

5 April 2018

### **EUROPEAN LITHIUM COMPLETES POSITIVE PFS**

#### Highlights

• Accelerated case NPV<sub>8</sub> A\$441.9 million, based on only the Measured and Indicated resource of 6.3 million tonnes at 1.17% Li<sub>2</sub>O

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- Lithium Hydroxide production 10,129tpa in Accelerated case
- No EIA required at mine site, formal screening process to confirm, mining plan to address environmental issues
- Assay results and declaration of the first resource in Zone 2 anticipated shortly
- The Company aims to have increased Measured and Indicated resources for the DFS, so that project design and evaluation will be at a mining rate of about 800,000tpa
- Definitive Feasibility Study to commence in July

European Lithium Limited (ASX: EUR, FRA: PF8, VSE:ELI) (the Company) is pleased to advise that it has completed the Pre-Feasibility Study (PFS) on its 100% owned Wolfsberg Lithium Project (the Project) in Austria with the results confirming the technical and economic viability of the Project. The Company is on track to become a major supplier to an integrated lithium industry in Europe where motor vehicle manufacturers are accelerating electric vehicle (EV) production and lithium battery plants are in construction or being planned. These developments have strong national government and European Commission support.

Tony Sage, Chairman, commented "Completion of the PFS which establishes the technical and economic viability of the Wolfsberg Lithium Project is a major step in its development. The Company will endeavour to formally start the DFS in July with the aim of completing it before the end of 2018".

#### Summary of key PFS Outcomes

The PFS outlines the development of an underground mine producing, in the Base case, an average of about 620,000tpa Run of Mine (**RoM**) from stoping and development over 12 years of production. Ore sorters will be used to reject waste from the RoM so that concentrator feed will average about 400,000tpa. The concentrator will produce an average of 55.4 ktpa spodumene concentrate with an average of 114 ktpa feldspar and 71 ktpa quartz as by-products. The lithium in the spodumene concentrate will be converted to an average of 8,400 tpa lithium hydroxide monohydrate at a hydrometallurgy plant to the south of Wolfsberg about 20km from the mine.

During the development of the mine plan it became evident that with little extra equipment and improved scheduling the mining rate could be increased to about 720,000tpa. This Accelerated case results in the Measured and Indicated resources of the Base case being mined and processed in 10 years rather than 12. The 20% increase in processing rate results in lithium hydroxide monohydrate production increasing to an average of 10,129tpa. The capital cost of the concentrator and hydrometallurgy plant for the increased production rate was factored up by DRA from the engineered Base case using standard scaling techniques.

The pre-tax NPV<sub>8</sub> for the Base case is US263.2 million (A342.7 million) which increases to US339.4 million (A441.9 million) for the Accelerated case (A=0.768US at 3/4/2018).

The production cost of lithium hydroxide monohydrate is US\$7,160/tonne for the Base case after by-product credits which reduces to US\$6,561/tonne for the Accelerated case. This is higher than current brine production from South America but lower than Chinese production from imported Australian spodumene.

The mine design consultant has concluded that mining rates can be further increased to about 800,000tpa which will probably be the upper limit for efficient mining. However, this will require additional Indicated resources to support the higher mining rate and increase the mine life which should increase the NPV of the project further.

The Company has previously announced an increase in Inferred resources (ASX release -European Lithium increases resource at Wolfsberg adding 4.7 million tonnes at 0.78% Li<sub>2</sub>O in Zone 1, 3 July 2017). Zone 1 is the northern limb of an anticline where previous exploration work was concentrated. A drill programme to convert this Inferred resource to Indicated has been developed with the assistance of SRK and submitted to the Mining Authority for approval. The Company has also previously announced the results of drilling in Zone 2 which is the southern limb of the anticline (ASX release - Assays confirm wide high grade pegmatite veins in Zone 2 at the Wolfsberg deposit, 28 June 2017). Further drilling in Zone 2 was undertaken January to March 2018 with five holes drilled and all showing numerous pegmatite intersections (ASX release - Project update, 29 March 2018). Assay results are anticipated mid April 2018 following which a first resource in Zone 2 should be declared. The aim is to have increased Measured and Indicated resources for the Definitive Feasibility Study (**DFS**) so that the project can be designed and evaluated at a mining rate of about 800,000tpa.

A summary of the PFS outcomes is provided in Table 1 for Life of Mine production.

Table 1: Production Evaluation Summary for the Base and Accelerated Cases

| Item  | Unit                | Base Case | Accelerated Case |
|---|---------------------|-----------|------------------|
| Mined RoM   | tonnes              | 7,435,386 | 7,435,386        |
| RoM Grade   | % Li₂O              | 0.71      | 0.71             |
| Concentrator Feed                                       | tonnes              | 4,923,659 | 4,923,659        |
| Concentrator Feed Grade                                 | % Li <sub>2</sub> O | 1.03      | 1.03             |
| Li <sub>2</sub> O recovery RoM to spodumene concentrate | %                   | 75.4      | 75.8             |
| Spodumene Concentrate produced (6% Li <sub>2</sub> O)   | tonnes              | 664,491   | 668,120          |
| Feldspar produced                                       | tonnes              | 1,363,467 | 1,365,574        |
| Quartz produced   | tonnes              | 847,896   | 849,447          |
| Li <sub>2</sub> O recovery in conversion plant          | %                   | 89.7      | 89.7             |
| Lithium hydroxide monohydrate produced                  | tonnes              | 100,737   | 101,287          |
| Mine Life after 2 year development                      | years               | 12        | 10               |
| Сарех   | US\$million         | 388.6     | 423.6            |
| Revenue (after transport)                               | US\$million         | 1,843.4   | 1,910.6          |
| Gross Operating Cost                                    | US\$million         | 880.3     | 840,3            |
| By-product credits                                      | US\$million         | 159.0     | 155.7            |
| Net Operating Costs                                     | US\$million         | 721.3     | 684.6            |
| Lithium Hydroxide Cost (Gross)                          | US\$/tonne          | 8,739     | 8,296            |
| Lithium Hydroxide cost (after by-product credits)       | US\$/tonne          | 7,160     | 6,561            |
| NPV <sub>8</sub> Pre-Tax                                | <b>US\$million</b>  | 263.2     | 339.4            |
| IRR Pre-Tax   | %                   | 21.2      | 25.6             |
| NPV <sub>8</sub> After-Tax                              | US\$million         | 154.8     | 202.4            |
| IRR After-Tax   | %                   | 15.9      | 18.7             |

#### **Pre-Feasibility Study**

The PFS was led by DRA Global who integrated the work of third party consultants and information provided by the Company. Areas of responsibility were as follows:

DRA Global - PFS lead and integration, process and infrastructure engineering, capital and operating cost estimates for process and infrastructure, construction planning and financial modelling

Dorfner Anzaplan - Metallurgical testwork in support of DRA process engineering

SRK Consulting - Mining engineering and mine capital and operating cost estimates, geotechnical engineering, hydrogeology, ore reserves

Paterson & Cooke - Tailings Design with capital and operating cost estimate

Umweltbüro – Environmental study

Benchmark Minerals Intelligence - Marketing study lithium carbonate/hydroxide

Orykton Consulting - Marketing study spodumene and by-products

Al Maynard & Associates - Geology from Independent Geology Report for Paynes Find Gold Limited (to be renamed European Lithium Limited) Prospectus 28 July 2016

