



Goulamina Lithium Project Mali

**Project update -
On schedule with
DSO in 4th quarter**

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Managing Director
May 2023

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EXPLORATION RESULTS, ORE RESERVES AND MINERAL RESOURCES REPORTING

The information in this presentation that relates to production targets and Ore Reserves is extracted from the Company’s replacement prospectus dated 6 May 2022 (Prospectus) which is available at leolithium.com. The information in relation to exploration results is extracted from the ASX announcement dated 13 April 2023 and information related to Mineral Resources is extracted from the ASX announcement dated 17 January 2023 (Announcements). The Company confirms that all material assumptions and technical parameters underpinning the production targets, Mineral Resources and Ore Reserve estimates in the Prospectus and Announcements 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 and in the Company’s ASX releases.

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.

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LEO LITHIUM - A COMPELLING INVESTMENT

Goulamina Project in Mali - an emerging large scale producer



01

Amongst the world's largest spodumene projects with a 142 Mt resource



02

Excellent financial metrics with NPV of US\$2.9 billion¹



03

Well funded - equity & debt from Ganfeng, construction underway

GOULAMINA LITHIUM PROJECT

Globally significant project

Leo Lithium (ASX:LLL)

- Pure play Li, listed June 2022, market cap A\$647 m¹
- Major shareholder Firefinch (17.6%), no other substantial

Goulamina Project overview

- Located in Mali, West Africa – large gold mining industry
- JV with Ganfeng Lithium Group, 50% interest at asset level
- China's largest lithium chemicals producer by capacity
- Leo is the developer and operator of Goulamina
- Stage 1: 506 ktpa spodumene production capacity
- Capital cost US\$285 million + US\$33 million working capital
- One of the lowest capital intensity projects globally
- Construction on plan; first spodumene product Q2 2024



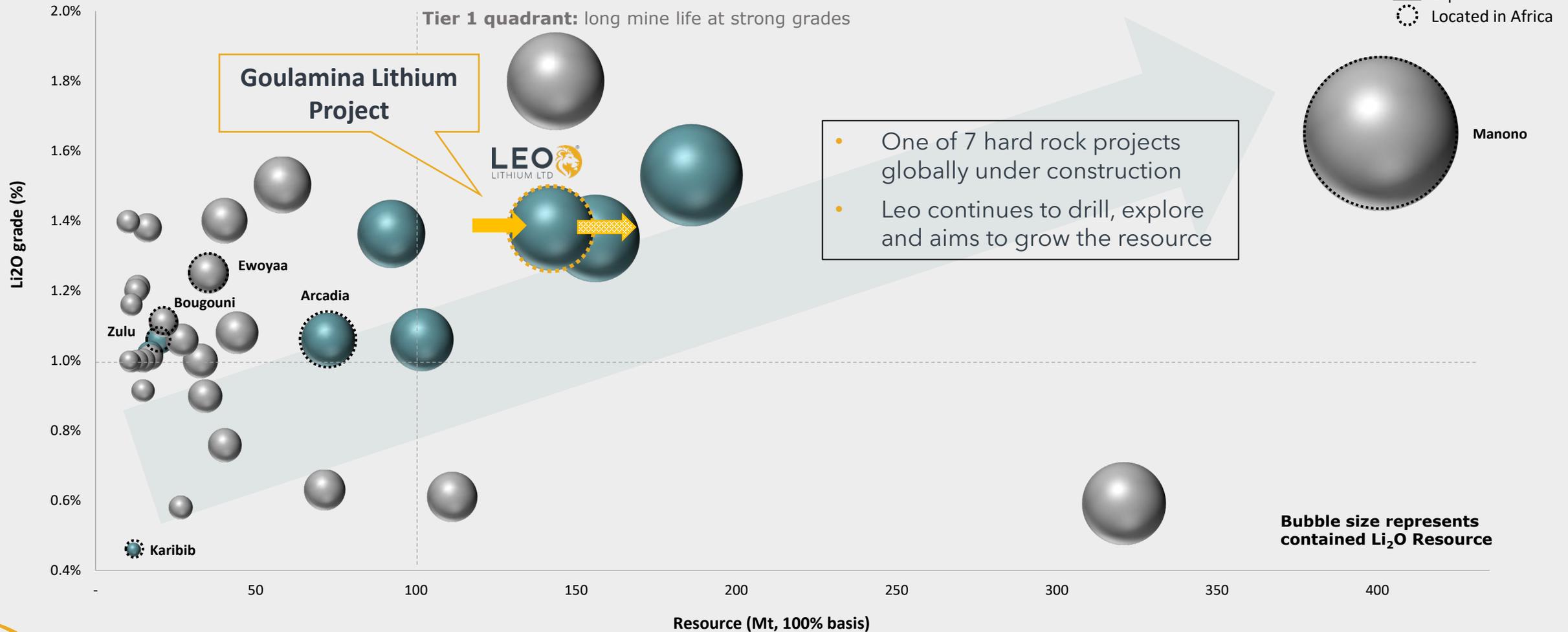
Growth opportunities for Leo Lithium

- DSO being progressed to bring revenue forward
- Resource and reserve growth through drilling
- Goulamina expansion with Stage 2

LARGE-SCALE, HIGH-GRADE RESOURCE

Global top 7 Mineral Resource of 142Mt at 1.38% Li₂O

Goulamina sits in the Tier 1 quadrant, grade > 1.0% Li₂O and resource > 100 Mt



Source: Public ASX Announcements (refer to Appendix for further information). Includes developers and explorers only (i.e. excludes producers).
 1. Final Investment Decision announced.

