Goulamina Lithium Project Update to DFS Delivers NPV of A$4.1 Billion and 83% IRR

- **Update to DFS confirms Goulamina Lithium Project amongst the world's largest lithium developments**
- **Annualised spodumene concentrate production of 506,000 tonnes increasing to a peak of 880,000 tonnes positions Goulamina as a leading global spodumene producer[1]**
- **Post-tax NPV of A$4.1 billion and post-tax IRR of 83%, more than double the prior DFS**
- **JV with Ganfeng provides project with US$130m equity funding, up to US$64 million in debt and offtake secured**
- **Post-tax real IRR significantly exceeds the 15% required for a positive Final Investment Decision (FID) upon formation of the Goulamina JV.**
- **Production to increase from 2.3 to 4.0 million tonnes per annum throughput, Stage 2 expansion targeted 18 months after commissioning of Stage 1**
- **Revised flowsheet sees lithium recovery increased to 80% based on testwork under supervision of Ganfeng**
- **Competitive operating cost of US$312 per tonne of concentrate**
- **Goulamina spodumene concentrate has successfully been converted into lithium hydroxide to a specification that meets the requirements of Ganfeng's customers**
- **Drilling has commenced at Goulamina and is targeting conversion of much of the 43.7 million tonnes at 1.35% Li_2O Inferred Mineral Resource to Ore Reserves**
- **Incorporation of hybrid solar/diesel/battery Power station to reduce GHG emissions**

Firefinch Limited (**ASX: FFX**) (**Firefinch** or the **Company**) is pleased to announce the results of an update to the Definitive Feasibility Study published on 20 October 2020 (**DFS Update**) for the Goulamina Lithium Project (**Goulamina** or the **Project**) in Mali, West Africa.

The DFS Update demonstrates exceptional financial returns and a higher production rate than outlined in the October 2020 DFS. The update revised engineering design, flowsheet and metallurgical testwork to DFS standard with additional targeted production for the 4.0 million tonnes per annum operation (**Stage 2**) determined at Pre-Feasibility standard. Spodumene concentrate price assumed was increased to an average US$978 per tonne.

Increased capital costs compared to the original DFS relate to the infrastructure and equipment changes to accommodate increased production from Stage 2 expansion and industry cost inflation.

1 Average spodumene production during the first 5 years of full production of Stage 2 is 831,000t. Refer table "DFS Update Key Metrics" on page 3 for Listing Rule 5.16 information and cautionary statement.

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Firefinch Managing Director, Dr Michael Anderson, said:

"We are absolutely delighted with the outcome of the DFS update which confirms Goulamina as a world leading lithium development with outstanding returns. Only 14 months ago in delivering the original DFS we said that, given market conditions for lithium, we would be patient to ensure we maximise shareholder returns - that patience has been rewarded. We thank our shareholders for their support.

*Our strategy has been to deliver a high return project; one with low technical risk, a quality partner in Ganfeng, the world's largest lithium chemical producer, to provide a funding solution and offtake support. That is the project that we will be demerging to form Leo Lithium Limited (**Leo**). We expect to take Leo to market in March-April next year with engineering, construction and drilling works underway and a clear path to first production in early 2024 in front of us.*

Only Firefinch shareholders will be eligible to receive an in-specie distribution of Leo shares and to participate in an entitlement issue upon listing of Leo."

Ganfeng Agreement and Demerger

The DFS Update follows Jiangxi Ganfeng Lithium Co. Ltd. (**Ganfeng**) and Firefinch agreeing to form an incorporated Joint Venture (**Goulamina JV**) to develop Goulamina. The key criteria for the Goulamina JV to approve a Final Investment Decision (**FID**) was the DFS Update returning a post-tax real Internal Rate of Return (**IRR**) of more than 15%, which has been greatly exceeded, returning 83%. Firefinch and Ganfeng will confirm FID upon formation of the JV. The JV has not been formed yet as an internal reorganisation of Firefinch subsidiaries is in progress to permit the formation of the JV company.

The remaining Condition Precedent to completion is the transfer of the Project Exploitation Licence to a single purpose Malian subsidiary as required by Malian legislation. This is expected to occur in early 2022 and will allow the formation of the JV and the final US$90 million of Ganfeng's US$130 million contribution will become payable. The first payment (US$39 million) was deposited by Ganfeng into an escrow account (refer to the ASX release dated 1 December 2021).

Ganfeng and Firefinch have agreed to proceed with early-stage engineering, drilling and various community and environmental works to fast track the development of the Project. Firefinch costs will be re-imbursed by the JV once it is established.

The 2.3 million tonnes per annum operation (**Stage 1**) capital cost is US$255 million and Ganfeng will contribute US$130 million in cash and arrange up to US$64 million of debt. Ganfeng has advised it is currently in discussion with Chinese banks to consider providing the debt funding. Further information on final funding arrangements including the funding of Stage 2 capital will be disclosed once the JV is formed.

Firefinch has announced its intention to demerge Goulamina into a new ASX listed company, Leo Lithium Limited. Firefinch will seek shareholder approval for the demerger in Q1 2022, with ASX listing approximately one month later (subject to regulatory approvals and rulings). The only way to receive an in-specie distribution of Leo shares at no cost as part of the demerger is to be an eligible Firefinch shareholder[2].

[2] Eligible Firefinch shareholders with a registered address in Australia, New Zealand or a qualifying jurisdiction. Subject to foreign law advice, it is Firefinch's current intention to be as inclusive as reasonably practicable in determining qualifying jurisdictions. Further details will be provided to the market in due course.

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Firefinch will retain up to 20% of the issued capital of Leo following the demerger. Firefinch has progressed regulatory requirements and is finalising documentation to implement the demerger.

In conjunction with Leo seeking admission to ASX, Leo will undertake a pro rata entitlement offer to fund working capital, costs of the demerger and enable flexibility to accelerate expenditure at Goulamina. A Prospectus for the entitlement offer will be made available when the Leo shares are offered under the entitlement offer. Only eligible Firefinch shareholders[2] will be able to participate.

DFS Update Key Metrics

Measured, Indicated & Inferred Mineral Resources	108.5 million tonnes at 1.45% Li_2O
Mine Life	21 years minimum
Ore Reserves (Proven and Probable)	52 million tonnes at 1.51 % Li_2O
Life of Mine Production spodumene concentrate	15.6 million tonnes
Annual Mine Throughput	2.3 rising to 4.0 million tonnes
Average annual spodumene concentrate production	Stage 1: 506,000 tonnes Stage 2: 831,000 tonnes[3] Life of Mine: 726,000 tonnes
Concentrate Specifications	6% Li_2O, <0.6%Fe_2O_3, low mica
Pre-tax NPV (8%)	A$5.6billion (US$4.0 billion)
Pre-tax IRR (real)	97.8%
Post-tax NPV (8%)	A$4.1 billion (US$2.9 billion)
Post-tax IRR (real)	83%
Capital Cost (Stage 1)	US$255 million
Capital Cost (Stage 2)	US$70 million
Cash Costs (Life of Mine)	US$312 per tonne concentrate
All in Sustaining Cost (AISC) (Life of Mine)	US$365 per tonne concentrate

Cautionary statement: The production inventory and forecast financial information referred to in the Stage 2 comprises Proven Ore Reserves (9.9%), Probable Ore Reserves (53.6%) and Inferred Mineral Resources (36.5%). The Inferred Mineral Resource included in the inventory is 30 million tonnes at 1.3% Li_2O. The Inferred Mineral Resource has been scheduled on a preliminary basis with all Inferred material mined after the Ore Reserves. The Inferred Mineral Resource does not have a material effect on the technical and economic viability of the Project. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Note: All dollar figures are in real terms.