### **Property Description and Location**

The Wolfsberg Lithium Project mine and concentrator site is located 20km east of Wolfsberg 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 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 but more recently has concentrated on high technology enterprises. The mining university in Leoben, 93km from Wolfsberg, currently has 3,000 students. Technical skill levels to support the Project are high. The Baltic to Adriatic rail corridor will pass just to the south of Wolfsberg on completion of the Koralm tunnel in 2022. The Project will be well located with good access to Europe's motorway and rail infrastructure to distribute lithium hydroxide to the lithium battery plants in construction or planning in northern Europe and by-products to regional industry



Figure 1: Wolfsberg Lithium Project Location

### **Mineral Resources**

The current resources at Wolfsberg are shown in Table 2. The mine design for this PFS is based on using only the Measured and Indicated resource of 6.3 million tonnes at 1.17% Li<sub>2</sub>O. Vein thickness and Li<sub>2</sub>O grade are of paramount importance and a semi-3D modelling approach is appropriate. Modelling was done in Surpac. Interpolation parameters are derived from variograph analysis. The block dimension of the model is 25m x 25m with variable thickness. Measured resources are stated for the veins immediately above and below the underground workings that visibly show continuity to the extent of the underground drilling which results in profiles at 50m along strike. Indicated resources are stated for the main cross sections where there are at least three drill holes not more than 50m apart. No Li<sub>2</sub>O cut off was applied as previous work indicated 74% of the pegmatite reported to saleable product and there were very limited zones of lower grade material. Table 2: Mineral Resources

| Category      | Tonnage (Mt) | Grade (%Li₂O) |
|---------------|--------------|---------------|
| Measured      | 2.86         | 1.28          |
| Indicated     | 3.44         | 1.08          |
| Total (M+I)   | 6.3          | 1.17          |
| Inferred      | 4.68         | 0.78          |
| Total (M+I+I) | 10.98        | 1.00          |

The resource comprises multiple parallel lithium bearing pegmatite veins dipping at about 60° as shown in Figure 2. The veins vary in thickness with the maximum width recorded at 5.5m but with an average of 1.4m. The historical underground development showed that there was good continuity of the veins along strike. Fifteen of the veins were considered to have economic potential and were included in the mine design.



Figure 2: Typical cross section showing pegmatite veins in the two host rocks

### Mining

SRK has determined that long hole open stoping is the preferred mining method and, following geological mapping underground and rock characterisation, a standard stope of 25m high by 75m wide with 4m rib and sill pillars is deemed appropriate for design. A crown pillar of 25m was considered adequate.

A minimum mining width of 1.2m has been considered practical and a dilution skin of 0.5m in the hanging wall and 0.3m in the footwall has been applied. This results in average dilution of 40% and a ROM grade of 0.71% Li<sub>2</sub>O. Ore sorters will be used to reject waste such that the grade to the concentrator is increased to 1.03% Li<sub>2</sub>O.

Mine access will be by the existing adit, increased in size to 5m x 5m, and a main decline developed in the competent amphibolite. Mining will be carried out using 25m sub levels and cross cuts will be developed from the decline every 25m and all veins intersected. Production drives will then be developed along the veins, to minimise waste development in mining, to the most distant stope and retreat stoping will then be carried out towards the central access. This is illustrated for the final mine development in Figure 3.



Figure 3: Isometric view of Mine development and Mineralisation

Remote loaders will be used to load from the stopes to a local stockpile where 30 tonne trucks will be loaded for transfer of RoM to the underground crusher and ore sorter. A second decline will be developed from the underground crusher/sorter to the surface plant for product haulage. Mica schist waste from the sorters will be returned to mined out stopes whilst amphibolite waste from the sorters will be trucked to surface and used for construction material. This allows the project to proceed without permanent surface waste dumps. To eliminate a tailings storage facility on the surface, cemented backfill is created from plant tailings to fill the mined-out stopes.

The tonnes and grade profile for the Base case is shown in Figure 4.

During the mine design work it became evident that improved scheduling would allow mining rates to be increased to about 720,000tpa with only a little increase in mobile



equipment. The tonnes and grade profile for this 'Accelerated' case is shown in Figure 5.

#### Figure 4: Production Profile for the Base case



#### Figure 5: Production Profile for the Accelerated case

The Company declared an increase in Inferred resource at depth following a deep hole drilling programme to 1100 masl. To determine the upside of the project SRK has considered the extension of the 9 main veins to this depth and after taking into consideration conversion losses estimated mineable material at depth as shown in Table 3. This can be considered an exploration target. Part of this material is already classified as Inferred. If the planned deep drilling programme in Zone 1 can bring this material into Indicated category then it could support a higher mining rate of about 800,000tpa and extend the mine life to 18 years following the initial two year development.

|          | In-S<br>(Mineral | itu<br>isation) | Development  |        | Stopi   | ng            | Total (RoM) |        |  |  |
|----------|------------------|-----------------|--------------|--------|---------|---------------|-------------|--------|--|--|
| Hostrock | Tonnage          | Grade           | Tonnes Grade |        | Tonnage | Tonnage Grade |             | Grade  |  |  |
|          | kt               | % Li₂O          | kt           | % Li₂O | kt      | % Li₂O        | kt          | % Li₂O |  |  |
| АНР      | 2,171            | 1.40%           | 843          | 0.30%  | 2,459   | 0.88%         | 3,302       | 0.73%  |  |  |
| МНР      | 4,546            | 1.11%           | 1,248        | 0.37%  | 4,564   | 0.78%         | 5,812       | 0.69%  |  |  |
| Total    | 6,717            | 1.21%           | 2,091        | 0.34%  | 7,023   | <b>0.81</b> % | 9,114       | 0.71%  |  |  |

Table 3: Estimation of Mineable Material at Depth

### Reserves

SRK has determined the Mineral Reserves as shown in Table 4. These Reserves include dilution and recovery and the technical and economic parameters presented in the PFS. The underground stoping cut-off grade was calculated at 0.3% Li<sub>2</sub>O. Underground ore sorting is used to increase the grade of the RoM material to the concentrator to 1.03% Li<sub>2</sub>O.

Supporting details are provided in the attached JORC Code Table 1.

Table 4: Mineral Reserve Statement

|                           | Tonnes<br>kt | Grade<br>% Li₂O | Content<br>kt Li₂O |
|---------------------------|--------------|-----------------|--------------------|
| Proven Reserves           | 4,319        | 0.69            | 29.7               |
| Probable Reserves         | 3,116        | 0.75            | 23.2               |
| Proven and Probable Total | 7,435        | 0.71            | 52.9               |

### **Processing Facilities**

Metallurgical testwork was undertaken by Minerex in the 1980's with the Minerals Research Laboratory of North Carolina State University, by Dorfner Anzaplan in 2017 and by DRA/Dorfner Anzaplan in 2018. This work was utilised by DRA in the process design for the Project.

RoM is crushed in two stages underground and screened. The +8mm goes to ore sorting using lasers in two stages where the waste is rejected. The accepted material is combined with the -8mm material and undergoes two further stages of crushing and is then trucked to surface.

The material passes through reflux classifiers to remove mica, is ground, then undergoes attrition scrubbing, passes through magnetic separation to remove magnetic waste, mica flotation to remove residual mica and then spodumene flotation where a 6% Li<sub>2</sub>O concentrate is produced. The flotation tailings then pass through feldspar flotation to

recover a feldspar concentrate and the tailings are scavenged of feldspar to produce a quartz concentrate. Spodumene concentrate is thickened and filtered for truck transfer to the hydrometallurgical plant. The process is shown in Figure 6. The feldspar and quartz concentrates are thickened, filtered and dried for transport to customers.



