

Wolfsberg Lithium Project Definitive Feasibility Study Results

Wolfsberg Lithium Project is well positioned to become a leading producer of battery grade lithium hydroxide in Europe

HIGHLIGHTS

ASX ANNOUNCEMENT

8 March 2023

- The Definitive Feasibility Study (DFS) demonstrates that the Wolfsberg Lithium project is set to deliver high returns, leveraging low operating costs, and benefiting from a lithium market which is anticipated to be in structural undersupply during most of the life of mine;
- Battery grade Lithium Hydroxide Monohydrate (LHM) production is ~ 8,800 tpa for 14.6 years;
- LHM OPEX (after byproducts) is US\$ 17,016/t LHM on average compared to reported spot prices for LHM in February 2023 of US\$ 79,500 DDP Antwerp;
- LHM prices² modelled in the DFS are projected to be at a 39% discount to current spot prices in 2025 and then escalate by 2% per annum;
- Estimated CAPEX is US\$ 866 million which supports a post-tax NPV of US\$ 1.5 billion @ WACC¹ 6%;
- Acceleration of decarbonization and energy transition in Europe combined with the rapid adoption of electric vehicles provides further upside; and
- Construction of downstream project facilities expected Q4, 2023.

The financial results of the DFS are set out in the table below:

	Unit	Results
Net Present Value (post tax , 6% WACC ¹)	US\$ million	1,504
Capital Cost Estimate (nominal)	US\$ million	873
Internal Rate of Return (IRR)	%	33.30
LHM Production	t/a	8,800
LHM OPEX	US\$/t LHM	19,409
LHM OPEX after by-product credits	US\$ /t LHM	17,016
Life of Mine Plan (LOMP) period	years	14.6
LHM sales price ² in 2025	US\$/t LHM	48,600
Ore Decense Fatimete ³⁸⁴	Million tonnes	11.48
	% Li ₂ O	0.64%

¹ WACC : Weighted Average Cost of Capital. This is determined by the split of debt and equity related to the BMW offtake agreement. ² The projected LHM sales price is USD 48600/t in 2025 which represents a 39% discount to the latest LHM spot prices DDP Antwerp reported by Fastmarkets in February 2023 (USD 79500 /t). Price then increases with CPI (~2%) over LOMP.

⁴ Includes 32.3% Proved Ore Reserves and 67.7% Probable Ore Reserves classified in accordance with the JORC Code guidelines

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³ Reported in accordance with the 2012 JORC code guidelines, statement by SRK Consulting (UK) Ltd, Effective Date July 01, 2022



Executive Summary

European Lithium Limited (ASX: EUR, FRA:PF8, OTC: EULIF) (European Lithium or the Company) is pleased to present the results of its Definitive Feasibility Study (Wolfsberg DFS or DFS) for its wholly owned Wolfsberg Lithium Project, located in Austria (Wolfsberg Lithium Project or Wolfsberg Project). The Wolfsberg DFS has been delivered by DRA Projects (Pty) Ltd (DRA), a diversified global engineering, project delivery and operations management group.

The Wolfsberg Project is held through European Lithium AT GmbH, a 100% owned subsidiary of European Lithium. European Lithium is aiming to be Europe's first and largest local supplier of critical lithium hydroxide monohydrate (LHM) in the region.

Tony Sage, Chairman, commented on the DFS results: "The robust DFS provided by DRA provides confidence in the commercialisation of the Wolfsberg Project. This positive news has come during a buoyant market for lithium and an increased urgency for decisive action to accelerate the green energy transition, especially in Europe. Our next steps include finalisation of the listing of Critical Metals on NASDAQ and continuing our discussions with our financiers. Through the business combination with Sizzle, Critical Metals Corp. expect to access substantial opportunities available in the U.S. market."

Building on completion of the Pre-Feasibility Study (**PFS**) for the Wolfsberg Project in April 2018, the Company conducted extensive infill geological drilling, mineral processing and metallurgical test work, built a pilot test facility which produced 1.7 t of bulk spodumene concentrate, updated its marketing studies and completed environmental mitigation studies. The results of this work has flowed into the Wolfsberg DFS which provides an accurate and detailed analysis of the compelling economics for the Wolfsberg Project.

The DFS has been prepared to international standards with Mineral Resource and Ore Reserve estimates prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the **JORC Code**, **2012**) guidelines, as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.

The Wolfsberg DFS plans an average (steady state) mine production rate of 780 kt/a, peaking at 840 kt/a over the Life of Mine (LOM) which is based on an Ore Reserve of 11.5 Mt, mined over approximately 15 years. The Project will comprise two integrated operations, a mining and processing operation to produce a lithium concentrate (spodumene), and a hydrometallurgical plant to convert the spodumene into battery grade LHM. The hydrometallurgical plant is planned to produce approximately 8.8 kt/a LHM with a total production of approximately 129 kt of LHM over the LOM. The forecast pricing assumptions for LHM are based on a 39% discount to current spot prices in Europe (~ USD 48 600/t) in 2025 which then escalate with United States Consumer Price Index (CPI) from 2026 onwards (refer to paragraph 9.6).

Field surveys for fauna and flora have been completed at the planned mine and concentrator site location. The DFS demonstrates that a mining fleet of battery electric vehicles (BEVs) can be economically viable for the Wolfsberg Project. The study confirms that that the underground portal, concentrator, and all the required surface infrastructure can be located within an area of less than 10 ha, which has significantly reduced the Wolfsberg Project's environmental footprint.

European Lithium is committed to the sustainable development of its Wolfsberg Project, utilising the most advanced mining and processing technologies to become a reliable low carbon producer of LHM and be a key part of the emerging lithium supply chain in Europe.



Forward looking statement

Some of the statements appearing in this announcement are forward-looking statements. Such forward-looking statements include details of the proposed production plant, forecast financial information (including revenue and EBITDA), estimated mineral resources and ore reserves, expected future demand for lithium products, planned strategies, corporate objectives, lithium recovery rates, projected concentrations, capital and operating costs, permits and approvals, levies, the Project development timeline and exchange rates, among others.

The Company has concluded that it has a reasonable basis for providing the forward-looking statements included in this announcement. However, you should be aware that such statements are only predictions and are subject to inherent risks and uncertainties including those mentioned elsewhere in this announcement. Those risks and uncertainties include factors and risks specific to the industries in which the Company operates and proposes to operate as well as general economic conditions, uncertainty and disruption from COVID-19 or the Russian invasion of Ukraine, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. These risks and uncertainties may be known or unknown. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside the Company's control. The Company does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Company, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

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1. DFS Summary

1.1 Wolfsberg Lithium Project Introduction

The planned Wolfsberg Project mine and concentrator site is located 20km east of Wolfsberg, Austria, and the hydrometallurgical plant located just to the south of Wolfsberg close to the A2 motorway and the natural gas transmission pipeline that follows the motorway. Wolfsberg is a town of approximately 25,000 inhabitants with a growing light industrial sector. There will be no requirement for the Project to provide accommodation or social infrastructure. Austria has a mining tradition with an established mining university in Leoben, 93km from Wolfsberg, that currently has 3,000 students. The number of technically skilled persons resident in the area to support the Project is high. The Baltic to Adriatic rail corridor will pass just to the south of Wolfsberg on completion of the Koralm tunnel in 2025. The Company believes the Wolfsberg Project will be well located with good access to Europe's motorway and rail infrastructure to distribute LHM to the lithium battery plants in construction or planning in northern Europe and by-products to regional industry.



Figure 1.1.1: Wolfsberg Lithium Project Location

The Wolfsberg Project comprises 54 exploration licences and 11 mining licences that were granted on 22 March 2011.





Figure 1.1.2: Location of Project Exploration and Mining Licences

The mining property is accessed from the direction of Wolfsberg to the west by surfaced road (the L148 Weinebene Straße) (approximately 23 km) or from the town of Deutschlandsberg in Styria by surfaced road (the L619) (approximately 26 km) to the east.

The planned hydrometallurgical plant in Wolfsberg is close to the A2 motorway, linking to the motorway network of Europe. The Koralm Tunnel under the Koralpe mountains, which will link Styria and Carinthia, is expected to be operational by 2026 and will bring high-speed rail access and connection to the Baltic-Adriatic Rail Corridor.

The Carinthia region in which the planned mine and metallurgical plant is located has a continental climate, with hot and moderately wet summers and long harsh winters, however weather does not significantly impact the mining and processing operations, which can be conducted throughout the year. The provincial roads are also kept free of snow by the local authorities.

The project operational site has ready access to skilled labour, electricity, natural gas, water, communications, and transport to meet the requirements of a future lithium underground mine, concentrator, and hydrometallurgical plant.

1.2 Compliance Statements

The information in this report which relates to Exploration Results and Mineral Resources is extracted from the Company's ASX announcements released 5 April 2018 (European Lithium Completes Positive PFS) 1 December 2021 (11% Increase in total Measured, Indicated and Inferred Resource), 2 December 2021 "High Quality Battery Grade Lithium Product Results Wolfsberg" and 9 November 2021 (EUR



increased Measured and Indicated Resource by 54%) which are available to view on (https://europeanlithium.com/). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant 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 announcements.

The Mineral Resource Estimate presented in this report was prepared by the Independent Competent Person, Mr Don Hains P. Geo. in compliance with the 2012 JORC Code, and released to the Australian Securities Exchange (ASX) on 1 December 2021. Mr. Hains is a registered geoscientist with the Association of Professional Geoscientists of Ontario, which is a Recognized Professional Organisation included in a list promulgated by the ASX from time to time. At the time of completing the resource estimate, Mr. Hains was a full-time employee of Hains Engineering Company Limited with over 30 years' experience in the minerals exploration and mining industry. Mr. Hains has sufficient experience that is relevant to the geology and styles of mineralisation and types of deposit under consideration, and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr. Hains has been responsible for reporting of exploration results and Mineral Resources on various lithium properties internationally in the past ten years.

The Competent Person who prepared the LOMP and Ore Reserve Statement as reported herein is Mr Jurgen Fuykschot, MSc, MBA, MAusIMM (CP), a member of and Chartered Professional in the Australasian Institute of Mining and Metallurgy (AusIMM), which is a Recognised Professional Organisation included in a list promulgated by the ASX from time to time. At the time of completing the majority of the work, Mr Fuykschot was a full-time employee (Principal Consultant (Mining)) at SRK, with over 24 years' experience in the mining and metals industry. Mr Fuykschot has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Fuykschot has been responsible for the reporting of Ore Reserves on various properties internationally for the past ten years.

Mr Chris Bray, BEng, MAusIMM (CP) is responsible for review of the LOMP and Ore Reserve Statement as reported by the Company. Mr Bray is a full-time employee and Principal Consultant (Mining) at SRK since 2006. He is a Member of and Chartered Professional in the Australasian Institute of Mining and Metallurgy and a Mining Engineer with 25 years' experience in the mining and metals industry, including operational experience in underground mines as well as mine planning and review experience on underground lithium projects, and as such qualifies as a CP as defined in the JORC Code. He has also been involved in the reporting of Ore Reserves on various properties internationally for over 10 years.

1.2.1 Reliance on Other Experts

Specialist subcontractors and consultants were appointed by European Lithium to conduct the exploration drilling, mine design, metallurgical testwork, and marketing studies. DRA Projects (Pty) Ltd (DRA) was appointed to integrate the inputs of all the consultants into the DFS and undertake the engineering, and capital and operating cost estimates for the processing plant and infrastructure.

European Lithium engaged the following consultants for the indicated areas of expertise:

- Hon.-Prof. Mag. Dr Richard Göd (ex-Chief Geologist Minerex, Austria) Geology adviser
- Technisches Büro für Geologie (Austria) Exploration management
- Geo Unterweissacher (Austria) Geologist





- Mine-IT Sanak-Oberndorfer GmbH (Austria) Resource evaluation
- Mr Don Hains (Hains Engineering) (Canada) Competent person for JORC resource reporting
- SRK Consulting (UK) Ltd Mine design, geotechnical design, and hydrogeology (water management)
- Paterson & Cooke (UK) Tailings and Backfill Management
- Dorfner ANZAPLAN (Germany) Metallurgical testwork
- DRA Projects (Pty) Ltd (South Africa) Concentrator and infrastructure study
- SENET (South Africa) Hydrometallurgical plant study (on behalf of DRA)
- Umweltbüro GmbH (Austria) Environmental baseline studies
- DLA Piper (Austria) Mining Law
- Haslinger Nagele (Austria) Permitting regime
- Kärntner Montanindustrie GmbH (KMI) (Austria) Liaison with Austrian Authorities
- Benchmark Mineral Intelligence (UK) Marketing study for lithium carbonate/hydroxide
- Orykton Consulting (Greece) Market evaluation of spodumene and by-products
- Gambosch Consulting Pty Ltd (Australia) Analysis of Lithium market
- Cresco Project Finance (Pty) Ltd (South Africa) Financial model (on behalf of DRA)
- ZAMG (Central Institution for Meteorology and Geodynamics) (Austria) Meteorology Seismic-Snow-Wind loads for both project sites.

1.3 Mineral Resource Estimate

On 1 December 2021, a mineral resource estimate was prepared by Mine-IT and audited by the Independent Competent Person Mr Don Hains, P. Geo. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. Mr Hains stated a 9.7 Mt combined Measured and Indicated classified Resources at 1.03% Li₂O grade and 12.88 Mt of Measured, Indicated and Inferred classified Resources at 1.00% Li₂O grade.

Classification	Tonnage (t)	Grade (% Li ₂ O)
Measured	4,313,000	1.13
Indicated	5,430,000	0.95
Total (M + I)	9,743,000	1.03
Inferred	3,138,000	0.90
Total (M + I + Inf)	12,881,000	1.00

Table 1.3.1: Mineral Resource Statement for the Wolfsberg Lithium Project, Effective Date December 01, 2021



1.4 Ore Reserves

The Ore Reserve Statement in the DFS has been reported by SRK on the 1st of July 2022, in accordance with the JORC Code (2012) guidelines. SRK confirms that the JORC Code has been aligned with the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) reporting template. As of the Effective Date, 01 July 2022, the Ore Reserve reported for the Wolfsberg Project (see Table 2.7.1.) in accordance with the JORC Code is 11,483 kt grading 0.64% Li₂O, with a with a content of 72.9 kt Li₂O of Proved and Probable Ore Reserve categories, and supports life of mine plan (LOMP) of 14.6 years at a production rate of approximately 780 kt/a ROM.

Classification	Cut-Off Grade (CoG) (% Li ₂ O)	Ore Tonnes (kt)	Grade (% Li ₂ O)	Content (t Li ₂ O)		
Proved						
AHP ¹	0.30	2,913	0.67	19,577		
MHP ²	0.32 to 0.45	800	0.82	6,525		
Sub-total Proved		3,713	0.70	26,103		
Probable						
AHP	0.30	3,285	0.54	17,688		
MHP	0.32 to 0.45	4,485	0.65	29,146		
Sub-total Probable		7,770	0.60	46,834		
Proved + Probable						
AHP	0.30	6,198	0.60	37,265		
MHP	0.32 to 0.45	5,285	0.67	35,671		
Total Ore Reserve		11,483	0.64	72,937		

Table 1.4.1: Ore Reserve Statement for the Wolfsberg Lithium Project, Effective Date July 01, 2022

¹ AHP: Amphibolite Hosted Pegmatites

² MHP: Mica schist Hosted Pegmatites

The Ore Reserve and Mineral Resource is reported and classified in accordance with the guidelines of JORC Code, 2012. The Mineral Resource is reported inclusive of the Ore Reserve.

Mineral Resources were converted to Ore Reserves in line with the material classifications which reflect the level of confidence within the Mineral Resource estimate. The Ore Reserve reflects that portion of the Measured and Indicated Mineral Resource which can be economically extracted by open pit and underground mining methods.

The Ore Reserve estimate considers the modifying factors and other parameters detailed in this release, including geotechnical, mining, metallurgical, hydrology, capital and operating costs, prices and recoveries, social, environmental, statutory, and financial aspects of the Project.

1.5 Production Targets

The LOM was was prepared by SRK and is used as a basis for the Ore Reserve estimate as at 1st of July 2022 and the operating model defined by DRA in the DFS 2022. The LOM is approximately 18 years, which includes a 3-year development period and production tail.



The Life of Mine Plan (LOMP) is based on the Ore Reserve estimate, which includes 32% [Proved Ore Reserves] and 68% [Probable Ore Reserves] classified in accordance with the JORC Code, over the period of 14.6 years. The following chart (Figure 1.5.1.) outlines the planned mining production over the LOM schedule and sorter feed to the process plant.



Figure 1.5.1: LOM Production Profile

1.6 Key Forecast Price Assumptions

The Wolfsberg DFS is based on a projected LHM price of USD 54000/t in 2023 which then drops to USD 48600 / t in 2025 and then escalates with an estimated CPI of just above 2% thereafter.

The following chart overlays the historical prices of LHM in USD/t and the assumptions in the DFS (in orange).





WOLFSBERG PROJECT HISTORICAL AND PROJECTED PRICE ASSUMPTIONS



The nominal LHM price of USD 54000/t in 2023 represents a 32% discount to the LHM spot (DDP Antwerp) reported by Fastmarkets in February 2023 (see graph above).





1.7 Key Operational Outcomes

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The tables below summarise the key planned operational outcomes of the Wolfsberg DFS.

ltem	Unit	Results
Average Annual Ore Feed to Crusher and Sorter Plant (Steady State)	kt/a	780
Average Annual Spodumene Concentrate Production (5.2% Li ₂ O)	kt/a	69.1
Average Annual Lithium Hydroxide Monohydrate (LHM) Production (LiOH)	kt/a	8.8
Life of mine (LOM) period	years	14.6
Total Ore Mined	Mt	11.48
Total Spodumene Concentrate Produced	kt	990
Total Coarse Feldspar produced	kt	1,950
Total Fine Feldspar produced	kt	587
Total Coarse Quartz produced	kt	1,000
Total Fine Quartz produced	kt	164
Total Lithium Hydroxide Monohydrate (LHM) Produced	kt	129

Table 1.7.1: Summary of Wolfsberg DFS planned Production

Item	Unit	Results
Capital Cost Estimate (nominal)	US\$ million	873
Sustaining Capital Cost (nominal)	US\$ million	99
Gross Operating Cost Estimate (nominal) LOM	US\$ million	2,514
Total Revenue (nominal) LOM	US\$ million	7,999
By-Products Credits LOM	US\$ million	310.1
Lithium Hydroxide OPEX (Gross)	US\$/t LHM	19,409
Lithium Hydroxide OPEX (after by-product credits)	US\$ /t LHM	17,016

Table 1.7.2: Summary	of Wolfsberg	DFS Capex and	l Opex Estimate
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1.8 Key Financial Outcomes

Item	Unit	Results
Net Present Value (NPV) (nominal, at 6% WACC ¹ rate)	US\$ million	1,504
Internal Rate of Return (IRR)	%	33.30
Project EBITDA (nominal LOM)	US\$ million	5,785
Discount Rate / WACC ¹	%	6.00
Project Payback Period	years	6.75
Debt to Equity Ratio	%	60/40
Exchange Rate	EUR/US\$	1.0855

Table 1.8.1: Summary of Wolfsberg DFS Economic outcomes1: WACC = Weighted Average Cost of Capital

1.9 Sensitivity Analysis

The parameter which has the largest impact on the NPV of the Project is the price of lithium hydroxide monohydrate. The DFS economic sensitivity estimates that an LHM price drop of 20% against the assumptions set out in Section 1.4 above would still deliver an NPV of USD 893 million. A 20% price drop against the assumed price set out in Section 1.4 would equate to a LHM price of USD 38 880/t in 2025.



Figure 1.9.1: NPV sensitivity analysis - kUSD



2. Wolfsberg Lithium Project

2.1 Geology and Exploration

The Project is located within the Koralpe-Wölz nappe system of the Upper Austroalpine unit of the Eastern Alps, a mountain range composed of pre-alpine (mainly Palaeozoic) medium- to fine-grade metasedimentary rocks. Within the Eastern Alps, a pegmatite belt covers an area of over 400 km, where most of the pegmatites do not host a lithium mineralisation. Minerex identified 15 parallel lithiumbearing pegmatite veins striking west-northwest to east-southeast and dipping at approximately 60° to the north-northeast. The veins were hosted in two host rock types, amphibolite and mica schist, and the pegmatites from these host rocks are known as amphibolite hosted pegmatites (AHP) and mica schist hosted pegmatites (MHP). The MHP veins were followed along strike for 1,700 m and the AHP veins for 800 m. Although the chemistry of the AHP and MHP is similar, there are physical differences. The AHP are coarsely crystalline with visible spodumene crystals, and a lithium grade of up to 2.94% Li₂O whereas the MHP have undergone a partial secondary recrystallisation, and their texture is much finer with spodumene crystals barely visible, and a slightly lower lithium grade of 2.7% Li₂O. Of the multiple spodumene-bearing pegmatite veins, 15 have been individually identified, within both amphibolite and mica schist host rocks, as having economic potential based on lithium grade and vein thickness. Veins of up to 5.1 m have been encountered. The geology of the Wolfsberg deposit is illustrated in Figure 2.1.1.