[3] Average spodumene production during the first 5 years of full production of Stage 2

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DFS Update

The DFS Update was supported by Lycopodium Limited (**Lycopodium**), managed by Firefinch with input from Ganfeng who oversaw flowsheet design and confirmatory metallurgical testwork. For further detail, shareholders are referred to the original DFS released to ASX on 20 October 2020**.**

The scope of the DFS Update was to:

- Review and revise the process plant design and flowsheets
- Undertake testwork to support the design changes
- Update the capital cost estimate based on the revised equipment selection and Q3 2021 pricing to +15/- 5% accuracy for Stage 1 and +15%/-10% for Stage 2
- Update the project execution plan, including the preliminary implementation schedule, including identification of the long lead item(s)
- Update the operating cost estimate based on the revised equipment selection and current market pricing to a +15/- 5% accuracy for both Stage 1 and Stage2
- Consider the ability to increase production from the October 2020 DFS capacity of 2.3 million tonnes per annum to 4.0 million tonnes per annum, and include provision for infrastructure that will minimise the capital cost and operational impact of expanding the plant in an operational phase after commissioning of Stage 1
- Consider the suitability of the Mineral Resource and Ore Reserve to support higher production rates and if Inferred Resources were able to be accommodated into the Life of Mine production target
- Revise the financial model based on the revised capital and operating costs and other adjustments
- Complete preliminary capital cost estimate and financial modelling for the Stage 2 expansion. Operating costs used were as per the original DFS.

Other elements of the original DFS remain largely unchanged.

Key outcomes are:

- Throughput to be increased from 2.3 million to 4.0 million tonnes per annum 18 months after commissioning of the Stage 1 processing circuit. Expansion involves the addition of a duplicate milling and flotation train
- A staged expansion allows for operational flexibility in duplicate circuits and for lessons learned from Stage 1 operations to be incorporated in Stage 2
- Spodumene production of 506,000 tonnes per annum for the first 18 months of production increasing to an annual production of 831,000 tonnes, (based on first 5 years of Stage 2 steady state operations), one of the biggest production profiles for any spodumene mine[4]

[4] Refer table "DFS Update Key Metrics" on page 3 for Listing Rule 5.16 information and cautionary statement.

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- The life of mine production target includes 30 million tonnes of Inferred Mineral Resource at 1.3% Li_2O. This is considered a conservative estimate of the conversation rate from Inferred Mineral Resources to Ore Reserves. The production target is indicative and is pending a revised mining schedule and design[5]

- The operating costs used in financial modelling are considered conservative. Both mining and processing costs are expected to reduce in unit rates upon optimisation and economies of scale have been fully assessed and incorporated

- Relative to spot pricing and recent price forecasts a conservative spodumene concentrate price of US$1,250/tonne real is applied for the first 5 years of production, and a long-term weighted average of US$900/tonne real applied for the balance of mine life. Life of mine average price is US$978 per tonne.

Project Description

Introduction

The Project is in southern Mali approximately 195 kilometres by road south of Bamako (150 kilometres direct distance) and 50 kilometres west of the town of Bougouni. The Project site lies between the villages of Mafèlè (3.5 kilometres south) and Goulamina (1 kilometre north). A sealed road extends to within 27 kilometres of the Project and connects the town of Bougouni to Yanfolila. A description of climate, environment and deposit geology is provided in the original DFS (refer to the ASX release dated 20 October 2020).

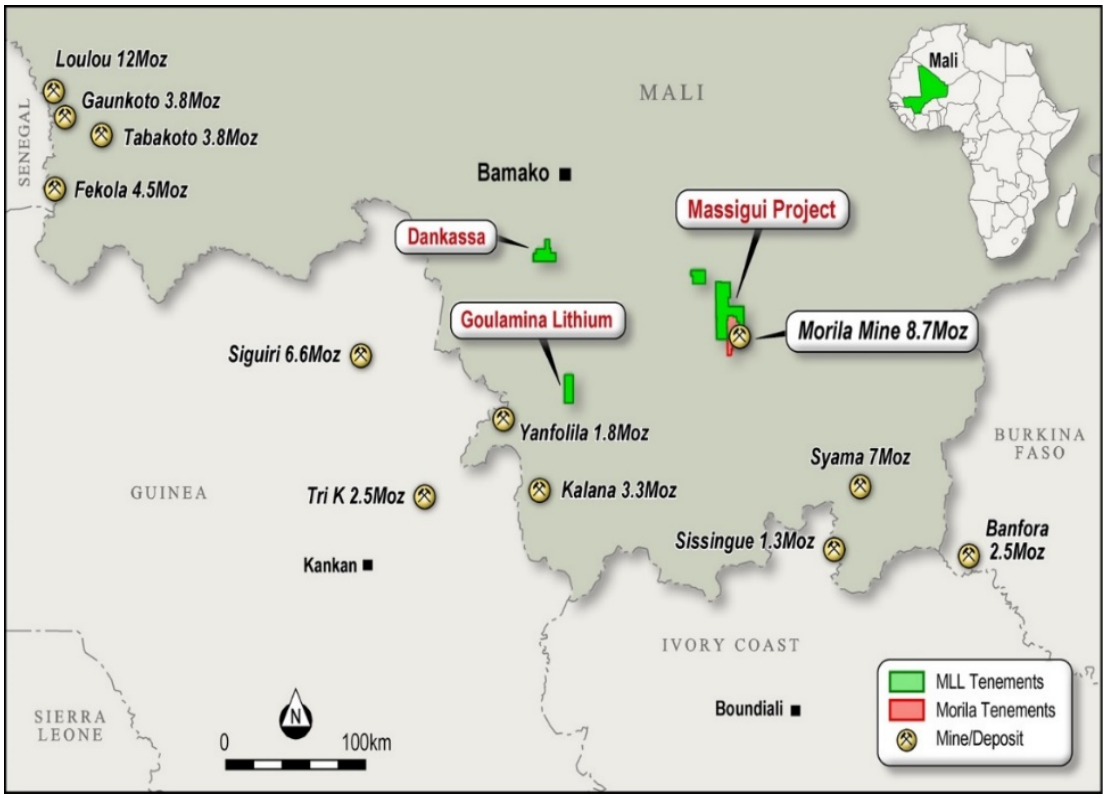

Figure 1: Location Plan of the Goulamina Lithium Project

[5] Refer to cautionary statement in the *DFS Update Key Metrics* table on page 3

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Mining Tenure

The Exploitation Permit (equivalent to a mining licence) for the project was granted on 23 August 2019 and has a 30-year validity, renewable in intervals of 10 years, until depletion of ore reserves. It covers an area of 100 square kilometres and has been granted for lithium and other minerals. The permit is to be transferred to a subsidiary of the Ganfeng-Firefinch JV.

Mineral Resource Estimate

A Measured, Indicated and Inferred Mineral Resource Estimate for Goulamina of 108.5 million tonnes at 1.45% Li_2O was published on 8 July 2020. There is no new information or data that materially changes that estimate.

