

ASX Announcement

ASX BGS

4 October 2017

GOULAMINA LITHIUM PROJECT PRE-FEASIBILITY STUDY

Highlights:

- PFS confirms the potential technical and economic viability of Goulamina, with five possible development scenarios considered.
- RC drilling program of new targets to commence later this month with further resource drilling included.
- Timing of commencement of the DFS will be determined following a detailed review of the PFS and the results of the forthcoming drilling program.

Birimian Limited (ASX: BGS; Birimian or the Company) is pleased to announce the completion of the Pre-Feasibility Study (PFS) for the Goulamina Lithium Project (Goulamina or the Project) located in southern Mali.

This announcement summarises the findings of the PFS, which was completed to an overall estimate accuracy of +/- 25%. The PFS is based on an Indicated Mineral Resource.

The PFS envisages a Project operational mine life of 9 to 14 years, processing between 14.0Mt at 1.39% Li₂O and 20.6Mt at 1.31% Li₂O. The plant would produce a 6% Li₂O concentrate production at an average recovery of 80.7%, demonstrated by metallurgical testwork.

The estimated capital cost ranges from US\$86.9M to US\$142.0M, including contingency. The Project has an NPV at a 10% discount rate (NPV $_{10}$) of between US\$85.6M and US\$126.4M. Inclusion of secondary processing lifts Project NPV $_{10}$ to US\$637.9M for an estimated additional capital cost of US\$221.0M for concentrate-only scenarios.

The Project is sensitive to scale therefore expansion of the existing Mineral Resource may be expected to increase NPV₁₀.

Birimian Executive Director and CEO, Greg Walker, said: "The PFS demonstrates that Goulamina is potentially a robust project, both technically and economically, based on the current Indicated Mineral Resource. The recent shallow-hole drilling results delineating additional lithium-bearing pegmatite anomalies at Yando, Sabali and Danaya have highlighted the exploration potential of the Project area. The forthcoming drilling program on these targets may increase the Project's Mineral Resource base, which in turn would redefine and enhance the preferred development strategy."



ASX CHAPTER FIVE COMPLIANCE AND PFS CAUTIONARY STATEMENT

The information and production target presented in this announcement is based on a PFS where Ore Reserves have not been declared. A PFS is a comprehensive study of a range of options for the technical and economic viability of a mineral project but it is at a lower confidence level than a Feasibility Study and the Mineral Resource estimate that is the basis of the PFS is not sufficiently defined to allow conversion to an Ore Reserve or to provide sufficient assurance of economic development at this stage. The PFS includes a financial analysis based on reasonable assumptions on the JORC modifying factors. The financial analysis in the PFS is conceptual and should not be used as a guide for investment. The PFS has considered a number of potential development options and no option has yet been selected for development. Further studies will be required before this selection may reasonably be made.

The production targets referred to in the PFS are based on a Mineral Resource which is classified Indicated. The Mineral Resource used for the PFS was prepared by a Competent Person in accordance with JORC 2012 guidelines and previously reported by Birimian to ASX on 22 June 2017 (please refer to this announcement for the Competent Person's statement and all material assumptions and technical parameters underpinning that Mineral Resource statement). The Company confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 22 June 2017 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed. There is no certainty that further exploration work will result in the determination of further Indicated Mineral Resources or Measured Mineral Resources or that production targets will be realised. Furthermore, there is no certainty that further exploration work will result in the conversion of Indicated and Measured Mineral Resources to Ore Reserves.

All JORC modifying factors have been sufficiently considered for the completion of the PFS, including mining studies, processing studies, laboratory scale metallurgical test work, conceptual engineering, logistics and infrastructure assessments. Flowsheets, Process Design Criteria (PDC) and Mass and Material Balances (MMB) were developed based on the testwork results and Como's experience in designing spodumene concentrators. Capital cost estimates were then derived based on quotes or estimates from suppliers of major equipment items and factored costs for civil, structural, electrical and instrumentation costs. Operating costs were developed from first principles, based on the Flowsheets, PDC, MMB, testwork results and Como's experience in developing operating costs for spodumene concentrators. Transport and logistics costs for reagent and consumable supply to the proposed site and concentrate/product shipment to suitable port facilities were developed by a third party (utilising a quote commissioned from international logistics experts). Marketing outlook and price forecast models were obtained from a third-party specialist mineral commodity research organisation. An option to treat some of the spodumene concentrate produced in a secondary processing facility in order to produce battery grade lithium carbonate has also been examined at concept study level as part of the PFS. This portion of the PFS has assumed that the spodumene concentrate will be available to process. It also assumes the use of conventional technology and processes to treat the spodumene and has utilised published unit capital costs (factored to scale), metallurgical recoveries and operating costs.

Third party consultants have been used to complete all technical aspects of the PFS. These studies support the assumptions that have been made in the PFS and all authors of those reports have given their consent to the use of their reports and findings within the PFS after having been given the opportunity to review the final PFS.

The Company has concluded that it has a reasonable basis for providing the forward-looking statements included in this ASX announcement. The Company also believes that it has a reasonable basis to expect to be able to fund a Definitive Feasibility Study (**DFS**) from existing cash reserves and forecast earnings and believes it has a reasonable basis to expect to be able to fund and further develop the Project, that is, to fund capital expenditure requirements (for each disclosed Scenario) as and when required based on the Company's own development timetables and based on the material assumptions set out in this announcement. All material assumptions on which the forecast financial information is based are set out in this announcement.

Given the uncertainties involved, Birimian recommends that investors should not make any investment decisions based solely on the results of this PFS.



1 Overview

Birimian proposes to develop Goulamina, which is located within the tenement covered by its Torakoro exploration permit granted on 23 February 2016.

On 31 January 2017, Birimian announced the findings of a Scoping Study for Goulamina (formerly named Bougouni), and advised that this PFS had commenced.¹

Goulamina is part of the larger Goulamina lithium project area, which covers an area of 257km² and is located in southern Mali, approximately 150 km south of the country's capital of Bamako and 50km west of the town of Bougouni (refer to Figure 1).

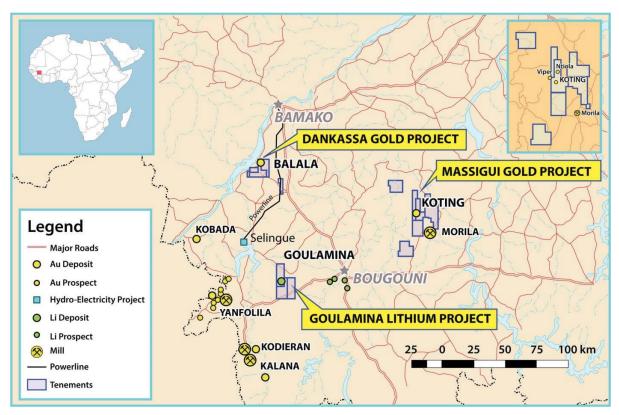


Figure 1: Location Plan of the Goulamina lithium project

The PFS was prepared by a number of third parties engaged by Birimian according to their disciplinary expertise, these being:

- Cube Consulting Pty Ltd (Cube) Mining and Geology Studies.
- Como Engineers Pty Ltd (Como) Engineering and Marketing Studies plus lead authorship.
- Southern Mining Consultants (SMC), engaged by Como Financial Analysis.
- Digby Wells Environmental (Digby Wells) Environmental and Social Impact Studies.

Birimian provided the risk analyses and reviewed Como's marketing study.