Figure 2.1.1: Geology of the Wolfsberg Deposit

The deposit type may be considered to be a class of rare-element pegmatite, of the lithium- caesiumtantalum family, of the albite-spodumene type. Although the origin of the intruded pegmatitic melt is still unclear, recent research assumes partial melting and internal differentiation of the mica schist.



2.2 Exploration

The previous exploration work completed by Minerex between 1981 and 1987 included geological and structural mapping, geochemical soil surveys, pitting, trenching, surface diamond drilling, and the development of an underground access decline with drives along selected veins to examine vein continuity and undertake infill drilling and underground trial mining (see in Figure 2.2.1). In total, there was 12,012 m of surface drilling, 4,715 m of underground drilling, 1,389 m of decline and underground mine development with channel sampling of the pegmatite dykes, and 9,940 m³ of surface trenches. Since 2011, European Lithium has added 50 drillholes with 14,903 m within Zone 1 and Zone 2. These deep hole drillings in Zone 1 demonstrate the extension of the veins in depth and along strike. Surface mapping of the pegmatite boulders and drilling in Zone 2 were undertaken by European Lithium in 2012.



Figure 1.2.1 Geology of the Wolfsberg Deposit

In 2019, a Phase 1 drilling programme, with a total length of 1,330.7 m, was conducted with the objective of infill drilling to convert Inferred Resources (2017) into Indicated Resources and to confirm the extension of the deposit toward the west. In 2021, a Phase 2 resource extension drilling programme was completed, with a total length of 7,953.0 m. The aim of the Phase 2 programme was to determine whether the Mineral Resource which had been defined at that time could be increased (in both size and grade) and to show extensions of the orebody for future drilling programmes.

On 1 December 2021, after completion of the Phase 2 programme, the Company released an updated Mineral Resource estimate to the ASX. The Mineral Resource estimate was reported in compliance with the JORC Code (2012) and was prepared by Mine-IT and audited by the independent Competent Person, Mr Don Hains, P. Geo. Mr Hains estimated 9.7 Mt combined Measured and Indicated classified Resource at 1.03% Li₂O grade and 12.88 Mt of Measured, Indicated and Inferred classified Resources at 1.00% Li₂O grade.

2.3 Drilling

Minerex undertook drilling approximately 100 m apart along strike, generating profiles of pegmatite intersections. Following the opening of the underground workings, drilling was undertaken in the eastern part of the deposit to infill the profiles to a spacing of approximately 50 m.

Intercepts from the cores form the basis for the geological model, and the core assays were used for the grade designation in the resource statement. The drill core from the Minerex exploration was however not preserved over the changes in project ownership, and information on drilling procedures and quality assurance/quality control (QA/QC) protocols was not available for the independent geologist report. Therefore, under the current JORC Code (2012) requirements, the resource was downgraded to an Inferred Resource.



The original primary information from the Minerex exploration was recovered from the archives of the Mining Authority in Vienna, and a programme of twin hole underground drilling and repeat channel sampling was undertaken in 2016 under strict QA/QC protocols (see underground drilling in Figure 2.3.1). The results showed a good correlation between the positions of the intersections, the thicknesses of the intersections, and the lithium grade of the intersections. Therefore, the independent Competent Person approved the use of the primary Minerex data for a JORC Code (2012) compliant Measured and Indicated Resource.

A deep hole drilling programme was undertaken in 2017, comprising four holes in Zone 1 that demonstrated the pegmatite veins extended to depth, and an Inferred Resource was declared.

A nine hole drilling programme was undertaken in 2017 in Zone 2.

An infill drilling campaign was undertaken in 2021, comprising 7,923.0 m of drill core in Zone 1, with the aim of recategorising the Inferred portion of the Mineral Resource as a Measured and/or Indicated Mineral Resource.



Figure 2.3.1: Core drilling

2.4 Sampling, Analysis and Data Verification

The independent Competent Person conducted two audits of the application of the QA/QC protocols to the data verification programme in 2016 and the surface drilling program and found no deviations from the protocols.

For the latest European Lithium drillholes only, potential mineralised intervals were sampled and analysed. Sampling was performed on one quarter of the HQ core. Intercepts were identified in the core shed by experienced geologists and then sawn by a trained technician in compliance with local safety regulations. Sample spacing ranged from 0.1 m to 1.2 m, with sections longer than 1.0 m split as much as possible so that individual samples were less than 1.0 m in length. Work over the last six years totals 1,402 samples (including blanks, standard samples, and duplicates).

The analysis was carried out by ALS Minerals in Ireland, an independent and ISO 9001:2015 and ISO/IEC 17025:2017 accredited laboratory. Sample preparation included sample comminution, lithium content analysis, trace element analysis, and major element oxide analysis. Digestion of the samples was performed by four-acid digestion.

Duplicates, standards, and blank samples (marble and blank silica powder: AMIS 0577) have been used) were inserted for quality control. Due to the relatively low number of samples, the analysis of variance (ANOVA) approach has been used in the drilling programmes since 2018.



Duplicate samples include sample, crush stage, and pulp duplication. The addition of duplicate samples to the sample batch is to show the total error of the sampling system and any inhomogeneities. The deviations outside the 10% line are due to the inhomogeneous distribution and grain size effects of the spodumene crystals.

2.5. Mineral Resource Estimate

Mine-IT delivered the Mineral Resource Estimate for the Wolfsberg Lithium project. For project evaluation, vein thickness and grade were of paramount importance. Therefore, a semi-3D modelling approach was selected. This is particularly true for vein thickness, which can be treated by statistical and numerical methods using this approach, while with alternative solutions it has to be indirectly derived from wireframed surface distance. The modelling was performed using the software suites Geovia Surpac and Seequent Leapfrog, with some adaptations for this particular application.

Extrapolation is limited to 50 m beyond the interpretation for classification as an Inferred resource. For the Measured resources, a boundary that represents the hull of the samples (no extrapolation) is used. For the Indicated resources, a boundary that allows for a moderate extrapolation of 20 m to 40 m is applied. Parameters refer exclusively to the strike/dip extension, as thickness is a model parameter. The results correlate well with prior Minerex publications. In the beginning of the project, the veins were modelled by standard wireframing, with very similar results as far as volume is concerned. The resource classification categories are summarised in 2.5.1.

The anticipated mining method (longhole open stoping) necessitates taking all the material in the stope; thus, no cut-off is applied. The reported grade is the average grade across the vein, including interbedding, assuming a minimum width of 2 m. By-products are not considered in the resource model estimate.

The block dimension of the model is $25 \text{ m} \times 25 \text{ m}$ (with variable thickness). The size is determined by assumed stope dimensions rather than blast dimensions. This is because the mining methods under consideration must extract the full panel size of a stope. Likewise, modelling of the transverse grade distribution is not relevant because the whole width must be mined in total.

Before modelling was undertaken, an intensive study on the sample data (grade and partial thickness) was conducted. The distributions of sample data are reasonably like a Gaussian distribution and do not show any tendency for outliers. Hence, no particular measures for capping must be applied.

On 1 December 2021, a mineral resource estimate was prepared by Mine-IT and audited by the Independent Competent Person Mr Don Hains, P. Geo. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. Mr Hains stated a 9.7 Mt combined Measured and Indicated classified Resources at 1.03% Li₂O grade and 12.88 Mt of Measured, Indicated and Inferred classified Resources at 1.00% Li₂O grade.



Classification	Tonnage (t)	Grade (% Li ₂ O)			
Measured	4,313,000	1.13			
Indicated	5,430,000	0.95			
Total (M + I)	9,743,000	1.03			
Inferred	3,138,000	0.90			
Total (M + I + Inf)	12,881,000	1.00			

Table 2.5.1: Mineral Resource Statement for the Wolfsberg Lithium Project, Effective Date December 01, 2021



2.6 Ore Reserves Estimate

2.6.1 Introduction

The Ore Reserve Statement in the DFS has been reported in accordance with the JORC Code (2012). SRK confirms that the JORC Code has been aligned with the Committee for Mineral Reserves International Reporting Standards (**CRIRSCO**) reporting template.

The Competent Person who prepared the LOMP and Ore Reserve Statement as reported herein is Mr Jurgen Fuykschot, MSc, MBA, MAusIMM (CP), a member of and Chartered Professional in the Australasian Institute of Mining and Metallurgy (AusIMM), which is a Recognised Professional Organisation included in a list promulgated by the ASX from time to time. At the time of completing the majority of the work, Mr Fuykschot was a full-time employee (Principal Consultant (Mining)) at SRK, with over 24 years' experience in the mining and metals industry. Mr Fuykschot has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Fuykschot has been responsible for the reporting of Ore Reserves on various properties internationally for the past ten years.

The Competent Person who reviewed and is responsible for the LOMP and Ore Reserve Statement is Mr Chris Bray, BEng, MAusIMM (CP), a member of and Chartered Professional in the AusIMM. Mr Bray is a full-time employee (Principal Consultant (Mining)) at SRK, with over 20 years' experience in the mining and metals industry. Mr Bray has been involved in the reporting of Mineral Reserves on various properties internationally for over ten years.

2.6.2 Modifying Factors

Mine modifying factors (dilution and recovery) were applied to the resource block model as part of the mine planning as follows:

- Mine dilution is based on the geotechnical assessment, assumed blast design, and benchmarked industry standards for the variation of LHOS given the orebody geometry and lithological characteristics. Dilution has been included in the stope optimisation phase, i.e. a dilution skin has been applied to the optimised stope shapes. This has been set at 0.2 m on the footwall and 0.5 m on the hanging wall. The stope width has been set at 1.2 m in the Deswik Stope Optimiser. In total, the minimum stope width is 1.9 m.
- Dilution for the development activities has been reduced by split firing, removing 60% of the waste from each cut.
- Mining recovery ranges from 60% to 90% depending on whether backfill is available when the stope is mined, or the stopes are located under or above the crosscuts from the hanging wall to the footwall. Development recovery has been assumed to be 100%.

2.6.3 Cut-off Grade

The Li_2O cut-off grade considers ore sorting based on the waste/ore ratio or percentage of host rock. The recovery yield of the ore sorter is inversely related to the percentage of host rock for amphibolite (AHP) and mica schist (MHP).

The concentrator recovery depends on the amount of host rock as well, similar to the ore sorting recovery.



SRK notes that the marginal cut-off only determines if a stope is worth mining after development has been paid for.

2.6.4 Ore Reserve Estimate Summary

SRK prepared a simplified real-term, post-tax, pre-finance cash flow model to test the economic viability of the Wolfsberg Project, based on the production schedules, operating and capital costs as presented in this report. SRK notes that the effective date of the Ore Reserve statement is 1 July 2022, with operating costs and capital expenditure in money terms at that time. The LHM sales price applied is that as resulting from the December 2022 forecast, incorporating the Bayerische Motoren Werke AG (**BMW**) offtake agreement (using the US CPI to de-escalate in SRK's test model, this results in a real LOM average price of approximately US\$49,000/t). The Project returns positive cashflows, and NPV, with a healthy IRR.

As of the Effective Date, 01 July 2022, the Ore Reserve estimate for the Wolfsberg Project (see Table 2.6.4.1.) is 11,483 kt grading 0.64% Li_2O , with a content of 72.9 kt Li_2O which supports a mine life of just under 15 years at a production rate of approximately 780 kt/a ROM. The production tail at the end of the mine life is not incorporated in the Ore Reserve estimate as the production rate cannot be maintained at sustainable levels.

Classification	Cut-Off Grade (CoG) (% Li ₂ O)	Ore Tonnes (kt)	Grade (% Li ₂ O)	Content (t Li ₂ 0)		
Proved						
AHP ¹	0.30	2,913	0.67	19,577		
MHP ²	0.32 to 0.45	800	0.82	6,525		
Sub-total Proved		3,713	0.70	26,103		
Probable						
AHP	0.30	3,285	0.54	17,688		
MHP	0.32 to 0.45	4,485	0.65	29,146		
Sub-total Probable		7,770	0.60	46,834		
Proved + Probable						
AHP	0.30	6,198	0.60	37,265		
MHP	0.32 to 0.45	5,285	0.67	35,671		
Total Ore Reserve		11,483	0.64	72,937		

Table 2.6.4.1: Wolfsberg Ore Reserve Statement, Effective 1 July 2022

With regard to the Wolfsberg LOMP and Ore Reserve Statement, SRK notes the following key aspects:

1. The key driver in the complexity of the project materials handling is related to the limited surface footprint available for stockpiling and plant infrastructure. Underground construction of the ore sorter and backfill plant caverns, silos for ROM storage during development, and excavation of waste stopes in amphibolite for mica schist storage, are essential for achieving the planned production schedule.



- 2. The current project timing assumes that the project can be developed with limited environmental and social impacts, and that an abridged, accelerated approval process might be allowed by the regulatory authorities. European Lithium hopes that the permitting of the project can be completed within a year. If an environmental impact assessment (EIA) is required for the mine and concentrator plant development, the permitting time frame is likely to be extended by several years. This can be attributed to the number of stages in the EIA process and the extent of stakeholder engagement required. The regulatory authorities will screen the project to determine whether an EIA is required. European Lithium expects that an EIA will be required for the hydrometallurgical plant but not for the mine and concentrator plant development.
- 3. Offtake agreements for by-products from the mine (amphibolite), concentrator plant (quartz and feldspar), and hydrometallurgical plant (anhydrous sodium sulphate) are not yet in place and assumptions with regard to sales prices and transport costs for quartz, feldspar and anhydrous sodium sulphate have been allowed for in the economic assessment. No revenue or transport costs beyond the mine gate have been considered for the amphibolite waste.
- 4. All by-products are assumed to be transported from site as and when produced due to limited stockpile capacity on site. Delays in the movement of these products off site, or inability to do so, would cause delays in the underground development and hence in production ramp-up.
- 5. Assumptions have been made with regard to the placement of approximately 200,000 m³ of mica gneiss material, from early underground mine development works, in the construction of the planned processing plant terrace, and up to 50,000 m³ mica schist material will be temporarily stored at a nearby quarry (no agreement for this is yet in place), after which it will be moved back into the underground mine as backfill.
- 6. The Ore Reserve is based on an integrated mine/hydrometallurgical plant facility, with the final product being LHM. The interim spodumene product as currently envisaged would be considered too low grade for sales on the open market.
- 7. The Measured and Indicated Resources as reported in this report are inclusive of all the Mineral Resources modified for the reporting of Ore Reserves.
- 8. The mining licences for the majority of the area to be mined are currently held by European Lithium, with proposed extensions for which the application has been lodged. The entire area is currently covered by exploration licences.
- 9. All the figures are rounded to reflect the relative accuracy of the estimate and have been used to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.
- 10. Only material classified as either a Measured or Indicated Mineral Resource has been included in the Ore Reserves Statement. SRK has classified part of the Measured Mineral Resources (2%) as Probable Ore Reserves, in line with its review of the Mineral Resources classification.
- 11. SRK reasonably expects the Wolfsberg deposit to be amenable to underground mining methods. Ore Reserves are reported at marginal COGs of 0.30% Li₂O for AHP stopes, ranging between 0.32% and 0.45% Li₂O for MHP stopes, and a development COG of 0.2% Li₂O, based on



an LHM price of US\$20,000/t, metallurgical recovery assumptions from test work, mining costs, processing costs, general and administrative costs, and other factors.

- 12. Mining recovery ranges from 60% to 90%, depending on whether the backfill is available when the stope is mined or if the stopes are located under or above the crosscuts from the hanging wall to the footwall. Development recovery has been assumed to be 100%. A dilution skin allowance (0.5 m for the hanging wall and 0.2 m for the footwall) has been applied.
- 13. Variable ore sorter and concentrator recovery is based on the waste content with an overall LOM Li₂O recovery to spodumene of 70.4%, and an Li recovery of 89.7% at the hydrometallurgical facility.

2.7 Life Of Mine and Production Targets

The Life of Mine (**LOM**) was prepared by SRK is used as a basis for the Ore Reserve estimate as at 1st of July 2022 and the operating model defined by DRA in the DFS 2023. The overall mine life, including a 3-year development/pre-production period and production tail, is approximately 18 years, and the LOM production period is 14.6 years.

The Life of Mine Plan (LOMP) considers mining the Ore Reserve, which includes 32% [Proved Ore Reserves] and 68% [Probable Ore Reserves] classified in accordance with the JORC Code, over the period of 14.6 years. The following chart outlines the expected mining production over the LOM schedule and sorter feed to the process plant.

The chart below outlines the planned material movement activities – including waste movement over the LOM.



Figure 1.5.1: LOM Production Profile



Parameter	Units	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Tonnage Mined	kt	16,188	22	612	1,271	1,002	904	1,094	1,130	1,165	1,041	896	982	890	871	887	875	898	750	676	204	18
ROM	kt	11,557	-	1	58	356	642	830	832	843	825	815	810	783	792	773	792	785	722	676	204	18
AHP Stope	kt	5,461	-	-	-	60	301	462	515	473	488	462	408	349	411	246	370	263	306	285	60	-
MHP Stope	kt	4,516	-	-	-	78	156	224	177	240	213	266	349	355	303	446	322	430	404	390	144	18
AHP ROM split fire	kt	742	-	1	45	82	119	81	118	66	23	-	35	60	8	34	30	42	-	-	-	-
MHP ROM split fire	kt	838	-	-	14	136	65	63	22	63	102	87	18	19	70	47	70	50	13	-	-	-
Waste	kt	4,347	-	349	1,213	646	262	264	298	322	216	80	172	107	79	114	84	113	28	-	-	-
AHP Waste split fire	kt	576	-	1	41	63	99	68	92	51	15	-	25	41	6	24	20	31	-	-	-	-
MHP Waste split fire	kt	581	-	-	7	92	52	43	15	40	68	61	15	12	45	35	48	38	10	-	-	-
AMPH Waste	kt	2,241	-	340	1,080	462	38	33	64	37	21	-	68	45	2	21	4	25	-	-	-	-
MICA Waste	kt	949	-	8	84	29	73	120	128	195	112	20	64	9	26	33	12	19	18	-	-	-
MICA Gneiss Waste	kt	284	22	262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.7.1: Material Mined (by Type and Source) - Yearly



3. Mining

3.1 Mining, Ventilation, and Water Management

The most appropriate underground mining method is a variant of sublevel stoping, longhole open stoping (LHOS) with paste fill. The neighbouring stopes are mined in succession, always alongside a cemented, backfilled stope.

European Lithium plans to operate the Wolfsberg underground lithium mine with BEVs, which will contribute towards a low carbon footprint production of lithium hydroxide, and will also reduce the ventilation requirements over the LOM. Due to the project footprint constraints at the mine portal and concentrator plant site, the surface infrastructure is to be kept to a minimum. No permanent waste storage facilities are to be constructed, and part of the plant infrastructure (ore sorter plant) is to be housed in specifically designed underground caverns, alongside the paste backfill plant (see Figure 3.1.1).

The Wolfsberg Project requires significant upfront underground development to create the various caverns, silos, and waste stopes, and to provide access and sufficient working areas to achieve a sustainable sorter plant production rate of 45 kt/month.

Two main lithologies are to be mined, amphibolite and mica schist, with some minor mica gneiss recovered during the initial development works. The mica gneiss is to be used in the concentrator plant terrace construction. European Lithium plans to sell all the amphibolite as aggregate. All the material streams that are not considered saleable are to be stored underground as uncemented rockfill (mica schist), paste fill (the concentrator tailings combined with the hydrometallurgical cake and cement), or a combination of the two.



Figure 3.1.1: Isometric view of Underground Infrastructure Caverns, Silos, and Waste Stopes



Some of the key items in the mine design (see Figure 3.1.2.) therefore include the following:

- Dual decline development, to start in November 2023: one main decline (to be used for people and services transport) and a conveyor decline (for sorter plant product and amphibolite transport to the surface by conveyor and installation of a return tailings pipeline).
- Construction of caverns to house the ore sorter and backfill plants.
- Construction of silos to temporarily store ROM prior to plant start-up.
- Excavation of stopes in the amphibolite material (which is assumed to be sold directly) to create space for mica schist development and sorter reject material that will need to be stored underground.
- Setting up of the mobile crusher initially at the portal to crush all the development material before it is either sold (amphibolite) or placed back underground (mica schist). Once the conveyor has been installed, the mobile crusher will be moved to the back end of the sorter plant, and transport of all the amphibolite to the surface will be via the conveyor.

A geotechnical assessment for the Wolfsberg Lithium Project has been completed by SRK (UK6314 Wolfsberg Phase 2 V2K, March 2018). SRK reported that the mapping and logging data indicated that the rock mass conditions are very consistent along strike and down dip. Both amphibolite and mica schist host lithologies can be described as having fair to good rock mass quality. Ground support requirements for the various development areas have been assessed, to ensure safe working areas. A dilution skin of 0.7 m has been applied, resulting in a dilution of approximately 43%. The effect of dilution is mitigated by the use of the ore sorter.

The proposed primary ventilation system is divided into three circuits. The first is the underground plant (conveyor decline/ore sorter plant/backfill plant), which receives a dedicated split of fresh air through the conveyor decline and exhausts from the west return air raise. The second and third ventilation circuits are the eastern and western production zones; each has a fresh air raise and return air raise.