The overall lithium recovery from RoM to spodumene concentrate is 75.4%

#### Figure 6: Spodumene and By-product Recovery

Tailings from the concentrator are thickened, detoxed, and pumped to the underground paste backfill plant, where cement is added, and the tailings returned to mined out stopes.

Spodumene concentrate will be trucked to the hydrometallurgical plant. The spodumene enters a flash calciner for conversion from alpha to beta form. It is then baked with sulphuric acid and then leached with water to form a lithium sulphate solution. After solid liquid separation the lithium sulphate solution undergoes a number of purification steps to remove impurities. It is then reacted with sodium carbonate to form a lithium carbonate precipitate. This then undergoes bicarbonation with carbon dioxide to increase the purity. The purified lithium carbonate is reacted with lime to transform the lithium carbonate to lithium hydroxide which is purified and crystallised to form lithium hydroxide monohydrate which is dried and packaged for shipment to battery plants. Previous testwork by Dorfner Anzaplan demonstrated that battery grade products can be made (ASX release - Battery Grade Lithium Carbonate and Hydroxide made from Wolfsberg spodumene concentrate, 27 July 2017). The overall lithium recovery from spodumene concentrate to lithium hydroxide monohydrate is estimated at 89.7%

The flowsheet for the conversion of lithium in spodumene to lithium carbonate is shown in Figure 7 and the flowsheet for the transformation of lithium carbonate to lithium hydroxide monohydrate is shown in Figure 8.



Figure 7: Flowsheet for conversion of lithium in spodumene to lithium carbonate



Figure 8; Flowsheet for transformation of lithium carbonate to lithium hydroxide

### Hydrogeology

SRK has undertaken an initial hydrogeology study. Total water inflows into the current mine workings were estimated at 26-311ps and as the majority of underground development is assumed to be below water table, this will increase as the mine develops. It is envisaged

that the mine water will be sufficient for all process requirements and no supplemental water will be necessary. It is expected that the site will be in water excess and that water will need to be discharged to the environment after treatment.

The Mining Law provides for the mining licence holder to utilise all water encountered during mining activities.

### Infrastructure

The mine site is accessed via an existing surfaced road from Wolfsberg (18km) and the current forest road (2km) will need to be surfaced. No camp facilities are required as personnel during construction and operations will house themselves in Wolfsberg and other nearby towns.

The power requirement at mine site is 13MW and this will be provided by the local utility, Kelag, via an underground cable from the Wolfsberg substation. The hydrometallurgical plant requires 11.5MW and this will be supplied from nearby power lines.

The hydrometallurgical plant will connect to the nearby natural gas transmission line for gas required for the flash calciner.

Road and rail infrastructure is in place for product distribution.

### Marketing

Benchmark Minerals Intelligence, a leading analyst of the battery materials market and publisher of monthly lithium price assessments, was engaged to provide an analysis of the lithium carbonate and lithium hydroxide market particularly pertaining to Europe and a forecast of lithium hydroxide prices in Europe.

There are 25 current lithium battery projects in construction or development with a total capacity of 338GWh. Four of these projects are in Europe with 78.5 GWh capacity. The lithium battery demand for Europe is shown in Figure 9. By 2025 Europe will account for 24% of global lithium battery demand. This translates to a lithium demand over 100,000tpa LCE by 2025 as shown in Table 10 whilst currently there is no meaningful production in Europe.



#### Figure 9: Lithium battery demand in Europe to 2025



#### Figure 10: LCE demand in Europe for battery plants to 2025

The trend in lithium battery manufacture is to use increasing nickel and less cobalt and this requires the use of lithium hydroxide rather than lithium carbonate. Hence, Benchmark Minerals Intelligence forecast that growth in use of lithium hydroxide will be 2.5 times the growth of lithium carbonate.

Benchmark Minerals Intelligence has assessed the global requirement for lithium to increase from 180,000t LCE in 2016 to 650,000t LCE by 2025 with growth in demand for electric vehicles. There are numerous projects planning to bring on lithium capacity particularly Australian producers producing spodumene concentrates for sale to China. Increasingly Chinese customers are taking equity interests in the Australian producers in order to ensure security of supply into China. The price forecast from Benchmark Minerals Intelligence is shown in Table 5. This projects the price of lithium hydroxide in Europe to increase from the 2017 level through 2022 and then decline as additional production comes on stream. Beyond 2025 a real terms price of US\$15,000/tonne lithium hydroxide is forecast. The mid point of the high-low forecast by Benchmark Minerals has been used for the economic evaluation. This equates to an average price LOM of US\$18,351.

| Lithium Carbonate Forecast - Battery Grade |       |      |      |      |      |       |       |       |       |       |       |       |       |       |       |
|--|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|  | 2011  | 2012 | 2013 | 2014 | 2015 | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | 2025  |
| Li2CO3 High - Global Prevailing Price      | 4.40  | 4.80 | 4.80 | 5.30 | 6.80 | 8.80  | 14.00 | 17.00 | 17.00 | 17.00 | 18.00 | 21.00 | 20.00 | 15.00 | 14.00 |
| Li2CO3 Low - Global Prevailing Price       | 4.40  | 4.80 | 4.80 | 5.30 | 6.80 | 8.80  | 12.00 | 15.00 | 15.00 | 15.00 | 15.00 | 16.00 | 16.00 | 14.00 | 12.00 |
| Li2CO3 Europe CIF - High                   | 4.50  | 4.68 | 5.15 | 5.70 | 7.00 | 10.89 | 15.40 | 17.05 | 17.60 | 17.60 | 18.70 | 18.70 | 19.00 | 16.00 | 14.00 |
| Li2CO3 Europe CIF - Low                    | 4.50  | 4.68 | 5.15 | 5.70 | 7.00 | 7.59  | 11.00 | 13.20 | 14.30 | 15.40 | 15.40 | 15.40 | 16.50 | 14.00 | 13.00 |
|  |       |      |      |      |      |       |       |       |       |       |       |       |       |       |       |
| Lithium Hydroxide Forecast - Battery       | Grade |      |      |      |      |       |       |       |       |       |       |       |       |       |       |
|  | 2011  | 2012 | 2013 | 2014 | 2015 | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | 2025  |
| LiOH High - Global Prevailing Price        | 6.60  | 6.80 | 7.20 | 7.50 | 8.80 | 12.60 | 18.00 | 22.00 | 23.00 | 23.00 | 23.00 | 24.00 | 21.00 | 20.00 | 17.00 |
| LiOH Low - Global Prevailing Price         | 6.60  | 6.80 | 7.20 | 7.50 | 8.80 | 12.60 | 17.00 | 19.00 | 20.00 | 20.00 | 22.00 | 22.00 | 19.00 | 18.00 | 15.00 |
| LiOH Europe CIF - High                     | 6.60  | 6.80 | 7.20 | 7.50 | 8.80 | 12.60 | 19.80 | 24.20 | 25.30 | 25.30 | 25.30 | 26.40 | 23.10 | 22.00 | 18.70 |
| LiOH Europe CIF - Low                      | 6.60  | 6.80 | 7.20 | 7.50 | 8.80 | 12.60 | 18.70 | 20.90 | 22.00 | 22.00 | 24.20 | 24.20 | 20.90 | 19.80 | 16.50 |

Table 5: Pricing Forecast for Battery-Grade Lithium Carbonate and Lithium Hydroxide to 2025 (USD/kg)

(Source: Benchmark Mineral Intelligence 22 February 2018)

Orykton Consulting analysed the market for spodumene and projected that with the increased production from Australia the price to China would decline to about US\$550/tonne from 2019.