Further exploration by the Company since the commencement of the PFS has indicated that Goulamina may contain more resource than was included in the PFS. Birimian has previously announced its

¹ ASX: 31 January 2017 'Pre-Feasibility commences following positive Scoping Study'.



intention to continue further exploration of the Goulamina area with a reverse circulation (**RC**) drilling program to test the newly discovered Yando, Danaya and Sabali anomalies announced in September 2017² and this work is planned for commencement in October 2017 (see Figure 2). The Company is currently assessing drilling tenders for a program of some 5000m of RC (about 50 holes), to an average depth of 80m and up to 150m. Depending on the results, a larger follow-up program will be undertaken.

The following four scenarios based on the sale of a 6% Li₂O spodumene concentrate were analysed:

Scenario 1	Small pit at 1.0 Mtpa (base case).
Scenario 2	Large pit at 2.0 Mtpa for Life of Mine (LOM).
Scenario 3	Small pit at 1.0 Mtpa for the first three production years and 2.0 Mtpa thereafter.
Scenario 4	Large pit at 1.0 Mtpa for the first three production years and 2.0 Mtpa thereafter.

A fifth scenario (**Scenario 5**), involving the secondary processing of approximately half (56%) of the available spodumene concentrate to produce battery grade lithium carbonate for sale, and sale of the residual spodumene concentrate was also considered. This scenario was based on a concept study undertaken into the secondary processing of spodumene to lithium carbonate.

The development and commissioning schedule for all Scenarios includes an 18-month construction period. For the purposes of the PFS, it was assumed that the project construction would commence in mid-2019, with initial production expected in early 2021 and a six-month production ramp period. Key operating parameters are presented in Table 1.

All costs presented in this document are denominated in United States Dollars unless otherwise stated. The PFS was completed to an overall estimate accuracy of +/- 25%.

Table 1 Key Operating Parameters

Item	Unit	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Basis		1Mtpa	2Mtpa	1-2Mtpa	1-2Mtpa	2Mtpa+Sec
LOM Resource	Mt	14.005	20.561	14.005	20.561	20.561
LOM grade (avg)	%Li ₂ O	1.39	1.31	1.39	1.31	1.31
Life (operating)	Years	14.0	10.3	8.8	12.5	10.3
CAPEX (initial plus upgrade, not sustaining)	\$M	86.862	126.278	139.695	141.961	412
Sustaining Capital	\$M	36.480	36.480	36.480	36.480	146
LOM Primary Metallurgical Rec.(avg)	%	80.7	80.7	80.7	80.7	80.7
LOM Secondary Metallurgical Rec.(avg)	%					85
NPV ₁₀	\$M	85.6	136.3	91.8	126.4	637.9
Net cashflow	\$M	335.1	417.0	294.9	486.8	1,522.9
IRR	%	21	25	22	22	39
Revenue	\$M	1,687	2,243	1,631	2,396	4,662
Total costs	\$M	1,352	1,826	1,337	1,909	3,139
Operating cashflow	\$M	575.8	727.2	576.0	849.8	2,588
EBIT	\$M	446.8	556.0	393.2	649.1	2,031

Note: No price or cost escalation used and no contingency included.

² ASX: 5 September 2017 'Goulamina Lithium Project Exploration Update'



2 Mineral Resource

The Mineral Resource on which the PFS is based was limited to the Indicated component of the current Indicated and Inferred Mineral Resource estimate announced by the Company in June 2017.³

Results from recent exploration work have indicated that available resources may be greater than those announced. Three new targets were identified as depicted in Figure 2.4

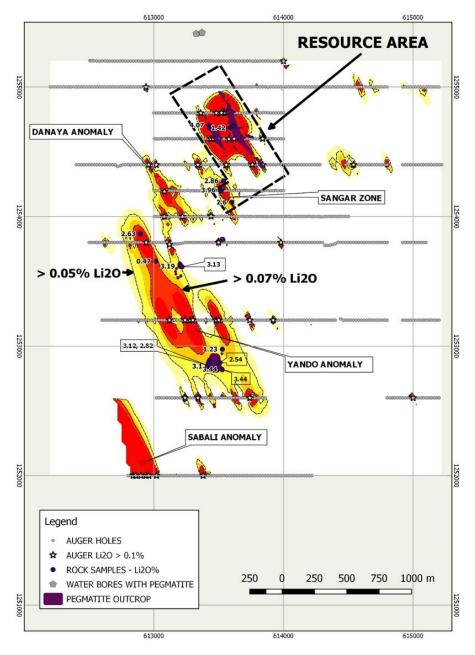


Figure 2: Image of Li in bottomhole auger samples from Goulamina (inverse distance weighted grid with 25m grid cell size and search 5:1 ellipse oriented to NW).

³ ASX: 22 June 2017 'Goulamina Lithium Resource Expansion and Project Update'

⁴ ASX: 5 September 2017 'Goulamina Lithium Project Exploration Results'



Cube was engaged by Birimian to estimate the Mineral Resources for Goulamina.

The Goulamina Mineral Resource estimate is an updated resource estimate for the deposit, following a second campaign of RC and diamond drilling completed during the 2017 year. This estimate was completed by Matt Bampton, Principal Consultant Geologist for Cube, who is the Competent Person for this Mineral Resource estimate. The effective date of the estimate is 22 June 2017. Geovia Surpac version 6.7.4 was used for all geological interpretation, Isatis geostatistical software used for grade estimation, with Supervisor statistical software and Isatis used for statistical and spatial analysis and development of the variography parameters.

The estimated resources at Goulamina have been classified in accordance with the guidelines set out in the JORC Code (2012). The final reported Mineral Resource has been limited by the results of preliminary mining studies. These studies have been used to generate an open pit shell which has assisted in a process to limit the material in the block model to that component which is considered to have reasonable prospects for eventual economic extraction.

The Mineral Resource for Goulamina as at June 2017 is shown in Table 2, using a lower cut-off grade for reporting of 0.4% Li₂O, based on preliminary economic considerations and a possible minimum grade that can be upgraded to make a saleable lithium concentrate.

Mineral Resource								
Category	Domain	Tonnes	Li₂O	Li ₂ O	Fe ₂ O ₃			
		(Mt)	(%)	(kt)	(%)			
Indicated	Weathered	1.0	0.91	9	1.72			
	Fresh	24.3	1.39	338	1.05			
SUB-TOTAL I	NDICATED	25.3	1.37	347	1.07			
Inferred	Weathered	0.4	0.77	3	1.25			
	Fresh	7.2	1.40	101	1.17			
SUB-TOTAL INFERRED		7.6	1.37	104	1.17			
TOTAL RESO	URCE	32.9	1.37	451	1.09			

Table 2: Goulamina Mineral Resource - June 2017 at a 0.4% Li₂O Cut-off

3 Mining

Cube was engaged by Birimian to complete a mining engineering study as a component of the PFS. Cube completed the study based on three processing plant scenarios – a 1.0 Mtpa scenario, a 2.0 Mtpa scenario and a hybrid 1.0 Mtpa plant in the first four years, expanded to a 2.0 Mtpa process plant thereafter.

The scope of work included collation of input parameters, open pit optimisation studies on the Indicated Mineral Resources of the Goulamina deposit, open pit designs and pit production scheduling. Following the pit optimisations and shell selection, an initial final pit design (**Smaller Option**) shown in Figure 3 was completed together with an internal design. The shape and geometry of the final and internal designs allowed the pit to be mined in four stages. A second final design (**Larger Option**) was completed to demonstrate the potential for the project with an extended mine life. This is shown in Figure 4.

The Smaller Option contained 51.5 Mt of material, of which 14.0 Mt is ore at a grade of 1.39% Li₂O for a total of 195 kt contained Li₂O.



