained Li<sub>2</sub>O, or 3.91Mt LCE.** It is one of the world's largest undeveloped hard-rock spodumene deposits, along with Liontown Resources' (LTR) Kathleen Valley and AVZ Minerals' (AVZ) Manono projects. The Goulamina resource has strike length of 2.9km north-south and 1.5km east-west, with mineralisation outcropping in central portion and extending to 220m below surface. Potential to increase Resources and Reserves exists via company's current infill and extensional drilling program.

### Ganfeng brings considerable clout to JV

- **LLL and Ganfeng each own 50% of the Goulamina Lithium Project**, via their Goulamina JV. The Mali government has an option to be 10% free carried by the JV, and also the right to acquire an additional 10% interest by purchasing equity at fair market value.
- **Ganfeng is a leading global producer of lithium chemicals**, supplying Tier 1 battery and EV manufacturers with market capitalisation of US\$24b. It has experience and equity in lithium projects and mines including hard rock spodumene such as Pilgangoora and Mount Marion (Australia) and Avalonia (Ireland), as well as brines and clays. Ganfeng is targeting 300ktpa LCE production by 2025. It earned its interest in the Goulamina JV by contributing US\$130M in cash, and has provided the JV US\$40M in debt. Besides bringing its intimate knowledge of upstream development, Ganfeng will likely allow LLL to consider partnering in downstream opportunities.

### DFS contemplates 831ktpa spodumene in Stage 2

- **Large-scale production profile.** Goulamina's Updated DFS in December 2021 contemplated an open-pit mine producing average 726ktpa spodumene concentrate over LOM across two stages: A 2.3Mtpa Stage 1 plant producing 506ktpa SC6 for the first 18 months, increasing to 4Mtpa in Stage 2 producing 831ktpa.
- **Initial LOM of 21 years** is underpinned by JORC Reserves of 52Mt @ 1.51% Li<sub>2</sub>O for 0.79Mt contained Li<sub>2</sub>O, with a low 3.3x strip ratio. Mining is to be conventional drill and blast, excavator and truck haulage. There is no Resource cut-off grade as mineralisation extends from footwall to hanging wall, allowing these to be mined in entirety and reducing reliance on selective mining. Processing includes three-stage crush, ball mill with coarse grind (p80=180µm), screen, two-stage magnetic separation, and three-stage flotation, with lithium recovery of 80%.

### Attractive financials from Updated DFS

- **The Updated DFS reveals Goulamina (100%) having a post-tax NPV8 real of US\$2.95b (Stage 1 and 2).** IRR is 83%, average annual EBITDA is US\$448M, payback only 1.5 years. The study was based on a spodumene price of US\$1,250/t for the first five years and US\$900/t thereafter. These are well below today's spot prices of US\$6,500-7,000/t.
- **Attractive NPV/pre-production capex ratio of 4.9x.** Capex for Stage 1 is US\$255M and for Stage 2 is US\$70M for total of US\$325M. NPV/pre-production capex ratio of 4.9x is highly attractive.
- **Potential upside from economies of scale on costs.** Stage 2 operating costs C1 of US\$312/t and AISC of US\$365/t FOB in the Updated DFS were not updated from the earlier Stage 1 only DFS, highlighting potential upside from economies of scale.
- **Nearby to highway for concentrate trucking.** Goulamina is only within 30km of a major highway, allowing for trucking concentrates to Abidjan Port in Cote D'Ivoire. Other port options are San Pedro (Cote D'Ivoire) and Dakar (Senegal.). Stage 1 power will be supplied on-site by diesel or LNG, while Stage 2 may have an addition of a staged hybrid solution incorporating solar and

battery storage combined with diesel. Bulk of water will be sourced from the Selingue Dam via a 29km pipeline.

### Fully permitted and offtake secured

- **Goulamina Mining Permit granted August 2019, with ESIA approval.** The ESIA is currently being updated due to minor changes to the process plant and infrastructure design. FID was approved by the JV in January 2022.
- **Gangfeng is obliged to acquire 100% of offtake following provision of US\$40M debt.** Pricing is linked to that prevailing for downstream lithium products. Product is 6% Li<sub>2</sub>O (SC6) concentrate, low in mica and iron (<0.6% Fe<sub>2</sub>O<sub>3</sub>).