Target markets and prices for the by-products from Wolfsberg were also assessed by Orykton. Feldspar would be targeted into Italy at a net back price of  $\leq$ 31.5/tonne to the ceramics industry, quartz to Austrian glass manufacturers at a net back price of  $\leq$ 74/tonne, sodium sulphate would have a net back price in Austria of  $\leq$ 78/tonne and aluminium silicate a net back price of  $\leq$ 12/tonne to Austrian cement producers.

#### **Environmental and Permitting**

Baseline studies have been undertaken at the mine site which is a commercial forest. There are no natural or water protection orders in place. A potential conflicts study has been undertaken which highlights the increase in road traffic through the town of Frantschach St Gertraud as being of concern. This will be mitigated by limiting transport through the town to the spodumene concentrate going to the hydrometallurgical plant in Wolfsberg. The other products, which are the major quantity, would take the road in the other direction towards Deutschlandsberg. Traffic and noise studies are being commissioned.

There have been no base line studies as yet at the hydrometallurgical plant site. This land is currently farmland in a growing industrial area. A proposal has been received from Umweltbüro to undertake the environmental studies required to rezone the land to industrial use.

Permitting responsibility at the mine site is that of the Mining Authority. Legal guidance is that no environmental impact assessment **(EIA)** is required, which will be confirmed by a formal screening process, but the submission of a mining plan, which is required before mining can commence, must address environmental issues. The hydrometallurgical plant falls under the regional environmental authority of Carinthia and will require an EIA.

The results of the PFS will be presented to the Mining Authority and the Carinthian Government with the intention to arrange an efficient permitting approval process.

### **Capital Costs**

The capital costs of the Base case project is US\$388.6 million (A\$479.8 million). The composition of the capital cost is shown in Table 6.

Table 6: Summary of Capital Cost Estimate

| Description  |     | Sub-Total   |
|--|-----|-------------|
| Mining   | USD | 78,206,826  |
| Concentrator Plant Underground                                 | USD | 18, 540,795 |
| Concentrator Plant Surface – Spodumene                         | USD | 38,897,057  |
| Concentrator Plant Infrastructure                              | USD | 28,357,356  |
| By Products Plant Surface                                      | USD | 20,557,546  |
| By Products Plant Surface Infrastructure                       | USD | 5,193,431   |
| Hydro Metallurgical Plant                                      | USD | 85,190,331  |
| Hydro Metallurgical Plant Infrastructure                       | USD | 10,272,702  |
| Project Indirect and Services                                  | USD | 37,638,470  |
| Project – Wolfsberg Lithium (including Construction Overheads) | USD | 322,854,513 |
| Design Development /Contingency                                | USD | 45,634,152  |
| Total Project Costs  | USD | 368,488,666 |
| Owners Cost  | USD | 20,088,799  |
| Total Project Cost   | USD | 388,577,465 |

### **Operating Cost**

The Base case cost at mine site to produce spodumene concentrate is shown in Table 7. Gross costs are US\$882.9/tonne which reduces to US\$685.6/tonne after by-product credits of feldspar and quartz. Mining costs including tailings backfill are 69.6% of gross costs.

Table 7: Spodumene Production Costs Gross and after By-Product credits

| Area                                    | Cost LOM (\$m) | USD Cost/tonne<br>spodumene |
|---|----------------|-----------------------------|
| Mining                                  | 379.0          | 570.4                       |
| Tailings Backfill                       | 29.6           | 44.5                        |
| Crushing and Sorter                     | 11.2           | 16.9                        |
| Concentrator                            | 166.9          | 251.2                       |
| Total Production Cost (gross)           | 586.7          | 882.9                       |
| Feldspar/Quartz by-product credit       | (131.1)        | (197.3)                     |
| Production Cost after by-product credit | 455.6          | 685.6                       |

The Base case operating costs to produce lithium hydroxide are shown in Table 8. Gross production cost is US\$8,738.6/tonne which reduces to US\$7,160.2 after by-product credits.

Table 8: Lithium Hydroxide Costs gross and after By-Product Credits

| Area                                    | Cost LOM (\$m) | USD Cost/tonne<br>LiOH |
|---|----------------|------------------------|
| Mine Site Spodumene Production          | 586.7          | 5,824.1                |
| Spodumene Transport Costs               | 5.0            | 49.6                   |
| Hydrometallurgy conversion to LiOH      | 259.0          | 2,571.1                |
| Management Costs                        | 29.7           | 294.8                  |
| Total Production Cost (Gross)           | 880.3          | 8.738.6                |
| Total by-product credits                | (159.0)        | (1,578.4)              |
| Production Cost after By-Product Credit | 721.3          | 7,160.2                |

#### **Economic Evaluation**

The project evaluation summaries for the Base case and the Accelerated case are shown in Table 1. Sensitivity analyses were undertaken on the Base case. The project is most sensitive to lithium hydroxide price. The price of lithium hydroxide would have to drop by 25%, to US\$13,800/tonne from the annual prices used for the LOM, before pre-tax NPV<sub>8</sub> falls to zero.



Figure 11: Pre-tax NPV and IRR sensitivity to changes in Capital Expenditure, Operating Costs and Lithium Hydroxide price

The economic analysis showed that the investment in the by-products plant to produce feldspar and quartz was worthwhile. The capital investment was established at US27 million and added US26 million to the Project NPV<sub>8</sub>.

The market strategy for Wolfsberg is to sell lithium hydroxide to the lithium battery plants of Europe. A strategy buoyed by the European Battery Alliance given their objective to create competitive and sustainable, battery cell manufacturing in Europe supported by a full EU-

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based value chain.

The Accelerated case, summarised in Table 1, clearly shows the benefits in increasing NPV and reducing operating costs by increasing production on top of established infrastructure and fixed costs. Further production increase to the 800,000tpa mined will be studied in the DFS, following declaration of increased Indicated resources, and it is expected that this will increase NPV further.

The economic evaluation was carried out on an all equity basis. Discussions have been held with the Carinthian and Federal Government investment agencies which are keen to lead an application for EC support funding through existing structural funds that are administered by national states. Such funding, if it materialises, would gear up the returns on the Project.

### Implementation

The project schedule estimates 25 months from release of funding/permits in place to full production.

| Name   | Duration | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 |
|--|----------|----|----|----|----|----|----|----|----|----|
| Wolfsberg High Level Implementation Schedule             | 25mo     |    |    |    |    |    |    |    |    |    |
| Project Release, Funding & Permitting Completed          | 0mo      |    |    |    |    |    |    |    |    |    |
| Water Treatment Plant Commissioned                       | 0mo      | ٠  |    |    |    |    |    |    |    |    |
| Mine Development: Access, Crushing & Sorting Cavity      | 8mo      |    |    |    |    |    |    |    |    |    |
| Underground Construction: Crushing & Sorting Plant       | 9mo      |    |    |    |    |    |    |    |    |    |
| Construction Concentrator Plant: Earthworks & Access Roa | 6mo      |    |    |    |    |    |    |    |    |    |
| Construction Concentrator Plant: Building Access         | 0mo      |    |    |    | -  | •  |    |    |    |    |
| Construction Concentrator Plant                          | 14mo     |    |    | 1  |    |    |    |    |    |    |
| Construction Hydromet Plant: Earthworks                  | 3mo      |    |    |    |    |    |    |    |    |    |
| Construction Hydromet Plant: Building Access             | 0mo      |    |    |    | -  | •  |    |    |    |    |
| Construction Hydromet Plant                              | 14mo     |    |    |    |    |    |    |    |    |    |
| Mining: Stope Cavity for Backfill                        | 0mo      |    |    |    |    |    |    | +  |    |    |
| Commissioning  | 5mo      |    |    |    |    |    |    |    |    |    |
| Ramp Up & Plant Optimisation                             | 3mo      |    |    |    |    |    |    |    |    |    |

The financial and production models are based on a 1 January 2019 kick off. The Company will immediately start work to finalise the areas of metallurgy, hydrogeology, land access and environmental identified in the PFS together with the Zone 1 drilling so that the DFS can be initiated in July 2018 for completion by end of 2018. Permitting and financing activities will be undertaken in parallel.