The Larger Option contained 88.9 Mt of material, of which 20.6 Mt is ore at a grade of 1.31% Li₂O for a total of 270 kt contained Li₂O.

Four scheduling scenarios were completed, based on the either of the pit designs (Smaller Option and Larger Option) combined with varying throughput options which included a 1.0 Mtpa option, a 2.0 Mtpa option and a hybrid option starting with a 1 Mtpa throughput for the first four years of production and increasing to 2.0 Mtpa from year five through to the end of the planned mine life. These options are tabulated in Table 3.

Table 3: Mining Study Options

Scenario	Pit Design Option	Ore Treatment Rate	Mine Life
1	Smaller: 14.0 Mt ore in 51.5 Mt open pit	1 Mtpa	14 years
2	Smaller: 14.0 Mt ore in 51.5 Mt open pit	Hybrid from 1Mtpa (years 1-4) to 2Mtpa thereafter	9 years
3	Larger: 20.6 Mt ore in 88.9 Mt open pit	Hybrid from 1Mtpa (years 1-4) to 2Mtpa thereafter	13.5 years
4	Larger: 20.6 Mt ore in 88.9 Mt open pit	2 Mtpa	10.5 years



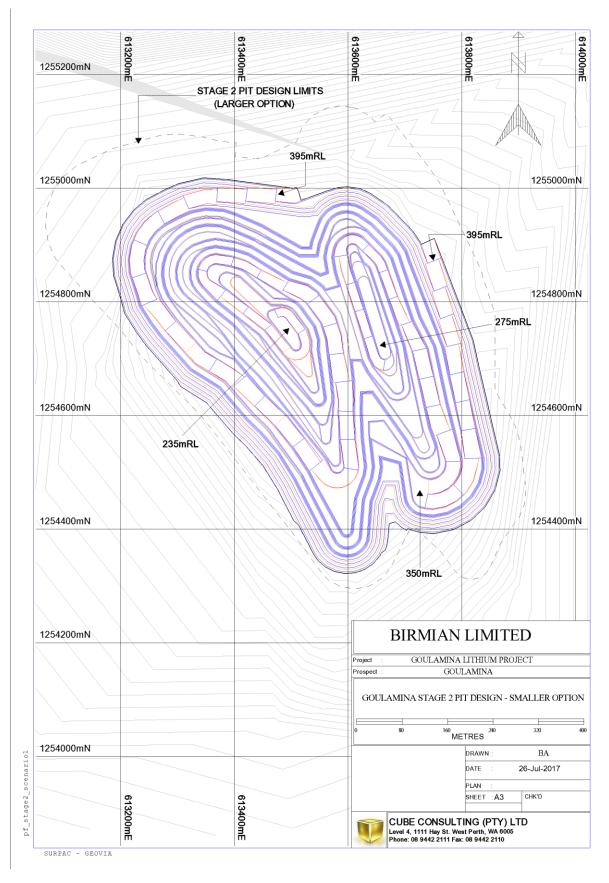


Figure 3: Goulamina Final Pit Design – Smaller Option (Scenarios 1 & 2)



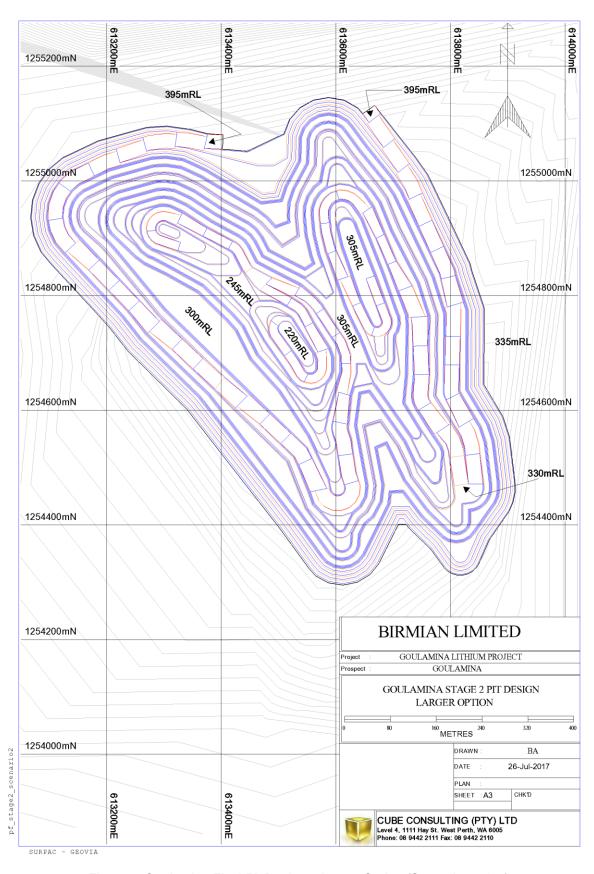


Figure 4: Goulamina Final Pit Design – Larger Option (Scenarios 3 & 4)



4 Processing

Birimian requested Como to conduct a PFS to estimate the capital and operating costs for a spodumene concentrator for Goulamina.

The PFS has examined the following options:

- 1. 1 Mtpa Processing Plant (Scenario 1).
- 2. 2 Mtpa Processing Plant (Scenario 2).
- 3. Stage expansion Start 1 Mtpa then after 4 years expand to 2 Mtpa (Scenarios 3 & 4).
- 4. High level examination of addition of downstream processing to produce lithium carbonate. (Scenario 5).

Metallurgical testwork data from two composites, one from the Main Zone and one from the West Zone generated from testwork conducted in Western Australia, formed the basis of the design of the Goulamina Processing Plant. This design was used as the basis for the estimation of the capital and operating costs.

The cost estimates are based on a plant design using proven technology and equipment throughout the plant and will be built to a standard which is compliant with Australian Standards.

Como has prepared this PFS based on information supplied by Birimian and information derived from similar studies. The selected flowsheet is conventional and does not incorporate any new or untested processes.



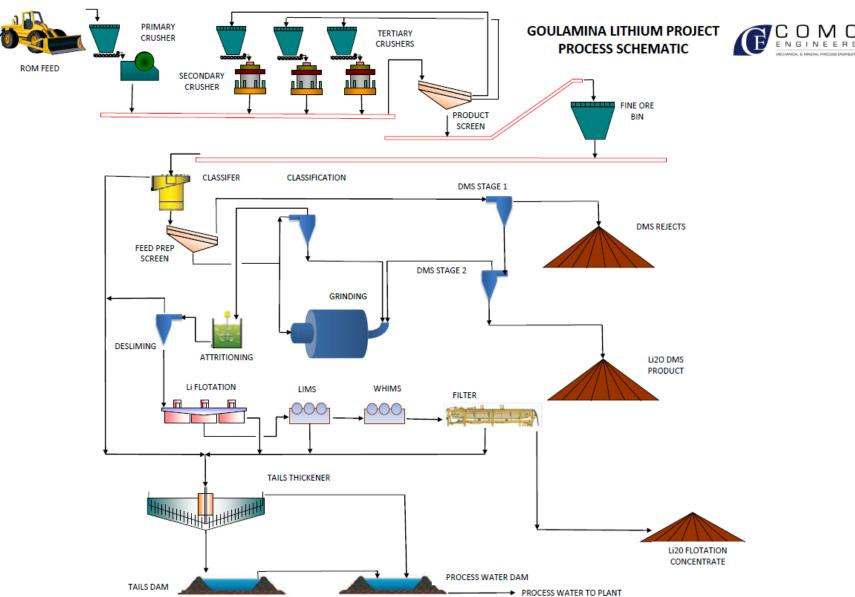


Figure 5: Goulamina Primary Concentrator Simplified Flowsheet



4.1 Process Description

The process developed for the PFS to generate a spodumene concentrate at Goulamina is a conventional spodumene concentration circuit.