Figure 3.1.2: Isometric View of Mine Development and Mineralisation

The production schedule requires a balanced feed of amphibolite and mica schist ROM. Plant feed will commence once sufficient ROM has been stored in the silos and stoping has been sufficiently ramped up so that a sorter plant production rate of 45 kt/month can be sustained, which is currently scheduled to be by October 2026 (see Figure 1.5.1). The overall mine life totals 18.3 years, including 3 years of preproduction development, prior to the start of plant feed. The production tails off in the last two years, with the last year not being able to sustain plant feed and removed from the economic assessment. The average annual ROM from stoping and development over the 13 years of full production is 709 kt/a, peaking at 842 kt/a. The average diluted ROM grade is 0.64% Li₂O.

The primary mine equipment fleet at the peak requirement consists of three jumbo drills, three longhole drill rigs, two rock bolting jumbos, five loaders, seven 50 t trucks, and various support and service equipment.

Key to the achievability of the LOMP is European Lithium's ability to dispose of/sell all the amphibolite material as and when mined, as well as the ability to temporarily store up to 50,000 m³ of mica schist at a nearby quarry. Any complications in disposing of the amphibolite could result in delays in the underground development and ramp-up due to limited storage capacity on the surface.

During project construction, some conventional diesel mining fleet is expected to be required due to the long lead time on BEVs. Prior to grid power hook-up, power supply will be provided by diesel generators.

A site-wide water balance model was prepared, and it was used to inform the requirements for water treatment and disposal. A mine dewatering plan has been designed to ensure dry working conditions and inform the costing for pumping.

With regard to the geochemical test work on the various rock types, the number of samples for a DFS level of study is considered low; therefore, this characterisation is considered preliminary in nature. The available results to date show that, in general, there is a low risk of acid generation from the Wolfsberg mine rock, low-grade ore, and ore sorter reject material.

Metal leaching from the mine rock materials, assessed by static testing on the results received to date, indicates that there is the potential for aluminium, chromium, and silver to leach from those materials. Some elements appear to be enriched relative to the crustal abundances in the tailings and cemented paste backfill; the leaching of the latter will be assessed once the kinetic monolithic leach test is complete.

3.2 Backfill

The primary objective for the backfill plant is to maximise underground tailings storage and minimise surface infrastructure development. The design captures all the tailings underground, eliminating the requirement for surface tailings storage infrastructure while having the additional benefit of potentially increasing ore recovery by filling voids and reducing dilution from the surrounding rock mass.

The backfill plant receives tailings as thickener underflow into an underground receiving tank at level 1,553 m. The tailings slurry is then dewatered using filter presses, and the resultant cake is stockpiled. The hydrometallurgical cake is trucked to the backfill plant and similarly stockpiled prior to use. The mobile plant is then used to load the tailings and hydrometallurgical cake into hoppers, which meter the constituents into a paste hopper at a ratio input into the supervisory control and data acquisition (SCADA) system, according to pre-defined paste mix recipes. Binder is stored underground in horizontal silos and metered into the paste backfill mixer via a silo, screw feed, and weigh hopper. The resultant paste backfill mixture is then pumped via positive displacement piston pump to the receiving stope.



A material balance assessment was conducted to maximise tailings storage underground. Table 3.2.1 shows the total waste material mined and backfilled throughout the entire mine life. The hydrometallurgical cake and tailings are captured within the paste backfill, and an expected 30% of the mica schist waste will be stored within the stopes (balance of mica schist stored in waste stopes).

Item	Unit	Value
Concentrator Tailings Available	Mt	2.96
Hydrometallurgical Cake Available	Mt	1.2
Mica Waste Available	Mt	3.14
Paste Fill Available	Mt	4.5
	Mm ³	3.5
Backfill Rate	t/h	81
Note: Paste Fill has a (dry) density of 1.29 t/m ³ .	II	

Table 3.2.1: Paste Fill LOM Material Balance

Transportation of the tailings from the surface concentrator plant to the underground backfill plant was assessed. The design of the underground reticulation system was undertaken by assessing a range of five regions selected to represent the extents of the orebody and the most and least onerous pumping cases. The resultant reticulation system uses inter-level boreholes, flanged decline piping, level piping, and stope piping.



4. Mineral processing and metallurgical testing

4.1 Concentrator Plant

Metallurgical test work has been focused on providing data for flowsheet development whilst aiming to maximise the recovery of spodumene and produce a concentrate that is of an acceptably high grade to be suitable for further hydrometallurgical processing.

The North Carolina State Minerals Research Laboratory (NCMRL) test work, in the mid-1980s, established a preliminary process flowsheet and reagent regime for the production of a spodumene flotation concentrate with by-products of feldspar, quartz, and mica. On the back of this early work, Dorfner ANZAPLAN was engaged to conduct further test work over the period 2017 to 2018 (PFS test work) and 2019 to 2020 (DFS supporting test work).

The PFS and DFS supporting test work included bench-scale metallurgical test work to derive comminution parameters, evaluate the benefit of ROM ore pre-concentration, characterise the flotation response, confirm the optimal flowsheet configuration, evaluate the degree of variability, and derive a metallurgical performance projection. Additionally, pilot-scale test work has been successfully undertaken during the DFS to generate bulk spodumene concentrate samples for calcination and hydrometallurgical test work, confirm the performance of the flowsheet, and derive process engineering design parameters.

The PFS comminution test work on AHP and MHP blend composites indicated that the plant feed can be characterised as being of medium hardness with a Crusher Work Index (**CWi**) of 9.3 kWh/t to 10.6 kWh/t and a Bond Ball Mill Work Index (**BBWi**) of 13.2 kWh/t to 14.1 kWh/t. The abrasion index (**Ai**) indicated that the ore can be classified as having a medium to high abrasion tendency.

Pre-concentration test work resulted in the inclusion of a sorting circuit to reject waste rock prior to milling and flotation. Comparative X-Ray Transmission (**XRT**) and laser-based sorting test work resulted in the selection of laser-based sorting for the DFS. The DFS primary sorting recoveries of 86% to 93% Li2O were found to be in good agreement with the results achieved in the previous 2017 sorting test work. The scavenger sorting tests achieved Li₂O recoveries of 35% to 41%, which were lower than the 50% previously assumed for the PFS.

The DFS test work included bench-scale milling and flotation feed preparation test work, followed by open-circuit and locked cycle flotation test work.

Open-circuit flotation optimisation test work on AHP: MHP blend composites achieved a rougher concentrate Li₂O stage recovery (after flotation feed preparation) of 82 wt% to 91 wt%. Rougher concentrate grades of 5.5 wt% to 6.0 wt% Li₂O were achieved, and all the samples achieved a final concentrate grade of > 6.4 wt% Li₂O.

Open-circuit variability test work achieved an average rougher concentrate Li2O stage recovery (after flotation feed preparation) of 84 wt%, and the Li_2O grade in the final cleaner ranged from 3.6 wt% to 7.3 wt%, averaging 5.9 wt%.

The DFS test work program also included a pilot campaign (see Figure 4.1.1 and Figure 4.1.2) on a 100 t ROM sample with the primary objective of producing spodumene concentrate for subsequent calcination and hydrometallurgical test work. In addition, it further aimed to confirm the performance of the flowsheet resulting from the laboratory bench-scale test work and to derive process engineering design parameters.



The pilot test work flowsheet included screening of the ore, followed by sensor-based ore sorting to reduce host rock dilution and pre-concentrate the spodumene ore. After sorting, the ore was further processed by crushing and grinding, followed by desliming. The deslimed ore was treated by low-intensity magnetic separation (LIMS) and wet high-intensity magnetic separation (WHIMS) methods to reject any residual host rock dilution.



Figure 4.1.1: Pilot Plant: Grinding Circuit with Ball Mill (bottom left), Screening (top middle), and HydroCyclones for Desliming (top left)

Subsequently, the material was processed in a mica flotation circuit to remove mica, which has a negative impact on the spodumene flotation performance. Finally, spodumene flotation was conducted by applying rougher and cleaner stages with the aim of producing a bulk spodumene flotation concentrate.





Figure 4.1.2: Overview of Pilot Plant including Magnetic Separators (bottom left), Lamella Thickener (right), and Flotation Cells (middle)

The feed rate of the pilot plant was 400 kg/h, and a mill grind of approximately 80% passing 175 μ m to 200 μ m was achieved. The pilot campaign included a series of commissioning and optimisation runs, progressing to the final optimal pilot run on 17 June 2019. During this final optimised run, an overall lithium recovery of 67 wt% and a final spodumene concentrate grade of 5.9 wt% Li₂O were achieved. This result is in line with the comparative bench-scale laboratory test work results, where a lithium recovery of 69 wt% was achieved. The pilot-scale spodumene flotation stage recoveries were also confirmed to be in line with the bench-scale laboratory test results, with spodumene flotation circuit stage recoveries of 81 wt% to 85 wt% compared to the 85 wt% recovery in the bench-scale laboratory test work.

The pilot plant produced 1.7 t of bulk spodumene concentrate with a grade of 5.7 wt% to 6.0 wt% Li_2O for further calcination and hydrometallurgical test work.

A metallurgical performance projection has been derived for a flowsheet inclusive of crushing and screening, sensor-based sorting, milling, classification, and magnetic separation, followed by flotation to produce separate mica (tails), spodumene, feldspar, and quartz concentrates.

The metallurgical performance estimate has been based on the combined mass balance grade and recovery data derived using the staged recovery and grade estimates for each circuit and applied to the DFS mine production schedule. The average LOM metallurgical performance projection is summarised in Table 4.1.1.

Stream	Summary of Average LOM Metallurgical Performance Projection		
	Yield (wt%)	Li2O Grade (%)	Total Recovery (%)
ROM	100	0.64	100
Sorter Feed	72.4	0.64	72.5
-8 mm Sorter Bypass	27.6	0.63	27.5
Sorter Rejects	33.8	0.08	4.3
Concentrator Plant Mill Feed	66.2	0.92	95.7
Grinding Slimes	3.6	0.52	2.9
Wet Magnetics	7.3	0.91	10.5
Attrition Slimes	0.70	0.71	0.8
Mica Flotation Concentrate	7.1	0.24	2.7
Spodumene Flotation Concentrate	8.6	5.19	70.4
Feldspar Product +0.1 mm -0.3 mm	16.9	0.31	8.2
Feldspar Product -0.1 mm	5.1	0.08	0.7
Feldspar Dry Magnetics Rejects	1.8	0.13	0.4
Quartz Product +0.1 mm -0.3 mm	8.6	0.01	0.1
Quartz Product -0.1 mm	1.4	0.00	0.0
By-Product Flotation Tails	5.1	0.03	0.3

Notes:

1. All the mass yield and recovery data is reported relative to the ROM Feed.

2. Totals may vary due to rounding.

Table 4.1.1: Concentrator Plant LOM Metallurgical Performance Projection

An average LOM spodumene recovery to Li_2O of 70.4 wt% is estimated at a concentrate grade of 5.2 wt% Li_2O .

The lower spodumene concentrate grade, compared to the 6.0 wt% for the PFS, is primarily as a result of a reduction in the ROM feed grade. The reduced spodumene concentrate grade is based on test work results which showed that a spodumene concentrate grade of > 6.0 wt% could typically be achieved for a spodumene flotation circuit feed grade of > 1.35 wt% Li₂O. The expected average LOM spodumene flotation feed grade for the BFS is approximately 1.1 wt% Li₂O.

The concentrator plant bench-scale and pilot-scale test work that has been conducted is considered by Dorfner ANZAPLAN and DRA to be adequate to meet the requirements of a DFS for the Wolfsberg Lithium Project

4.2 Hydrometallurgical Plant

Hydrometallurgical test work was conducted at Dorfner ANZAPLAN for European Lithium's Wolfsberg Project. The test work included all the processing steps of the flowsheet and was completed by





performing bench-scale, locked cycle, and pilot-plant tests. Analytical methods complying with ISO standards were applied to the head samples, products, and by-products. The aim of the Dorfner ANZAPLAN bench-scale and locked cycle tests was to assess whether a battery grade LHM could be produced from lithium-bearing concentrates generated from the Wolfsberg deposit.

The test work programmes in 2017, 2019, 2020, 2021, and 2022 also included the following:

- Pilot plant concentrate roasting by Thyssenkrupp Industrial Solutions Research and Development (2019)
- Thickening and filtration tests by FLSmidth (2019)
- Lithium hydroxide production bench-scale tests by GEA Messo GmbH (2019 and 2020)
- Bench-scale test work for the conversion of lithium carbonate to LHM by Dorfner ANZAPLAN (2021 and 2022)

Five concentrates were used in the test work:

- Dense Media Separation (DMS) concentrate
- Flotation concentrate
- Concentrates with different proportions of AHP and MHP host rocks were tested. These concentrate composites were as follows:
 - Concentrate with 30:70 AHP to MHP split
 - o Concentrate with 50:50 AHP to MHP split
 - Concentrate with 70:0 AHP to MHP split.

Generally, the AHP ore contains relatively coarse-grained spodumene crystals whereas the MHP bears much finer crystals.

Lithium carbonate was produced from spodumene concentrates by calcination and sulphuric acid roasting, followed by impurity removal and carbonate precipitation. Purification of the raw carbonate was carried out by bicarbonation.

Flotation and DMS concentrates were roasted at 1,100 °C for 60 min. Acid baking of the roasting product was conducted at 250 °C for 60 min with sulphuric acid at an acid to sample ratio of 0.4 and 0.35 for the flotation and DMS concentrates, respectively. The resulting lithium recovery to leach solution was 96% for the flotation concentrate compared to the 92.9% for the DMS concentrate. The leach solution was purified through neutralisation with sodium hydroxide and lime. Neutralisation with sodium hydroxide produced high volumes of the residue that were difficult to filter or centrifuge, with a resultant low lithium extraction of approximately 50%. The lime treatment was found to be more successful, achieving a lithium extraction of 96.4% from the flotation concentrate and 92.9% from the DMS concentrate. The operating costs for lime neutralisation were also significantly lower when compared to those for neutralisation with the sodium hydroxide.

The final lithium sulphate solution purification step was ion exchange (see Figure 4.2.1) to reduce the content of polyvalent ions such as magnesium (Mg), calcium (Ca), and aluminium (Al). The calcium content was reduced from 13 mg/L to 0.5 mg/L. Sodium sulphate was recovered in the form of Glauber salt through cooling and crystallisation.



Figure 4.2.1: Ion Exchange Unit used during the Test work

Lithium hydroxide was produced from the carbonate by precipitation with lime (Ca(OH)₂).

The process involved the reaction of lithium carbonate with lime to form calcium carbonate and soluble lithium hydroxide. The calcium carbonate was filtered off and the solution crystallised to obtain lithium hydroxide. Test work results indicated that lime precipitation alone cannot achieve the battery grade purity of the product. An impurity removal stage with sodium carbonate was applied before the two-stage crystallisation (crude and pure) to produce a battery grade product. The LHM crystals from the crude crystallisation stage were dewatered in a centrifuge and washed with mother liquor from the pure lithium hydroxide crystallisation stage to remove excess sodium and potassium hydroxide remaining in the aqueous phase after dewatering the crude crystals. The crude lithium hydroxide crystals were redissolved in a minimal amount of distilled water before entering the pure lithium hydroxide crystallisation stage. In the pure crystallisation stage, water was removed from the solution by evaporation, causing most of the lithium hydroxide to crystallise in the monohydrate form. Due to the limited carryover of calcium, sodium, and potassium impurities from the crude to the pure crystallisation stage, the resulting LHM crystals contained very low levels of impurities.

5. Recovery Methods

5.1 Concentrator Plant

DRA designed the process plant for the Wolfsberg Lithium project to treat 0.86 Mt/a ROM ore and includes all the processing requirements from the ROM handling through to the final concentrate plant loadout and tailings disposal. The process design has been developed based on the test work findings and assessments, various desktop-level trade-off studies, and relevant DRA design information. The process flowsheet includes conventional pre- concentration, size reduction, and mineral beneficiation unit processes.

The Wolfsberg spodumene ore deposit comprises two host rock types: AHP and MHP. LHOS has been proposed as the underground mining method and is anticipated to produce a ROM ore blend containing approximately 44% host rock dilution on average.



Pilot-scale ore sorting test work indicated that both the AHP and MHP material is amenable to preconcentration using sensor-based sorting for host rock rejection. The process flowsheet thus consists of an underground crushing and sorting circuit ahead of the concentrator plant, which is located on the surface. MHP sorter rejects and MHP mining development waste material will be deposited in the underground open stopes, along with the tailings backfill material. The AHP sorter rejects and AHP mining development waste material will be conveyed to the surface for commercial use.

A summary of the process flowsheet is presented in Figure 5.1.1. below.





Figure 5.1.1. Concentrator Plant Flowsheet for the Wolfsberg Lithium Project



The flowsheet includes crushing, screening, and laser sorting underground. The crushing and preconcentration circuit has been designed to treat 0.86 Mt/a ROM ore at an average grade of 0.64 wt% Li₂O. Figure 5.1.2. depicts the underground plant layout.



Figure 5.1.2: Isometric view of the Underground Crushing and Sorting Plant

The process plant on the surface (see Figure 5.1.3.) includes milling, classification, and magnetic separation followed by flotation to produce separate mica (tails), spodumene, feldspar, and quartz concentrates. The milling and flotation circuits have been designed to treat the pre-concentration circuit product stream at a design throughput of 0.54 Mt/a and an average mill feed grade of 0.92 wt% Li_2O .



Figure 5.1.3. Surface Concentrator Plant and Infrastructure

The inclusion of pre-concentration and the underground location of the crushing and sorting plant results in a smaller surface footprint, lower surface noise levels, and reduced power, gas, reagent, and consumable requirements for the milling and flotation circuits at the lower throughput. Additionally,



waste generation has been minimised with the inclusion of backfilling and the production of quartz and feldspar by-products, eliminating the requirement for a tailings storage facility (TSF).

5.2 Hydrometallurgical Processing Facility

The hydrometallurgical plant (see Figure 5.2.1) will operate 365 days per year, 7 days per week, and 24 hours per day at 90.0% combined availability and utilisation.



Figure 5.2.1: Hydrometallurgical Plant

The plant is therefore effectively operating for approximately 7,884 h/a. The hydrometallurgical plant is designed to process 69,989 t/a of spodumene concentrate and produce 8,834 t of lithium hydroxide monohydrate (LiOH.H2O) product per year at an estimated lithium recovery of 89.73%. The LHM recovery calculation is an interpolation from test work data on the lithium oxide grade and associated LHM recoveries.

A summary of the process is presented as a block flow diagram in Figure 5.2.2.




Tailings & Utilities Area 730 Ion Exchange Area 755 (IX) Reagents: Sulphuric Acid, Hydroch oric Acid ¥ Quicklime, Sodium Hydroxide & Area 735 Lithium Carbonate Precipitation & Filtration Area 760 ¥ Tailings Area 740 Lithium Bicarbonate **Conversion & Filtration** Area 765 ¥ Cooling Water Towers, Area 750 Compressed Air Sodium Sulphate Removal & Natural Gas (SSR) ¥ Area 780 Area 770 Lithium Hydroxide Services: Production, Thickening, Filtration & Impurity Removal Area 775 Area 785 Lithium Hydroxide Crystallisation, Drying & (Filtration & Reverse Osmosis) Packaging

Figure 5.2.2. Hydrometallurgical Plant Flowsheet

The process starts with alpha to beta spodumene concentrate conversion in a rotary calcination kiln. The lithium is extracted from the aluminium silicate matrix with sulphuric acid during acid baking. Lithium is leached with water to form a lithium sulphate solution. The lithium sulphate solution is separated from the unleached solid aluminium silicate. Elements, other than lithium, that are leached are then removed in impurity removal stages (primary and secondary impurity removal, and ion

The purified lithium sulphate solution then reacts with sodium carbonate to form a lithium carbonate precipitate. The non-precipitated sodium sulphate, left in solution, is then sent to sodium sulphate removal (crystallisation process). The crystallised anhydrous sodium sulphate crystals are dried and sold as a by-product. The lithium-rich solution is circulated back to be used as leach solution. The lithium carbonate solution is processed using a bicarbonation process to increase the purity.

The battery grade lithium carbonate is then transformed to lithium hydroxide using calcium hydroxide. The lithium hydroxide is purified (dissolved calcium is removed from the solution), and two-stage crystallisation is used to form battery grade lithium hydroxide monohydrate (LiOH.H2O) solid crystals. This product is then dried and packaged as the final product.

6. **Project Infrastructure**

6.1 Mine and Concentrator Plant Site

The location of the adit and concentrator plant in the PFS was changed to an alternative property further north of the mine site. The selected site is the most suitable location for portal daylight and access to the concentrator, it is relatively flat, and it provides ease of access to the L148 Weinebene Straße. Nonetheless, the concentrator plant remains on sloping terrain; consequently, this necessitates significant rock blasting, retaining walls, and earth moving to establish access roads and level terrain to construct the required facilities. Part of the terrace is constructed by utilising suitable waste backfill material from the decline development, eliminating the requirement for a waste rock storage facility. Inplant and access roads will be asphalt lined. A total development area of less than 10 ha was achieved, and environmentally sensitive areas were avoided, both key contributors to minimising the environmental impact.