GOULAMINA RESOURCE & RESERVE

Mineral Resource of 143Mt at 1.38% Li₂O and Ore Reserve of 52Mt at 1.51% Li₂O

Goulamina Mineral Resource Estimate

Classification	Tonnes (m)	Grade Li ₂ O (%)	Contained Mt Li ₂ O
Measured	8.4	1.57	0.13
Indicated	72.8	1.44	1.05
Inferred	61.1	1.29	0.79
Total	142.3	1.38	1.97

Goulamina Open Pit Ore Reserve Estimate

Proven	8.1	1.55	0.13
Probable	44.0	1.50	0.66
Total	52.0	1.51	0.79



Pegmatite outcrops at Goulamina

Drilling to increase the Mineral Resource of 143Mt

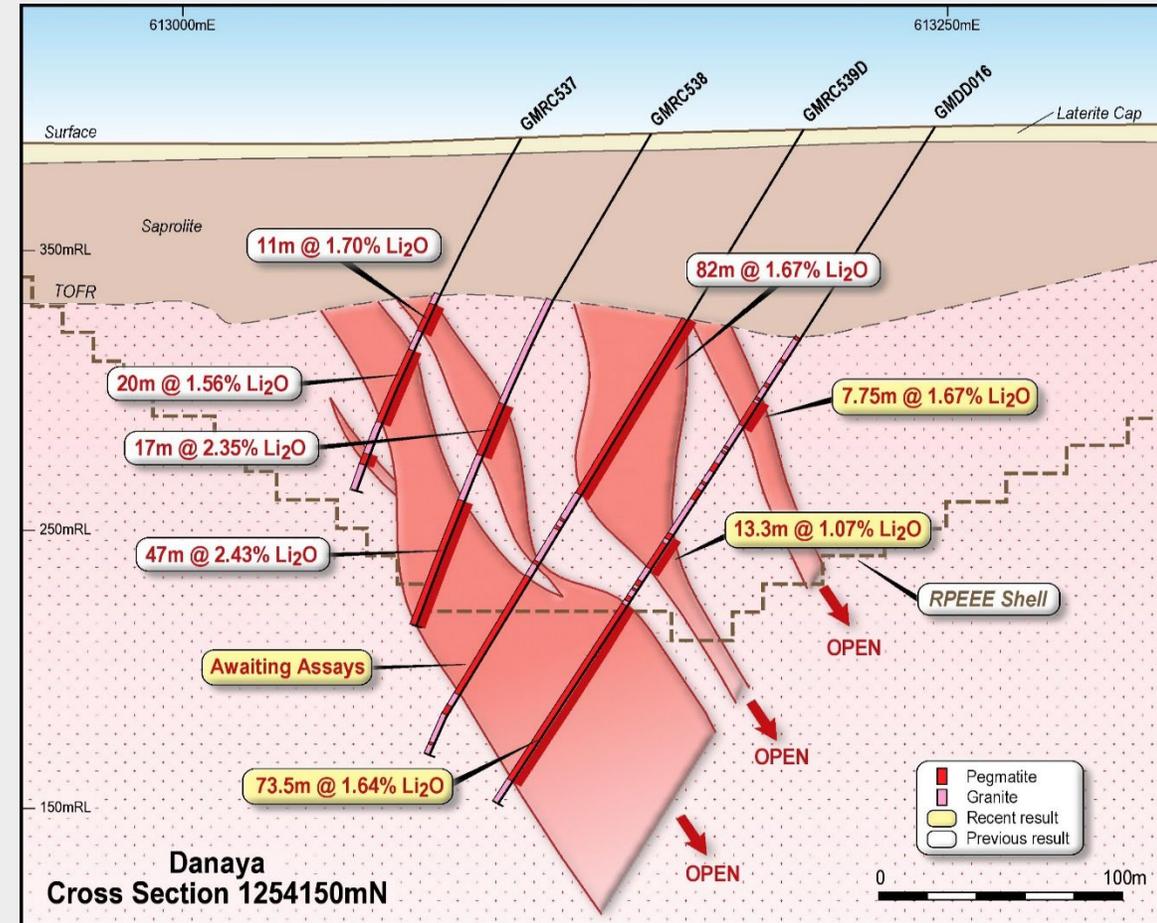
Top 7 Global Mineral Resource of 142.3Mt @ 1.38% Li₂O

Approaching end of current resource drilling campaign

- Excellent results continue to be generated
 - 115.7 metres at 1.74 % Li₂O, from 147.6 m (GMRC534D)
 - 73.5 metres at 1.64 % Li₂O, from 199.17 m (GMDD016)
 - 71 metres at 2.00 % Li₂O, from 18 m (GMRC599D)
- Targeting open mineralisation along strike & downdip