Run of Mine feed is first crushed in a three-stage crushing circuit with a closing screen in both the secondary and tertiary circuits to minimise slimes formation. Crusher product is delivered to a Fine Ore Bin (**FOB**). Fine ore is then fed from the FOB to a de-sliming classifier, with slimes reporting to the tailing thickener feed.

The de-slimed material is then screened at 6 mm and the +6 mm material reports to the first stage of Dense Media Separation (**DMS1**). DMS1 floats are rejected to be used as road sheeting or disposed of in the mine waste storage area and DMS1 sinks are then directed to the second stage of Dense Media Separation (**DMS2**). DMS2 sinks are stockpiled as Li₂O Dense Medium Separation (**DMS**) product for packaging and shipping. DMS2 floats are combined with mill cyclone underflow and directed to mill feed.

The de-slimed, -6 mm material stream, is combined with mill discharge and classified at approximately 100 microns (μm) in the mill cyclone. Mill cyclone underflow, combined with DMS2 floats is directed to mill feed as described above. Mill cyclone overflow (-100 μm) is then attritioned in a bank of attritioning cells and de-slimed in de-sliming cyclones. De-sliming cyclone overflow proceeds to the tailing thickener feed and underflow is directed towards flotation. Flotation consists of a single rougher stage and either 3 or 4 stages of cleaning.

Flotation tailing is directed towards the tailing thickener feed and flotation concentrate is first treated in a Low Intensity Magnetic Separator (**LIMS**) to remove grinding steel and other metallic iron and then in a Wet High Intensity Magnetic Separator (**WHIMS**) to remove iron contamination in the concentrate. LIMS and WHIMS rejects are both directed to the tailing thickener feed, while the cleaned concentrate is filtered for excess water removal and stockpiled as Li₂O flotation concentrate for packaging and shipping, or feed to a secondary processing plant to produce either lithium carbonate or lithium hydroxide.

Tailing thickener underflow is pumped to the Tailing Storage Facility (**TSF** or **Tails Dam**) for final disposal. TSF decant water and the tailing thickener overflow are combined in the process water dam and recycled back to the process as process water.

4.2 Estimated Metallurgical Recovery

Recovery estimates for the Main and West Zones have been calculated from flotation testwork results and applying corrections to the Heavy Liquid Separation (**HLS**) testwork results (to correct for expected DMS plant performance compared to ideal separations achieved in HLS testwork) as shown in Table 4.

 Main Zone
 West Zone

 DMS Recovery (%)
 36.3
 17.5

 Flotation Recovery (%)
 45.5
 57.8

 Overall Recovery (%)
 81.8
 75.3

Table 4: Process Recoveries

The location of the Main Zone composite is within the first pit scheduled to be processed, as such the plant design was principally based on the testwork results from this sample. The location of the West Zone composite is in the lower levels of the second stage cutback and represents material to be processed much later in the project life.



5 Capital Cost Estimate

5.1 Basis

The Project execution strategy is based around an Engineering Procurement Construction Management (**EPCM**) contracting strategy with pre-fabricated modular plant components sourced from Africa or Asia and installation with local tradesmen supervised by expatriates.

The design is based on a fit-for-purpose plant design based on relevant Australian Standards.

At Birimian's request, reputable vendors (e.g. Metso Minerals Australia, Outotec, The Weir Group, Multotec Australia) were contacted for major equipment pricing.

The following exchange rates were used where applicable:

\$0.75 = AUD1.00

CFA450 = AUD1.00

ZAR10 = AUD1.00

Construction of the buildings for both the accommodation and processing plant would be carried out by local contractors in an appropriate local style i.e. concrete block.

5.2 1.0 Mtpa Concentrator and Infrastructure Capital Cost Estimate

The capital cost estimate to construct a new 1.0 Mtpa Plant including all direct and indirect costs is approximately \$55.36 million plus owner's cost of \$5.45 million including contingency. Infrastructure for this option, including all direct and indirect costs, is approximately \$26.04 million including contingency.

Infrastructure cost estimate includes allowances for:

- Access road from highway (approx.15 km), intersection upgrade and internal roads around plant.
- A 187-room accommodation camp.
- Tailings storage facility (TSF) 750 m x 750 m starter dam (approx. 4 years capacity).
- Site buildings and offices (all staff offices and ablutions, warehouse, plant workshop).
- Diesel generators for plant and camp 8 x 1 MW gensets.
- Water pipe line from Sélingué dam (approx. 20 km).
- 6 x 110 kl self-bunded diesel storage tanks.
- Site and camp communications.
- Loader, crane and forklift trucks.
- 33 rail carriages for transport.

5.3 2.0 Mtpa Concentrator and Infrastructure Capital Cost Estimate

The capital cost estimate to construct a new 2.0 Mtpa Plant including all direct and indirect costs is approximately \$82.59 million plus owner's cost of \$8.15 million including contingency. Infrastructure for this option, including all direct and indirect costs, is approximately \$35.54 million including contingency.



Infrastructure cost estimate includes allowances for:

- Access road from highway (approx. 15km), intersection upgrade and internal roads around plant.
- A 260-room accommodation camp.
- TSF 1,000m x 1,000m starter dam (approx. 4 years capacity).
- Site buildings and offices (all staff offices and ablutions, warehouse, plant workshop).
- Diesel generators for plant and camp 12 x 1 MW gensets.
- Water pipe line from Sélingué dam (approx. 20 km).
- 9 x 110kl self-bunded diesel storage tanks.
- Site and camp communications.
- Loader, crane and forklift trucks.
- 66 x rail carriages for transport.

5.4 1.0-2.0 Mtpa Concentrator and Infrastructure Capital Cost Estimate

The capital cost estimate to construct a new 1.0 Mtpa Plant which is easily upgraded to 2.0 Mtpa, including all direct and indirect costs, is approximately \$64.91 million plus owner's cost of \$6.12 million including contingency.

The capital cost estimate to expand the 1.0 Mtpa Plant to 2.0 Mtpa, including all direct and indirect costs, is approximately \$31.04 million, plus owner's cost of \$3.20 million including contingency.

5.5 Summary of Capital

The capital cost estimates for the various options are summarised in Table 5.

Table 5: Summarised Capital Cost Estimates

Option	Total	Materials & Equipment	Installation	Sub-Total	Contingency
1.0 Mtpa Concentrator					
Processing Plant	\$55,364,609	\$31,719,573	\$16,299,353	\$48,018,926	\$7,345,683
Infrastructure	\$26,045,129	\$18,809,175	\$3,636,896	\$22,446,070	\$3,599,059
Owner's Cost	\$5,453,875	\$2,614,318	\$2,128,182	\$4,742,500	\$711,375
TOTAL	\$86,863,613	\$53,143,066	\$22,064,431	\$75,207,496	\$11,656,117
2.0 Mtpa Concentrator					
Processing Plant	\$82,590,779	\$47,079,951	\$24,522,723	\$71,602,674	\$10,988,105
Infrastructure	\$35,540,344	\$25,871,450	\$4,798,947	\$30,670,397	\$4,869,947
Owner's Cost	\$8,146,542	\$3,908,705	\$3,175,244	\$7,083,949	\$1,062,592
TOTAL	\$126,277,665	\$76,860,106	\$32,496,914	\$109,357,020	\$16,920,644
1.0-2.0 Mtpa Concentrator					
Processing Plant	\$64,910,704	\$37,206,798	\$19,054,758	\$56,261,556	\$8,649,148
Plant Upgrade	\$31,039,039	17,881,439	\$9,049,377	\$26,930,816	\$4,108,223
Infrastructure	\$35,540,344	\$25,871,450	\$4,798,947	\$30,670,397	\$4,869,947
Owner's Cost	\$6,117,406	\$2,861,597	\$2,457,887	\$5,319,484	\$797,923
Owner's Cost - upgrade	\$3,200,645	\$1,394,799	\$1,388,370	\$2,783,169	\$417,475
TOTAL	\$140,808,138	\$85,216,083	\$36,749,339	\$121,965,422	\$18,842,716



5.6 Concentrator Operating Cost Estimate

Operating costs for the processing plant were estimated for the 1.0 Mtpa and 2.0 Mtpa options.