Tony Sage Non-Executive Chairman European Lithium Limited

END

Visit the Company's website to find out more about the advanced Wolfsberg Lithium Project located in Austria.

#### **Competent Person's Statement**

The information in this announcement pertaining to the Wolfsberg Lithium Project, and to which this statement is attached, relates to Ore Reserves. These have been prepared by Jurgen Fuykschot who is a Member of the Australian Institute of Mining and Metallurgy with over 23 years of experience in the mining and resource exploration industry. Mr. Fuykschot has sufficient experience, as to qualify as a competent Person as defined in the 2012 edition of the "Australian Code for Reporting of Mineral Resources and Ore reserves". Mr. Fuykschot consents to the inclusion in the report of the matters based on information in the form and context in which it appears. The company is reporting under the 2012 edition of the Australasian Code for the Reporting of Results, Minerals Resources and Ore reserves (JORC code 2012).

The information in this announcement pertaining to the Wolfsberg Lithium Project, and to which this statement is attached, relates to Project Development and Metallurgical Studies and is based on and fairly represents information and supporting documentation provided by the Company and its Consultants and summarized by Dr Steve Kesler who is a Qualified Person and is a Fellow of the Institute of Materials, Minerals and Mining and a Charted Engineer with over 40 years' experience in the mining and resource development industry. Dr Kesler has sufficient experience, as to qualify as a Competent Person as defined in the 2012 edition of the "Australian Code for Reporting of Mineral Resources and Ore reserves". Dr Kesler consents to the inclusion in the report of the matters based on information in the form and context in which it appears. The company is reporting progress on project development and metallurgical results under the 2012 edition of the Australasian Code for the Reporting of Results, Minerals Resources and Ore reserves (JORC code 2012).

### ASX Release

### European Lithium Limited

### JORC Code, 2012 Edition – Table 1 report

### Section 1 Sampling Techniques and Data

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

| Criteria               | JORC Code Explanation  | Commentary  |
|------------------------|--|---|
| Sampling<br>Techniques | <ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul> | <ul> <li>Diamond drilling and channel sampling were used for<br/>underground material collection. European Lithium<br/>Limited completed seven diamond drill holes totalling<br/>829.6 m. 89 channel samples were cut sampling 325<br/>m of exposed pegmatite veins. Channel sampling was<br/>with a twin bladed saw to cut a channel across the full<br/>width of the exposed pegmatite veins. The parallel<br/>cuts were 4.5 cm apart with depth averaging 11 cm.<br/>The material between the parallel cuts were chipped<br/>out onto plastic sheets and bagged. The average of<br/>the sample weights was 25 kg. All collected samples<br/>were sent to ALS Ireland for sample preparation and<br/>analysis.</li> </ul> |
| 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.).  | <ul> <li>All drilling on the Wolfsberg Project has been core drilling, both from surface and from underground.</li> <li>A total of eighty four historic surface holes are shown on the Minerex maps, with an additional thirty four underground holes shown on cross-sections.</li> </ul>   |

| Criteria                 | JORC Code Explanation   | Commentary  |
|--------------------------|---|---|
|                          |   | <ul> <li>The 2016 underground drilling was undertaken using<br/>a Sandvik TE130 drill with a 50 mm diamond coring<br/>bit and a 3 m long standard coring tube.</li> <li>The seven from surface cores drilled in 2017 was<br/>performed using an Atlas Copco (Mustang A66CBT)<br/>drill rig.</li> <li>Core has not been orientated in any of the drilling<br/>programmes.</li> </ul>   |
| Drill Sample<br>Recovery | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>  | <ul> <li>No documentation concerning the historic Minerex drilling exists.</li> <li>For the European Lithium exploration programmes core recovery was measured for all runs and core boxes. Core recovery data was recorded into a core recovery paper log and then later transferred into an excel spreadsheet template for import to the database. Average core recovery was between 97.2% and 99.5% for the pegmatites.</li> </ul>   |
| Logging                  | <ul> <li>Whether core and chip samples have been geologically<br/>and geotechnically logged to a level of detail to support<br/>appropriate Mineral Resource estimation, mining studies<br/>and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature.<br/>Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant<br/>intersections logged.</li> </ul> | <ul> <li>Lithological and geotechnical logging was undertaken<br/>by trained professional geologists.</li> <li>For lithology logging descriptions were undertaken<br/>over the full length of drill core on a paper lithology<br/>logging form, on which was recorded rock type,<br/>colour, mineralogy, foliation and structural<br/>characteristics. Paper logs are later transferred to<br/>excel spreadsheets template for import to the<br/>database.</li> <li>The geotechnical logging is undertaken on a domain<br/>run interval basis with breaks made at points where<br/>the rock mass characteristics change. Data were</li> </ul> |

| Criteria | JORC Code Explanation | Commentary  |
|----------|-----------------------|---|
|          |                       | recorded into previously prepared Excel spreadsheet<br>logging templates. Major structures are broken into<br>individual domains and recorded in a separate logging<br>sheet.   |
|          |                       | • Senior Geotechnical Engineer s from SRK Consulting<br>have undertaken site visits in February 2015 and<br>January 2017 to discuss the geotechnical aspects of<br>the Wolfsberg Project with the European Lithium<br>Limited's technical team. Further technical<br>discussions were held at the office of Mine-IT on the<br>24th of January 2017.   |
|          |                       | • DRA is of the pinion that the recovered cores have<br>been logged to a level of detail to support the<br>appropriate Mineral Resource estimation.   |
|          |                       | • For the 2016 and 2017 drilling campaigns individual photographs of each core box were taken using a Panasonic LUMIX GX 80 camera with a LUMIX G VARIO12-32 optics the digital images include full metadata. To ensure consistency of the scale, a fixed frame was used to shoot down the core boxes at a fixed height. The core box was oriented so that the starting depth is at the top left corner of the picture and the drill hole number, box number, starting and ending depths of the core with a scale bar were always included. Additionally, a colour reference chart was included to each picture to enable calibration and correct reproduction of the digital images. |
|          |                       | • DRA are of the opinion that the level of detail applied to the 2016 and 2017 photography is industry best practice.   |