2023 Plans:

1. Full Mineral Resources update in June
2. Reserve upgrade in August
3. Re-examine Stage 2 capacity
 - Ganfeng verbally supportive of 1 mtpa in total



Cross section looking north showing thick high-grade results below the current RPEEE (Reasonable Prospects for Eventual Economic Extraction) resource pit shell

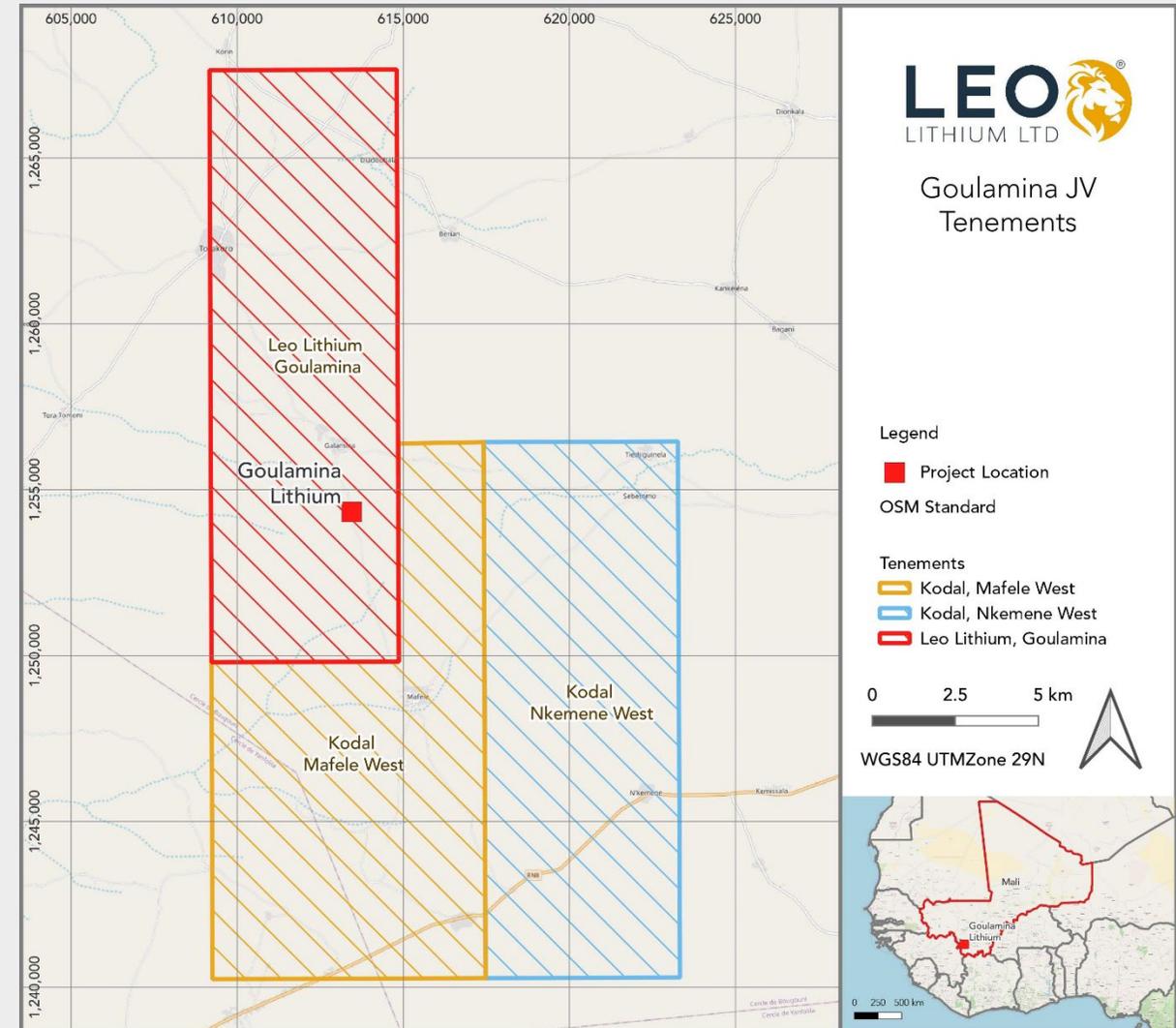
Land holding to nearly triple

Acquisition of two nearby mineral concessions

- Binding agreement reached with vendors
- Concessions adjacent to Goulamina
- Will nearly triple land holding
- Under-explored & prospective for pegmatite
- Provide flexibility and expansion potential for locating infrastructure for:
 - Mineral byproduct storage
 - Solar farm, roads, agricultural projects

Next steps

- Complete acquisition
- Commence sterilisation drilling
- Develop exploration plans



MID TERM PROJECT STATUS UPDATE

Updated capital and cost estimates for Operational Readiness phase

Updated capital estimate as a result of ongoing optimisation work and improved cost visibility