The operating costs have been calculated utilising the following parameters:

- (a) 1.0 Mtpa or 2.0 Mtpa production rate (as specified)
- (b) Expatriate staff roster: 9 weeks on, 5 weeks off (assumed FIFO)
- (c) Malian Staff: 14/7 roster (assume bus in bus out)
- (d) Local employees: 6/2
- (e) Allowance for the following expatriate staff:
 - Processing Manager
 - Mill Foreman Trainer
 - Shift Supervisors
 - Manager Maintenance and Engineering
 - Maintenance Superintendent
- (f) Diesel generated power cost
- (g) Diesel delivered cost of \$0.98 per litre
- (h) Costs from ROM bin to stockpiling of concentrate
- (i) Allowance for administration costs included
 - (i) Foreign exchange rates of:
 - \$0.75 = AUD 1.00
 CFA 450 = AUD 1.00
 ZAR 10 = AUD 1.00
 - (ii) Contribution to Community Development Projects
 - Establish and operate medical clinic
 - · Roads, education and agricultural projects

The operating cost estimate is exclusive of:

- Loading and transport of spodumene concentrate from Goulamina to Port.
- Taxes and royalties.
- All mining related costs.

Processing plant operating costs for the proposed new 1.0 Mtpa processing plant have been estimated to be \$22.63 per tonne of ore treated or \$114 per tonne of spodumene concentrate produced.

A summary of the operating costs is shown in Tables 6 and 7.

Table 6: 1 Mtpa Operating Cost Estimate

Total Costs (\$)							
Cost Area	Annual	\$/Tonne	% Breakdown				
Administration	2,273,570	2.27	10.0				
Process and Maintenance Labour	3,215,334	3.22	14.2				
Process and Maintenance FIFO/Camp	701,274	0.70	3.1				
Reagents and Operating Consumables	6,466,287	6.47	28.6				
Power	8,684,899	8.68	38.4				
Maintenance	1,285,661	1.29	5.7				
Total \$	22,627,026	22.63	100				



Processing plant operating costs for the expanded 2.0 Mtpa processing plant have been estimated to be \$17.97 per tonne of ore treated or \$91 per tonne of spodumene concentrate produced.

Table 7: 2 Mtpa Operating Costs

Total Costs (\$)							
Cost Area	Annual	\$/Tonne	% Breakdown				
Administration	2,372,677	1.19	6.6				
Process and Maintenance Labour	3,827,597	1.91	10.6				
Process and Maintenance FIFO/Camp	820,094	0.41	2.3				
Reagents and Operating Consumables	11,809,460	5.90	32.9				
Power	15,173,866	7.59	42.2				
Maintenance	1,943,703	0.97	5.4				
Total \$	35,947,398	17.97	100				

6 Downstream Lithium Chemical Production (Scenario 5)

Como has conducted a desktop study to identify various process options to produce lithium chemicals (hydroxide or carbonate) from spodumene concentrate on site. This has come about as the project economics support a higher production rate of 2 Mtpa rather than the 1 Mtpa concentrator originally contemplated. The resulting higher production rate of concentrate faces a potential logistics bottleneck to export the additional concentrate. Export of a lower volume, high value lithium chemical could alleviate this potential problem. This desktop review covered production processes evaluated and/or incorporated into other feasibility studies, and other operating data estimation methodologies (Nemaska, Galaxy Resources, Neometal's Mt Marion, Tianqi's Kwinana lithium hydroxide plant and references by Deutsche Bank and the Royal Australian Chemical Institute).

6.1 Capital Cost Estimate

As part of the PFS, Como identified a number of feasibility study documents related to Nemaska Lithium Inc's Whabouchi project in Canada. The capacity of the Whabouchi hydrometallurgical plant is 214ktpa of 6% spodumene concentrate feed per annum, which is in line with that of the additional concentrate that would result from the expansion for the Goulamina Processing Plant from 1 Mtpa to 2 Mtpa. On this basis, it is considered valid to conclude that same capacity facility would be suitable for Goulamina following the concentrator expansion.

The CAPEX published in 2016 by Nemaska was CDN\$310M, which equates to approximately \$247M. This value has been adopted for the purposes of this PFS for the construction of lithium hydroxide/carbonate production facility.

6.2 Operating Cost Estimate

The OPEX used in this PFS is an average operating cost of \$2,650/t Li₂CO₃ determined from a number of projects and two calculation methods using Goulamina input costs for (power, diesel and reagents) and a recovery of 85% (noting this relates to Scenario 5). The range of values obtained by this method was between \$1,992 - \$3,485 (which represents a range of between + 32% and - 27% of the average of \$2,650).



6.3 Lithium Carbonate vs Hydroxide

Either of these two end products can be produced from the other. Most commonly, lithium hydroxide has been produced from lithium carbonate, with the cost of one being higher than the other, depending on the order in which they are produced.

Lithium hydroxide is commonly produced by a metathesis reaction between lithium carbonate and hydrated lime, viz. $\text{Li}_2\text{CO}_3 + \text{Ca}(\text{OH})_2 \rightarrow 2 \text{ LiOH} + \text{CaCO}_3$. The resulting slurry is then filtered to remove the CaCO₃ followed by crystallisation and drying for recovery of solid lithium hydroxide.

Nemaska proposes to produce lithium carbonate from lithium hydroxide solution by reaction with carbon dioxide (carbonation) as opposed to sodium carbonate, which will be followed by filtration and drying.

Nemaska and Neometals (Mt Marion project in Western Australia) have quoted OPEXs for the production of lithium carbonate via lithium hydroxide for their respective projects. Unfortunately, no such data could be found for production of lithium carbonate from lithium hydroxide. Nemaska's significantly lower cost is most likely due to the availability of cheap hydro-electric power compared to Neometal's reliance on gas generated power in the WA goldfields. Table 8 presents the identified costs.

 Operator
 LiOH monohydrate
 Li₂CO₃

 Nemaska
 CAD\$1,112
 CAD\$1,639

 Nemaska
 \$834
 \$1,229

 Neometals
 \$1,533
 \$1,825

Table 8: Operating Cost Assumption for Lithium Hydroxide Production

7 Marketing

7.1 Product Specification

The spodumene concentrate produced from Goulamina will be classified as Chemical Grade specification, having a Fe₂O₃ grade of between 0.9 - 1.7%.

Two concentrate streams will be produced at a grade of 6% Li₂O, one from the DMS circuit (<5mm+0.5mm) and one from the flotation circuit (currently 80% minus 106 µm).

The DMS concentrate produced from Heavy Liquid Separation (**HLS**) testwork conducted on the Main Zone Composite has the approximate composition presented in Table 9.