The concentrator plant area includes a winterised building of approximately 14,508 m². European Lithium commissioned the Austrian Central Institution for Meteorology and Geodynamics (**ZAMG**) to provide meteorological data and the associated wind and snow loads for the two project sites. Typical steel sections of the portal frame have been designed based on a 6 kN/m² snow load. The maximum span between columns is 22 m and was calculated based on the Eurocode guidelines. A 1.7 m high bund wall will be built around the building as applicable to ensure that the snow build-up can be easily removed with a front-end loader (FEL) and without damaging the insulated steel panelling.

Various insulated steel panel buildings were sized based on the anticipated staff complement and will provide office space and ablution facilitates for the mine, backfill plant, and the concentrator plant site operations. Fabric structures will provide cover for the mining facilities and by-product stockpiles.

Bulk water supply is obtained from underground fissure water, and water discharged to the environment will be treated according to the necessary Austrian environmental requirements.

A sewage treatment plant, with a wastewater production of 40 m³/d, will be provided. The final effluent will conform to the required Austrian discharge standards.

A total connected electrical power requirement of 27.6 MW for the mine and concentrator will be provided by the local utility, Kelag, in the Carinthia region of Austria via an underground cable from the Wolfsberg substation. Kelag will also be providing compressed natural gas to the site for use in the process. The total project power and gas requirements for the mine and concentrator plant are as per Table 6.1.1.

The control system architecture will be designed around a centralised programmable logic controller (PLC) and SCADA system.

Area	Connected Load (MW)	Running Load (MW)
Underground Mine, Infrastructure and Concentrator (Power)	27.6	15
Underground Mine, Infrastructure and Concentrator (Gas)		13

Table 6.1.1: Nominated Maximum Demand Loads per Site

6.2 Hydrometallurgical Plant

The plant will be situated within an industrial area to the south of Wolfsberg where the required bulk services, electricity (11.5 MW), water, and natural gas supply (1,600 m³/h) are readily available.



Road and rail infrastructure is readily accessible for product distribution. Approximately 6 ha is required for the hydrometallurgical plant.

Various insulated steel panel buildings were sized based on the anticipated staff complement and will provide office space and ablution facilities for the process plant site operations, and the various process units and areas.

Water, gas, and dust discharged to the environment will be treated according to the necessary Austrian environmental requirements.

The power for the hydrometallurgical process plant will be supplied from the local distribution network within Wolfsberg. A buried 20 kV cable will be routed from the nearest municipal substation to the main intake substation.

The on-site infrastructure will be reticulated from one main prefabricated intake substation via a buried medium-voltage (**MV**) backbone network to the respective plant areas. Substations will employ prefabrication techniques to minimise on-site construction activity.

Power and gas will be supplied by Kelag (as for the concentrator) from its local network, refer to Table 6.2.1 for the expected demand.

Area	Connected Load (MW)	Running Load (MW)
Hydrometallurgical Plant (Power)	13.8	11.5
Hydrometallurgical Plant (Gas)		20

Table 6.2.1: Nominated Maximum Demand Loads

The control system architecture will be designed around a centralised PLC and SCADA system.

7. Environmental Studies, Permitting and Social/Community Impact

7.1 Sensitive Features at the Project Sites

The Wolfsberg Lithium Project is located below the protected Alpine region in the Lavanttal Alps and on the Koralpe mountain range. The mine and concentrator sites are on land used for forestry (mostly spruce) and hunting (deer), near a ski resort and an associated ski slope. Patches of land around the sites are used for livestock grazing, and hiking routes along forest roads pass nearby.

Natural habitats on and around the mine and concentrator sites have largely been transformed by forestry, but there are still small areas of habitats of conservation importance next to these sites. Populations of animals of conservation importance that could be disturbed by the development of the mine and concentrator include the grouse and bat populations.

The watercourses draining the sites and the downstream river system feature high-quality water. Negative changes in the water quality are unlikely to be allowed by the regulatory authorities.

There are no designated protected areas neighbouring the project sites, but there are several in the region of the sites.



A surfaced winding road, the L148 Weinebene Straße, provides access to the mine and concentrator sites from Wolfsberg and a railway station in the village of Frantschach-St Gertraud, on the northern outskirts of Wolfsberg. In the Frantschach-St Gertraud Municipality zoning plan, the L148 Weinebene Straße is recorded as being in poor condition near the mine and concentrator sites. However, European Lithium states that the road has recently been upgraded.

The hydrometallurgical plant site is between the villages of Magersdorf and Wolkersdorf. Part of the site is in the Wolkersdorf industrial zone, and it includes a disused railway siding, which is overgrown with vegetation. There is much agriculture in the Lavant River valley near the site. Meadows and woodland border the eastern side of the site. The forest comprises commercial spruce-dominated mixed plantation and semi-natural alder swamp forest. Field and forest paths in the vicinity of the site are classified as walking trails of local importance.

The Wolkersdorf industrial zone featured lignite mining in the 1950s and 1960s. The nearby Wolkersdorf main shaft was covered with a concrete slab in 1969. Until 2019, the industrial zone was designated as a polluted air area because of the air pollutant, inhalable Particulate Matter 10 (PM10). Development in this zone must take account of neighbouring residential, agricultural, and recreational land uses and not impact on air quality.

7.2 Environmental and Social Studies Completed

Impact definition studies to support the approvals to proceed with the project have not commenced yet. These studies will need to be scoped in consultation with the regulatory authorities and consider the available baseline information.

Studies of land use and habitats on and around the mine and concentrator sites were undertaken in 2017, 2019, and 2021 by Umweltbüro, an environmental consultancy. A typical habitat is presented in figure 7.2.1 below. The survey areas were wider than these sites and provided input on three locations considered for the sites. Initially, the surveys assumed that the mine and concentrator surface infrastructure would be above the lithium deposit, then at a site to the east of the deposit, and then north of the deposit, across the L148 Weinebene Straße and the Brandgraben Stream. The latter site is now the preferred site.



Picture 7.2.1: Typical Habitat: Spruce Trees and Protected Wood Grouse

The work undertaken to date by Umweltbüro provides perspective on the sensitivity of the sites and the conflicts with other land uses, and has influenced the project design.

SRK has completed water and geochemistry studies that have provided input into the design of the mine and concentrator plant.



The above-mentioned studies do not define the impacts of the proposed development or evaluate the significance of the impacts.

7.3 Measures Taken to Minimise the Footprint and Impacts of the Project

At the mine and concentrator site, the surface area that will be disturbed has been kept below 10 ha and largely in one location. Residual material from mining and processing will be used in the mine workings to provide support. Some residual material (amphibolite by-product) will be sold as a construction material. The crusher and sorter have been placed underground. This and a steel envelope around the concentrator plant will attenuate sound emissions and thus reduce the potential for noise disturbance. The concentrator plant has also been designed with hydro-fluoric scrubbers to clean air emissions. There is also a water treatment facility, and storm water management infrastructure is included in the design of the concentrator plant, including a pollution control dam designed for a 1:50 year storm event.

An electric mining fleet will be deployed which will also reduce the ventilation requirements for the underground mine and as well as toxic emissions and noise pollution.

7.4 Environmental and Social Approvals

The process of obtaining approvals to develop and operate the Wolfsberg Lithium Project mine and plant will commence after a roadmap for approvals has been formally agreed with the regulatory authorities. This roadmap will be formally set out by the regulatory authorities once they have reviewed the final DFS report and therefore there is uncertainty as to the what the approvals process will be.

Based on informal discussions with regulatory authorities, discussions with Umweltbüro GmbH Environmental Consultants and a note on permitting from Haslinger Nagele (Austria), the approvals process could be as follows:

- For the mine and concentrator development, a condensed approval process under the Mineral Resources Act of 1999 (MinroG) and the Mining Authority could be possible, but there is a risk that a longer approval process, involving an EIA process, could be required. A formal screening decision will be made by the regulatory authorities on the need for an EIA.
- For the hydrometallurgical plant, it is given that a full EIA process will need to be followed to inform approval decisions. As the plant is remote from the mine site, MinroG does not apply. The permitting of the plant is likely to be under the Austrian Trade Act and the district administrative authority.

Regardless of the approvals route, the approvals process will involve stakeholder engagement. Austria is a signatory to the Aarhus Convention; Austrian law conforms to the Convention's principles of public involvement in decisions on matters of environmental interest. These principles cover access to information, participation in decision-making, and access to justice. According to MinroG, other parties that must be consulted are landowners, neighbours, the local municipality and other regulatory authorities. The latter authorities are likely to include spatial planning (land use), health, environmental protection and water authorities with jurisdiction in the areas occupied by the project.

In summary, the key approvals required for the project include the following:

• Approvals under MinroG, which include an operating plan and an installation plan, and require the consideration of environmental factors, the vision for mine closure, and a mine waste



management plan, which must be prepared to formal specifications (even if there is no waste facility on the surface)

- EIA approval for the hydrometallurgical plant
- EIA approval for the mine and concentrator only if this is deemed to be required
- Secondary approvals:
 - Deforestation (clearing) permits for clearing of the forest and the use of forest soil for purposes other than forest cultivation
 - Nature conservation permits
 - Water permits for water abstraction, industrial use, discharges, diversion of watercourses, and construction of bridges
 - Emissions permits for stack emissions from the hydrometallurgical plant
 - Land zoning approvals if any rezoning of land is required.

The secondary approvals listed above could be rolled into an EIA approval if the EIA route is followed but may be obtained as separate approvals if there is no requirement for an EIA.

The following conditions could trigger a requirement for an EIA for the mine and concentrator development:

- If the mine is not able to provide assurances that the by-products can be sold. If the amphibolite by-products are stockpiled at the concentrator site, the development footprint could exceed the 10 ha limit.
- If there are changes to the mine surface infrastructure layout that result in the exceedance of the 10 ha limit.
- If the mineral processing operation at the mine site is not recognised as an exclusively physical process.
- If the material returned to the mine site from the hydrometallurgical plant is considered to be waste placement underground, as it is an output of a processing operation that is detached from the mine site.
- If significant stakeholder opposition is evident during the mandatory consultation processes that inform the regulatory authorities' decision-making.
- If the cumulative impacts of the project and other proposed/recent developments in the region are considered material. For example, regulatory authorities will have to consider whether the deforestation and forest-soil disturbance thresholds have been exceeded.

Considering the approvals required under MinroG, it is reasonable to expect that the regulatory authorities will require the following information for the mine and concentrator sites:

- Formal characterisation of mining and processing residues
- Precise definition of the potential impacts on water resources (groundwater and surface water) including consideration of the impacts of backfill in the mine workings on water quality, and commitments to implement measures to prevent the deterioration of water quality

- Precise definition of impacts on biodiversity (impacts on habitats, and plant and animal populations of conservation importance) and commitments to provide compensation measures for the net loss of biodiversity
- Information on the climate resilience of the development
- A mine waste management plan
- A transportation plan outlining planned road usage, proposed upgrades to roads and road maintenance activities, and road safety practices
- An emergency plan, with details on how emergency scenarios relating to road hazards and hazardous materials will be handled
- A closure plan and cost estimate.

8. Project Implementation Plan

8.1 Construction and Schedule

Implementation management will be undertaken by a lean Owner's Team, supported by an Engineering, Procurement and Construction Management (EPCM) Contractor.

The critical path is determined by permitting and mining activities. The sequence is as follows: obtaining the mining permit, establishing the portal, developing the decline, creating underground cavities for the crusher and sorting plant, creating silos to store the early mine production ROM, creating waste storage stopes, and ramping up production after plant commissioning. Mine production commences once the silos have been established, and plant hot commissioning commences once mine production (with the aid of stored ROM) can sustain a plant feed able to maintain an 80% or more plant processing capacity. A project duration of four years is estimated. Schedule risks include permitting delays, and the requirement that civil construction must avoid the winter months. The project duration and key activities are indicated in Figure 8.1.1.

Equipment will be procured on the international market, ensuring "European Conformity" (EC) compliance. No long lead items that cannot be procured within the schedule timeframe have been identified. The project will initially focus on early works, i.e. portal establishment and procuring of mining fleet, utility supply, and certified vendor data. Construction contractors will preferably be local to Austria and at a minimum registered in the EU. In addition, the geotechnical survey, which could not be performed during the BFS, is an urgent early activity.

Mining activities will be managed by European Lithium and executed by a mining contractor.

Engineering, procurement, logistics management, and construction will be managed by the EPCM contractor. Onboarding of the EPCM contractor will be delayed to minimise their contract duration, which is determined by either commissioning date, site access date, or long lead procurement periods. During detailed design, all effort will be made to achieve a responsible environmental outcome.

Important considerations for construction are the limited footprint, challenging weather conditions, the delay in access to services, and logistics constraints. To mitigate the weather delays, the building envelope needs to be established on time and before the snow season. Contractors will provide their own services except for the generator to facilitate mining development. Utility power will be available in time for production mining. Traffic on access roads will increase markedly during construction, and it will also include the removal of amphibolite material and topsoil. Stakeholder engagement will be



important to mitigate the effects of the added activity during construction on the surrounding communities. Coordination of decline logistics to facilitate both mining and underground plant construction will require a dedicated effort. Due to limited free space on site, construction materials will be stored off site by contractors.

Task Name	Duration	Start	Finish	020	2023		2024	202	5 aloalo	2026	020	20	27
Project Release & Funding Completed	0 mons	01/11/22	01/11/22	0304	01/	11		SQ+QTC	2030	CHQ1Q2	TT	401	Q2Q3
Drilling Permit approved	0 mons	15/11/22	15/11/22	•	15/	11							
EIA & Mine Permitting	16 mons	01/11/22	28/02/24										
Mining Permitting Process (incl Access Roads)	0 mons	26/04/23	26/04/23			26/0	4						
Geotech Mining	9 mons	09/11/22	09/08/23										
Portal & Early Works Engineering	3 mons	13/02/23	12/05/23										
Concentrator Engineering	15.45 mons	01/03/23	04/06/24										
Hydromet Engineering	17 mons	17/05/23	27/09/24										
Procurement Mining & Contracts - Early Works & Mine Contractor	3 mons	22/11/22	27/02/23										
Concentrator Procurement - Long Lead Mechanical Equipment	3 mons	29/03/23	27/06/23										
Hydromet Procurement - Long Lead Mechanical Equipment	3 mons	09/06/23	04/09/23										
Fabrication & Deliveries - Mining Equipment	16 mons	28/02/23	19/06/24										
Fabrication Concentrator	23 mons	28/06/23	14/05/25										
Fabrication Hydromet	18 mons	05/09/23	25/02/25										
Power Available	0 mons	25/04/25	25/04/25						25/	04			
Construction - Early Works & Portal Development	6.8 mons	12/05/23	21/11/23										
Constr - UG - Mining Development	38.7 mons	13/09/23	29/10/26					1 1 1			H		
Constr - UG - Crushing & Sorting Facilities - Caverns Access	0 mons	02/06/25	02/06/25						02	/06			
Constr - UG - ROM Silo Completed	0 mons	01/09/25	01/09/25						•	01/09			
Constr - UG - Waste Stoping Complete	0 mons	15/10/26	15/10/26									15	/10
Constr - UG - Crushing, Sorting & Backfill	17.25 mons	27/11/24	30/04/26										
Construction - Concentrator Plant	34.5 mons	12/05/23	05/03/26										
Construction - Hydromet Plant	27.8 mons	22/02/24	26/05/26						0.000				
Cold Commissioning	7.5 mons	09/03/26	02/10/26										
Hot Commissioning & Ramp up	4.3 mons	04/08/26	01/12/26										
Project Complete	0 mons	01/12/26	01/12/26									• 0	1/12

Figure 8.1.1: Project Schedule

8.2 Operational Readiness

European Lithium with its Austrian subsidiaries will recruit an experienced project development team to work with an EPCM contractor experienced in lithium projects. An operational management team with mining and metallurgy experience will be recruited and be mobilised in a phased manner during construction. Austria has a well-established mining tradition and hosts Europe's second oldest mining university in Leoben, the Montanuniversität, which currently has over 3,000 students.

European Lithium's Austrian Management Team will consist of the CEO, CFO/Sales and Procurement, Mine Manager, Process Line Manager (concentrator and hydrometallurgical plant), and the HR Manager.

European Lithium's Austrian subsidiaries will apply any applicable safe operating procedures and develop a common hazard register during the project execution to ensure zero-harm and environmentally friendly workplaces during all the operational phases.

Following the completion of the DFS, European Lithium will present the project to the Carinthian and Federal Governments and the Mining Authority to request their support for an efficient and timely permitting process, and to prevent any potential permitting delays.

9. Updated Market Studies

EUR Lithium commissioned Gambosch Consulting Pty Ltd in February 2023 to update the marketing study completed by Orykton Consulting in 2018. Market dynamics and prices are substantially



different in 2023 versus 2018 and this is reflected in a different price outlook between the PFS 2018 and the current DFS 2023. The conclusions of this updated marketing report as well as revised price projections for LHM are summarised in paragraph 9 below:

9.1 Utilisation of Lithium Hydroxide Monohydrate

The main product of the Wolfsberg Lithium Project is planned to be lithium hydroxide monohydrate (LHM).

LHM is a critical material for electric vehicles as it is a key component in the production of highperformance lithium-ion battery cathodes.

The cathode of electric vehicle (**EV**) batteries typically contains lithium cobalt oxide (LiCoO₂), lithium iron phosphate (LiFePO₄), or another lithium-containing material. LHM is used to produce the cathode material by reacting it with the metal oxide, typically cobalt or iron, in a process called lithiation. The resulting compound is then mixed with other materials to form the cathode.

LHM is preferred over other forms of lithium, such as lithium carbonate, due to its higher purity and the fact that it is better suited to high nickel carbon cathode chemistries which are critical for long range EVs.

9.2 Electric Vehicle Market Projections

The amount of lithium required to produce a battery pack for an electric vehicle is substantial. For example, the battery pack in a Tesla Model 3 electric vehicle contains approximately 10 kilograms (22 pounds) of lithium, while the larger battery pack in a Tesla Model S or X can contain up to 50 kilograms (110 pounds) of lithium. For this reason, the demand for LHM is intimately linked to the growth of the EV market worldwide.

Sales of EVs doubles in 2021 from the previous year to a record 6.6 million. This trend of rapid adoption is observed across all major geographies. Global sales of EVs continued to skyrocket in 2022 with 2 million sold in the first quarter, up 75% from the same period in 2021.

Below are the projections of the International Energy Agency (IEA) dated April 2021.





9.3 Lithium Demand

Lithium demand has almost doubled since 2017 to 80 kt in 2021, of which demand for EV batteries accounts for 47%, up from 36% in 2020 and only 20% in 2017. Lithium is also used in the production of ceramics, glass and lubricants. But EV batteries are now the dominant driver of demand for lithium and therefore set the price.



Figure 9.3.1: Battery Metals demand, 2017-2021



Moving forward there is a strong consensus amongst analysts that lithium demand will continue to grow at a CAGR between ~30% between 2020 and 2030.



Figure 9.3.2: Forecasted Global Lithium Demand 2020 – 2030 (Source: Goldman Sachs, 29 May 2022)

9.4 Lithium Supply Deficit

According to the IEA, the availability of lithium supply is of particular concern because it is irreplaceable for Li-ion batteries and there are no commercial alternative battery chemistries available at scale today that meet the performance of Li-ion batteries.

Lithium is extracted from two very different sources: brine or hard rock. Lithium brines are concentrated saltwater containing high lithium contents and are typically located in high elevation areas of Bolivia, Argentina and Chile with Chile being the largest producer. Lithium hard rock is primarily mined in Australia and an intermediate concentrate grading 5% to 6% lithium oxide (spodumene) is produced then converted into LHM in a refinery. Hard rock lithium mining is generally lower cost then mining brines and produces a higher quality product. Most of the conversion of spodumene into LHM is done in refineries which are typically integrated or owned by the same company which is mining the lithium ore body. The Wolfsberg Lithium Project will produce LHM from hard rock lithium ores and hence will be an integrated producer of LHM.

The top five lithium producers account for approximately half of global lithium production. Major lithium producers include a combination of large chemical and mining companies, including Sociedad Quimica y Minera de Chile (SQM), Pilbara Minerals (Australia), Livent Corporation (USA) and Ganfeng Lithium Co (China), Tianqi Lithium (Australia / Chine / USA JV).

All the major lithium producers have aggressive expansion plans underway and there are also some large new entrants such as Covalent in Australia which is a JV between SQL and Wesfarmers and will produce 40kt/a of LHM.

However, most analysts believe that the lithium market will be in undersupply from 2025 onwards. The graph below illustrates the lithium deficit projections done by Macquarie as November 2022.





Figure 9.4.1: Lithium Deficit Projections (Source: Bloomberg, Company data, Macquarie Research, November 2022).

The Figure 9.4.2. below illustrates the lithium deficit projections which were completed by Fastmarkets in November 2021.