### Funding – covered for Stage 1 capex

- **LLL had attributable cash of US\$124M (A\$179M) end June 2022,** comprising US\$60M (A\$86M) on its consolidated balance sheet and 50% share of the Goulamina JV's US\$129M (A\$185M) cash. Along with 50% share of JV's US\$40M debt (A\$58M), this should be sufficient to fund LLL's share of Goulamina's US\$255M Stage 1 capex and other expenses (Figure 1). Debt drawdown is available from November 2022 to May 2024, maturing five years after financial close, with interest tied to the overnight financing rate by Federal Reserve Bank NY plus 6% margin.

**Figure 1: LLL Funds and Expenditure US\$M**

<b>Expenditure:</b>	
Stage 1 capex US\$255M (50% share)	128
Corporate, exploration, working capital, other	17
<b>Total</b>	<b>145</b>
<b>Funding:</b>	
JV cash share US\$130M (50% share)	65
JV debt share US\$40M (50% share)	20
Consolidated cash	60
<b>Total</b>	<b>145</b>

Source: Company; Foster Stockbroking estimates

### Timeline – targeting first product 2Q2024

- **Project schedule is 27 months construction from February 2022,** with the critical path being ball mill procurement and installation. The ball mill has already been secured under budget, with an

eight-week improvement on the baseline schedule. Mobilisation for bulk earthworks is scheduled for 4Q 2022.

- **Wet commissioning to commence 1Q 2024 and first product end 2Q 2024**, which is expected to make Goulamina the first hard rock lithium mine in West Africa. The company is also awaiting vendor information to see whether it can investigate accelerated production targeting as early as possible in 1Q24. Stage 2 construction is expected 18 months after Stage 1 commissioning.
- **Work progressing in line with schedule and budget.** Early stage development is underway, including detailed plant design, procurement of long lead items such as ball mill and crushers, site roadworks, installation of camp, and sterilisation of waste rock facility.

### Experienced management

- **Simon Hay is the MD of LLL, bringing in valuable lithium mining and production experience.** He was previously CEO of Galaxy Resources (GXY) – owner of the Mt Cattlin spodumene hard-rock mine, prior to its merger with Orocobre (ORE) to form Allkem (AKE).

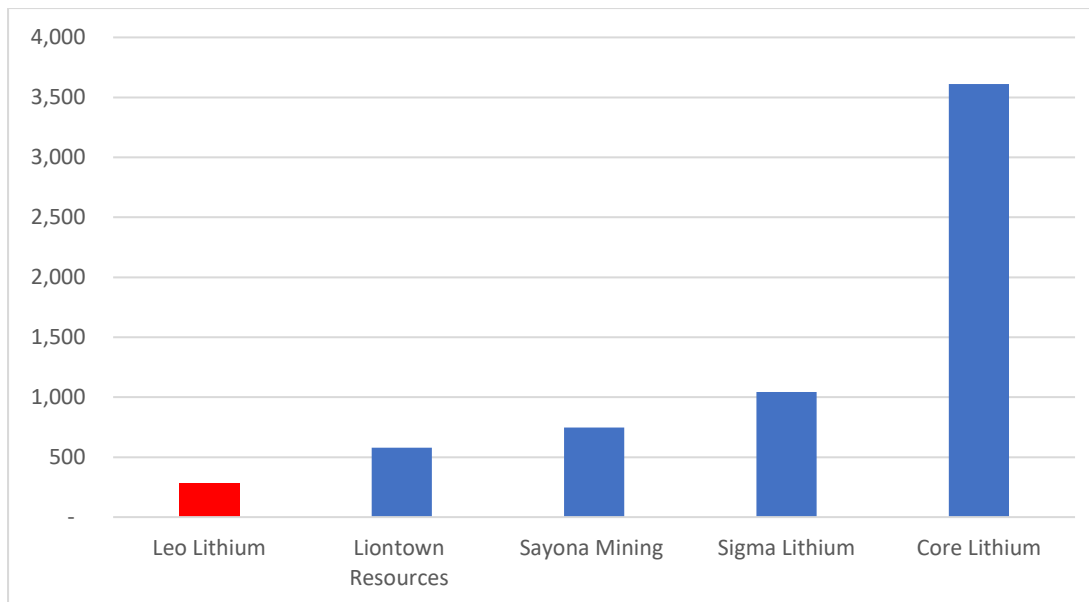
### Sanctions lifting ease sovereign risks

- **The Economic Community of West African States (ECOWAS) lifted economic and financial sanctions on Mali on July 2022**, in response to the country's progress for democratic elections. Mali has announced a transitional period of 24 months effective from March 2022 for elections including a constitutional referendum (March 2023); local elections (June 2023); legislative elections (November 2023); and Presidential elections (February 2024). The lifting of sanctions allows use of preferred transport routes for Goulamina. LLL stated the sanctions did not have any material impact on the project to date.