Product	Al ₂ O ₃	Fe ₂ O ₃	K ₂ O	Li ₂ O	MnO	SiO ₂
s.g.	%	%	%	%	%	%
>2.9	23.4	0.90	0.37	6.21	0.19	66.4

Table 9: Predicted DMS Concentrate Specification

The flotation concentrate produced from testwork conducted on the Main Zone Composite had the following approximate composition, before and after Wet High Intensity Magnetic Separation (**WHIMS**) processing (Table 10). Due to low recoveries reported in the WHIMS testwork, this data should be considered indicative only, as optimisation (in operation) of the WHIMS conditions is required to improve recovery. However the results indicate a Fe₂O₃ grade similar to the DMS concentrate of 0.9% may be achievable, which would be within the iron contamination limits for chemical grade spodumene concentrate. Flotation concentrate analyses are presented in Table 10.



Table 10: Goulamina Flotation Concentrate Specification

Product	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	K₂O (%)	Li₂O (%)	SiO ₂ (%)
Clnr 3 Con 1 to 4	23.5	1.71	0.78	6.12	62.9
WHIMS Non-Mags	23.5	0.92	0.89	6.32	64.6

8 Concentrate Pricing Forecast

The marketing and sales of spodumene concentrates has been described as opaque due to the fact that there is no open market in which transactions take place. Negotiations and transactions take place directly between producers and buyers and pricing information is rarely made public. Some subscription based services exist specialising in this type of information. However, the quality of the information available through these organisations is also limited by the information available in the public domain.

Birimian has purchased a detailed market analysis for lithium from Industrial Minerals Research (**IMR**). This report is not publicly available and provides current detailed analysis of the dynamics of the lithium market out to 2026 (for the purposes of this PFS, prices are assumed to remain flat after then). The IMR Report provides forecast CIF China prices for lithium carbonate (both 99 - 99.5% and 98.5%) and lithium hydroxide (monohydrate) (56.5 - 57.5% LiOH). These prices, and a spodumene FOB price derived from this price data, have been used for the purposes of the financial analysis in this PFS.

Over the LOM, the average FOB price calculated for a 6% Li₂O spodumene concentrate ranges between \$615.76/t and \$657.87/t (depending on the Scenario). The LOM average price determined for lithium carbonate production is \$10,675.75/t

8.1 Supply and Demand Forecasts

The IMR report contains a detailed summary of supply and demand forecasts through until 2025. IMR predict a growing oversupply as new product enters the market up until 2024, but thereafter a growing supply deficit.

8.2 Marketing Strategy

In 2016, Birimian management undertook preliminary discussions culminating in the development of Memoranda of Understanding (**MoU**) with potential partners Tongdow Group and Far East First New Energy Co. The MoUs concerned potential offtake agreements and arrangements to assist in bringing the Project into production.

The change in Company management earlier this year⁵ for resulted in a re-appraisal of the marketing needs of the Project to focus, not just on spodumene concentrate sales, but also the potential to produce and sell a secondary product (either lithium carbonate or lithium hydroxide).

The Company has commenced discussions with potential end users of both spodumene concentrate and/or a secondary product and anticipates the conclusion of these negotiations prior to the completion of a DFS. Completion of the PFS will enable the Company to advance discussions with suitable potential partners on project financing and offtake arrangements.

⁵ ASX: 22 March 2017 'Board Changes and General Meeting Cancellation'

⁶ ASX: 27 April 2017 'Board Changes'



9 Financial Analysis

9.1 Introduction

Como engaged SMC to prepare a series of cashflow models to test five Scenarios for the Project. The first four Scenarios were based on a PFS level of confidence. The fifth Scenario for the production of 6% spodumene and a higher value lithium carbonate (Li₂CO₃) product is based on a concept study and is a preliminary level technical and economic assessment, which is of a lower-level of confidence than a PFS.

These initial processing scenarios were:

- 1. 1 Million Tonnes per annum (Mtpa) process plant throughput (Scenario 1)
- 2. 2 Mtpa process plant throughput (Scenario 2)
- 3. 1 Mtpa followed by 2 Mtpa on pit design v1 (small pit) (Scenario 3)
- 4. 1 Mtpa followed by 2 Mtpa on pit design v2 (large pit) (Scenario 4)
- 5. Concept study to process at 2 Mtpa and produce 6% spodumene and lithium carbonate products (Scenario 5)

A cashflow model was prepared for each of the Scenarios based on open pit mining schedules prepared by Cube that provided tonnes of ore, waste and cost mined on a quarterly basis together with tonnes and spodumene grade for material processed each quarter for the life of each Scenario. In addition, Como provided logistics costs per tonne of concentrate shipped (from an independent logistics study undertaken by Ridgehill Resources Pty Ltd, which incorporated a quote for concentrate shipment for the Project to either Abidjan or Dakar from Bolloré Logistics), advice concerning taxation rates, royalties and depreciation schedules applicable to the Project. These items were incorporated into all Scenario financial models and are detailed as follows:

Item	Units	Rate
Road/Rail to Abidjan (Spodumene Concentrate)		
Export Charges Mali	\$/t	\$6.30
Transport Charges	\$/t	\$60.18
Warehousing Charges	\$/t	\$20.58
Stuffing and FOB Charges	\$/t	\$70.89
Agency Fees	%	10%
TOTAL	\$/t	\$173.75
Mali Mineral Royalty Rate	%	6
Mali Income Tax Rate Applicable	%	25
Depreciation (Capital return before Income Tax is payable)	%	100

All mining costs are also included and mining cost is included as one of the items in the sensitivity analysis.

Como provided metallurgical recovery of spodumene to a 6% concentrate, capital cost to construct the process plant together with operating costs, sustaining capital estimation and logistic costs.

Scenario 5 was undertaken at a lower level of confidence to produce both 6% spodumene product and through downstream processing of part of the 6% spodumene to produce a high-grade lithium carbonate, high value battery grade product on site.



9.2 Price and Cost escalation

The financial modelling assumes no price or cost escalation and all capital costs are expressed in 2017 dollars. No allowance has been made for potential movements in exchange rates that may affect the Project's economic outcome.

9.3 Cashflow Model Results

The major results for the Project are summarised in Table 11.

Table 11: Summarised Cashflow Model Results

ltem	Unit	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Basis		1Mtpa	2Mtpa	1-2Mtpa	1-2Mtpa	2Mtpa+Sec
LOM Resource	Mt	14.005	20.561	14.005	20.561	20.561
LOM grade (avg)	%Li ₂ O	1.39	1.31	1.39	1.31	1.31
Life (operating)	Years	14.0	10.3	8.8	12.5	10.3
CAPEX (initial plus upgrade, not sustaining)	\$M	86.862	126.278	139.695	141.961	412
Sustaining Capital	\$M	36.480	36.480	36.480	36.480	146
LOM Primary Metallurgical Rec. (avg)	%	80.7	80.7	80.7	80.7	80.7
LOM Secondary Metallurgical Rec. (avg)	%					85
NPV ₁₀	\$M	85.6	136.3	91.8	126.4	637.9
Net cashflow	\$M	335.1	417.0	294.9	486.8	1,522.9
IRR	%	21	25	22	22	39
Revenue	\$M	1,687	2,243	1,631	2,396	4,662
Total costs	\$M	1,352	1,826	1,337	1,909	3,139
Operating cashflow	\$M	575.8	727.2	576.0	849.8	2,588
EBIT	\$M	446.8	556.0	393.2	649.1	2,031

Notes: No price or cost escalation used and no contingency included.