Goulamina Mineral Resource Estimate - June 2020

Estimate	Classification	Tonnes (Millions)	Contained Tonnes Li_2O	Li_2O(%)
June 2020	Measured	8.4	133,000	1.57
	Indicated	56.2	832,000	1.48
	Inferred	43.9	606,000	1.38
	Total	**108.5**	**1,570,000**	**1.45**

Ore Reserves

In the original DFS, Cube Consulting (**Cube**) undertook open pit optimisation, open pit designs, production scheduling and reporting of an Ore Reserve estimate in accordance with the JORC Code (2012 Edition).

Proven and Probable Ore Reserves were derived from Measured and Indicated Mineral Resources and are contained within the final pit design and scheduled to be processed through the planned processing facility. The Ore Reserves do not include any material classified as Inferred.

Goulamina Open Pit Ore Reserve Estimate – October 2020

Category	Cut- off grade Li_2O%	Tonnes millions	Grade Li_2O%	Tonnes Li_2O
Proven	0.00	8.1	1.55	125,000
Probable	0.00	44.0	1.50	660,000
Total	**0.00**	**52.0**	**1.51**	**785,000**

The Ore Reserve is contained within an open pit containing 169 million tonnes of waste resulting in a waste to ore strip ratio of 3.26:1 with a total of 222 million tonnes of ore plus waste mined over the Life of Mine. Included in the waste material is 1.8 million tonnes of Inferred Mineral Resource which is not reported to Ore Reserves and is an opportunity to provide additional reserves with further drilling.

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Further details are available in JORC Table 1 included in the ASX release dated 20 October 2020.

Some 43.9 million tonnes of Inferred Mineral Resources at a grade of 1.38% Li_2O lie within, beneath or along strike from the final pit design. That pit was been constrained by the limit of available Indicated and Measured Resources and a US$666 per tonne optimisation. Recent pit optimisations estimated using a $900 per tonne spodumene concentrate price and including Inferred Mineral Resources demonstrate that the pit will be much larger and it is conservative to include 30 million tonnes of Inferred Mineral Resource at a grade of 1.3% Li_2O in the life of mine production target. Detailed evaluation of those Inferred Mineral Resources has provided confidence that with the drilling underway, and assuming results are in line with expectations, a high proportion is likely to convert to Indicated Resources and be available for inclusion in Ore Reserve estimates. Work continues on open pit optimisation, design and scheduling based on new long-term pricing.

Firefinch is confident that there is considerable exploration upside beyond the current Mineral Resource and this potential will be tested in the drilling program approved by the parties.

Mining

A standard open-pit mining operation of drill, blast, excavation, and truck haulage will be employed for the Project. Contractors will be employed for mining operations. Given the nature of the deposit, the pegmatites will be mined from footwall to hanging wall, rather than selectively using a cutoff grade, hence a zero cut-off grade applies.

A review of equipment selection and pit designs for the original DFS has determined that there are no mining constraints to increasing throughput to 4.0 million tonnes per annum. Work is continuing to identify economies of scale, and it is expected to see a decrease in the average unit cost for mining per ore tonne. The unit costs for the original DFS have been retained in the DFS Update.

Process Selection and Testwork

The process plant design has been amended on advice of Ganfeng and their experience in similar operations around the globe and the Ganfeng managed testwork conducted as part of this DFS Update. The revised process flowsheet will comprise the following unit processes:

- Three-stage crushing to a P_{80} of 6.2 millimetres with a fine ore bin and overflow dead stockpile
- Closed circuit ball milling and screening to an estimated P_{80} of 180 µm based on a closing screen P_{100} of 212 µm.
- Two-stage magnetic separation
- Three stage flotation (roughing, cleaning and recleaning)
- Concentrate dewatering, filtration and storage
- Separate flotation and process tailings thickening with common tailings pumping to a Tailings Storage Facility
- Reagent mixing and distribution
- Separate flotation and process water circuits
- Air services

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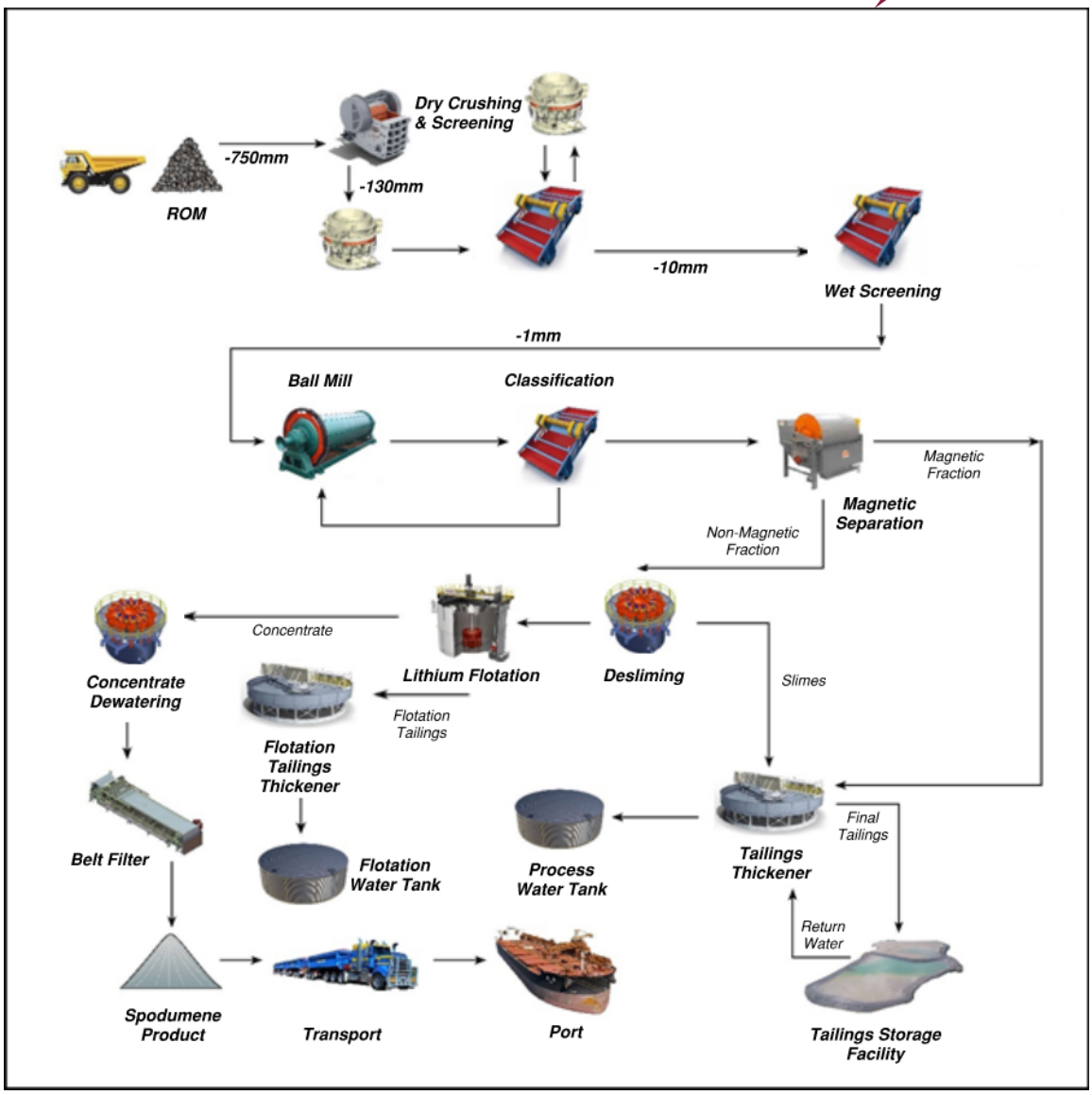

Figure 2: Simplified Process Flow Sheet

Ganfeng have undertaken a testwork program that has verified the changes to the process flow sheet. Recoveries in locked cycle testwork (see tabulation below) have matched or exceeded the original DFS testwork, and as a result, the predicted recoveries have been increased to 80%.