Figure 9.4.2: Lithium Supply -Demand Balance (Source: Fastmarkets, November 2021)

Back in 2021, Fastmarkets projected an oversupply of lithium in 2022 and 2023 which clearly did not eventuate as the market is clearly in undersupply of lithium as of February 2022. But looking ahead to 2026 to 2030, the likelihood of a structural undersupply of lithium is very high as the development timelines for new lithium projects are more than 10 years on average.

The last point is important as the Wolfsberg project is projected to start production in 2026 – and it is reasonable to anticipate this will coincide with a shortage of supply of LHM in the market.



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This is associated an ambitious plan to develop a European lithium-ion battery industry which is virtually non-existent today. The EU has plans to develop over 1,500GWh li-ion battery manufacturing capacity for EV transition to support the local production of electric vehicles.

The number of Gigafactories in Europe is anticipated to increase from 142 in 2022 to over 1200 by 2030, which represents a forecasted demand for LHM of approximately 650 Kt per annum.

There is no production of LHM in Europe as of February 2023, which is why the Wolfsberg Lithium Project is poised to fill a critical gap in the emerging European electrical vehicle supply chain. The Long Term Lithium Offtake Agreement (Offtake Agreement) executed with BMW in late 2022 illustrates the structural shortage of sources of battery grade LHM for European car manufacturers.

It is also important to note that a large portion of the known planned capacity expansions for LHM or lithium carbonate production are already allocated to Chinese battery producers through a web of offtakes and cross investments.



9.6 Wolfsberg LHM pricing assumptions

The following chart overlays the historical prices of LHM in USD/t and the assumptions in the updated DFS.



Figure 9.6.1: Wolfsberg project historical and projected price assumptions

The Wolfsberg DFS is based on a projected LHM price of USD 54000/t in 2023 which then drops to USD 48600 / t in 2025 and then escalates with an estimated CPI of just above 2% thereafter.

The nominal LHM price of USD 54000/t represents a **44% discount** to the latest LHM reported by Fastmarkets in February 2023 which are consistent with the LHM prices reported by DDP Antwerp in December 2022.

LHM prices reported by Fastmarkets December 2022:

China, CIF Busan:	USD 80148 /t
North America, DDP USGC:	USD 74665 /t
Europe, DDP Antwerp:	USD 79500 /t





The LHM market is growing rapidly and is disrupted by the emergence of EV batteries as the main usage of lithium. As a result, historical data is not a reliable guide to project future prices.

Gambosch Consulting adopted a simple a simple approach which is based on applying a substantial discount to current spot prices (~ 40%) and then escalating the price with CPI. The market consensus is that the lithium market will remain in structural deficit until 2030 and hence there is no rationale for a price correction back to pre- 2020 price levels which would reflect other industrial market dynamics (glass, ceramics).

According to Gambosch Consulting, the likelihood of a wall of production of LHM is very low, because of the lead times to develop a lithium mine, and more importantly because LHM refineries are extremely complex to operate and require very high quality spodumene which in turns requires a very high-quality mineral resource which are rare, although lithium is various mineral forms, is very common.

Gambosch Consulting states that the market risks are probably higher on the demand side, which is driven by assumptions relating to the adoption of EVs over the next decade. The International Energy Agency is currently anticipating over 250 million EVs on the roads in 2030. This is nearly twice the number expected in November 2021, which was 142 million and supported our modelling. This revision is based on the much higher adoption of EV vehicles than originally anticipated in 2021 and 2022 and the changes in legislation in Europe and other geographies as well as accelerated investment in EV infrastructure.

Gambosch Consulting price assumptions underpin the DFS 2022. It should be noted that these price assumptions are consistent with the recent publications of the Australian Department of Industry, Science and Resources from December 2022 (below) which anticipates very similar LHM prices.







9.7 Changes in LHM market conditions since PFS dated April 2018

Gambosch Consulting outlined that market conditions in April 2018 were substantially different from the conditions as of December 2022 which is why the baseline price assumptions changed:

LHM price baseline PFS April 2018:	USD 26800 /t
LHM price baseline DFS December 2022:	USD 54000 /t

This substantial price increase is based on the following material changes:

- 1. **Much higher real EV sales in 2021 than expected** in the PFS 2018. EV sales in 2021 were over 6.6 million versus 5 million expected which is over 30% higher than expected.
- Deficit of supply of LHM in 2021 2024 versus an expected large surplus in PFS 2018. The supply / demand of Fastmarkets were based on slower EV sales and larger volumes of LHM being available. Also, a lot of the supply hitting the market is allocated well in advance to Chinese cathode producers and is generally not available making the market deficit worse for European players.
- 3. The IEA doubled their expectations in terms of EV adoption by 2030 versus their projections back in 2021. This has a profound impact on the LHM market as the supply of lithium cannot keep up. The charts below illustrate the latest projections and scenarios of the IEA:



Notes: PLDVs = passenger light-duty vehicles; BEV = battery electric vehicle; LCVs = light commercial vehicles; PHEV = plug-in hybrid electric vehicle. The figure does not include electric two/three-wheelers. For reference, total road vehicle stock (excluding two/three-wheelers) in 2030 is 2 billion in the Stated Policies Scenario, 2 billion in the Announced Pledges Scenario and 1.8 billion in the Net Zero Emissions by 2050 Scenario.

The operating model of PFS 2018 was based on much more conservative demand for LHM based on an installed base of EVs of only 140 million by 2030.

4. The war in Ukraine has essentially cancelled Europe's access to cheap natural gas. The price of energy is now expected to be much higher in Europe which will structurally increase the cost of producing LHM by ~15%. More importantly the EU and Germany are more committed



than ever to reduce their dependency on oil and gas and transition to EVs. This is supported by a raft of legislative incentives, subsidies, infrastructure investments which are collectively accelerating the adoption of EVs.

5. Much higher reported LHM prices across all regions than expected even in the most aggressive scenarios back in 2018. As mentioned previously, this is driven by a structural deficit of LHM which is not expected to recede before 2030 in the most optimistic case. In April 2018, most analysts were expecting LHM prices of USD 15000 / t to USD 2500 / t. The reality is ~USD 80000 /t as of December 2022 across all regions.

9.8 By-Products Market in Europe

The Wolfsberg Project will produce four by-products: feldspar, quartz, and amphibolite from the concentrator plant, and anhydrous sodium sulphate from the hydrometallurgical plant. Amphibolite and anhydrous sodium sulphate will be sold at a break-even value. Market research studies for these by-products were focused on the near European region.

The Wolfsberg feldspar comprises high-quality glass and ceramic grades. Europe imports large quantities of Turkish feldspar, and there is the opportunity to displace some of this with attractive pricing. The ceramics centre of Sisulu, Italy, is a target market.

Two recent trend reinforce the prospects of this business: Turkey is favouring added-value actions, e.g. ceramics production, so exports of feldspar are becoming more expensive. Additionally, freight costs have increased significantly in the last year, making the differential logistics advantage of European Lithium stronger.

The Wolfsberg quartz grade, classified in glass and ceramics, meets the lower-scale clear glass requirements of consumers. Orykton Consulting advocates that Austria and the adjacent regions of Bavaria, Czech Republic, and Slovakia could absorb the total quartz production of Wolfsberg.

Orykton Consulting concludes that Lenzing, in Austria, could absorb the Wolfsberg production of sodium sulphate within its sales, if offered at an attractive price

10. Capital and Operating Costs

10.1 Capital Cost

Costs are defined as the expenditure required in order to establish assets during the design, construction, and commissioning phases of the project. This includes all the costs associated with labour, construction, plant and equipment, bulk materials, other materials, permanent equipment, subcontracts, packaging, transport, loading, offloading, insurance, strategic spares, and the indirect capital costs, which contribute to the physical construction of the project. The capital cost estimates were developed as follows:

- Mine development, mobile equipment, and mining stationary equipment: SRK
- Cemented tailings backfill: P&C
- Underground infrastructure backbone, the concentrator including underground crushing and sorting, surface infrastructure at the mine site, and bulk services and earthworks at the hydrometallurgical plant: DRA



- Hydrometallurgical plant and balance of infrastructure: SENET
- All the project indirect costs, including owner's costs (with owner's inputs) and design development (project contingency): DRA

10.1.1 Estimation

In compiling the estimate, various pricing and costing sources were utilised. All the source documentation, such as reference projects, pricing database, and quotations, has been duly recorded. The general approach to estimating was to measure or quantify each unit cost element from the engineering layout drawings, process flow diagrams (PFDs), mechanical equipment list, motor lists, cable schedules, and instrument lists where possible. Limited factoring was applied to those items that could not be measured or quantified. Equipment pricing and construction rates were obtained, where possible, from European vendors and contractors. The capital estimate has been sourced from quotations supported by specifications and scopes of work as part of a formal procurement process. The estimate is based on a project execution strategy, whereby major packages of construction work and initial underground mine construction will be awarded to specialist contractors.

The capital cost estimate (CCE) has a base date of June 2022 and has been presented in United States dollars (US\$) in present day (June 2022) terms. The exchange rates applied to the estimate are average rates taken over a six-month period (5 January 2022 to 4 July 2022) (see Table 10.1.1.). Where prices were obtained in other currencies, they were converted as per the vendor quotes and/or the project Forex (foreign exchange).

Exchange Rates (Average Rates over a Six Month Period) (5 January								
2022 to 4 July 2022)								
Currency	Converting to US\$	Converting from US\$						
US\$	1.00	1.00						
ZAR	0.0650	15.3828						
AUD	0.7271	1.3754						
EUR	1.0855	0.9212						
CNY	0.1571	6.3652						
GBP	1.2868	0.7771						

Table 10.1.1: Exchange Rates (average rates over a six month period)

The CCE meets the required level of accuracy that will facilitate a BFS level and complies with the typical industry standard of a Class 3 estimate as defined by the Association for the Advancement of Cost Engineering (AACE International).

The estimate for the concentrator and hydrometallurgical plants underwent a formal quantitative risk assessment (**QRA**) process (conducted by ProjectLink), which resulted in a P80 contingency being applied to the estimate. Other contingencies were estimated by the respective consultant.



10.1.2. Overall Capital Cost Summary

The overall capital cost (CAPEX) summary shown in Table 10.1.2. is for the complete scope of works totalling US\$866,158,223 including Owners Costs and a P80 Contingency.

Work Breakdown Structure (WBS) Area Description	Capex (Excluding Contingency)	Contingency P80	Capex (Including P80 Contingency)
Mine	US\$154,598,630	20.00%	US\$185,518,356
Concentrator Plant	US\$257,869,041	14.44%	US\$295,104,268
Hydrometallurgical Plant	US\$265,401,170	21.00%	US\$321,135,415
Laboratory	US\$2,631,160	20.00%	US\$3,157,392
Backfill Plant	US\$14,244,761	20.00%	US\$17,093,713
Owners Costs	US\$38,578,363	14.44%	US\$44,149,079
Total Project Cost	US\$736,122,288	US\$133,395,994	US\$866,158,223

Table 10.1.2: Summary of Overall Capital Cost Estimate

10.2 Operating Cost

A summary of the total LOM operating cost (**OPEX**), including mining, concentrator plant, hydrometallurgical plant, and backfill plant costs, and general overheads, is presented in Table 10.2.1. This LOM cost covers a 15-year period from October 2026 to May 2041.

The operating costs were developed from first principles, and pricing was obtained from the market (e.g. consumables, reagents, and power cost) or factorised (e.g. maintenance cost). The estimate includes all the labour, materials, and consumables deemed to be required for the operation. It also considers all the direct costs (comprising fixed and variable costs) that will be incurred in the life cycle of the operation. Fixed costs are defined as costs that will be incurred irrespective of production rates and typically include labour costs, environmental costs, and equipment rental. Variable costs are defined as costs that will vary depending on the level of production. These costs are based on unit consumption rates and are incrementally incurred as production rates vary. These costs typically include reagent consumption, power and gas, and variable consumable costs.

Description	Unit	Value over LOM	Value per Tonne ROM	Value per Tonne LHM
LOM ROM	t	11,482,763		
LOM LHM	t	129,569		
Mining	US\$	484,790,446	42.2	3,742
Concentrator Plant	US\$	410,322,708	35.7	3,167
Hydrometallurgical Plant	US\$	686,525,091	59.8	5,299
Backfill Plant	US\$	91,426,835	8.0	706
Owners Cost	US\$	31,500,000	2.7	243
Products Transport Cost	US\$	305,036,411	26.6	2,354
Total	US\$	2,009,601,491	175.0	15,510
Note: The cost in the table is in real terms.				

Table 10.2.1: Summary of Total Operating Costs Over LOM

11. Economic Analysis

11.1 Assumptions

The economic evaluation of the Wolfsberg Project is based on June 2022 cost estimates in US dollars. The US CPI forecast was applied to the projections and used a market outlook for a long-term lithium hydroxide price forecast. In addition, current Austrian tax regulation assumptions were applied.

A financial model was developed using as input the mine schedule from SRK, and the concentrator production model from DRA that calculates mass flows and recoveries through the various process stages, and the production tonnages for spodumene concentrate, feldspar, and quartz. Lithium hydroxide monohydrate recovery and the resultant anhydrous sodium sulphate production were derived from the hydrometallurgical mass flow model developed by SENET.

The base case provides for mining at an average of 709 kt/a ROM, peaking at 842 kt/a ROM, feeding a crusher/ore sorter circuit that rejects waste and feeds approximately 540 kt/a ore to a concentrator.

The concentrator produces approximately 69 kt/a spodumene concentrate, approximately 176 kt/a feldspar, and approximately 81 kt/a quartz. The spodumene is converted to approximately 8.8 kt/a lithium hydroxide at the hydrometallurgical plant in Wolfsberg. The by-products are sold to regional glass and ceramic producers.

Three months' working capital was provided for. In addition, a sum of US\$5.6 million in respect of closure and rehabilitation was provided for.

No royalty payments are due to state or federal governments, but there is a royalty payment of $\leq 1.50/t$ (US $\leq 1.86/t$) of minerals sold from the tenements to a previous project owner under a private agreement. This royalty has been applied to the sale of spodumene concentrate, feldspar, and quartz. The transfer of spodumene to the hydrometallurgical plant is treated like a sale.

The LHM prices were modelled, and considering the experience in 2022 and the market balance factors for the period 2023 to 2040, the following can be expected:

- In the period 2023 to 2030, the hype of the 2022 prices will ease since supply might balance the demand, and prices will reach US\$64,000/t LHM at some point.
- In the long-term period (2031 to 2040), demand growth beyond supply will drive prices back to the 2022 level, i.e. US\$65,000/t LHM.
- Updated LHM forecast prices as per December 2022 are applied for revenue calculations, as based on the agreement signed with BMW. Actual revenue is based on spot price as published by FastMarkets minus 10% discount.

11.2 Financial Results

The forecast shows a US\$945 million funding requirement, assuming a 60:40 debt to equity funding split. Figure 11.2.1 shows the cash flow and funding requirement profiles over the life of the project.



Figure 11.2.1: After-Tax Cash Flow and Cumulative Cash Flow Profiles



The pre-production capital cost for the base case is US\$866.2 million with an additional US\$80.4 million in sustaining capital (in real costs, the nominal value is US\$99.3 million). Mine closure costs of US\$5.6 million have been provided for, escalating at the US CPI.

The post-tax equity NPV is US\$1,504 million using a 6% discount rate. The post-tax IRR is 33.3%, and the payback period is 6.75 years. The project key performance indicators are presented in Table 11.2.1

Description	Unit	Results
Average Annual Ore Feed to Crusher and Sorter Plant (Steady State)	kt/a	780
Average Annual Spodumene Concentrate Production (5.2% Li2O)	kt/a	69.1
Average Annual Lithium Hydroxide Monohydrate (LHM) Production (LiOH)	kt/a	8.8
Life of mine (LOM) period	years	14.6
Total Ore Mined	Mt	11.48
Total Spodumene Concentrate Produced	kt	990
Total Coarse Feldspar produced	kt	1,950
Total Fine Feldspar produced	kt	587
Total Coarse Quartz produced	kt	1,000
Total Fine Quartz produced	kt	164
Total Lithium Hydroxide Monohydrate (LHM) Produced	kt	129
Capital Cost Estimate (nominal)	US\$ million	873
Stay in Business Capital Cost (nominal)	US\$ million	99
Gross Operating Cost Estimate (nominal)	US\$ million	2,514
Lithium Hydroxide Monohydrate (LHM) Average Market Price (Nominal)	US\$/t	61,737
Total Revenue (delivered to client, nominal)	US\$ million	7,999
By-Products Credits	US\$ million	310.1
Lithium Hydroxide Cost (Gross)	US\$/t thousand	19.41
Lithium Hydroxide Cost (after by-product credits)	US\$/t thousand	17.01
Project EBITDA (nominal LOM)	US\$ million	5,785
Net Present Value (NPV) (nominal, at 6% discount rate)	US\$ million	1,504
Internal Rate of Return (IRR)	%	33.30
Discount Rate	%	6
Project Payback Period	years	6.75
Exchange Rate	EUR:US\$	1:1.0855

Table 11.2.1: Wolfsberg Lithium Project Key Performance Indicators



11.3 Capital Structure

The base case was evaluated using a 40:60 equity to debt funding structure. The sources of funding can be seen in Table 11.3.1. An all-inclusive interest rate of 4% per annum was assumed for senior debt.

Funding Source	Value (US\$ thousand)	Percentage of Total (%)	Percentage of Total Funding Required (%)
Senior Debt	587,593	62.16	60.00
Mezzanine Facility	-	-	-
Pure Equity	391,729	41.44	40.00
Shareholder Loans	-	-	-
Working Capital Facility	-	-	
Early Operations Revenue (Project)	-34,002	-3.6	
Total Sources	945,319	100	100

Table 11.3.1: Funding Sources

The European Lithium Board confirmed on 22 December 2022 that they have executed a binding Offtake Agreement with BMW.

11.4 Sensitivity Analysis

The sensitivity analyses shown in Table 11.4.1 and Table 11.4.2 were carried out to assess the impact of changes in pre-production CAPEX, OPEX, and lithium hydroxide price on NPV and IRR.

Both the NPV and IRR are most sensitive to the lithium hydroxide price. A drop of between 15% and 20% in the sales price would result in an NPV₆ drop of US\$500 million. However, an increase in price would be strongly beneficial.

The project is less sensitive to changes in CAPEX and OPEX. A 20% increase in CAPEX results in a post-tax NPV6 of US\$1,393 million and an IRR of 28.84%. A 20% increase in OPEX results in a post-tax NPV₆ of US\$1,314 million and an IRR of 30.42%.





Figure 11.4.1: NPV sensitivity analysis

	Nominal Project NPV												
	Total Capex Flex												
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%			
	-20%	1,003,950	976,229	948,479	920,729	892,978	865,228	837,478	809,728	781,977			
	-15%	1,156,736	1,129,019	1,101,302	1,073,585	1,045,868	1,018,118	990,368	962,617	934,867			
-lex	-10%	1,309,522	1,281,805	1,254,088	1,226,371	1,198,654	1,170,937	1,143,220	1,115,502	1,087,757			
rice F	-5%	1,462,308	1,434,591	1,406,874	1,379,157	1,351,440	1,323,723	1,296,006	1,268,288	1,240,571			
les P	0%	1,615,053	1,587,358	1,559,660	1,531,943	1,504,226	1,476,509	1,448,791	1,421,074	1,393,357			
al Sa	5%	1,767,787	1,740,091	1,712,396	1,684,701	1,657,006	1,629,294	1,601,577	1,573,860	1,546,143			
Tot	10%	1,920,520	1,892,825	1,865,130	1,837,434	1,809,739	1,782,044	1,754,349	1,726,646	1,698,929			
	15%	2,073,254	2,045,558	2,017,863	1,990,168	1,962,473	1,934,777	1,907,082	1,879,387	1,851,692			
	20%	2,225,987	2,198,292	2,170,597	2,142,901	2,115,206	2,087,511	2,059,816	2,032,120	2,004,425			

Table 11.4.1: NPV sensitivity for price and CAPEX

	Nominal Project NPV												
	Tatal Canav Elay												
	Total Capex Fiex												
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%			
	-20%	1,804,502	1,776,807	1,749,112	1,721,417	1,693,721	1,666,026	1,638,331	1,610,636	1,582,938			
	-15%	1,757,140	1,729,445	1,701,750	1,674,054	1,646,359	1,618,664	1,590,969	1,563,260	1,535,543			
	-10%	1,709,778	1,682,082	1,654,387	1,626,692	1,598,997	1,571,299	1,543,582	1,515,865	1,488,147			
	-5%	1,662,415	1,634,720	1,607,025	1,579,330	1,551,621	1,523,904	1,496,187	1,468,469	1,440,752			
)	0%	1,615,053	1,587,358	1,559,660	1,531,943	1,504,226	1,476,509	1,448,791	1,421,074	1,393,357			
	5%	1,567,691	1,539,982	1,512,265	1,484,548	1,456,831	1,429,113	1,401,396	1,373,679	1,345,962			
	10%	1,520,304	1,492,587	1,464,870	1,437,153	1,409,435	1,381,718	1,354,001	1,326,284	1,298,567			
	15%	1,472,909	1,445,192	1,417,475	1,389,757	1,362,040	1,334,323	1,306,606	1,278,889	1,251,172			
	20%	1,425,514	1,397,797	1,370,079	1,342,362	1,314,645	1,286,928	1,259,211	1,231,488	1,203,737			

Table 11.4.2: NPV sensitivity for OPEX and CAPEX

12. Risk Evaluation

The project team undertook a formal risk assessment, and those risks with a residual resultant high rating are discussed in this section. Hazard and operability (HAZOP) studies were performed for the concentrator plant, hydrometallurgical plant, and the hydrofluoric acid storage and dispensing system. A QRA was performed for the concentrator and hydrometallurgical plant and was used to inform the capital contingency allowance. The QRAs benchmarked the project risk profile and confirmed it to be within the expected project maturity range.