The key performance indicators generated in the financial analysis are detailed in Table 12:

Table 12: Key Performance Indicators

ltem	Unit	Scenario	Scenario	Scenario	Scenario	Scenario
		1	2	3	4	5
Breakeven LOM price on NPV ₁₀	\$/t	612.83	611.65	618.37	606.89	
Pre-Production Capex/avg tpa	\$/tpa	86.83	63.14	62.30	60.41	205.80
Total Capex/avg tpa	\$/tpa	128.87	85.59	114.27	121.63	278.98
Production year payback	yr	6.6	5.6	6.0	7.2	2.0
Operating margin	%	26	25	24	27	44
Total margin	%	20	19	18	20	33
Value/tonne of ore processed						
Revenue	\$/t	120.44	109.07	116.49	116.53	226.75
Cash cost	\$/t	79.33	73.70	75.36	75.20	100.86
Total cost	\$/t	96.51	88.79	95.43	92.85	152.68
Cost/t spodumene concentrate						
Cash cost	\$/t	421.77	416.10	400.92	424.18	569.42
Total cost	\$/t	513.13	501.27	507.72	523.76	862.02
Brooke Hunt Method C1 cost	\$/t spod	383.35	379.15	363.74	384.74	492.61
Brooke Hunt Method C2 cost	\$/t spod	383.35	379.15	363.74	384.74	492.61
Brooke Hunt Method C3 cost	\$/t spod	421.77	416.10	400.92	424.18	569.42

9.4 Physical Inputs

The following inputs presented in Table 13 were used to populate each of the cashflow models.



Table 13: Economic Model Physicals

Item	Unit	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Basis		1Mtpa	2Mtpa	1-2Mtpa	1-2Mtpa	2Mtpa+Sec.
Pre-production	years	1.5	1.5	1.5	1.5	1.5
Life of process production	years	14.0	10.3	8.8	12.5	10.3
Project life	years	15.5	11.8	10.3	14.0	11.8
Change of production	Project yr	0	0	4.5	4.5	0
LOM ore mined	Mt	14.005	20.561	14.005	20.561	20.561
LOM waste mined	Mt	37.511	68.377	37.511	68.377	68.377
LOM total material mined	Mt	51.516	88.937	51.516	88.937	88.973
Strip ratio w:o		2.68	3.33	2.68	3.33	3.33
LOM ore processed	Mt	14.005	20.561	14.005	20.561	20.561
LOM average spodumene grade	%	1.39	1.31	1.39	1.31	1.31
LOM avg spodumene mass pull	%	18.8	17.7	18.8	17.7	17.7
LOM avg spodumene recovery	%	80.7	80.7	80.7	80.7	80.7
LOM recovered 6% spodumene	Mt	2.634	3.642	2.634	3.642	3.642
LOM 6% spodumene exported	Mt	2.634	3.642	2.634	3.642	1.602
LOM Li ₂ CO ₃ Recovery	%	-	-	-	-	85
LOM Li ₂ CO ₃ Production	kt	-	-	-	-	256

9.5 Sensitivity Analysis

The economic cash flow model was used to prepare a sensitivity analysis for the NPV₁₀ for the Project after taxation. The sensitivity analysis was completed on the following variables:

- Processed tonnes
- Mass pull to 6% spodumene
- Price of 6% spodumene
- Pre-production capital
- Production capital
- Mining cost
- Processing cost

The sensitivity analysis determines how the NPV $_{10}$ is affected with changes to one variable at a time while holding the other variables constant. The results of the sensitivity analysis are presented in Table 14. In this table, "B/E" represents the breakeven and it indicates the change in the variable that will bring the project NPV $_{10}$ to \$0.0. Elasticity is a measure of sensitivity that indicates for a 1% change in the variable, what change in the NPV $_{10}$ will occur. A value greater than 1 indicates that the change in the variable will induce a higher value change in the NPV $_{10}$ than the change in the variable itself and indicates a higher sensitivity to change.



Table 14: Sensitivity Table for the Base Case NPV₁₀ – After Taxation

	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	BE%	Elasticity	BE%	Elasticity	BE%	Elasticity	B/E%	Elasticity
Processed tonnes	-87	1.2	-	0.8	-88	1.1	-85	1.2
Mass pull to 6 %	-16	6.3	-16	6.2	-15	6.6	-17	6.0
Price 6 % spod.	-16	6.3	-16	6.2	-15	6.6	-17	6.0
Pre-production cap	-99	1.0	-	0.9	-99	1.0	-	0.8
Production capital	-	0.2	-	0.1	-	0.4	-	0.4
Mining cost	-	0.8	-100	1.0	-	0.8	-	0.9
Processing cost	-73	1.4	-84	1.2	-78	1.3	-86	1.2

10 Project Funding Options

The market for lithium and its associated commodities is reported by many to be expanding and this may result in a rising price for these commodities.

UBS report⁷ the price for 5.5% Li₂O spodumene concentrate has risen from under \$200/t in 2000 to over \$800/t in 2017 and that battery grade lithium carbonate has risen from approximately \$2,000/t to approximately \$12,000/t over the same period. Most commodity analysts conclude that the rising demand and hence prices, is due to the rapidly increasing demand for Electric Vehicles (**EVs**) and to a lesser extent, other uses of lithium batteries. A number of nations, notably China, France and United Kingdom have announced that they will either phase out internal combustion engines in transport vehicles or subsidise EVs. According to Deutsche Bank⁸: "Global lithium demand was 184kt in 2015, with battery demand increasing 45% year on year and accounting for 40% of global lithium demand. Based on our analysis, global lithium demand will increase to 534kt by 2025, with batteries accounting for 70% of global demand." In such a rising consumption and price environment, funding by way of equity, debt or offtake contract structure (forward payment options) could reasonably be expected to be available to the Company to allow it to develop the Project.

The PFS has provided positive technical and economic fundamentals, which provide the Company with a platform for discussions on debt, equity and offtake arrangements. In all Scenarios, the determined IRR exceeded 20% without gearing.

The Project's location would facilitate supply of primary or secondary product to Europe or North America. Significant end-users, principally lithium battery and EV manufacturers, are seeking to secure long-term lithium supply by various means. The Company has received expressions of interest from such parties (including a lapsed offer to acquire the Project) and will engage with these parties and other potential partners to explore avenues for cooperation to address Project financing requirements. Peer projects have concluded such arrangements, which provides reason for confidence that Birimian can conclude similar arrangements. The Company believes completion of the PFS provides the basis for more quantifiable discussion of these options.

⁷ UBS Securities Australia Ltd, "Lithium and Graphite: Driving Demand", 15 June 2017

⁸ Deutsche Bank Market Research, "Lithium 101", 9 May 2016



The Company's Board and management has extensive experience in financing and in developing projects internationally, particularly in Africa. In addition, the Company is examining options to augment its management skills matrix with advisers and consultants experienced in the lithium market and will make necessary appointments as appropriate.

For these reasons, the Company believes it has a reasonable basis to expect to be able to fund and further develop the Project. However, there is no certainty that the Company can raise funding when required.

11 Environment and Social Impact Input

Birimian appointed Digby Wells to undertake the Environmental and Social Impact Assessment (**ESIA**) process and associated specialist studies for the Project.

The ESIA is being undertaken in compliance with the relevant Malian legislation and in accordance with international standards, such as the International Finance Corporation (**IFC**) Performance Standards, the Equator Principles and World Bank Group Environmental Guidelines.

The baseline environment is based on the findings of the environmental Screening Assessment, including the site visit undertaken from 6 to 10 October 2016, as well as the initial specialist site visit findings undertaken in March and May 2017.