Testwork returned recoveries in the high 80%'s but is not reflective of real plant performance. Losses due to desliming in the testwork using wet screening were 5%, However, the desliming circuit in the plant will use hydrocyclones and losses in desliming are assumed at 10%.

The reagent suite used in this DFS update testwork was different from that used in the original DFS testwork and facilitated the removal of the mica flotation circuit and the losses associated with that circuit.

A coarser grinding size was used in testwork, P_{80} = 180 µm compared to 106 µm used in the original DFS testwork. The coarser grinding size creates less slimes and thus reduces desliming losses.

Following flotation testwork, concentrate was then successfully converted into battery grade lithium hydroxide at 99.5% purity to a specification that meets the requirements of Ganfeng's Tier 1 customers.

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Locked Cycle Testwork (Adjusted)

	Mass (%)	Grade (% Li_2O)	Recovery (%)
Concentrate	20.6	6.1	80.34
Tailing	62.1	0.14	5.56
Mags	4.3	1.5	4.12
Desliming	13	1.2	9.97
Feed	100	1.56	100

Plant Design

The DFS Update envisages building a 2.3 million tonne per annum throughput plant accommodating in the design the infrastructure and equipment to accommodate the construction of a Stage 2 expansion to increase plant throughput to 4.0 million tonnes per annum. The expansion of the plant will be built after commissioning of Stage 1 and be commissioned approximately 18 months after commissioning. The staged approach allows the process flow sheet to be optimised for full production based on operating experience. An additional US$15 million in capital cost has been included in the Stage 1 capex estimate to facilitate the optionality to readily expand to Stage 2 operations.

Due to the difficulty in changing out, or adding jaw crushing capacity once in production, the design and cost estimate is based on installing a large single jaw crusher in Stage 1 that can accommodate 4.0 million tonnes per annum throughput.

The relatively low incremental cost and the major operational impact of upgrading conveyors for a higher capacity, allows for conveyors that can run at 4.0 million tonnes per annum throughput to be included in the Stage 1 design.

The surge bin above the secondary cone crusher will be designed to feed two units, although Stage 1 (2.3 million tonnes per annum) only requires one. This will allow a second feeder and cone crusher to be installed as part of Stage 2 (4.0 million tonnes per annum) without a lengthy shutdown required. The concrete and steelwork in the secondary & tertiary crushing building has been designed and will be installed as part of Stage 1 to allow for Stage 2 equipment.

The conveying layout from the fine ore storage to the milling circuit includes a splitter bin before milling rather than conveying direct from the bin to the mill feed. This feature enables a future feeder and conveyor to be installed to feed the second mill train without a major shutdown and capital-intensive project to modify the mill feed.

The plant layout has been designed with a central services spine of structural steel supports, to accommodate the installation of Stage 1 and Stage 2 pipework, electrical, controls and instrumentation infrastructure and enable a linear flow of process plant infrastructure. This design enables Stage 2 infrastructure and services to be mirrored on the opposite side to the Stage 1 equivalents for the milling, magnetic separation, and flotation areas with minimal impact on operations.

The Stage 2 milling and classification plant will replicate the Stage 1 plant unless operations highlight that changes are required to grind size. This will provide valuable operational redundancy and commonality to the operation.

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When Stage 2 is completed, the two-train milling and processing circuit will have increased operational flexibility enabling a 2.3 million tonne per annum throughput rate to continue during milling circuit maintenance outages. There are also potential synergies with spares holdings due to commonality of spares.

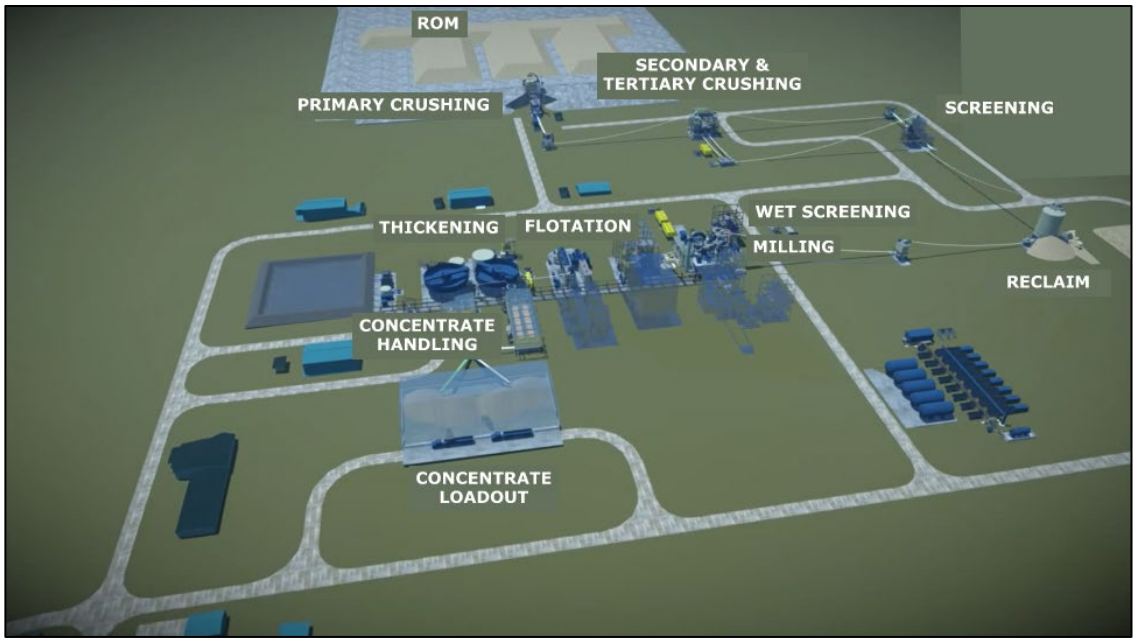

Figure 3: Process Plant Layout

Tailings Storage Facility

Work has commenced to revise the design of the tailings storage facility (**TSF**) to accommodate the increased throughput and required life of mine volumes. This cost has not been included in estimates.

Power

The original DFS envisaged that power would be supplied from a 15 megawatts on-site power station fuelled by diesel or LNG. A build own operate (**BOO**) contracting strategy was selected for that study and continues to be the preferred option. At Morila, Firefinch is in the process of replacing the existing diesel power station with a new hybrid solution incorporating a solar photo voltaic (**PV**) plant, and bulk energy storage systems (batteries), combined with high-speed diesel generators. Firefinch has had numerous expressions of interest and initial costings for such plants on a BOO basis.

Including PV power generation will substantially reduce the Greenhouse gas emissions from the project.