- Reflects detailed engineering of Stage 1, additional scope and industry wide cost escalation
- US\$5m increase in 2021 DFS Capital Cost Estimate from US\$255m to US\$260m (2% increase)
- An additional US\$25m contingency allowance (as 12 months more construction) bringing total capital costs for construction to US\$285m (12% increase). 90% of contracts (by value) are now awarded or under negotiation

Review of operational readiness phase by senior operations leadership team

- 2021 DFS estimates were high level and underestimated the costs required to reach first concentrate production
- Operational readiness costs estimated at US\$33m include mining ramp-up, plant commissioning and building an operating workforce in Mali
- Revised capital cost and Operational Readiness Phase bring total expenditure from FID to first production to US\$318m

Project remains on track to deliver first spodumene by Q2, 2024

- Remains one of the largest spodumene projects globally with a low capital intensity of US\$563/t SC6 capacity

EARLY REVENUE OPPORTUNITY

Direct Shipped Ore (DSO)

Opportunity

- Export ore in 2023
- 6-9 months in advance of spodumene production
- Targeting up to 90,000 tonnes in Q4 2023
- Additional 95,000 tonnes available in Q1 2024

Wide-ranging benefits

- Early commissioning of mining operations
- Commissioning of logistics channel on ore
- Early revenue during solid pricing environment
- Creates balance sheet flexibility
- Ganfeng need lithium units

DSO activity ramping up

- Mine plan complete and surface layout designed
- Grade control drilling complete - awaiting assays
- First labour recruited

Next key steps

- Appoint major contractors - mining, explosives, crushing, logistics
- All out to tender or close to award
- Minor approvals needed
- Secure second port for comparison purposes
- Complete hiring and training the workforce

Direct Shipment Ore

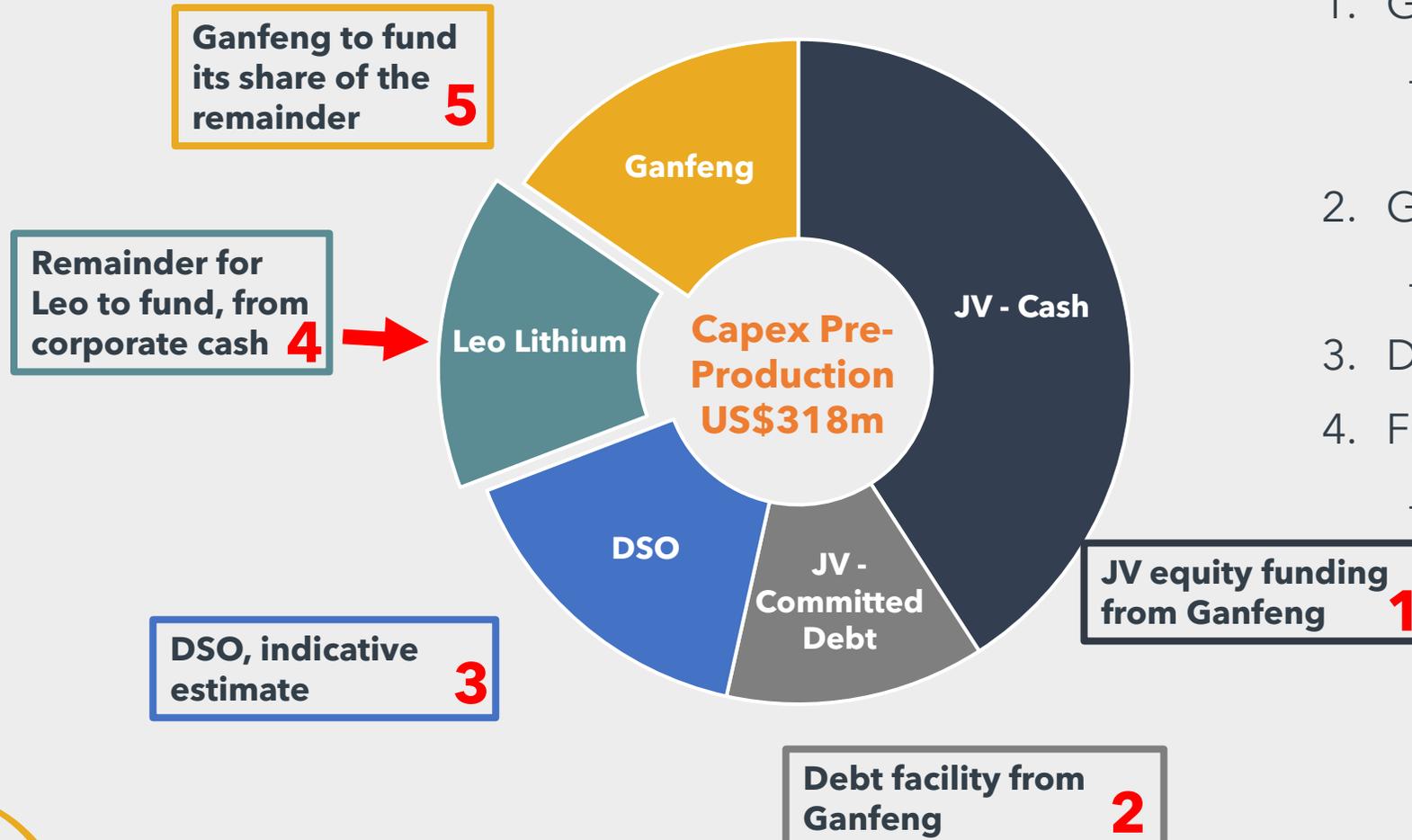
Mobile equipment fleet started arriving in late April