The project area is considered impacted or disturbed due to existing exploration and agricultural activities. Very few mammal species were encountered throughout the surveys and large mammals are considered rare, largely due to exploitation for bush meat.

No protected animal (including invertebrates) species were encountered during the surveys, however additional small mammal trapping is planned to take place during the wet season.

The Project is adjacent to two local communities, Goulamina to the immediate north and Mafélé to its south, with village populations of approximately 960 and 1300 for Goulamina and Mafélé respectively.

The Mali Mining Code (Law No. 2012-015 of 27 February 2012) requires the submission and approval of both an ESIA and Community Development Plan (**CDP**) to the Ministry of Mines, prior to an exploration licence being awarded.

A draft CDP has been compiled based on the findings of the Social Impact Assessment. The draft CDP identified community needs and LED projects that may be beneficial for the local communities. The draft CDP will be refined between Digby Wells and Birimian before finalising the plan for submission to the authorities. The CDP will be developed as an initial 5-year plan and will require review and revision every two years during implementation.

The draft ESIA will be made available for public review and stakeholder engagement will be undertaken to disseminate project information, potential impacts and proposed mitigation measures to affected parties. The draft ESIA will be compiled and made available for public review for one month from February 2018. Based on the current schedule, it is expected that the ESIA will be finalised for submission in March 2018.



12 Risk

A risk assessment approach was used to identify key project risks for the next phase of the development of Goulamina. The risk analysis was undertaken by Birimian in accordance with the Company's Risk Management Framework. The following risks were formally considered in this PFS. Of these, the following three were rated as high:

- Inability to raise additional capital as required.
- Commodity price volatility.
- ESIA outcome negative for project.

The remainder were rated as a medium risk:

- Country and sovereign risk.
- Maintaining "social licence to operate".

Risks associated with further phases, such as construction and operations, were not considered in this assessment unless they were deemed to be of such magnitude as to make the development of the Project potentially inadvisable. No risks of this nature were identified. The risk rating was based on the Birimian risk matrix.

13 Conclusions and Recommendations

The PFS has concluded that a project based on the Mineral Resource utilised and undertaking spodumene concentrate sales only:

- could process between 14.0Mt at 1.39% Li₂O and 20.6Mt at 1.31% Li₂O of ore over an operational mine life of 9 to 14 years;
- could be capable of producing a 6% Li₂O concentrate at an average metallurgical recovery of 80.7%;
- may be developed with capital costs ranging from \$86.9M to \$142.0M, including contingency, depending on the scenario chosen;
- could incur approximately 50% of C1 costs as concentrate transport and logistics;
- has an indicated NPV₁₀ of between \$85.6 and \$126.4M; and
- is sensitive to scale and consequently expansion of the known Mineral Resource may increase NPV₁₀.

The PFS also considered a Scenario involving the secondary processing of approximately half of the spodumene produced to battery grade lithium carbonate at site. In this scenario, the NPV₁₀ of the Project rose to \$637.9M and total capital was estimated to be \$347.3M (including \$221M capital for the secondary processing plant).

The financial analysis has identified the following key points:

- 1. All Scenarios considered demonstrate a positive NPV₁₀.
- 2. The NPV₁₀ of the Project is sensitive to throughput and secondary processing;
- 3. Approximately 50% of the total cash operating cost for spodumene sales (concentrate only Scenarios) is associated with transport and logistics associated with the concentrate; and



4. The PFS assumes the use of diesel to generate the power required for the operation and this, in turn, represents between 38% and 42% of the process operating cost for the Project (concentrate only Scenarios).

These points represent clear opportunities to materially improve Project NPV₁₀ through cost and process route optimisation initiatives in the DFS phase.

Additionally, if the Project Mineral Resource inventory is expanded as recent exploration work suggests is possible, there may be potential to increase the annual treatment rate even further than the 2.0 Mtpa considered in the PFS and this may have a further positive impact on the NPV₁₀.

The principal recommendations of the PFS are as follows:

- 1. The PFS has demonstrated that the Project may be capable of commercial exploitation and it consequently warrants further assessment in a DFS phase; and
- 2. Subject to the outcomes of further exploration work, the following options are to be investigated for the DFS:
 - (a) Fully define the costs to develop the Project in a single stage with a 2.0 Mtpa concentrator;
 - (b) Fully define the costs to develop the Project in two stages, with initial construction of a 1.0 Mtpa concentrator, followed by a 2.0 Mtpa concentrator expansion; and
 - (c) Fully define the costs to incorporate the inclusion of a lithium carbonate/hydroxide production facility to coincide with the 2.0 Mtpa concentrator expansion.

To achieve these outcomes, the PFS recommends the following work program:

- 1. Continued exploration activities to enable revision of the Mineral Resource to support DFS level studies;
- 2. Further mine optimisation studies to support the evaluation of processing options;
- 3. Open pit geotechnical investigations and slope design recommendations to DFS level of confidence;
- 4. Mining equipment selection and CAPEX/OPEX determination for all scenarios are included at DFS level of confidence;
- 5. Complete a comprehensive variability metallurgical testwork program to improve confidence in the prediction of metallurgical performance across all prospective ore sources;
- Complete a comprehensive hydrometallurgical testwork program on Goulamina concentrates to derive the process requirements in order to enable DFS level cost estimates to be developed for this process option;
- 7. Conduct further detailed transport and logistics investigations to better understand the potential infrastructure limitations and determine the possible extent for reductions in transportation costs;
- 8. Conduct investigations into the potential for reduction of power costs including the availability and cost of hydro-electric power from Sélingué hydro-electric power station and other potential alternate energy sources;
- 9. Conduct a geotechnical investigation on identified site location options as well as further hydrological and hydrogeological work;
- 10. Complete the required ESIA studies; and
- 11. Develop marketing and financing arrangements for all Scenarios to a level sufficient to adequately support a DFS.



14 Peer Review

As the study is at PFS level and has been prepared by a competent third party (Como), supported by technical experts in relevant disciplines, Birimian does not propose having the PFS peer reviewed. Management will review the PFS and make a recommendation to the Board regarding the proposed work program for a DFS. While some work on a DFS can be undertaken independent of the planned drilling program, establishment of the potential scale of the Goulamina Mineral Resource and mine optimisation will be dependent on the results of that program and therefore necessarily related DFS studies cannot commence until these results are known.

Yours faithfully

Greg Walker

Executive Director/CEO

For further information contact:

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Competent Person's Declaration (Mineral Resources)

The information in this announcement that relates to Mineral Resources is based on information announced to ASX on 22 June 2017 and compiled by or under the supervision of Mr. Matt Bampton, who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr. Bampton is a full-time employee of Cube Consulting Pty Ltd, and has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Bampton consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Competent Person's Declaration (Production Target)

Information in this announcement relating to the Goulamina PFS and Production Target is based on technical data compiled or supervised by Mr Darryl Butcher, an Independent Consultant trading as BDB Process Pty Ltd. Mr Butcher is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Butcher has sufficient experience which is relevant to primary concentrator metallurgy and hydrometallurgy from the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as a Competent Persons under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves'. This includes over 20 years of experience in primary concentrator process development, design, project implementation and operations and hydrometallurgical process development, design, project implementation. Mr Butcher consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Previous Reported Mineral Resource

There is information in this announcement relating to previous Mineral Resource estimates at the Goulamina Project. The Company confirms that it is not aware of any other new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates in the original market announcement 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 announcement.

Forward Looking Statements

This release 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. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release 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 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. The Company disclaims any intent or obligations to or 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 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.