The demand for power in Stage 2 will increase to approximately 25 megawatts and Firefinch will utilise its experience at Morila to select a staged hybrid solution for Goulamina. At this stage the unit cost of power assumed is unchanged, but the final hybrid power solution is expected to bring significant cost savings through reduced diesel consumption.

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Water Supply

The bulk of the water supply will be sourced from the Sélingué Dam, pumped via a 29 kilometre pipeline. The Company has received approval to extract water and will seek to amend these approvals to include the volumes required for Stage 2.

The TSF will capture rainfall and runoff from the plant site and waste dumps will also be harvested to the TSF. It is estimated that 2.6 million cubic metres of rainfall will be harvested on an annual basis. This will be a major contributor to the overall water balance.

There is potential to the northwest and southwest of the mine site for development of surface water run-off facilities to provide a buffer in the event of disruption to supply from the Sélingué Dam.

Groundwater exploration is currently being carried out on site.

Communications

Internal communications and IT services will be via a site wide fibre optic network. A local service provider will be contracted to install facilities on site and provide a link into the local, national, and international telecommunication network. A radio network will be established to cover the mine, process plant and infrastructure services. A local ground station will be installed to provide global satellite voice and data connection.

Camp

Accommodation for the Project comprises of a 200-person permanent camp which will be used for operations personnel. This has been increased from 150 in the original DFS to cater for the Stage 2 expansion. Temporary accommodation has been allowed for construction. The majority of the workforce are expected to reside in local towns and villages.

Transportation and Logistics

Mali is a landlocked country with most of its imports coming by road from the ports of Abidjan in Côte d'Ivoire or Dakar in Senegal. Significant investment has been made by development agencies in road infrastructure in both Mali and Côte d'Ivoire. Concentrates will be loaded onto trucks by the haulage contractor's front-end loader. The payload is limited to 38 tonnes of concentrate per truck. A weighbridge will be installed and maintained by the haulage contractor.

Trucks will haul the product to a shed at Abidjan port supplied and managed by a terminal operator. Mali and Côte d'Ivoire are part of the Africa Continental Free Trade Area which means that tariffs are not applicable. The round trip to Abidjan will take 6 to 7 days requiring a truck fleet of between 220 and 250.

Work continues interacting with local and international logistics providers and on evaluating back loading options.

Community and Environment

An Environmental and Social Impact Assessment (**ESIA**) was completed by Digby Wells Environmental (Mali). The ESIA contains both an Environmental and Social Management Plan and a Community Development Program.

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A scoping study has recently been carried out to incorporate changes to the mine layout into the livelihood restoration plan required under the ESIA. Work on executing the plan will commence this month.

It should be noted that no dwellings need to be relocated as part of the project development, and compensation will largely be based on the acquisition of cleared farmland.

Government and Fiscal Regime

Mali has an established Mining Code and a track record for facilitating and rapidly permitting mineral development and production. Under Article 65 of the Mining Code, on issue of the Exploitation Permit (granted in August 2019), the Government of Mali receive a 10% free carried interest in the mining company, with an option to purchase an additional 10%. Lithium du Mali S.A. was created in March 2020 and serves as the exploitation company for the Goulamina Lithium Project.

Mali has been suffering from political instability in recent times, however, all current mines (including Firefinch's Morila gold mine) report no interruption to normal operations, the country is operating as normal, an interim Government appointed and democratic elections are due to be held in 2022.

Capital Cost Estimate

The capital cost estimate for Stage 1 of the Project is to +15%/- 5% confidence and Stage 2 to +15%/-10%. It was compiled by Lycopodium with input from the Company on mining and owner's costs and is shown in the table below:

Capital Costs

Capital Cost (US$ millions)	Stage 1	Stage 2	Total
Mine Development	9	-	9
Process Plant	113	48	151
Non-Process Infrastructure	56	-	56
Management	22	10	32
Owners Costs	28	5	33
Contingency	28	7	35
Total	**255**	**70**	**325**

The estimated capital cost of Stage 1 of the project has increased in line with expectations, primarily driven by general cost escalation (which has been recently report across the industry) and incremental capital associated with providing the flexibility to readily move to a Stage 2 operation. The key contributors to this increase are as follows;

- Global increases in commodity prices such as steel and copper
- Increases in global transportation costs
- Increase in labour rates
- Foreign Exchange fluctuations

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- Redesign of process plant infrastructure to facilitate the rapid installation of a second milling and flotation circuit, without impacting on production at a cost of approximately US$15 million
- Upgraded water and road infrastructure to support increase usage and traffic volumes to allow for the increased production throughput

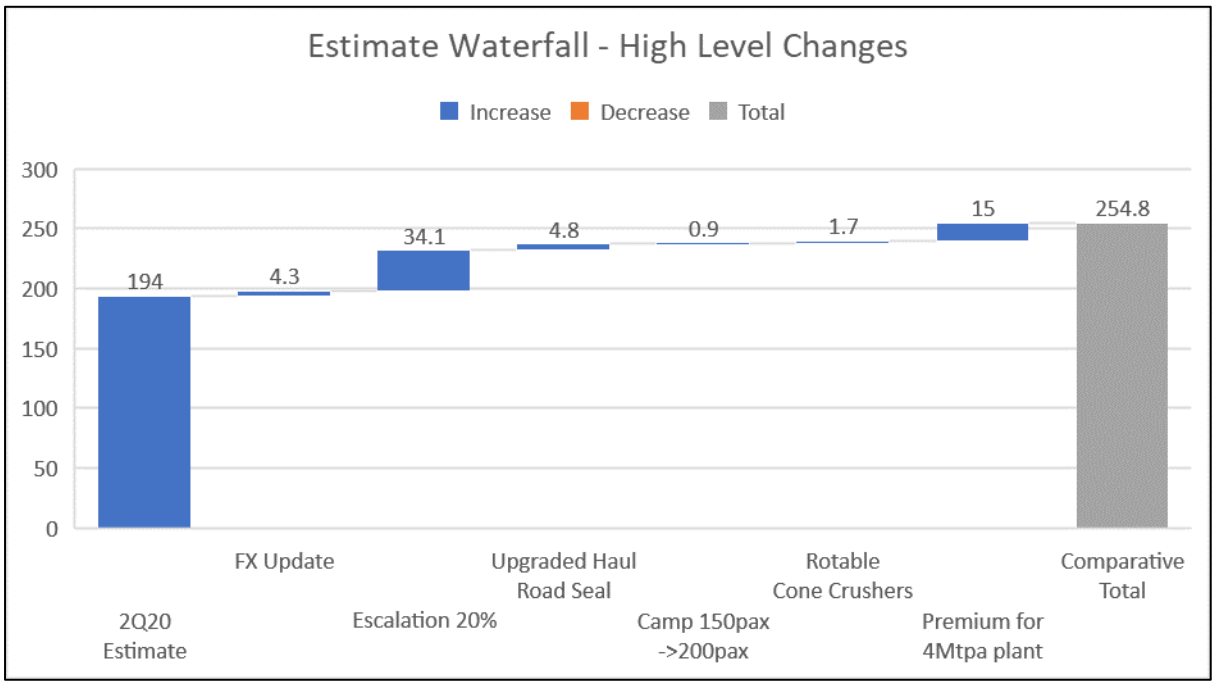

Figure 4: Changes in Capital Cost from Original DFS

Operating Costs

Operating Costs by Area	**US$ per Concentrate Tonne**		
	DFS	**Updated DFS**	**Change**
Mining	87	84	-3
Transport	99	99	0
Processing - Power	39	39	1
Processing - Consumables	29	46	17
Processing - Maintenance	4	8	40
Processing - Assay	2	4	24
Processing - Mobile Equipment	1	4	3
Processing - Labour	8	10	2
General and Administration	16	18	2
Total	**285**	**312**	**27**