### Undervalued when compared to peers

- **Trading below average of peers on EV/Resource.** Figure 2 shows listed spodumene hard-rock developers currently constructing mines, comparing their EV to JORC Resource (equity share) multiples. We note that LLL has the lowest multiple, probably because of an "Africa discount" given that Goulamina's project metrics such as cost, NPV, IRR, payback, production, and mine life are comparable to peers.

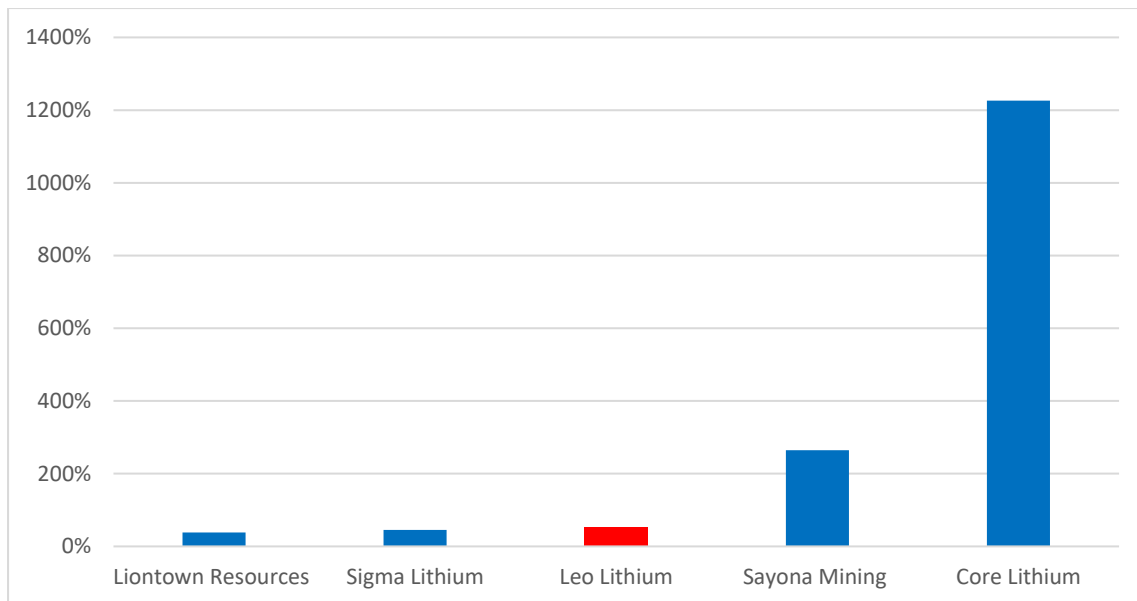
**Figure 2: Stocks with hard-rock projects under construction: EV/JORC Resource (A\$/LCE t)**



Source: Foster Stockbroking estimates.

- **At low end for market cap as % of NPV.** Similarly, we compare LLL to the same group on market capitalisation as % of project NPV (equity share). Here LLL ratio's is 52%, sharing the lower end with Liontown Resources (LTR) and Sigma Lithium (SGMA), while Sayona Mining (SYA) and Core Lithium (CXO) are trading at significant premium to their project NPVs. We expect this may be due to short lead times to first product for CXO (4Q22) and SYA (1H23) vs LLL (2Q24).

**Figure 3: Lithium mine constructors: Market cap as % of project NPV**



Source: Foster Stockbroking estimates.

### Summary – We expect share price to appreciate as LLL nears production

- **Expect LLL re-rating as construction progresses.** We expect that as 1) Construction of Goulamina progresses, 2) It remains on budget and time, and 3) There is no return to Mali sanctions, that the market will have greater confidence in LLL and the share price will respond accordingly. From the comparable peer charts, the share price re-rating could be substantial, at least 2x or greater, given the massive discounts LL is currently trading to peers.

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Mark Fichera  
D: +61 2 9993 8162  
E: [mark.fichera@fostock.com.au](mailto:mark.fichera@fostock.com.au)



FOSTER STOCKBROKING

A.B.N. 15 088 747 148 AFSL No. 223687  
Level 9, 275 George, Sydney, NSW 2000 Australia  
Level 9, 66 St Georges Terrace, Perth WA 6000, Australia  
General: +612 9993 8111 Equities: +612 9993 8100  
Email: [contact@fostock.com.au](mailto:contact@fostock.com.au)  
[www.fostock.com.au](http://www.fostock.com.au)  
PARTICIPANT OF ASX GROUP

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