|  | Criteria   | JORC Code Explanation   | Commentary   |
|--|--|---|--|
| <ul> <li>Sub-Sampling<br/>Techniques and<br/>Sample</li> <li>Preparation</li> <li>If corrected or core</li> <li>If not and w</li> <li>For appre</li> <li>Qual stage</li> <li>Meas represent insta</li> <li>Whe the meas th</li></ul> |  | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul> <li>Only mineralised intersections are cut.</li> <li>Cutting of the core was performed at the core shed<br/>after logging and sample mark up. The drill core is cut<br/>in half along the core axis. The cutting operation is<br/>undertaken by trained technicians and is supervised<br/>by the responsible geologist.</li> <li>All remaining core after sampling is stored on metal<br/>racks in the Wolfsberg core shed.</li> <li>Samples with visible mineralization (spodumene) are<br/>taken on the basis lithology and mineralogy and range<br/>from a minimum of 0.5 m to a maximum of 1.0 m<br/>thickness.</li> <li>DRA are of the opinion that the sample sizes are<br/>appropriate to the grain size of the material being<br/>sampled.</li> </ul> |
|  | Quality of assay<br>data and laboratory<br>tests | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>   | <ul> <li>All sample preparation and assays were undertaken<br/>by an independent laboratory (ALS Ireland), which is<br/>ISO 9001:2008 and ISO 17025 accredited. Sample<br/>preparation was using ALS procedure PREP31Y and<br/>Lithium analysis using procedure LIOG63; four acid<br/>digestion with analysis by ICP-OES and a detection<br/>limit of 0.01% Li2O.</li> <li>A combination of Rare Earth and trace elements were<br/>also tested for using procedure ME-MS81 and ME-<br/>ICP06, including Loss on Ignition.</li> <li>For the 2016 underground drilling standards and<br/>blanks were introduced every twenty samples (5%)</li> </ul>   |

| Criteria                                    | JORC Code Explanation   | Commentary   |
|---|---|--|
|   |   | <ul> <li>frequency). Acceptable levels of accuracy for standards and blanks were obtained.</li> <li>For the 2017 surface drilling duplicates and external laboratory checks were also undertaken with acceptable levels of accuracy and precision.</li> </ul>  |
| Verification of<br>sampling and<br>assaying | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul> | <ul> <li>An independent Competent Person has verified the intersections.</li> <li>All the primary data was transferred into standardized Excel spreadsheet templates and later imported into an Access database.</li> <li>Li assays were converted to Li<sub>2</sub>O for reporting using a conversion of Li<sub>2</sub>O% = Li% * 2.153.</li> <li>An electronic database containing collars, surveys, assays and geology is maintained by Mine-it, an independent Mining Information Management Consultancy based in Leoben, Austria.</li> </ul>  |
| Location of data<br>points                  | <ul> <li>Accuracy and quality of surveys used to locate drill holes<br/>(collar and down-hole surveys), trenches, mine workings<br/>and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>                                   | <ul> <li>Site surveys were conducted by an external licensed<br/>Surveyor, using a total station instrument 1600 Leica<br/>with standard accuracies of ± 2 mm per kilometre. All<br/>coordinates are tied into the state triangulation<br/>network and provided in the Austrian Gauss Kruger<br/>co-ordinate system.</li> <li>For the most recent geological model and resource<br/>estimate, the most recent surveying data of the<br/>Austrian Surveying Service (BEV) was used to<br/>represent the surface topography. DRA is of the<br/>opinion that this level of accuracy is adequate to</li> </ul> |

| Criteria  | JORC Code Explanation  | Commentary   |
|---|--|--|
|   |  | provide topographic control for the drill collars used in the geological modelling.  |
| Data spacing and<br>distribution                              | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>                                 | <ul> <li>Underground channel sampling along exposed veins were generally at 3 m intervals.</li> <li>A number of underground drill holes were selected as twin holes to validate the original Minerex data. Pegmatite intersections in drill core were sampled and assayed in widths up to 1 m. For veins exceeding 1 m the samples up to 1 m were prepared and assayed separately and the results later composited to represent the assay of the true width.</li> <li>A similar rationale was applied to the 2017 surface cored drill holes.</li> <li>DRA is of the opinion that the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification.</li> </ul> |
| Orientation of data<br>in relation to<br>geological structure | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul> | <ul> <li>Underground channel samples were perpendicular to the pegmatite veins and across the full width.</li> <li>Underground and surface drill holes were orientated perpendicular to the dip of the pegmatite veins.</li> <li>DRA is of the opinion that the orientation of the drilling in relation to the pegmatite veins has not introduced any sampling bias.</li> </ul>  |
| Sample security   | <ul> <li>The measures taken to ensure sample security.</li> </ul>  | • All drill core was placed in core boxes and labelled with drill hole number and core position. Drill core boxes were transferred to the secure Wolfsberg core  |

| Criteria          | JORC Code Explanation   | Commentary  |
|-------------------|---|---|
|                   |   | shed and placed on racks. All work was under the supervision of European Lithium Limited company personnel.   |
|                   |   | <ul> <li>Channel samples were placed in sample bags and<br/>labelled with unique sample number and transferred<br/>to the Wolfsberg core shed.</li> </ul>   |
|                   |   | <ul> <li>All samples for sample preparation and assay were<br/>loaded into a truck and driven to ALS (Ireland) for<br/>handover.</li> </ul>   |
| Audits or reviews | <ul> <li>The results of any audits or reviews of sampling techniques<br/>and data.</li> </ul> | • An audit by Mr Don Hains (the independent Competent Person) of the application of the QA/QC protocols was undertaken between the 25th and 29th of August 2016 and again on the 21st to 23rd of June 2017. No deviations from the protocols were observed. |

### Section 2 Reporting of Exploration Results

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

| ia  | JORC Code explanation  | Commentary                  |
|---|--|-----------------------------|
| Mineral tenement<br>and land tenure<br>status | • 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. | Insert your commentary here |

| ia   | JORC Code explanation   | Commentary |
|--|---|------------|
|  | • 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.  |            |
| <i>Exploration done by other parties</i> • Acknowledgment and appraisal of exploration by parties. |   | •          |
| Geology  | • Deposit type, geological setting and style of mineralisation.   | •          |
| Drill hole<br>Information  | <ul> <li>A summary of all information material to the understanding<br/>of the exploration results including a tabulation of the<br/>following information for all Material drill holes:</li> </ul>   | •          |
|  | <ul> <li>easting and northing of the drill hole collar</li> </ul>   |            |
|  | <ul> <li>elevation or RL (Reduced Level – elevation above sea level<br/>in metres) of the drill hole collar</li> </ul>  |            |
|  | <ul> <li>dip and azimuth of the hole</li> </ul>   |            |
|  | <ul> <li>down hole length and interception depth</li> </ul>   |            |
|  | hole length.  |            |
|  | • If the exclusion of this information is justified on the basis<br>that the information is not Material and this exclusion does<br>not detract from the understanding of the report, the<br>Competent Person should clearly explain why this is the<br>case. |            |
| Data aggregation<br>methods  | <ul> <li>In reporting Exploration Results, weighting averaging<br/>techniques, maximum and/or minimum grade truncations<br/>(e.g. cutting of high grades) and cut-off grades are usually<br/>Material and should be stated.</li> </ul>                        | •          |
|  | <ul> <li>Where aggregate intercepts incorporate short lengths of<br/>high grade results and longer lengths of low grade results,<br/>the procedure used for such aggregation should be stated</li> </ul>  |            |

| ia  | JORC Code explanation   | Commentary |
|---|---|------------|
|   | 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.   |            |
| Relationship<br>between<br>mineralisation   | • These relationships are particularly important in the reporting of Exploration Results.   | •          |
| widths and<br>intercept lengths   | • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.   |            |
|   | • 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'). |            |
| <ul> <li>Diagrams</li> <li>Appropriate maps and sections (with scales) and<br/>tabulations of intercepts should be included for any<br/>significant discovery being reported These should include,<br/>but not be limited to a plan view of drill hole collar locations<br/>and appropriate sectional views.</li> </ul>   |   | •          |
| <ul> <li>Balanced reporting</li> <li>Where comprehensive reporting of all Exploration<br/>is not practicable, representative reporting of both<br/>high grades and/or widths should be practiced<br/>misleading reporting of Exploration Results.</li> </ul>  |   | •          |
| <ul> <li>Other substantive<br/>exploration data</li> <li>Other exploration data, if meaningful and material, should<br/>be reported including (but not limited to): geological<br/>observations; geophysical survey results; geochemical<br/>survey results; bulk samples – size and method of<br/>treatment; metallurgical test results; bulk density,<br/>groundwater, geotechnical and rock characteristics;<br/>potential deleterious or contaminating substances.</li> </ul> |   | •          |

| ia           | JORC Code explanation   | Commentary |
|--------------|---|------------|
| Further work | • The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-<br>out 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. |            |