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The key contributors to the changes in operational costs are as follows:

- Increase in fuel price impacted on the unit rate for power, although usage has decreased due to reduced grinding requirement. There is potential for further reduction when hybrid solar/diesel plant costs are better understood.
- Global increases in commodity prices such as steel and copper has impacted the price of consumables such as grinding media
- Increases in global transportation costs
- Increase in labour rates, particularly expatriates
- Assay costs have increased based on Morila experience
- Cost of has increased
- Foreign Exchange fluctuations
- Operating costs estimates are to +15%/-5% confidence for both Stage 1 and Stage 2

Note that optimisation work is continuing in both mining and processing to evaluate the economies of scale in the expanded case.

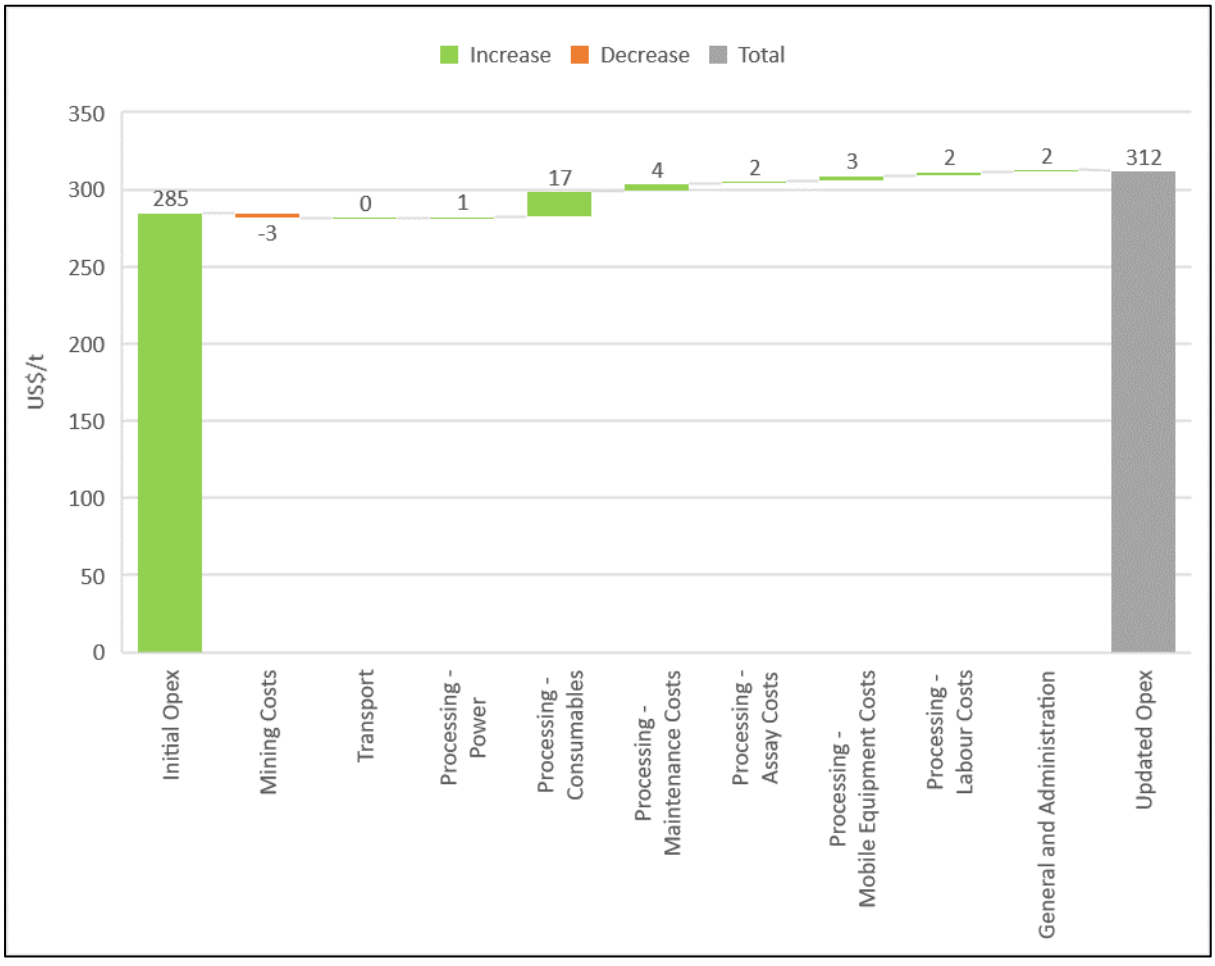

Figure 4: Waterfall chart showing change in Operating Cost due to Updated DFS

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The table below summarises average life of Mine operating costs per tonne of concentrate.

C1 Costs (Life of mine average, real terms)		US$/tonne concentrate
Mining		87.9
Processing		112.3
SGA		12.9
Road Transport & Port Handling		99.0
	Total C1 Costs	**312.1**
C2 Costs		
C1 Costs		312.1
Initial Capital Depreciation		13.7
Sustaining Capital Depreciation		5.4
	Total C2 Costs	**331.1**
C3 Costs		
C2 Costs		331.1
Site Closure & Rehabilitation		0.8
Royalties		46.3
	Total C3 Costs	**378.2**
All-in-Sustaining Cost (AISC)		
C3 Costs		378.2
Initial Capital Depreciation		(13.7)
	All-in-Sustaining Cost (AISC)	**364.6**

Financial Analysis

Total earnings before interest, tax, depreciation, and amortisation (**EBITDA**) over the 21.5-year Project life are US$9,651 million. See below for all key financial performance metrics, tax has been calculated based on the current tax regime in Mali. Corporate tax is 30%, VAT 17% and royalties are 6%.

The chart and table below present the financial analysis outcomes and illustrate annual and cumulative pre-tax ungeared free cash flow generated by the Project.

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Project Economics	*Units*	
Post-tax NPV (8% real discount rate)	AUD (millions)	4,150
Post-tax NPV (8% real discount rate)	US$ (millions)	2,946
Post-tax IRR (Real)	%	83.0%
Life of Mine Revenue	US$ (millions)	15,255
Project EBITDA	US$ (millions)	9,651
Average Project Annual EBITDA	US$ (millions)	448
Life of Mine Post-Tax cashflow	US$ (millions)	6,834
Payback period from first production	Years	1.5
Price for spodumene concentrate first 5 years	US$/tonne	1,250
Price for spodumene concentrate years 6 to 22 years	US$/tonne	900
Mineral Resources and Ore Reserves		
Proved and Probable Ore Reserves	Million tonnes	52
Inferred Resource included in Life of Mine production target	Million tonnes	30
Average Grade	% LiO_2	1.43%
Production Summary		
Mine Life	Years	21.5
Strip ratio		3.3:1
Annual Crusher Feed Stage 1	Million tonnes	2.3
Annual Crusher Feed Stage 2	Million tonnes	4
Lithium Recovery	%	80%
Average annual spodumene concentrate production (Life of Mine)	Tonnes	726,000
Annual spodumene production Stage 1	Tonnes	506,000
Annual spodumene production Stage 2[6]	Tonnes	831,000
Costs		
Capital Cost for Stage 1	US$	255
Capital Cost for Stage 2 Expansion	US$	70
Life of Mine Operating Costs Spodumene Concentrate	US$/tonne	312
All-in Sustaining Costs (AISC) Spodumene Concentrate	US$/tonne	365

[6] Average spodumene production during the first 5 years of full production of Stage 2. Refer table "DFS Update Key Metrics" on page 3 for Listing Rule 5.16 information and cautionary statement.