Several key residual risks are presented below.

12.1 Mine, Concentrator, and Hydrometallurgical Plants Technical Risks

The surface weathering zone is not adequately modelled and may impact the underground crusher/sorter and backfill location or support requirements. Geotechnical core drilling for this location has been included in the drilling work programme to start in 2022/2023. Similarly, a surface geotechnical investigation is required to enable the efficient design of civil works and earthworks.

The ability to temporarily store up to 50,000 m³ of initial development mica schist, as well as 150,000 m³ of surface development topsoil and unsuitable excavated soil, at a nearby quarry, needs to be confirmed. It is assumed that amphibolite material will be collected from site as and when mined as only limited storage capacity is available.

Additional test work is recommended to ensure optimal process design solutions as the test work is not fully conclusive, for example, the ROM feed grade is on the low end of the test work range, and hydrometallurgical locked cycle test (LCT) circuit stability was not achieved.

Traffic volumes will raise community concerns in Frantschach-St Gertraud. Heavy traffic through Frantschach-St Gertraud should be minimised by limiting it to spodumene concentrate transport to the Wolfsberg plant. By-products and supplies should be transported using the road to Deutschlandsberg. Traffic volumes and a traffic management strategy during construction also need consideration.



Weather delays to construction need to be considered. The construction schedule should be planned to perform the civil construction in non-snow months and erect buildings before the snow starts.

12.2 Overall Project Risk

The following overall project risks should be considered:

- This DFS assumes the offtake agreement with BMW executed as per the agreement signed between EUR and Delivery starts in 2026 and European Lithium states that should this not be achieved, force majeure will apply for extension of time.
- European Lithium will structure the project financing to ensure that there is a mix of offtake finance, private equity, bank credit, export credit finance for equipment sourced in Europe, and shareholder funding. Discussions have been held with European, Austrian, and International investment agencies who are keen to assist in obtaining sufficient project finance on behalf of European Lithium.
- Project execution risk resulting from the lack of local experience in mining projects in Austria. European Lithium will recruit an experienced project development team to work with an EPCM contractor experienced in lithium projects. An operational management team with mining and metallurgical experience will be recruited, and mobilisation will be phased as required during the construction phase. Austria has a mining tradition and hosts Europe's second oldest mining university in Leoben, the Montanuniversität, which currently has over 3,000 students. An experienced mining contractor who is familiar with European conditions will be employed. The plant operating contractors, required at the plants' commissioning, will be similarly selected. A rigorous selection process of European construction contractors will be followed to assess their capability and capacity to execute their scopes of work.
- Permitting delays are likely to occur. An abridged environmental approval process could be applicable to the mine as key criteria such as the 10 ha surface development limit, avoidance of sensitive environmental sites, and no surface tailings facility, have been met. There are however approval risks, that could lead to a protracted approval process and implementation. A full EIA process is required for the hydrometallurgical plant. European Lithium will, following completion of the BFS, engage with the Carinthian and Federal Governments to determine the way forward with the approval process. A preliminary investigation indicated that the sale of spodumene may achieve a positive business case if delays in the approval of the hydrometallurgical plant are encountered.

12.3 Recommendations

The DFS outlines the following key items of work as recommended prior to implementation to optimise the design and schedule and mitigate implementation risks

12.3.1 Water Management

The following recommendations are proposed:

- Prepare a water impact assessment.
- Install continuous flow monitoring meters on some of the key watercourses surrounding the project area, e.g. Mitterbach and Prössingbach. By gauging the smaller catchments in the project area, the hydrological regime can be more accurately characterised and the rainfall runoff regime more accurately modelled. This may present an opportunity to reduce water management requirements.



- Collect more water quality data. More water quality samples (more frequent samples and at more locations) would support the detailed design of the dewatering system, water treatment plant, and particularly the water impact assessment (required as part of further work). This may present a potential upside for the Project.
- Although the dewatering system has been designed to be flexible and modular to accommodate any uncertainty in the actual groundwater inflows when mining, there will be future opportunities to reduce the uncertainty in the dewatering capacity requirements by better characterising the hydrogeology as part of any future drilling or during development of the decline. This will help to manage previously unmapped major water- bearing structures. It could also potentially reduce the dewatering requirements and present a potential upside for the project in the future.

12.3.2 Geotechnics

SRK proposes the drilling of seven boreholes: five that intersect the main underground plant areas and one on each of the two legs of the access declines. The boreholes have been located so that the collars are on existing roads/tracks within the project area.

The purpose of the boreholes is to sample the rock mass in the vicinity of the mine access decline, the ore sorter and backfill plant caverns, and the rock silos to provide data that will be used to assess the stability, stand-up times, excavation methods, and short- and long-term support requirements for these excavations, which will need to remain stable and be accessible to personnel and equipment for the whole life of the mining operation.

12.3.3 Mining

SRK recommends that the following be undertaken prior to project construction:

- Conduct a discrete event simulation of the underground and surface materials handling, assessing the truck cycle times including all the required battery changing/charging and all the material movements.
- Set up offtake agreements for the amphibolite material for sale as and when produced.
- Assess industrial use for the mica schist (or a portion thereof) to reduce pressure on waste management while in production.
- Incorporate updated designs for the ore sorter caverns and ensure that an area is available for the mobile crusher to be installed.
- Develop the design of areas for underground workshops, crib rooms and explosives storage.
- Confirm with the owners of the local quarry that the mica schist can be (temporarily) stored at their facility (a quantity of up to 50,000 m³).
- Continue discussions with local suppliers to optimise the supply rates for consumables and equipment.
- Contact a wider range of mining contractors (possibly non-German speaking) to ensure that the preferred mining contractor can be identified and engaged for the project.
- With regard to the ventilation design, SRK recommends that further optimisation be undertaken on, for instance, electrical power consumption according to ventilation demand by activities



and/or air quality in workplaces, and by the use of variable speed drives (VSDs) and active centralised management to minimise ventilation power consumption wherever practicable.

12.3.4 Acid Rock Drainage and Metal Leaching (ARDML) It is recommended that the ARDML section be updated when the outstanding results of the tailings (static leach tests) and cemented paste backfill (CPB) test work (monolithic leach tests (MLTs)) and some static leach tests of the individual components) become available. Further work is recommended to assess the long-term behaviour of the project's mine rock materials to evaluate the potential mine contact water quality and its constraints. 12.3.5 Concentrator Metallurgical Test work and Mineral Processing Additional bench-scale and locked cycle open-circuit test work is recommended to further characterise the flotation response and improve the metallurgical performance projections for the lower ROM feed grade of 0.64 Wt% Li₂O. It is not believed that this test work will have a material impact on the overall capital and operating cost estimates derived in the current study phase, and it is furthermore expected to potentially offer an opportunity for improvement once the conditions have been fully optimised.

to potentially offer an opportunity for improvement once the conditions have been fully optimised.

12.3.6 Hydrometallurgical Plant Metallurgical Test work and Mineral Processing

Additional test work is recommended to determine the possible build-up of certain impurities, demonstrate the achievement of stability over a series of sequential LCT runs, and to determine the use of seed material, the optimal percentage of solids (20% to 50% w/w) at leach, and other optimising opportunities.

12.3.7 Infrastructure

DRA recommends the following infrastructure investigations:

- An updated Logistics/Traffic Study to consider the various options for the transportation of materials between Wolfsberg and the mine site. In 2018, Planum GmbH carried out a performance verification of the road transport to the mine site on the L148 and L619 on behalf of European Lithium.
- A surface civil geotechnical investigation, which also assesses the suitability of development materials for backfill and optimises off-site storage of in-situ materials.

12.3.8 Environmental and Permitting

Permitting is a critical path activity. No work pertinent to the permitting of the project has commenced yet. The permitting roadmap will be determined in consultation with regulatory authorities based on the information in the DFS report and a formal screening process (Section 7.4).

The following permits are required:

• For the mine and concentrator plant, a mining licence must be obtained in accordance with MinroG,. A condensed approval process could be possible as the mine has a small surface footprint (10ha), but a protracted full EIA process may be required. Several plans will have to be submitted as part of the approval process/ processes (Section 7.4). The plan that will be



subject to most scrutiny will be the mine waste management plan, which must prove there will be no impact on groundwater or surface water during mining and post closure.

- For the hydrometallurgical plant, a full EIA process is anticipated. The permitting of the plant is likely to be under the Austrian Trade Act and the District Administrative Authority. A preliminary investigation indicated that the sale of spodumene may achieve a positive business case if delays in the approval of the hydrometallurgical plant are encountered.
- Secondary approvals including forest clearing, nature conservation, water and emissions permits and land zoning approvals if any rezoning of land is required. These could be rolled into EIA approval processes.

This announcement has been approved for release on ASX by the Board of Directors.

Yours faithfully European Lithium Limited

-END-

Transaction with Sizzle Acquisition Corp

The Company has entered into a business combination agreement (the **Transaction**) with Sizzle Acquisition Corp, (Nasdaq: SZZL) (**Sizzle**), a publicly traded special purpose acquisition company, (see EUR announcement 26 October 2022). Under the business combination agreement, the Company's wholly owned subsidiary, European Lithium AT (Investments) Ltd and its Austrian subsidiaries, ECM Lithium AT GmbH and ECM Lithium AT Operating GmbH, will combine with Sizzle via a newly formed, lithium exploration and development company named "Critical Metals Corp." which is expected to be listed on NASDAQ in the first half of 2023, under the symbol "CRML."

Upon the closing of the Transaction, Critical Metals Corp will own the Wolfsberg Project and a 20% interest in the Weinebene and Eastern Alps Projects currently held by EUR. EUR will be the largest shareholder of Critical Metals Corp, which represents an approximate 80% ownership interest, and continue to be listed on the ASX as a mining exploration and development company.

The Transaction is subject to approval by Sizzle shareholders, the effectiveness of a Form F-4 Registration Statement filing under U.S. securities laws, and other customary requirements.



Appendixes

1. Compliance with ASX Listing Rules

Listing rule 5.8

Item	Location of information in announcement
Geology and geological interpretation	p. 13-+15
Sampling and sub-sampling techniques	p. 15, p. 67-69
Drilling techniques	p. 14-15, p. 67-68
The criteria used for classification, including drill and data spacing and	р. 70-71
distribution. This includes separately identifying the drill spacing used to	
classify each category of mineral resources (inferred, indicated and	
measured) where estimates for more than one category of mineral resources	
are reported	
Sample analysis method	p. 15, p. 69
Estimation methodology	p. 16-19, p. 76-83
Cut-off grade(s), including the basis for the selected cut- off grade(s)	p. 17, p. 82, 87-89
Mining and metallurgical methods and parameters, and other material	p. 22-36, p. 83-84
modifying factors considered to date	

Listing rule 5.9

Item	Location of information in announcement
Material assumptions and the outcomes from the preliminary feasibility study or feasibility study (as the casemay be). If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported	Economic Analysis p. 53-56
The criteria used for classification, including the classification of the mineral resources on which the orereserves are based and the confidence in the modifyingfactors applied	Ore Reserves Estimate p. 17-19 p. 84-85
The processing method selected and other processing assumptions, including the recovery factors applied and the allowances made for deleterious elements	p. 89-94
The basis of the cut-off grade(s) or quality parameters applied	p. 17, p. 82, p. 87-89
Estimation methodology	p. 16-19, p. 76-83
Material modifying factors, including the status of environmental approvals, mining tenements and approvals, other governmental factors and infrastructurerequirements for selected mining methods and for transportation to market	p. 95-96
The criteria used for classification, including the classification of the mineral resources on which the orereserves are based and the confidence in the modifyingfactors applied	p. 101-102



Listing rule 5.16

Item	Location of information in announcement
All material assumptions on which the production target is based. If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported	Life Of Mine and production targets p. 20-21 Economic Analysis p. 53-56
A statement that the estimated ore reserves and/or mineral resources underpinning the production target has been prepared by a competent person or persons in accordance with the requirements of the JORC Code.	p. 17-19
 The relevant proportions of: Probable ore reserves and proved ore reserves; Inferred mineral resources, indicated mineral resources and measured mineral resources; An exploration target; and Qualifying foreign estimates, Underpinning the production target. 	Ore Reserves Estimate p. 17-19

Listing rule 5.17

Item	Location of information in announcement
All material assumptions on which the forecast financial information is based. If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported	Economic Analysis p. 53-56
The production target from which the forecast financial information is derived (including all the information contained in rule 5.16)	Life Of Mine and production targets p. 20-21 Economic Analysis p. 53-56
If a significant proportion of the production target is based on an exploration target, the implications for the forecast financial information of not including the exploration target in the production target	N/A – none of the production target is based on an Exploration Target.

2. Reliance on Experts

Specialist subcontractors and consultants were appointed by European Lithium to conduct the exploration drilling, mine design, metallurgical test work, and marketing studies.



DRA Projects (Pty) Ltd (DRA) was appointed to integrate the inputs of all the consultants into the BFS and undertake the engineering, and capital and operating cost estimates for the processing plant and infrastructure.

European Lithium engaged the following consultants for the indicated areas of expertise:

- Hon.-Prof. Mag. Dr Richard Göd (ex-Chief Geologist Minerex, Austria) Geology adviser
- Technisches Büro für Geologie (Austria) Exploration management
 - Geo Unterweissacher (Austria) Geologist
 - Mine-IT Sanak-Oberndorfer GmbH (Austria) Resource evaluation
 - Mr Don Hains (HainsTech) (Canada) Competent person for JORC resource reporting
 - SRK Consulting (UK) Ltd Mine design, geotechnical design, and hydrogeology (water management)
 - Paterson & Cooke (UK) Tailings disposal
 - Dorfner ANZAPLAN (Germany) Metallurgical test work
 - DRA Projects (Pty) Ltd (South Africa) Concentrator and infrastructure study
 - SENET (South Africa) Hydrometallurgical plant study (on behalf of DRA)
 - Umweltbüro GmbH (Austria) Environmental baseline studies
 - DLA Piper (Austria) Mining Law
 - Haslinger Nagele (Austria) Permitting regime
 - Kärntner Montanindustrie GmbH (KMI) (Austria) Liaison with Austrian Authorities
 - Benchmark Mineral Intelligence (UK) Marketing study for lithium carbonate/hydroxide
 - Orykton Consulting (Greece) Market evaluation of spodumene and by-products
 - Gambosch Consulting Pty Ltd (Australia) Analysis of Lithium market
 - Cresco Project Finance (Pty) Ltd (South Africa) Financial model (on behalf of DRA)
 - ZAMG (Central Institution for Meteorology and Geodynamics) (Austria) Meteorology Seismic-Snow-Wind loads for both project sites.

The information in this report which relates to Exploration Results and Mineral Resources is extracted from the Company's ASX announcements released 5 April 2018 (European Lithium Completes Positive PFS) 1 December 2021 (11% Increase in total Measured, Indicated and Inferred Resource), 2 December 2021 "High Quality Battery Grade Lithium Product Results Wolfsberg" and 9 November 2021 (EUR increased Measured and Indicated Resource by 54%) which are available to view on (https://europeanlithium.com/). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant 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 announcements.

The Competent Person who prepared the LOMP and Ore Reserve Statement as reported herein is Mr Jurgen Fuykschot, MSc, MBA, MAusIMM (CP), a member of and Chartered Professional in the AusIMM, which is a Recognised Professional Organisation included in a list promulgated by the ASX from time to time. At the time of completing the majority of the work, Mr Fuykschot was a full-time employee (Principal Consultant (Mining)) at SRK, with over 24 years' experience in the mining and metals industry. Mr Fuykschot has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Fuykschot has been responsible for the reporting of Ore Reserves on various properties internationally for the past ten years.

Mr Chris Bray, BEng, MAusIMM (CP) is responsible for review of the LOMP and Ore Reserve Statement as reported by the Company. Mr Bray is a full-time employee and Principal Consultant (Mining) at SRK



since 2006. He is a Member of and Chartered Professional in the Australasian Institute of Mining and Metallurgy and a Mining Engineer with 25 years' experience in the mining and metals industry, including operational experience in underground mines as well as mine planning and review experience on underground lithium projects, and as such qualifies as a CP as defined in the JORC Code. He has also been involved in the reporting of Ore Reserves on various properties internationally for over 10 years.

3. Appendix 3: JORC Code 2012 Table 1.

Section 1. Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

ASX Release 1 December 2021 – EUR announces 11% increase in Total Measured, Indicated and Inferred Resources to 12.9 Mt at 1.00% Li₂0.

Criteria JORC Code Explanation	Commentary
 Sampling Techniques Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Diamond drilling used for material collection. European Lithium Limited completed 20 deep hole diamond drill holes with a total length of 7,953.3 m in Zone 1. Drill hole diameter is considerably large, and orientation is approximately perpendicular to the dip of pegmatite veins to ensure that each sample is representative of veins it intersects. Sample intersections are contact to contact with a minimum sample length of 0.1 m up to 1 m length. After cutting a ¼ split of HQ were sent to ALS laboratories for assay.

Criteria	JORC Code Explanation	Commentary
Drilling Techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 Diamond drilling used for the entire program. Overburden drilling was performed in PQ diameter and for final core drilling HQ diameter was used. 3 m length standard coring tube is used. The drill core was not orientated.
Drill Sample Recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Core recovery was measured for all runs and recorded into "Core recovery log" then later transferred into an Excel spreadsheet template for import to the database. Overall core recover is excellent, and average is 97.63%.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 Both lithology and geotechnical logging was undertaken by trained professional geologists. For lithology logging descriptions were done over the full length of drill core on paper "Lithology logging form", recorded rock type, colour, foliation and structural characteristics, mineralogy, core recovery and a graphic log representative of the lithology. Paper logs are later transferred to Excel spreadsheet template for import to the database. The geotechnical logging is undertaken on a domain run interval basis with breaks made at points where the rock mass characteristics change. Data were recorded into previously prepared Excel spreadsheet logging templates. For the drilling campaign individual photographs of each core box were taken using a Panasonic Lumix GX80 camera with a Lumix G Vario 12 to 32 optics. The photography include full metadata. To ensure consistency of scale, a fixed frame was used to shoot down the core boxes at a fixed height. The core

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	Criteria	JORC Code Explanation
	Sub-Sampling Techniques and Sample Preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.
	Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.
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Commentary box is oriented that the starting depth is at the top left corner of the photograph and the drill hole number, box number. starting and ending depth of the core with a scale bar included. Additionally a colour reference chart was included to enable calibration and correct reproduction of the digital images.

Cutting of core was performed in the core shed after logging and

Only mineralised intervals are cut in half in first instance and then one of the pieces split in two quarters. The cutting is done

Samples with visible mineralisation (spodumene) are taken

regardless of the lithology and grade and ranging from 0.1 m to

• All remaining core is stored securely in the Wolfsberg core shed.

The CP is of the opinion that the sample size is appropriate to

The QA/QC actions taken to provide adequate confidence in

data collection and processing are discussed above. In general QA/QC procedures involving duplicates in every stage (core duplicate, crush, pulp laboratory as well laboratory duplicates) is

implemented. Duplicates, standards and blanks were introduced

every 20 samples (5% frequency). Acceptable levels of accuracy

All sample preparation and assays were undertaken by ALS

(Ireland), which is ISO 9001:2015 and ISO 17025:2017

and precision for standards and blanks were obtained.

Sample preparation was using ALS procedure PREP31Y.

The core photography was done in wet conditions.

by technicians and supervised by geologists.

the grain size of the target mineralisation.

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sample mark up.

1 m in thickness.

accredited.

•

The core is cut along core axis.