#### 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<br>integrity        | • Measures taken to ensure that<br>data has not been corrupted<br>by, for example, transcription<br>or keying errors, between its<br>initial collection and its use for                   | • Past 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.).  |
|                              | Mineral Resource estimation purposes.   | • Few contradictions were detected and any observed discrepancies were documented. Finally, the data were compiled into an Access database.  |
|                              | <ul> <li>Data validation procedures<br/>used.</li> </ul>  | <ul> <li>New data (2016-2017) were acquired and processed under a strict QA/QC procedure.</li> </ul>   |
|                              |   | <ul> <li>The Minerex data was further verified in a programme of twin hole drilling and<br/>underground channel sampling of the exposed veins.</li> </ul>  |
| Site visits                  | • Comment on any site visits<br>undertaken by the Competent<br>Person and the outcome of<br>those visits  | • The Competent Person has visited the site on a number of occasions between 2016-2018, and has assisted European Lithium Limited in setting up comprehensive QA/QC protocols.   |
|                              | <ul> <li>If no site visits have been<br/>undertaken indicate why this is<br/>the case.</li> </ul>   | <ul> <li>Specific site visits were undertaken in August 2016 and June 2017 to audit the<br/>application of the QA/QC procedures, with no deviations found.</li> </ul>  |
| Geological<br>interpretation | <ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> </ul> | • The fundamental basis of the geological interpretation (vein identification) was<br>done by Minerex. By being in charge over the whole period of the exploration<br>they are assumed to have the best knowledge about the deposit. Dr Richard<br>Göd, the geology adviser to European Lithium Limited, was the Chief Geologist<br>in charge of the Minerex exploration. The geological experts in charge now<br>have not detected any flaws in the previous works and interpretations. |

| Criteria                                  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | • The effect, if any, of alternative interpretations on Mineral Resource estimation.   | <ul> <li>Underground mine development was carried out by Minerex to intersect the<br/>pegmatite veins and follow them by drifting along strike, which confirmed the<br/>geological interpretation and demonstrated the vein continuity.</li> </ul>  |
|   | <ul> <li>The use of geology in guiding<br/>and controlling Mineral<br/>Resource estimation.</li> <li>The factors affecting continuity<br/>both of grade and geology.</li> </ul>                                    | <ul> <li>Extensive mineralogical studies were made as part of the metallurgical<br/>testwork programme of Minerex.</li> </ul>   |
|   |  | • Data comprise listings (samples, etc.) and a wide range of geological maps.<br>Although not directly used for resource estimation they are extremely helpful<br>for understanding the deposit characteristics.  |
|   |  | • So far, no alternative interpretation of the geology has been considered.   |
|   |  | • The resource estimation recognizes the characteristics of the vein structure and makes estimates on a vein by vein basis  |
|   |  | <ul> <li>The pegmatite intrusion visibly shows continuity along strike as evidenced by<br/>the underground drifting. Continuity down dip is evidenced from borehole<br/>profiles.</li> </ul>  |
| Dimensions                                | • The extent and variability of<br>the Mineral Resource<br>expressed as length (along<br>strike or otherwise), plan<br>width, and depth below<br>surface to the upper and lower<br>limits of the Mineral Resource. | <ul> <li>The currently explored deposit has an extension in strike of 1500 m. The maximum vertical extension is about 400 m (1600 masl to 1320 masl), but varies 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.</li> <li>The width of the veins averages 1.35 m with maximum width recorded at 5.5 m. Intersection lengths in the boreholes were logged but not sampled if less than 0.5 m.</li> </ul> |
| Estimation and<br>modelling<br>techniques | • The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,   | <ul> <li>For project evaluation vein thickness and grade are of paramount importance.<br/>For this situation a semi-3D modelling approach is most appropriate for both<br/>key figures. This is in particular true for vein thickness, which can by this<br/>approach be treated by statistical and numerical methods, while by alternative<br/>solutions it has to be indirectly derived from wireframed surface distance. The<br/>modelling was done in Surpac and Leapfrog, with some adaptations for this</li> </ul>  |

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| Criteria              | JORC Code explanation  | Commentary   |
|-----------------------|--|--|
|                       | <ul> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul> | <ul> <li>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 only the interpolation between these geologically defined nodes for each vein.</li> <li>Before modelling was undertaken, an intensive study on the sample data (grade, partially thickness) was conducted. The distributions of both are actually very close to a Gaussian distribution and do not show any tendency for outliers. Hence no particular measures for capping must be applied.</li> <li>Model results are always statistically compared with sample data. As far as possible this is done also for groupings such as by the host rock type. Comparisons were also done with records from former drifting. An essential part is also the evaluation of the plausibility of vein identification, which is still in progress.</li> </ul> |
| Moisture              | • 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.   |
| Cut-off<br>parameters | <ul> <li>The basis of the adopted cut-<br/>off grade(s) or quality<br/>parameters applied.</li> </ul>  | • 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. No grade cut-off has been used as the Minerex data indicated that 74% of the pegmatite reported to saleable product and there were very limited zones of lower grade material.   |

| Criteria                                   | JORC Code explanation  | Commentary   |
|--|--|--|
| Mining factors or<br>assumptions           | <ul> <li>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.</li> </ul> | • 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 Prefeasibility study concluded that long hole open stoping and cut<br>and fill were appropriate mining methods. Minimum sampling width was 0.5 m.<br>The economic minimum mining width still has to be established taking into<br>account current studies to remove waste dilution by sensor based sorting. 13%<br>of the sample composites had interbedding which has been included as<br>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 to assure stability.  |
| Metallurgical<br>factors or<br>assumptions | <ul> <li>Metallurgical<br/>factors or<br/>assumptions</li> <li>The basis for assumptions or<br/>predictions regarding<br/>metallurgical amenability. It is<br/>always necessary as part of<br/>the process of determining<br/>reasonable prospects for</li> </ul>  | • Minerex conducted extensive metallurgical testing and concluded that a 6% Li <sub>2</sub> O 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 testwork also demonstrated that the spodumene concentrate was amenable to conversion to lithium carbonate.    |
|  | eventual economic extraction<br>to consider potential<br>metallurgical methods, but the<br>assumptions regarding   | • Additional testwork undertaken by European Lithium Limited has shown that<br>the spodumene concentrate from Wolfsberg can be successfully processed to<br>battery grade lithium carbonate and lithium hydroxide, using commercially<br>proven technology. This coupled to the fact that the deposit is technically and   |