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Notes: All dollar figures in real terms. Operating costs includes all mining, processing, transport, freight to port, port costs and site administration/overhead costs royalties. All Costs expressed in US Dollars unless otherwise noted, AUD$1 = US$0.71. All in Sustaining Costs (AISC), are operating costs including all mining, processing, transport, port costs, site administration costs, royalties, sustaining capital and mine closure costs. Project totals exclude working capital, finance costs, and corporate costs associated with project development.

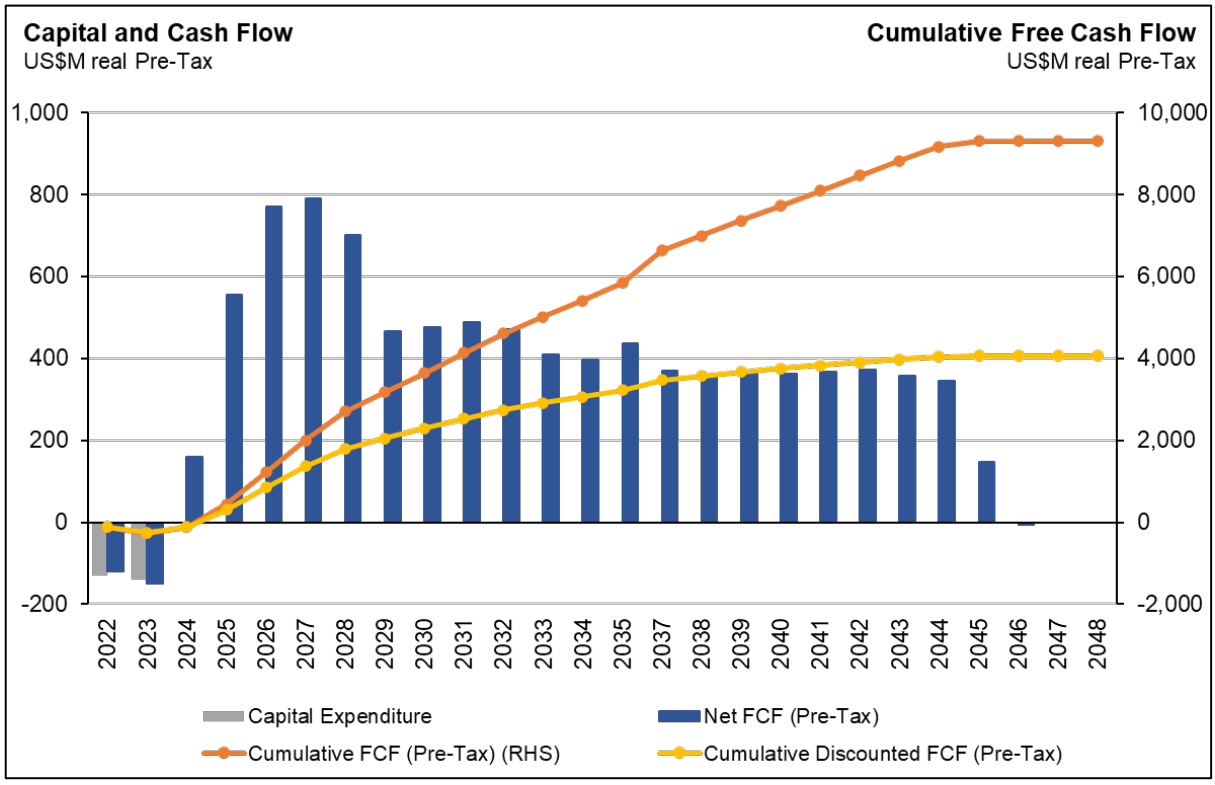

Figure 5: Life of Mine Cashflow

A sensitivity analysis of key parameters and assumptions has been performed using the NPV result of US$3,994 million (discounted at 8% pre-tax, real) as the baseline.

	NPV Change US$(millions)			
Variable	**Downside**		**Upside**	
Price	(1,239.7)	-20%	1,239.7	+20%
Volume Mined	(984.7)	-20%	985.4	+20%
Operating Costs	(378.3)	+20%	378.3	-20%
Recovery	(714.7)	-10%	357.8	+5%
Feed Grade	(758.8)	-0.2%	759.6	+0.2%
Discount Rate	(647.5)	+10%	830.6	+6%
Concentrate Target Grade (target 6%)	(183.8)	6.2%	513.4	5.5%
Capex	(45.7)	+20%	45.7	-20%
Sustaining Capex	(13.4)	+20%	13.4	-20%

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Spodumene Price and marketing

The original DFS used a Life of Mine spodumene concentrate price of US$666 per tonne. Spot prices are in the range of US$ 2,000 to US$ 2,300 per tonne at the time of writing. Long term prices adopted by others range up to US$1400 per tonne. Market commentary is bullish for lithium with the well-known EV thematic resulting in estimates of exceptional growth in demand.

A price of US$1,250 per tonne real has been adopted for the first 5 years of the project when it is expected that spodumene supply response will be unable to match demand growth. The balance of mine life uses a US$900 per tonne price as long-term real price.

Offtake has been secured through the joint venture with Ganfeng. Ganfeng are a ~US$35 billion company and a leading lithium chemical producer who in turn supply tier 1 battery makers and EV makers. Secure offtake de-risks the Goulamina project. Ganfeng receive 50% of offtake rights on subscription of US$130 million cash and the balance of provision of debt.

Offtake pricing is determined via a formula which is linked to the prevailing price of downstream lithium products and the agreement contains a numbers of offtake protection mechanisms relating to shipping, floor price during the debt period and non-performance.

Schedule

Implementation is forecast to take 28 months from award of the Engineering, Procurement and Construction Management contract to practical completion.

Opportunities

- There remains significant potential to further increase resources at Goulamina in the Danaya zone and at depth in the Sangar zones
- Both capital and operating costs have been updated using Q4 2021 pricing. It is widely acknowledged that there will be market corrections in some areas as the global supply chain recovers from the impacts of the Covid-19 pandemic. In addition to commodity prices, it is noted that both the cost and reliability of sea borne transport is expected to see a marked improvement in the next 12 to 18 months, which will have a positive effect on the project outcomes
- Early engineering works have already commenced to finalise data sheets and specifications for the long lead time equipment. The supply and installation of the ball mill is on the project critical path so expediting the procurement can potentially reduce the schedule
- Work is continuing to firm up operating cost estimates for both processing and mining. The increased throughput to 4.0 million tonnes per annum is expected to realise economies of scale, particularly on fixed costs

This announcement has been approved for release to the ASX by the Board.