PROJECT WELL FUNDED

Ganfeng equity, debt, DSO and Leo Lithium corporate funds

Goulamina JV Funding - Sources



Funding draw down order

1. Ganfeng equity: sitting in JV account
 - Initial US\$130m investment with US\$92.7 million¹ remaining
2. Ganfeng debt (potentially expandable)
 - US\$40 million in place, undrawn
3. DSO provides another funding source
4. Finally Leo corporate cash
 - Cash balance A\$71.2 million¹

PROJECT ON SCHEDULE

Construction is underway, engineering & procurement advancing on plan

Project status update

- 27 month schedule - Feb 2022 commencement
- Scheduled activities remain on plan
- First product late Q2 2024
- Critical months ahead (wet season, fabrication, workforce build)

Upcoming construction-related activities

Q2 2023: Ongoing civils, concrete, accommodation, road construction

Commence wet season preparation, air-strip, mobilisation of resources for structural mechanical & piping

Q3 2023: Install plant and equipment, commence pipeline from Selinque dam to mine site

Major project milestones

Q3 2023: EPCM eng. & procurement complete

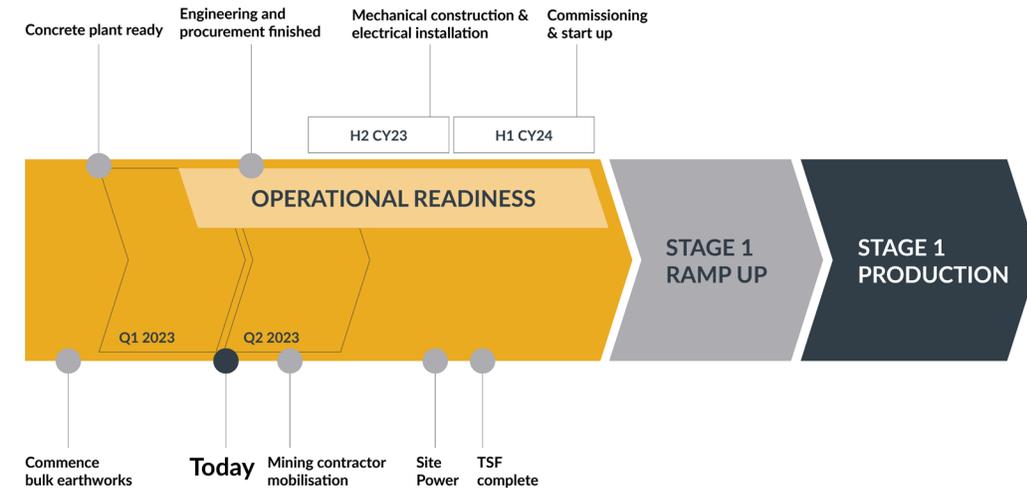
Q1 2024:

Structural completion & commissioning

Q4 2023: Permanent accommodation camp ready

Q2 2024:

Electrical commissioning, mineral commissioning



FABRICATION CONTINUING

First equipment packages completed

Major equipment package progress

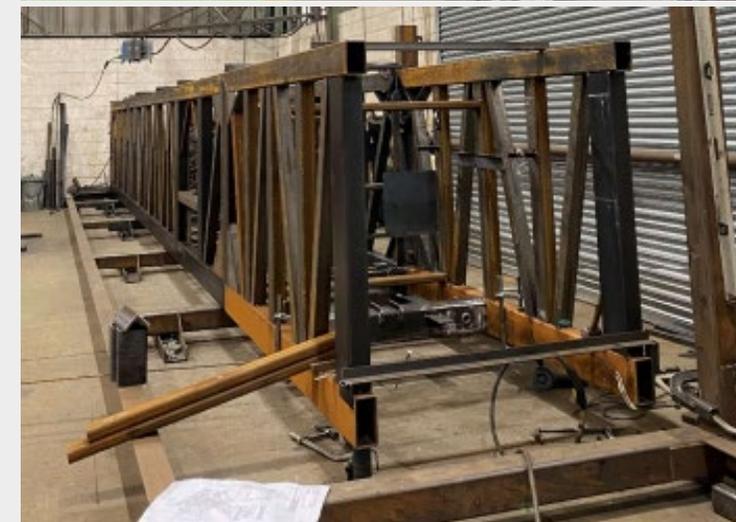
- Flotation cells ~40% complete
- Belt filters ~45% complete
- Radial Stacker - ~40% complete
- Steel ~30% complete
- HV Switchboards - 30% complete