Criteria	
Verification of sampling and assaying	 The by either in by either in The use of Document data verifing protocols. Discuss a
Location of data points	 Accuracy (collar an and other Specificat Quality an

Criteria	JORC Code Explanation	Commentary
		 Lithium analysis was using ALS procedure LIOG63 by four acid digestion and analysed by ICP.
		 Combination of rare earth and trace elements including major oxides analysed by ME-MS81 and ME-ICP06 including LOI.
		 Certified standards used are AMIS 0341, AMIS 0342 sourced form African Minerals Standards and GBW 07152, GBW 07153, NCS DC 86303, NCS DC 86304 and NC DC 86314 sourced from Brammer International Standards.
		Blank material was limestone BCS CRM 393.
erification of mpling and	The verification of significant intersections by either independent or alternative company personnel.	• Mineralised intersections visibly identified, verified and labelled by logging geologists.
saying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	• The independent CP has reviewed the drill logs and reported sample intervals and compared them against the core photos. The CP is satisfied that the sample intervals accurately represent the reported mineralised intervals.
	Discuss any adjustment to assay data.	• All the primary data was transferred into standardised Excel spreadsheet templates and imported into an Access database.
		 Li assays were converted to Li2O for reporting using a conversion of Li2O% = Li% * 2.153.
		 An electronic database containing collars, surveys, assays and geology is maintained by Mine-IT, an independent mining information consultancy based in Leoben, Austria
ocation of data bints	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	• Drill hole collar survey is conducted by an external licensed surveyors company, using a total station instrument 1600 Leica with standard accuracies of +/- 2 mm per kilometre. All coordinates are tied into the state triangulation network and provided in the Austrian Gauss Kruger coordinate system (EPSG: 31252).



Criteria	JORC Code Explanation	Commentary
		 Drill hole deviation is carried out internally by the drilling company GEOPS using DeviShot, with readings every 60 m for azimuth and inclination.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Target infill drilling is designed to close section spacing to no more than 100 m and typically less than 50 m. The current drill program is a continuation of drill programs undertaken in 2016 to 2019. Pegmatite intersections in drill core were sampled and assayed on widths up to 1 m. For veins exceeding 1 m the samples up to 1 m were prepared, assayed separately and composited subsequently.
		announcement 23 April 2018).
Orientation of data in relation to geological	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	Drill hole was perpendicular to the dip of the pegmatite veins.No sampling bias was introduced.
structure	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	
Sample security	• The measures taken to ensure sample security.	 All drill core was placed into labelled PVC core boxes with drill hole and box number and run intervals. Drill core boxes were transferred to the Wolfsberg core shed and securely stored. All samples for sample preparation and assay were transported to ALS (Ireland) by secure courier. Chain of custody was followed insuring that only dedicated personnel from European Lithium team and ALS lab had access to the sample at all stages of sampling process.

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Criteria	JORC Code Explanation	Commentary
		• Remaining coarse and pulp duplicates are returned after assaying and Stored in Wolfsberg core shed.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	• Due to Covid-19 situation, no physical audit by the CP was done. This is now planned in Q1/2022. The CP had previously undertaken site visits in 2014 and 2016 and has monitored drilling, logging and QA/QC procedures on a regular basis throughout the various drill campaigns.



Section 2. Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.

Criteria	JORC Code Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	• The 100% owned subsidiary in Austria, ECM Lithium AT GmbH, has 54 exploration licences in the Wolfsberg project area valid to 31 December 2024 and renewable for additional 5-year terms following demonstration that exploration work has been undertaken on any one licence in the preceding 5 year term.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	 European Lithium AT GmbH has 11 mining licences in the Wolfsberg project area. These are held in perpetuity as long as the terms of the mining licence are met. These licences obligate the company to mine for at least 4 months per year but this requirement has been suspended by the mining authority until 31 December 2021 to allow technical studies to be undertaken. Land access is granted by the landowner who waived all rights to object to development of an underground mine on his land which is a commercial forest. European Lithium AT GmbH is obliged to pay the landowner compensation for use of forest roads and any emissions. This is documented in a waiver agreement dated 15 April 2011. A compensation rate of €2,000/month was agreed with the landowner in 2015 for this current work programme. There was a dispute with the landowner which has been referred to arbitration. Meanwhile the compensation amount of €2,000/month was being paid. The dispute has been settled with an amendment to the agreement from 15 April 2011, dated 27 May 2021. An amended compensation amount of €2,400/month is to be paid by European Lithium AT GmbH. All other clauses of the 15 April 2011 agreement remain in place.

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Criteria	JORC Code Explanation	Commentary
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The project was previously owned by the Austrian state company, Minerex, who conducted extensive exploration of the project area in 1981 to 1987. In total 9,940 m³ of surface trenches, 12,012 m of diamond drilling from surface, 4,715 m of diamond drilling from underground and 1,389 of underground mine development were undertaken. A twin hole drill and data verification program completed in 2016 (see ASX announcement 16 November 2016) enabled incorporation of historic data in the resource estimation.
Geology	Deposit type, geological setting and style of mineralisation.	 The spodumene bearing pegmatites occur in form of veins within a regional anticline. The pegmatite veins are intruded into amphibolite and mica schist host rocks strictly concordant to their foliation. On the northern limb of this anticline, which is known as Zone 1, the strata uniformly strikes WNW-ESE(average 120 °) and dips to the NNE at an average of 60 °. The amphibolite hosted pegmatites (AHP) are stratigraphical hanging wall position relative to the mica schist hosted pegmatites (MHP) although they overlap. The AHP has greyish to greenish spodumene crystals aligned sub-parallel to the pegmatite contacts and average about 2 to 3 cm in length reaching a maximum of 15 cm. Spodumene crystals are more or less homogeneously distributed within a fine-grained matrix of feldspar and quartz with flakes of muscovite. The MHP lack the typical features and textures of pegmatites having undergone a penetrative metamorphic overprint almost completely recrystallising the original pegmatitic minerals. The spodumene minerals are in the form of mm sized lenticular grains embedded into very fine feldspar, quartz and muscovite matrix. A comprehensive description of the geology and mineralisation is provided in the 'Independent Geologists Report' contained within the 'Second Replacement Prospectus' of 28 July 2016 that can be found on the company website www.europeanlithium.com.



Criteria	JORC Code Explanation	Commentary
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar 	• All the drill collar, drilling, downhole survey and associated geochemical, and logging data was transferred to standardised Excel spreadsheet templates for import to the Access database. A full list of drill hole coordinates is provided in the Appendix.
	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 The current announcement refers to the results received for 20 holes drilled in 2021. Assay data and major intercept data for holes drilled in exploration programs in 2016 to 2019 has been previously reported (see ASX announcements of 10 March 2017, 17 April 2017, 31 May 2017, 8 June 2017, 28 June 2017, 04 February 2018 and 27 April 2018). Refer to ASX announcement 9 November 2021 for plan and cross sections. Drill location data for the 20 holes form 2021 are summarised in the Appendix.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 No cut-off grades were used as the proposed mining method (longhhole open stoping) requires taking all material within the stope width. Pegmatite veins with a minimum width of 0.1 m were sampled contact to contact and sample lengths up to 1.0 m were taken and aggregated to provide a composite grade for the width of the intersection. No metal equivalent values are reported.
Relationship between mineralisation widths and	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	 The drill holes were made perpendicular to the dip of the pegmatite veins and intersections. The calculation of true thickness is based on the measured contact angle (ß) between host rock and pegmatite veins.

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Commentary • Calculations follows the formula: True thickness = Measured

 $\begin{array}{l} MT=measured thickness\\ T_T=tyse thickness\\ \alpha=dip angle of bombole\\ \beta=measured dip angle\\ \gamma=90 \circ \beta\\ T_T=MT^*ons(\beta) \end{array}$

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• See Appendix for a representative cross section showing inferred extensions to the interpreted geological model.

• All grades are reported from ALS labs. Assay data for all 20

batches for completed holes have been received and are listed in

thickness * cos(ß)

the Appendix.

	intercept lengths	 If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').
	Criteria	JORC Code Explanation
	Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.
	Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results
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<i>Other substantive exploration data</i>	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 All observed data are recorded in separated files. This includes Geotech logging, density measurements, core recovery, and magnetic susceptibility. Density measurements are by the Archimedes method. Density samples are taken at regular intervals for all core and all lithological units.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 No current plans for Zone 1. Requirements for additional drilling Zone 1 and Zone 2 still to be determined.



Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.

Criteria	JORC Code Explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Historical data derive from paper works from Minerex, the company which executed the exploration program in the 1980s. Data have been scanned or manually transcribed. There were multiple checking phases by comparing data with different sources (e.g. laboratory reports, annual summary reports, geological maps, core logging, etc.). Few contradictions were detected and any observed discrepancies were documented. Finally, the data were compiled into an Access database. See ASX announcement 5 April 2018 New data (2016 to 2021) were acquired and processed under a strict QA/QC procedure. A visit is planned for Q2/2022
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• The competent person has visited the site 24 to 31 October 2015 and 24 to 27 August 2016 to review twin hole drilling for historic data verification and resource drilling. The CP did not observe any areas of concern during the site visits and data review. Covid-19 restrictions prevented a site visit in 2021. A visit is planned for Q2/2022.

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Criteria	JORC Code Explanation	Commentary
		 An audit and site visit of application of the QA/QC procedures tool place 24 to 27 August 2016, with no deviations found. Since then, audits of QA/QC procedures have been undertaken in conjunction with review of drill data in 2018 and 2021. In the opinion of the CP. QA/QC procedures are well developed and no areas of concern have been identified.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. 	 The fundamental basis of the geological interpretation (vein identification) was done by Minerex. By being in charge over the whole period of the exploration they are assumed to have the best knowledge about the deposit. HonProf. Mag. Dr Richard Göd, the geology adviser to European Lithium Limited, was the Chief Geologist in charge of the Minerex exploration. The geological experts in charge now have not detected any flaws in the previous works and interpretations.
	 The factors affecting continuity both of grade and geology. 	 Undergound mine development was carried out by Minerex to intersect the pegmatite veins and follow them by drifting along strike, which confirmed the geological interpretation and demonstrated the vein continuity.
		• Extensive mineralogical studies were made as part of the metallurgical test work programme of Minerex.
		• Data comprise listings (samples, etc.) and a wide range of geological maps. Although not directly used for resource estimation they are extremely helpful for understanding the deposit characteristics.
		 So far, no alternative interpretation of the geology has been considered.
		• The resource estimation recognises the characteristics of the vein structure and makes estimates on a vein by vein basis.
		• The pegmatite intrusion visibly shows continuity along strike as evidenced by the underground drifting. Continuity down dip is evidenced from drill hole profiles.

Dimensions The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. The maximum vertical extension is about 400 m (1,650 mast) along strike due to varying exploration strategies in the past. The veins are steep to medium dipping and most of them have expressions on the surface. It is expected that the deposit continues deeper than currently explored. The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate taccount of such data. The availability of check estimates of the estimation of eleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	Criteria	JORC Code Explanation	Commentary
 The nature and appropriateness of the estimation modelling techniques The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The currently explored deposit has an extension in strike of 1,700 m. The maximum vertical extension is about 400 m (1,650 masl to 1,250 masl) along strike due to varying exploration strategies in the past. The veins are steep to medium dipping and most of them have expressions on the surface. It is expected that the deposit continues deeper than currently explored.
 Estimation and modelling techniques The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. For project evaluation vein thickness and grade are of paramount importance. For this situation a semi-3D modelling approach is most appropriate for both key figures. This in in particular true for vein thickness, which can by this approach be treated by statistical and numerical methods, while by alternative solutions it has to be indirectly derived from wireframed surface distance. The modelling was done in Surpac and Leapfrog, with some adaptations for this particular application. Interpolation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 			 The width of the veins averages 1.45 m with maximum width recorded at 5.5 m. Intersection lengths in the boreholes were logged but not sampled if less than 0.1 m.
	Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	 For project evaluation vein thickness and grade are of paramount importance. For this situation a semi-3D modelling approach is most appropriate for both key figures. This in in particular true for vein thickness, which can by this approach be treated by statistical and numerical methods, while by alternative solutions it has to be indirectly derived from wireframed surface distance. The modelling was done in Surpac and Leapfrog, with some adaptations for this particular application. Interpolation parameters are derived from variography analysis. Variogram ranges are about 75 m for thickness and 75 m for grade, however both with evidence of a significant nugget ratio. The search distance is set at 100 m for both.



Criteria	JORC Code Explanation
	 Any assumptions behind modelling of selective mining units.
	• Any assumptions about correlation between variables.
	 Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade sutting an experiment.
	 The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

Variogram para	• Variogram parameters for lithium grade and vein thickness are:				
Parameter	Grade	Thickness			
Nugget (C0)	0.081	0.24			
Sill (C1)	0.34	1.12			
Range (R1, m)	75	75			
Model	Spherical	Spherical			
Maximum distance (m)	100	100			

- Extrapolation is limited to 50 m beyond the interpretation for classification as inferred resource. For the measured resource a boundary is used which represents the hull of the samples (no extrapolation). For the indicated resources another boundary is applied which allows for a moderate extrapolation of 20 to 40 m. parameters refer exclusively to the strike/dip extension, as thickness is a model parameter.
- The results correlate well with prior publications of Minerex. In the very beginning of the project the veins were modelled by standard wireframing with very similar results as far as volume is concerned.
- The anticipated mining method (longhole open stoping) necessitates taking all material in the stope, thus no cut-off is applied. The reported grade is the average grade across the vein, including interbedding, assuming a minimum width of 2 m.
- By-products are not considered in the resource model estimate.

* *



	Criteria	JORC Code Explanation	Commentary
			 The only element that is of potential concern is the Fe2O3 concentration of the spodumene concentrate. That may limit access to the high quality glass/ceramic market, but is of no concern if converting to lithium hydroxide.
			 The block dimension of the model is 25 m × 25 m (with variable thickness). The size is very much determined by assumed stope dimensions rather than blast dimensions. This is because the mining methods under consideration have to extract the full panel size of a stope. Likewise modelling of the transverse grade distribution is not relevant because the whole width has to be mined as a total.
			 Selectivity in mining is assumed limited to selection and dimensioning of stopes. Future deposit modelling investigations will focus on vein regularity because this is of relevance for dilution.
(O)			 Currently only thickness and grade is under investigation. No reasonable correlation exists for these two parameters.
			 The geological interpretation refers to the vein identification, i.e.assigning distinct drill hole intersections to a distinct vein. This is done primarily on basis of the global geological structure, which is fairly well known. For adjacent located veins however, this is sometimes ambiguous. This is the prime basis for modelling, which handles on the interpolation between these geologically defined nodes for each vein.
			 Before modelling was undertaken, an intensive study on the sample data (grade, partially thickness) was conducted. The distributions of both are reasonably similar to a Gaussian distribution and do not show any tendency for outliers. Hence no particular measures for capping must be applied.
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to the high quality glass/ceramic market, but is of no con converting to lithium hydroxide.	icern if
 The block dimension of the model is 25 m × 25 m (with v thickness). The size is very much determined by assumed dimensions rather than blast dimensions. This is because the methods under consideration have to extract the full panel si stope. Likewise modelling of the transverse grade distribution relevant because the whole width has to be mined as a total 	variable I stope mining ize of a n is not

- ivity in mining is assumed limited to selection and sioning of stopes. Future deposit modelling investigations will on vein regularity because this is of relevance for dilution.
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	Criteria	JORC Code Explanation			(Commenta	ry		
)			 Mode far as rock t driftin vein id Resources below. 	l results are a possible thi type Compar g. An essent dentification, by vein and	Ilways st s is don isons w ial part i which is resourc	atistically e also for ere also c s also the s still in pro e classific	compared v groupings s done with re evaluation ogress. ation categ	with samp such as b ecords fr of the pla ory are s	ble data. As by the host om former ausibility of ummarised
			Vein	Measured an	d Indicated	1	Inferred		
			Code	Vol (m³)	% Li20	Thick (m)	Vol (m³)	% Li20	
			0.0	69,198	0.70	1.01	38,297	0.65	
			0.1	100,271	0.87	1.57	56,247	1.40	_
			0.2	23,820	1.38	0.93	22,149	1.24	
			0.3	59,695	0.86	1.04	40,342	0.97	_
			1.1	217,673	1.07	1.32	96,328	0.86	_
			1.2	283,799	0.64	1.87	74,868	.055	_
			2.1	295,988	1.31	1.57	85,590	1.05	
			2.2	155,731	1.24	1.13	41,000	1.46	
			3.1	326,297	1.40	1.37	98,673	1.00	
			3.2	136,193	1.23	0.83	65,981	1.17	
			4	202,067	0.89	0.95	115,054	0.81	
			6.1	114,146	0.74	0.92	56,701	0.72	
			6.2	528,001	0.95	1.52	140,513	0.78	
			7	1,021,712	1.02	2.11	186,142	0.78	
			8	47,218	0.63	1.40	35,937	0.68]
			Sum	3,581,809	1.03	1.45	1,153,822	0.90	
			Tonnes	9,742,520			3,138,396	_	

Criteria	
Moisture	• Whether natural m moisture
Cut-off	Whether
parameters	natural moisture
Mining factors or assumptions	 Assumption minimum r external) n the proce eventual en methods
	methods Resources
	case, this basis of th

teria	JORC Code Explanation	Commentary
		All resource classes include potential crown pillars.
		• The model results have been reviewed by the CP in Leapfrog to verify vein assignments by drill hole and intersection.
e	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The principle calculation is a volumetric one based on vein geometry. For the transformation into tonnage the density figure determined during data validation is used (dry). Considerations on moisture will be subject of the mining investigations.
ters	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	 Currently no cut-off for either thickness or grade is used. Indirectly a cut-off for thickness occurs because only samples with a length of more than 0.5 m are sampled and hence only these contribute to the resources. The mining method proposed (longhole open stoping) requires taking the full width of the stope; regardless of grade, thus no cut-off grade is used. For modelling purposes, a minimum mining width of 2 m is assumed.
factors or tions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	 Currently no particular assumptions for mining methods are made. This is with the exception of the full-vein-width (semi-3D) modelling approach. This is based on the assumption that in every case the full width has to be mined and no selectivity is conceivable for any separation within the vein. For this reason, the modelled grade includes also the dilution due to interbeddings which are observed regularly. The Minerex PFS concluded that longhole open stoping and cut and fill were appropriate mining methods. Minimum sampling width was 0.5 m. the economic minimum mining width still has to be established taking into account current studies to remove waste dilution by sensor based sorting. 13% of the sample composites had interbedding which has

Criteria	JORC Code Explanation	Commentary
		 been included as internal dilution within the resource estimate. Mining studies undertaken in 2017 by SRK Consulting included a preliminary mining layout utilising a standard stope shape of 25 m high by 75 m wide with 4 m rib and sill pillars.
		 Based on the mining method selection criteria, SRK (2017) further recommended that the most appropriate underground mining method to be considered for low cost mining at Wolfsberg is a variant of sublevel stoping called longhole open stoping. Pillar support and partial backfill was recommended for assure stability.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Minerex conducted extensive metallurgical testing and concluded that a 6% Li2O spodumene concentrate could be produced by crushing, grinding, flotation and magnetic separation. Saleable by- products of feldspar, quartz and mica were also obtained which have value with the projects location in central Europe. Limited test work also demonstrated that the spodumene concentrate was amendable to conversion to lithium carbonate.
		 Complex test work at the company's pilot plant facility (Dorfner ANZAPLAN, in Hirschau, Germany) with mined bulk samples from the existing underground mine (2,500 t) has been undertaken by the company and did show that the spodumene concentrate from Wolfsberg can be successfully processed to battery grade lithium carbonate and lithium hydroxide, using commercially proven technology (see ASX announcement 5 April 2018). This coupled to the fact that the deposit is technically and economically viable as determined by a PFS (see ASX announcement 5 April 2018), and may be mined economically using longhole open stoping, means that the deposit meets the criterion for eventual economic extraction as required for a resource to be stated under JORC (2012).



Criteria	JORC Code Explanation	Commentary
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	 Waste storage on surface is constrained by the 10 ha limit that triggers a detailed EIA for the mine. Some of the waste from mining and processing will sold as by-product and the rest will be used as fill in the mine. There will be no tailings storage facility on surface. At present, assurance that by-products can be sold has not been obtained yet. The mine area is in a commercial forest and there are no nature conservation or water protection zones. Environmental permitting processes have not commenced yet, the permitting processes could be protracted and could delay project execution. The material placed in the mine workings needs to characterized and it must be proved that the backfill will not pollute water resources. Mine waste and closure plans still need to be prepared and approved.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 The measurements of density for pegmatite and the major host rocks, amphibolite and mica schist were obtained using the Archimedes method. For mineralised pegmatite zones routine density information was determined at regular intervals every 0.5 m. The procedure follows the Archimedes method by weighing samples of full core diameter in 10 to 15 cm lengths in air and in water. Results obtained form 565 samples of pegmatite were 2.70 ±0.07; from 1,837 amphibolite samples (3.00 ±0.1) and 2.83 ±0.08 for 2,936 samples of mica schist. An average density of 2.73 t/m³ has been used to convert volumetric measures to tonnage within the mineralised resource envelope, regardless of pegmatite type.

Criteria	JORC Code Explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). 	 Former exploration activities comprise underground drifts following some selected veins. In this way the continuity of theveins was demonstrated and investigated, as well as the reasons for the occurrence of disturbances. This appraisal is supported by the statistical analysis of the variability based on the drill hole data. Measured resources are stated for the veins immediately
	 Whether the result appropriately reflects the Competent Person's view of the deposit. 	 above and below the underground workings that visibly show continuity to the extent of the underground drilling which results in profiles at 50 m along strike. Indicated resources are stated for the main cross-sections, where there were at least three drill holes not more than 50 m apart. Inferred resources are stated for the main cross sections, where there are at least three drill holes not more than 75 m apart
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The resource estimate has been prepared by Mine-IT Sanak Oberndorfer (Prof. Dr. Thomas Oberndorfer) and audited by the independent competent person, Mr Don Hains, P. Geo.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant 	 The relative accuracy of the mineral resource estimate is reflected in the reporting of the mineral resource as per the guidelines of the JORC code (2012). The resource estimate refers to global estimates of tonnes and grade.