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Competent Person's Declaration

The information in this announcement that relates to Exploration Results and Mineral Resources, including the Mineral Resources contained in the Production Target. is based on information compiled by Firefinch's Geology Manager, Mr Simon McCracken, a Competent Person. Mr McCracken is a member of the Australian Institute of Geoscientists. Mr McCracken has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity 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 (the JORC Code)". Mr McCracken consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Other technical information in this release has been prepared under the supervision of Dr Alistair Cowden BSc. (Hons) PhD, a director of the Company. Dr Cowden is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Dr Cowden has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr Cowden consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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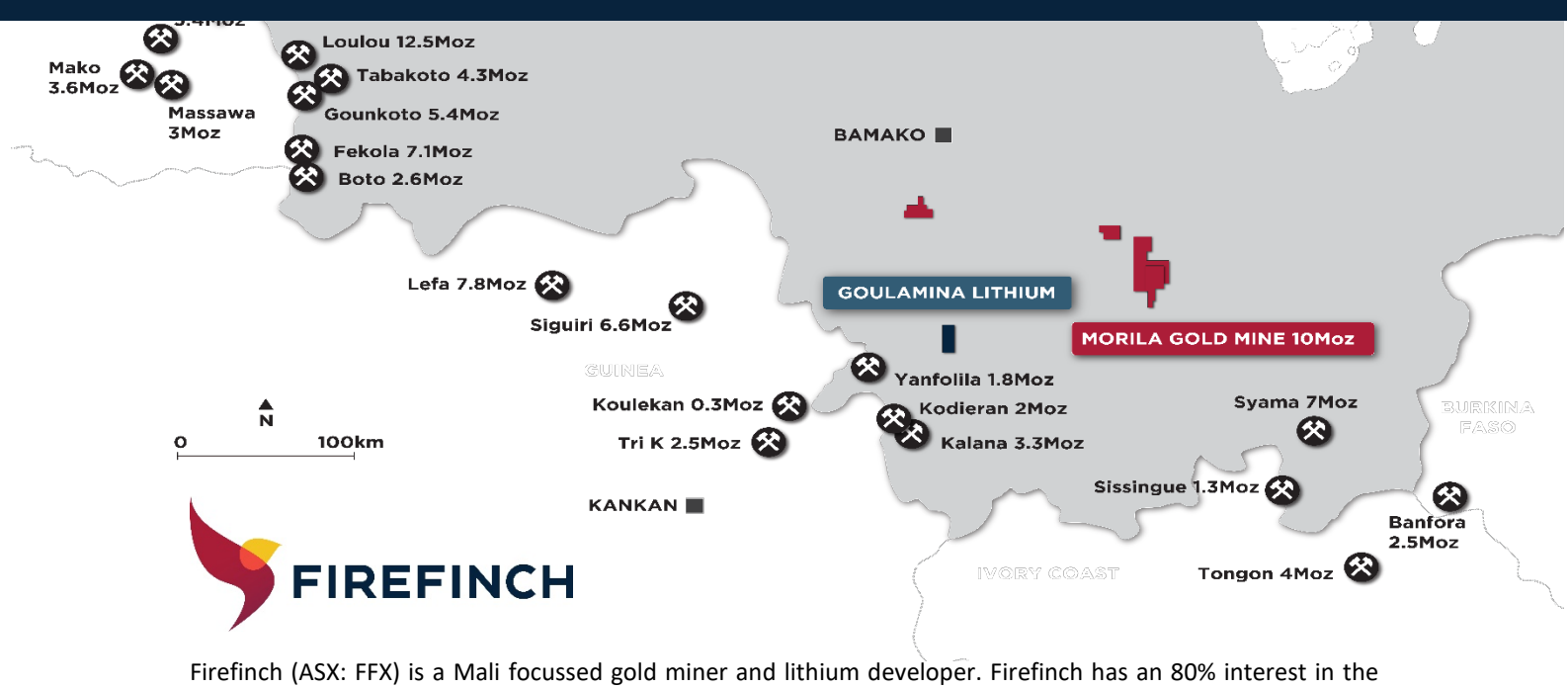

Firefinch (ASX: FFX) is a Mali focussed gold miner and lithium developer. Firefinch has an 80% interest in the Morila Gold Mine (**Morila**) and it currently owns 100% of the Goulamina Lithium Project (**Goulamina**).

Goulamina is one of the world's largest undeveloped high quality spodumene deposits. In partnership with Ganfeng, Firefinch will bring the project into production. A 50/50 incorporated joint venture has been established, with Ganfeng contributing US$194 million in development funding, comprising US$130 million in equity funding and US$40-64 million in debt funding. All permits are in place and the Definitive Feasibility Study Update confirmed Goulamina as a long life, large scale and low-cost open pit project expected to produce 726,000 tonnes of spodumene concentrate at an average cash cost of US$312/t. Goulamina has high grade, low impurity Ore Reserve of 52Mt at 1.51% Li_2O for 0.79Mt contained Li_2O comprising 8.1 million tonnes of Proven Ore Reserves at 1.55% Li_2O and 44.0 million tonnes of Probable Ore Reserves at 1.50% Li_2O. Goulamina has a Mineral Resource of 109Mt at 1.45% Li_2O for 1.57Mt contained Li_2O comprising 8.4 million tonnes at 1.57% Li_2O in the Measured category, 56.2 million tonnes at 1.48% Li_2O in the Indicated category and 43.9 million tonnes at 1.45% Li_2O in the Inferred category. The Company is in the process of demerging Goulamina into a new ASX listed entity, Leo Lithium.

The Morila Gold Mine is one of the world's great open pit gold mines, having produced over 7.5Moz of gold since 2000 at grades that were among the highest in the world, earning it the moniker "Morila the Gorilla". Firefinch acquired Morila for just US$28.9 million in late 2020 with the strategic intent to rapidly increase production; initially targeting 70-90kozpa of gold from a combination of satellite pits, stocks and tailings, and thereafter growing production to 150-200kozpa of gold by mining the Morila Superpit. Morila's current Global Resource is 2.43 million ounces of gold (Measured: 1.73Mt at 0.5g/t gold for 0.03Moz, Indicated: 26.7Mt at 1.49g/t gold for 1.28Moz and Inferred: 22.1Mt at 1.58g/t gold for 1.12Moz). However, Morila's geological limits have not been tested. Exploration is therefore a major focus at the existing deposits and multiple targets on the 685km^2 of surrounding tenure.

Firefinch is a responsible miner. We support positive social and economic change through contributing to the communities in which we operate. We seek to buy local, employ local and back local socio-economic initiatives, whilst operating in a manner that safeguards the environment and places our team's safety and wellbeing as our first priority.

The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources at Goulamina and Morila and the production estimates for Goulamina. The Company also confirms that all material assumptions and parameters underpinning the Mineral Resource estimates and production estimates continue to apply and have not materially changed. Please refer to ASX Announcements of 8th July 2020 and 20th October 2020 (Goulamina), 8th February 2021 (Morila Resource), 7th September 2020 and 28th April 2021 (Morila Tailings), 24th November 2020, 3rd May 2021, and 10th August 2021 (N'Tiola, Viper, Domba, Koting, Morila Pit 5), and 5th May 2021, 6th July 2021 and 29th July 2021 (Morila Gold Production, Ore Reserves and Production Targets).

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