Steel plate work, Asia



Steel, Asia



Radial Stacker, Europe

MAJOR SITE WORKS UNDERWAY

Concreting advancing solidly



Primary crusher wall scaffolding



Primary crusher foundation with main chamber in background

MAJOR SITE WORKS UNDERWAY

Earthworks continues progressing to plan



Civil earthworks in readiness for the permanent camp installation



TSF wall construction with drainage layer being installed

MAJOR SITE WORKS UNDERWAY

Transport and logistics ongoing with first containers on site via Abidjan



Permanent accommodation components have arrived on site



Unloading of the first steel on site

MAJOR SITE WORKS

Aerial views



Crusher view



TSF view



Pioneer and permanent camps

PRODUCT TRANSPORT & LOGISTICS

Seeking flexibility with multiple port options

Progress on product storage and port logistics

- First port agreement secured at Abidjan, Côte d'Ivoire
- 10 year agreement for min. 250,000 tpa concentrate storage & export



Shed cleaning in readiness for DSO



Abidjan Port bulk export loading facility and secured warehouse

West African transport routes from Goulamina

PRODUCT TRANSPORT & LOGISTICS

Early engagement with trucking contractors

Progress on road routes and trucking

- Plan spodumene transport options in parallel to DSO
- Studies show 50 t payloads possible, 32% higher than DFS
- Likely to use half-height containers
 - Better security, more efficient handling, better utilisation of trucks



West African transport routes from Goulamina site



4-axle, 50 t payload trailers being assessed

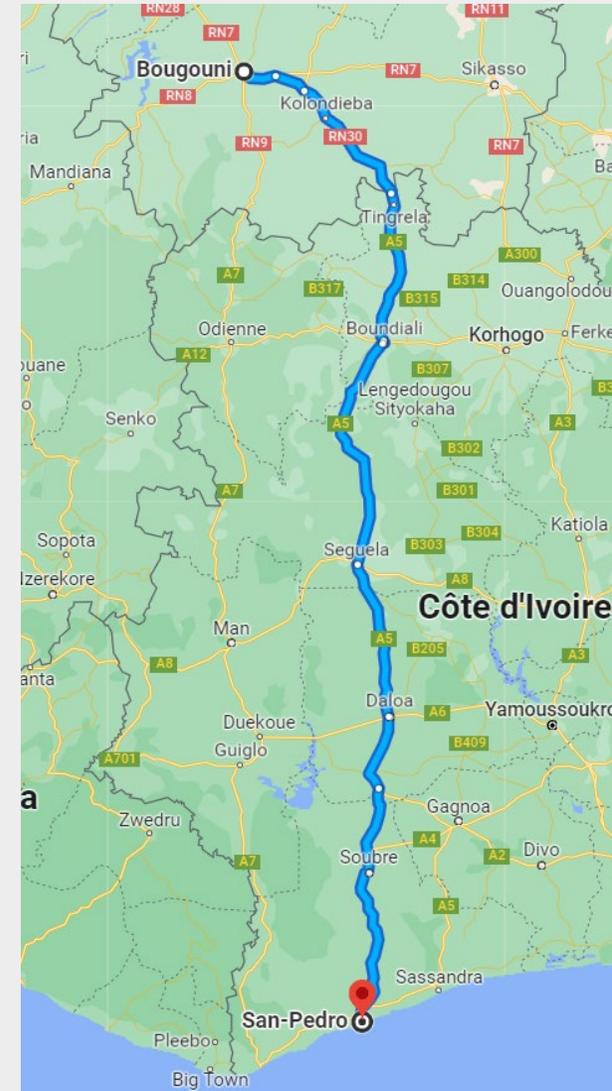
San Pedro Truck Route

Staff Road Trip - March 2023

- Staff drove 934km from Goulamina Project to the Port of San Pedro
- Road is sealed for the entire route, lower quality in places
- Border crossings formalities completed quickly
- Regular checkpoints throughout Côte d'Ivoire

Conclusions

- Feasible route, better condition than envisaged
- 3 day journey each way assumed in the DFS - potential to improve on that
- Can use large parts of this route for Abidjan export too: divert east along A2
- Trial San Pedro port for one of the DSO shipments