Criteria	JORC Code Explanation	Commentary
	 economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	

Section 4. Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	 The Wolfsberg Mineral Resource estimate as reported on 9 November 2021 has been used as the basis for the LOMP and Ore Reserve assessment. SRK notes that European Lithium released two successive Mineral Resource estimates (9 November and 1 December 2021) with the sole difference being the addition of Inferred Mineral Resources in the 1 December 2021 estimate. As the Measured and Indicated Mineral Resource categories did not change, the use of the 9 November estimate is deemed acceptable as it is factually the same. The Mineral Resource estimate details are described in the previous sections. The Mineral Resources are reported inclusive of the Ore Reserves. Only Measured and Indicated Resources have been included in the Reserves. The Ore Reserves are located within the boundaries of the European Lithium exploration lease, and the balance of the applications have been located
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 The Competent Person for the preparation of the LOMP and Ore Reserve Statement is Jurgen Fuykschot (MSc, MAusIMM (CP)), Principal Consultant (Mining) at SRK UK at the time of completing the work. He has undertaken multiple site visits, with the most recent visit undertaken in January 2017 as part of the PFS. Due to COVID-19 restrictions, no further site visits were undertaken as part of the FS scope of work.



Criteria	JORC Code Explanation	Commentary
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. 	 A PFS, which included significant co-author contributions by DRA, SRK, Mine-IT, and European Lithium, was completed in March 2018 for the Wolfsberg Project Work on the FS, which started in August 2021 and was completed in Q4 2022, was led by DRA with mining support from SRK and significant inputs by P&C (backfill), Mine-IT (Mineral Resources), SENET (hydrometallurgical plant), and European Lithium. In order to support the Ore Reserve estimate, SRK created a FS-level mine design, schedule, and cost estimate considering only Measured and Indicated Mineral Resources.
		 Dilution and loss factors have been considered in the FS.
Cut off Parameters	The basis of the cut-off grade(s) or quality parameters applied.	• SRK considered a COG of 0.3% Li ₂ O for the stope optimisation process in the Deswik Stope Optimiser to run a preliminary Life of Mine plan and operating cost assessment.
		The following formulas were used to calculate the recoveries for COG calculation purposes:
		$MHP_{Yield} = 0.75x[0.01 + 0.89x(1 - \%Waste)] + 0.03x(1 - \%Waste) + 0.25$
		$AHP_{Yield} = 0.70x[0.01 + 0.90x(1 - \%Waste)] + 0.02x(1 - \%Waste) + 0.31$
		$Concentrator Recovery = 0.8 - \frac{4.93 + 0.32x(\%Waste_{Sorted}x100)}{100}$
		 It was assumed that the hydrometallurgical plant would recover 100% of the lithium hydroxide. Also, SRK used US\$20,000/t of LHM as an assumed sales price for the COG assessment. A sales cost of 5%, based on the LHM price, was applied. The resulting
		revenue was calculated using the following formula:
		Revenue = LHM _{price} xConcentrator Recovery x Contained Lithium - Tonnes x Total Cost - SalesCost



Criteria	JORC Code Explanation	
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The following table shows the operating costs used in the COG assessment, which are based on a preliminary Life of Mine plan and operating cost assessment.				
OPEX Item	AHP (US\$/t ore)	MHP (US\$/t ore)		
Stoping	45.00	48.00		
Sorting	2.43	2.43		
Concentrator	40.56	40.56		
Hydrometallurgical plant	656.18	656.18		
Infrastructure and power	13.97	13.97		
G&A*	3.00	3.00		

* SRK assumed an allowance for the G&A costs

The COG analysis uses a regression based on the results for different percentages of the host rock, and it also uses the MS Excel Goal Seek function to calculate the ROM lithium grade that breaks even (costs equal revenue). The results of the analysis are presented in the following figure:

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Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	 The method and assumptions used as reported in the PFS or FS to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and preproduction drilling. 	 A mine design and schedule have been completed for the Wolfsberg underground project. The LOMP and associated Ore Reserve estimate produced for the Wolfsberg Project only consider Indicated and Measured material. Inferred material has not been included in the mining studies or Ore Reserve estimate. Stopes were created in Deswik Stope optimiser or Deswik Automated Design; a detailed mine design was created in Deswik CAD. All the solids supported by Indicated material and above the COG were subsequently scheduled based on a development and production schedule created in Deswik.
	 The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	 The mining method selected for the Wolfsberg Project is a retreat LHOS method with paste backfill as follows: Longitudinal narrow LHOS for individual pegmatite veins with a sublevel interval of 25 m (floor to floor). Sill- and rib-pillars are to be left between stopes for geotechnical stability where pastefill was not planned. The mining recovery in these stopes ranges from 60% to 80%. Access provided via ore drives running along the veins. Surface access via a new portal with a dual decline, with internal declines providing access to sublevels. The mining sequence and basis for the mine design have been determined through the assessment of the following: Geotechnically stable stope spans and underground chambers throughout the deposit, considering groundcontrol requirements.

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Criteria	JOBC Code Explanation

 Impact of mining recovery and dilution.
 A sublevel interval of 25 m providing a balance between practical access development for various mining stages – production drilling, blasting and mucking, and economic considerations.
 Blending of material types to create a material balance for
downstream processes.
 Sizing of working areas to create the desired material throughput to the processing plant.
 Stockpiling requirements for predominant material types.
• Mine dilution is based on the geotechnical assessment, assumed blast design, and benchmarked industry standards for the variation of LHOS given the orebody geometry and lithological characteristics. Dilution has been included in the stope optimisation phase, i.e. a dilution skin has been applied to the optimised stope shapes. This has been set at 0.2 m on the footwall and 0.5 m on the hanging wall. The stope width has been set at 1.2 m in the Deswik Stope Optimiser. In total, the minimum stope width is 1.9 m.
• Dilution for the development activities has been reduced by split firing, removing 60% of the waste from each cut.
• Mining recovery ranges from 60% to 90% depending on whether

• Variable orebody width, dip, and strike length.

Commentary

- Mining recovery ranges from 60% to 90% depending on whether backfill is available when the stope is mined, or the stopes are located under or above the crosscuts from the hanging wall to the footwall. Development recovery has been assumed to be 100%.
- The mine plan takes a different approach to handling based on the available underground infrastructure. During the initial pre

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Criteria	JORC Code Explanation	Commentary
		 production stage, development material is handled via trackless equipment to surface. Once the conveyor decline has been equipped, and the mobile crusher has been moved underground, all material to exit the mine will be conveyed to surface. All mica schist waste will be trucked to the empty stopes to be co-deposited with the paste fill or as rockfill. The mine plan includes considerable unfront development of the
		dual decline, ore sorter and backfill plant caverns, ROM silos for temporary storage, and waste stopes for future mica schist storage.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. 	• The metallurgical processes proposed for the Wolfsberg Project have been produced concurrently with the mining studies of the FS and have been based upon the test work conducted at Dorfner ANZAPLAN in 2017, 2018, 2019, and 2020 under the management of DRA.
	 The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. 	 The proposed processes are conventional for the production of spodumene concentrate, and the conversion to lithium hydroxide monohydrate is by the only commercially established process. Early test work at the North Carolina State Minerals Research
•	 Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and 	Laboratory in the 1980s was preliminary in nature and conducted on a range of material throughout the deposit reported to be representative of the orebody as a whole. Pegmatites from the two
	the degree to which such samples are considered representative of the orebody as a whole.	host rock types have similar and fairly uniform chemistry but are different in spodumene crystal size.
	 For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	on approximately 5 t of AHP and MHP bulk sample material, which was sampled from the two 500 t bulk samples that were mined and crushed (-70 mm) in 2013. It was estimated that



Criteria	JORC Code Explanation	
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	dilution with the host rock for both ore types was approximately 30%. The 2018 PFS test work was conducted on various ratios of AHP:MHP, i.e. 30:70, 50:50, and 70:30. The PFS flotation and conversion test work reflects industrial laboratory bench-scale test work.
•	DRA cannot comment on the representivity of the 2017/2018 bulk sample as DRA was not involvement in the sample selection.
•	The optimisation test work in 2019/2020 was conducted on 50t of each ore type (AHP and MHP) at a crush size of -70 mm. The additional bulk samples were sourced from the original 500 t bulk sample stockpiles of AHP and MHP ore mined in 2013.
•	Additionally, the FS included flotation feed preparation and variability test work on 10 variability samples. The samples were composited from 18 pegmatite ore (AHP and MHP) and 10 corresponding host rock sample intervals. Host rock samples comprised hanging wall and footwall material associated with the pegmatite ore sample.
•	Bench-scale open-circuit and locked cycle industrial-scale laboratory flotation optimisation and variability test work was conducted during the FS.
•	Pilot-scale sorting, milling, slime removal, magnetic separation, mica flotation, and spodumene flotation test work has been completed. The pilot-scale test work confirmed that a spodumene flotation concentrate containing > 5.0 wt% Li ₂ O can be produced. The bench-scale and pilot-scale results (final optimised run) were found to be in good agreement. The pilot plant produced 1.7 t of bulk spodumene concentrate sample with a grade of 5.7 wt% to 6.0 wt% Li ₂ O for further calcination and hydrometallurgical test work.

The concentrator plant metallurgical process involves laser-

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		 based sorting for waste rejection prior to milling, slimes removal, magnetic separation, mica flotation, spodumene flotation and by-product (feldspar and quartz) flotation, by-product cleaning, and tailings disposal via backfill. The ROM feed grade for the FS is lower than that reported for the PFS, which formed the basis of the sample selection for the FS test work. The FS samples cover a wide range of Li₂O feed grades reflecting spodumene flotation circuit feed grades of 1.0% to 2.3% Li₂O, with an average grade of 1.4% Li₂O. Based on the FS mine schedule and metallurgical performance projections, the average ROM grade of 0.64% Li₂O is expected to result in a spodumene flotation feed grade of 1.1% Li₂O, which is on the lower end of the test work sample range. Additional bench-scale and locked cycle open-circuit test work is thus recommended to further characterise the flotation response and improve the metallurgical performance projections for the result in a spodumene performance projections for the result in a spodumene flotation feed grade of 1.1% Li₂O, which is on the lower end of the test work sample range. Additional bench-scale and locked cycle open-circuit test work is thus recommended to further characterise the flotation response and improve the metallurgical performance projections for the lower ROM feed
		 The concentrate and final by-product thickening processes for the FS have been specified using typical benchmark fluxes. It is expected that the size of these units adequately caters for the required throughput; however, specific vendor test work is required, ahead of detailed design, to validate the study assumptions. The Wolfsberg hydrometallurgical plant includes the conversion of the spodumene to lithium hydroxide monohydrate by calcination, acid baking, leaching, carbonate precipitation, and transformation to lithium hydroxide with lime. The Fe₂O₃ content in the flotation concentrate was targeted for the glass and ceramics market. However, it is not considered to be an issue for the FS as Fe₂O₃ is removed in the.



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			conversion to lithium hydroxide at the hydrometallurgical processing facility.
			 Historical test work programmes were conducted between 2017 and 2020. The tests included the following: Hydrometallurgical test work by Dorfner ANZAPLAN
			 Pilot plant concentrate roasting by Thyssenkrupp Industrial Solutions – Research and Development (2019)
			 Thickening and filtration tests by FLSmidth (2019)
			 Lithium hydroxide production bench-scale tests by GEA Messo GmbH (2019 and 2020)
			Adequate hydrometallurgical bench-scale and pilot-scale test work has been conducted to support the FS design and metallurgical performance projection.
\bigcirc			The lithium hydroxide monohydrate produced during the bench- scale testing campaign meets the battery grade specifications.
	Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 An environmental and social management system is not in place for the project. European Lithium does not have a sustainability policy and has not made any commitments to become aligned with specific environmental, social, and governance standards. Several environmental studies have been completed for the project, but an assessment of the environmental and social impacts has not been undertaken, and there has been no formal engagement with stakeholders yet.
			• From the available information, it appears that the project could be developed with limited environmental and social impacts.
$\langle \mathcal{V} \rangle$			• An abridged, accelerated approval process might be allowed by



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		the regulatory authorities.
		 If an EIA is required for the mine and concentrator plant development, the permitting time frame is likely to be extended by several years. The regulatory authorities will screen the project to determine whether an EIA is required. European Lithium expects that an EIA will be required for the hydrometallurgical plant, but not for the mine and concentrator plant development. The latter expectation might not be realised.
		 Considering the approvals required under the Mineral Resources Act, it is reasonable to expect that the regulatory authorities will require the following information for the mine and concentrator plant sites:
		 Formal characterisation of the mining and processing residues
		 Precise definition of the potential impacts on water resources (groundwater and surface water) and commitments to implement measures to prevent the deterioration of water quality
		 Precise definition of impacts on biodiversity (impacts on habitats, and plant and animal populations of conservation importance) and commitments to provide compensation measures for the net loss of biodiversity
		 Information on the climate resilience of the development
		A mine waste management plan
		 A transportation plan outlining planned road usage, proposed upgrades to roads and road maintenance activities, and road safety practices
		 An emergency plan, with details on how emergency scenarios relating to road hazards and hazardous



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		 materials will be handled A closure plan and cost estimate European Lithium plans to operate the mine using BEVs when these are available so that there is the potential for the mine to become carbon neutral in future.
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	 The work undertaken in this FS, notably by DRA, has provided a detailed assessment of the land, access, and infrastructure requirements to support the LOM. This considers the infrastructure and mine workings already in place. Infrastructure for power, water, transportation, and groundworks for plant development and other surface buildings – such as mine offices and change houses – has been estimated. Negotiations regarding available land will have to be further advanced during the next phase of the project to secure the locations of the concentrator and hydrometallurgical sites. The mine site is 23 km from Wolfsberg, a town of 25,000 people. All personnel will accommodate themselves in Wolfsberg or other nearby towns. There are good labour and technical skills in Austria. Motorway and rail access, water, natural gas, and power are available adjacent to the hydrometallurgical plant site.



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Costs	 The derivation of, or assumptions made, regarding projected capital cost in the study. The methodology used to estimate operating cost. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 As noted by DRA, the capital cost estimate meets the required level of accuracy that will facilitate a FS level and complies with the typical industry standard of a Class 3 estimate as defined by AACE International: typical variation in low and high ranges of-10% to -20% and +10% to +30%, respectively. The capital costs for the surface facilities and underground mine are based, as much as possible, on indicative quotes (preferably from local suppliers and contractors) for infrastructure, earthworks, mining equipment, and consumables. There is an overall project capital contingency of 18.1% at P80. The operational costs were estimated from first principles with the input parameters such as labour, explosives, and energy costs locally sourced or adjusted from databases for the project location and country. A third-party royalty payment of €1.50/t (US\$1.86/t) of spodumene and by-products from the concentrator plant is deemed payable. Exchange rates applied to the estimate are average rates taken over a six-month period (5 January 2022 to 4 July 2022). Transport charges for product sales were estimated by Orykton Consulting based on the assumed distance to market.
<i>Revenue factors</i>	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 Consulting based on the assumed distance to market. The sales price for lithium hydroxide monohydrate is based on a nominal price profile based on information provided by Orykton Consulting, less 10% discount as agreed in the December 2022 BMW offtake agreement. When de-escalating by the US CPI, this results in a LOM average sales price of approximately US\$49,000/t.

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		 The BMW offtake agreement stipulates sales price will be based on spot price for LHM as published by FastMarkets minus 10%. The agreement is understood to stipulate that production has to start during 2026, and is initially for 5 years, and is subject to extension at the same conditions. Prices for by-products of feldspar, quartz, and anhydrous sodium sulphate are based on price assumptions as per the PFS, escalated by 4% to adjust for inflation. These by-products contribute 4% to the project estimated revenue (in real terms).
Market ssessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract 	 The demand and supply of Li products depend heavily on the electromobility penetration rate in the automotive industry. Governmental policies related to the mitigation of greenhouse gas emissions will drive the demand for Li-ion batteries for EV. Based on the present dynamics, demand will surpass supply in the near future; therefore, prices will remain at the current high levels. The market will absorb all the lithium metal units produced. In the period 2023 to 2030, prices are expected to ease, since supply might balance the demand, reaching US\$54,000/t LHM and US\$5,000/t spodumene 6% Li₂O at some point. However, in the long-term period of 2031 to 2040, demand will grow beyond supply and will bring prices back to the November 2022 level, i.e. US\$74,565/t LHM and US\$5,903/t spodumene 6% Li₂O. The increasing demand (through new EV battery megafactories) will require the opening of new mines, especially in Europe where Li sourcing is a critical strategic priority. EV producers are looking for transparent and low-risk supply chains.

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		• Estimations have been based on the comparison between by- product specifications and the common industrial mineral grades consumed widely by leading applications, e.g. glass and ceramics and the current market conditions (e.g. supply-demand equilibrium). Application tests with specific customers have not been executed. Prior to entering a firm supply agreement, an extensive product approval process (homologation) needs to be performed.
Economia	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 SRK prepared a simplified, real-term, post-tax, pre-finance cash flow model to test the economic viability of the Wolfsberg Project, based on the production schedules, operating cost, and capital cost as presented in the FS report. SRK notes that the effective date of the Ore Reserve statement is 1 July 2022, with operating costs and capital expenditure in money terms at that time. The LHM sales price applied is that as resulting from the December 2022 forecast, incorporating the BMW offtake agreement (using the US CPI to de-escalate in SRK's test model, this results in a real LOM average price of approximately US\$49,000/t). The project returns positive cashflows, and NPV, with a healthy IRR. The LOM average unit costs (real terms) per tonne of LHM produced are approximately US\$17,000/t, with the main cost contributors being the hydrometallurgical plant (31%), mine including backfill (26%), concentrator plant (19%), and product freight (14%). The project is reliant on the disposal of all the by-products from the mine (amphibolite) and plants; however, no offtake agreements are currently in place. No revenue or freight costs for the amphibolite material have been allowed for. The project capital cost is US\$866 million over a four-year construction period, with a sustaining capital of US\$86 million.



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Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 No formal process of stakeholder engagement has commenced yet An environmental and social management system is not in place for the project. European Lithium does not have a sustainability policy and has not made any commitments to become aligned with specific environmental, social, and governance standards. Several environmental studies have been completed for the project, but an assessment of the environmental and social impacts has not been undertaken, and there is no record of engagements with stakeholders yet. It is recommended that European Lithium establish a
		 new recommended that European Enhant consistent a management system, become aligned with specific industry sustainability standards, complete impact assessments and develop impact management plans, engage with stakeholders and overtly consider stakeholder input in decision-making. The approach to stakeholder engagement needs to be formalised it should be carefully planned and documented. Evidence o conscientious consideration of stakeholder concerns in project decision-making should be recorded. Following best practice, a grievance mechanism should be established, and constructive relationships with local communities should be maintained.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. 	 No offtake agreements have yet been negotiated for any of the by products. The project is heavily reliant on all the by-products from site being disposed of, in particular the amphibolite material from underground development and production, the by-products from the concentrator plant (feldspar and quartz), and by-product from the hydrometallurgical plant (sodium sulphate).

	policy and has not made any commitments to become aligned with specific environmental, social, and governance standards. Several environmental studies have been completed for the project, but an assessment of the environmental and social impacts has not been undertaken, and there is no record of engagements with stakeholders yet.
	 It is recommended that European Lithium establish a management system, become aligned with specific industry sustainability standards, complete impact assessments and develop impact management plans, engage with stakeholders, and overtly consider stakeholder input in decision-making.
	 The approach to stakeholder engagement needs to be formalised; it should be carefully planned and documented. Evidence of conscientious consideration of stakeholder concerns in project decision-making should be recorded. Following best practice, a grievance mechanism should be established, and constructive relationships with local communities should be maintained.
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		• The project must file a mining operation plan with the Mining Authority before mining can commence. This must detail production information and mining techniques, and address safety as well as protection of the environment.
	 The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	 Permitting has been discussed under environmental factors (see above) An EIA must be completed for the hydrometallurgical plant as part of the licensing regime with the Carinthian Government. If an EIA is also required for the mine and concentrator plant, this would significantly delay the project timeline.
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).


Audits or reviews • The results of any audits or reviews of Ore Reserve estimates. Nc Discussion of relative accuracy/ accuracy/ confidence • Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence •	 No external reviews have been undertaken. The confidence level in the Ore Reserve estimate is high due to the following reasons: Realistic input parameters have been used for the Desai Stope Optimiser process.
Discussion of relative accuracy/ confidence• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence	 The confidence level in the Ore Reserve estimate is high due to the following reasons: Realistic input parameters have been used for the Desai Stope Optimiser process.
 limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The use of this software allows the calculation of individual stope grades based on individual dilution parameters. An overall dilution number would not be appropriate due to the high variability in the vein thickness. The veins have been mapped for geological and geotechnical purposes.

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