San Pedro Truck Route

Road quality exceeded expectations



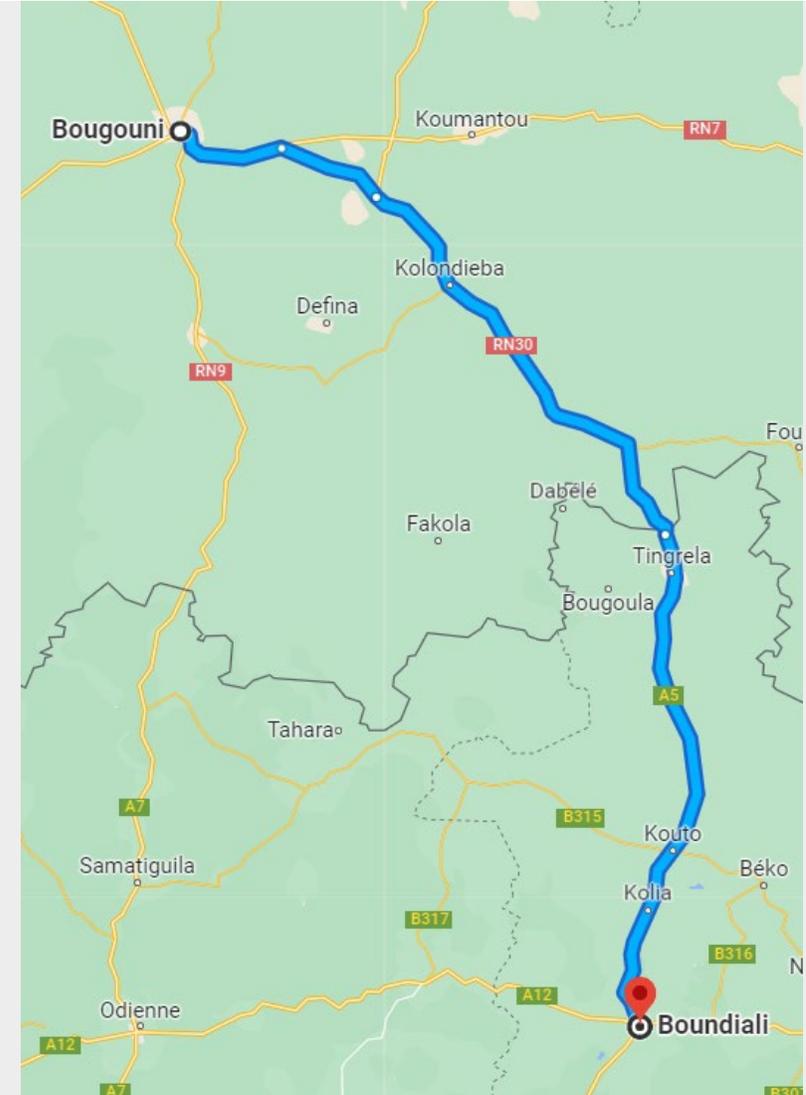
Example of road conditions
Bougouni - Kolondieba Section
Average speed 88km/hr



Kolondieba - Tingrela Section
Average speed 98km/hr
1hr 45 mins border crossing



Tingrela - Boundiali Section
Average speed 78km/hr



GOULAMINA

Strong Govt. & Community Support

Mali in general

- Govt. continues to work towards elections in 2023-24
- Free movement of people & equipment in the West African region
- Bougouni region (hosts Goulamina) remains calm and stable
- Ministers of Mines and Finance very supportive of the project
- Govt 10% free carry stake: process yet to commence

Community

- Regular engagement with community leaders
- Employment growing: over 400 on site, mostly Malians
- JV committed to fund local projects in 2023 for water supply and roads
- Local community projects to accelerate from Q2
- Priorities: materiality assessment, ESG framework selection, community projects



Goulamina JV community team members on recent visit to the Goulamina village

LEO LITHIUM A COMPELLING INVESTMENT

- ✓ Large scale, high grade
- ✓ Critical mineral
- ✓ Outstanding financials
- ✓ Funding secured
- ✓ Ganfeng Lithium JV partner
- ✓ Mali Govt. support
- ✓ Construction underway
- ✓ On budget & schedule
- ✓ Near term revenue

Very undervalued vs peers

Corporate Strategy 5 year plan Near term catalysts



			Timeframe
	EXECUTE STAGE 1	<ul style="list-style-type: none"> • First spodumene product mid-2024 • Early revenue from DSO in Q4 2023 	2023-24
	DEVELOP STAGE 2	<ul style="list-style-type: none"> • Upgrade resource & reserve • Re-examine Stage 2 capacity • Stage 2 scoping study → FFED phase 	2023-25
	DOWNSTREAM	<ul style="list-style-type: none"> • Consider Downstream options • Early-stage discussions underway 	2023+
	GROWTH	<ul style="list-style-type: none"> • Exploration with a lithium focus • Greenfields, farm-ins, M&A • Africa, Australia, The Americas 	2023+



For more information

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APPENDIX: PEER COMPARISON

Company references

Rank	Company	Project name	Stage	Announcement title	Announcement date	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)	Resource grade (% Li ₂ O)	Contained Li ₂ O (Mt)
1	AVZ	Manono	DFS	Updated Mineral Resource Estimate	24-May-21	100	174	128	401	1.65%	6.62
2	SQM / Wesfarmers	Mt Holland	Development	Kidman Resources Scheme Booklet	01-Aug-19	66	106	17	189	1.50%	2.84
3	Rio Tinto	Jadar	Scoping	Update to Ore Reserves and Mineral Resources at Jadar	23-Feb-22	-	85	58	144	1.80%	2.58
4	Liontown	Kathleen Valley	Development	Kathleen Valley Lithium Project - DFS Update 2	08-Apr-21	20	109	27	156	1.35%	2.11
5	Leo Lithium	Goulamina	Development	Goulamina Resource increased by 33.8Mt to 142.3Mt	17-Jan-23	8	73	61	142	1.38%	1.97
6	American Lithium	Falchani	PEA	Mineral Resource Estimates for the Falchani Lithium Project in the Puno District of Peru	18-Apr-19	-	61	260	321	0.59%	1.90
7	Livent / Investissement	Whabouchi	Development	NI 43-101 Report on the Estimate to Complete for the Whabouchi Lithium Mine	31-May-19	37	38	17	92	1.36%	1.26
8	Sigma	Grota do Cirilo	Development	Sigma Lithium Corporate Presentation October 2022	03-Oct-22	37	37	12	86	1.43%	1.22
9	Sayona	North American Lithium	Development	Annual Report to shareholders	13-Oct-22	1	72	28	102	1.06%	1.08
10	Frontier	Pakeagama Lake	PFS	Frontier Announces Expansion of Spark Deposit	28-Feb-23	1	25	32	58	1.50%	0.88
11	Prospect	Arcadia	DFS	Staged OFS Investor Presentation	11-Oct-21	16	46	11	73	1.06%	0.77
12	Infinity Lithium	San Jose	Scoping	South-West Connect Conference	20-Oct-22	-	59	52	111	0.61%	0.68
13	Allkem	James Bay	FS	Annual Report to shareholders and Appendix 4E	25-Aug-22	-	-	40	40	1.40%	0.56
14	Piedmont	Carolina Lithium	DFS	Piedmont Increases Mineral Resources	22-Oct-21	-	28	16	44	1.08%	0.48
15	AfriTin Mining	Uis	PEA	AfriTin Corporate Presentation	01-Oct-21	-	-	72	72	0.63%	0.45
16	Atlantic Lithium	Ewoyaa	PFS	Robust Ewoyaa Pre-Feasibility Study	1-Feb-23	4	25	7	35	1.25%	0.44
17	Critical Elements	Rose	FS	Rose Lithium-Tantalum project feasibility study	13-Jun-22	-	31	3	34	0.90%	0.31
18	Zinnwald Lithium ¹	Zinnwald	PEA	PEA for the revised Zinnwald Lithium Project	06-Sep-22	19	17	5	40	0.76%	0.31
19	Savannah	Mina Do Barroso	Scoping	Annual Report and Financial Statements	31-Dec-21	7	8	12	27	1.06%	0.29
20	Kodal Minerals	Bougouni	FS	FS demonstrates robust economics for development of the Bougouni Lithium Project	27-Jan-20	-	12	10	21	1.11%	0.24
21	Sayona	Moblan	PFS	Sayona Doubles Quebec Lithium Resource Base	01-Mar-22	5	7	4	16	1.38%	0.22
22	Premier African Minerals	Zulu	DFS	Africa's Next Lithium Developer	20-Jun-21	-	-	20	20	1.06%	0.21
23	Keliber Oy	Keliber	DFS	Mineral Resources from Keliber's New Tuoreetsaaret Lithium Deposit	23-Jun-22	4	9	3	17	1.02%	0.17
24	Sayona	Authier	DFS	Annual Report to shareholders	13-Oct-22	6	8	3	17	1.01%	0.17
25	CAT Strategic Metals	Kamativi	Pre-scoping	NI 43-101 Technical Report on the Kamativi Tailings Lithium Project	07-Nov-18	-	26	0.3	27	0.58%	0.15
26	Red Dirt	Mt Ida	Pre-scoping	Maiden Lithium Mineral Resource Estimate at Mt Ida	19-Oct-22	-	3	9	13	1.20%	0.15
27	Lion Town	Buldanía	Pre-scoping	Annual Report to Shareholders	30-Sep-22	-	9	6	15	1.00%	0.15
28	Rock Tech Lithium	Georgia Lake	PEA	Rock Tech Files Revised Technical Report	21-Apr-22	2	4	7	13	1.08%	0.14
29	Avalon	Separation Rapids	PEA	NI 43-101 Separation Rapids Lithium Deposit	26-Sep-18	3	5	2	10	1.40%	0.14
30	Essential Metals	Dome North	FS	2022 Annual Report	28-Sep-22	-	5	6	11	1.21%	0.14
31	European Lithium	Wolfsberg	FS	EUR Merger with NASDAQ Corp	26-Oct-22	4	5	3	13	1.00%	0.13
32	Global Lithium	Manna	Pre-scoping	GL1 Agrees to Acquire 100% of Manna Project and update	25-Oct-22	-	-	10	10	1.14%	0.11
33	Snow Lake Resources	Thompson Brothers	Pre-scoping	Annual Report to Shareholders	01-Nov-22	-	9	2	11	1.00%	0.11
34	Global Lithium	Marble Bar	Pre-scoping	GL1 Agrees to Acquire 100% of Manna Project and update	25-Oct-22	-	-	11	11	1.00%	0.11
35	Green Technology	Seymour	Pre-scoping	Investor Presentation South - West Connect Conference	20-Oct-22	-	5	5	10	1.04%	0.10
36	Lepidico	Karibib	Development	Helikon 4 & Rubicon Stockpiles Upgrade to Mineral Resources	30-Jan-23	2	8	1	12	0.46%	0.05

Source: Company filings at March 2023.

Notes: Ranked by contained Li₂O. Figures are rounded. 1. Lithium grade is reported on a Li basis. Grade converted to Li₂O using a factor of 2.153.