| Criteria                                   | JORC Code explanation   | Commentary   |
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|  | metallurgical treatment<br>processes and parameters<br>made when reporting Mineral<br>Resources may not always be<br>rigorous. Where this is the<br>case, this should be reported<br>with an explanation of the<br>basis of the metallurgical<br>assumptions made.  | economically viable, and may be mined economically using long hole open<br>stoping, means that the deposit meets the criterion for eventual economic<br>extraction as required for a resource to be stated under JORC (2012).  |
| Environmental<br>factors or<br>assumptions | <ul> <li>Assumptions made regarding<br/>possible waste and process<br/>residue disposal options. It is<br/>always necessary as part of<br/>the process of determining<br/>reasonable prospects for<br/>eventual economic extraction<br/>to consider the potential<br/>environmental impacts of the<br/>mining and processing<br/>operation. While at this stage<br/>the determination of potential<br/>environmental impacts,<br/>particularly for a greenfields<br/>project, may not always be<br/>well advanced, the status of<br/>early consideration of these<br/>potential environmental<br/>impacts should be reported.<br/>Where these aspects have not<br/>been considered this should<br/>be reported with an</li> </ul> | <ul> <li>It is envisioned that the waste from mining and processing will be utilised as fill in the mine and that there will be no permanent tailings dam.</li> <li>The mine area is in a commercial forest and there are no nature conservation or water protection zones.</li> </ul> |

| Criteria       | JORC Code explanation   | Commentary   |
|----------------|---|--|
|                | explanation of the environmental assumptions made.  |  |
| Bulk density   | <ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul> | <ul> <li>The measurements of density for pegmatite and the major host rocks, amphibolite and mica schist, were made during the recent twin hole drilling programme. For mineralised pegmatite zones routine density information was determined at regular intervals every 0.5 m.</li> <li>The procedure follows the Archimedes method by weighing samples of full core diameter in 10-15 cm lengths in air and in water.</li> <li>Results obtained from 54 samples of pegmatite were 2.72± 0.06; from 145 amphibolite samples (3.08±0.10) and 2.85±0.07 for 136 samples of mica schist.</li> </ul> |
| Classification | <ul> <li>The basis for the classification<br/>of the Mineral Resources into<br/>varying confidence categories.</li> <li>Whether appropriate account<br/>has been taken of all relevant<br/>factors (i.e. relative confidence</li> </ul>   | • Former exploration activities comprise underground drifts following some selected veins. In this way the continuity of the veins 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.  |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | <ul> <li>in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>   | <ul> <li>Measured resources are stated for the veins immediately 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.</li> <li>Indicated resources are stated for the main cross-sections, where there were at least three drill holes not more than 50 m apart.</li> <li>Inferred resource was considered as that material not included in the two previous definitions.</li> </ul> |
| Audits or reviews                                 | • The results of any audits or reviews of Mineral Resource estimates.  | <ul> <li>The resource estimate has been prepared by Mine-IT Sanak Oberndorfer and<br/>audited by the independent Competent Person, Mr Don Hains.</li> </ul>   |
| Discussion of<br>relative accuracy/<br>confidence | <ul> <li>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 appropriate, a qualitative discussion of the factors that could affect the relative</li> </ul> | <ul> <li>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).</li> <li>The resource estimate refers to global estimates of tonnes and grade.</li> </ul>  |

| Criteria | JORC Code explanation   | Commentary |
|----------|---|------------|
|          | accuracy and confidence of the estimate.  |            |
|          | <ul> <li>The statement should specify<br/>whether it relates to global or<br/>local estimates, and, if local,<br/>state the relevant tonnages,<br/>which should be relevant to<br/>technical and economic<br/>evaluation. Documentation<br/>should include assumptions<br/>made and the procedures<br/>used.</li> </ul> |            |
|          | <ul> <li>These statements of relative<br/>accuracy and confidence of<br/>the estimate should be<br/>compared with production<br/>data, where available.</li> </ul>  |            |

#### 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   |
|---|--|--|
| Mineral Resource<br>estimate for<br>conversion to Ore<br>Reserves | <ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul> | <ul> <li>The Wolfsberg Mineral Resource estimate as reported on at 21 November 2016 and described in the previous sections has been used as the basis for the Ore Reserve assessment.</li> <li>The Mineral Resources are reported inclusive of the Ore Reserves.</li> <li>Only Measured and Indicated Resources have been included in the Reserves.</li> <li>The Ore Reserves are located within the boundaries of the ECM exploration lease.</li> <li>Provision has been made for a crown pillar and rib and sill pillars based on a geotechnical assessment. These pillars are not included in the Ore Reserve.</li> </ul>   |
| Site visits   | <ul> <li>Comment on any site visits<br/>undertaken by the Competent<br/>Person and the outcome of<br/>those visits.</li> <li>If no site visits have been<br/>undertaken indicate why this is<br/>the case.</li> </ul>                              | <ul> <li>The designated Competent Person for the Ore Reserves is Jurgen Fuykschot (MSc, MAUSIMM, CP), Principal Consultant (Mining) at SRK UK. He has undertaken multiple site visits with the most recent visit undertaken in January 2017.</li> <li>Additional site visits have been completed by 'Other Experts' supporting the Competent Person in undertaking the technical study and review including Ben Lepley (Geology) in November 2017, James Bellin (Geohydrology) in February 2018 and Matt Arnold (Mining) in November 2017.</li> <li>These visits incorporated on-site investigations and review of the available datasets, as well as discussions with the Company on future project development.</li> </ul> |
| Study status  | • The type and level of study<br>undertaken to enable Mineral<br>Resources to be converted to<br>Ore Reserves.   | <ul> <li>A PFS was completed in March 2018 for the Wolfsberg project which included<br/>significant authoring contributions from DRA Global, SRK, Mine-IT and ECM.</li> </ul>  |

| Criteria                      | JORC Code explanation   | Commentary   |
|-------------------------------|---|--|
|                               | <ul> <li>The Code requires that a study<br/>to at least Pre-Feasibility<br/>Study level has been<br/>undertaken to convert Mineral<br/>Resources to Ore Reserves.<br/>Such studies will have been<br/>carried out and will have<br/>determined a mine plan that is<br/>technically achievable and<br/>economically viable, and that<br/>material Modifying Factors<br/>have been considered.</li> </ul> | <ul> <li>In order to support the Ore Reserve estimate, SRK created a PFS level mine design, schedule and cost estimate considering only Measured and Indicated Mineral Resources.</li> <li>All material modifying factors have been have been considered in the PFS study.</li> </ul>  |
| Cut-off parameters            | <ul> <li>The basis of the cut-off<br/>grade(s) or quality parameters<br/>applied.</li> </ul>  | <ul> <li>The orebodies show a sharp lithological contact and any dilution is assumed to be 0% Li<sub>2</sub>O</li> <li>SRK considered a number of Li<sub>2</sub>O (%) cut-off grade determined the dilution and cut-off grade parameters for use in the Deswik Stope Optimiser, as the main factor influencing the economic viability of a stope is the amount of dilution incurred during exploitation.</li> <li>Inputs to the technical economic model, including the impacts of ore-sorting and a lithium-carbonate price of 10,000 USD/t, were modified in order to run a goal-seek process. The target was a cash-flow of zero based on specific input parameters (variable stope waste factors and stoping costs. A marginal cut-off grade of 0.3% Li<sub>2</sub>O was used for the stope optimization process. The development cut-off grade was set at 0.2% Li<sub>2</sub>O based on split-firing of the ore development.</li> </ul> |
| Mining factors or assumptions | • The method and assumptions<br>used as reported in the PFS or<br>DFS to convert the Mineral<br>Resource to an Ore Reserve  | <ul> <li>A full mine design and schedule has been completed for the Wolfsberg UG project.</li> </ul>   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
| (i.e<br>app<br>opt<br>or c  | (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).  | <ul> <li>The LoM plan and associated Ore Reserve estimate produced for Wolfsberg only consider Indicated and Measured material. Inferred material has not been included in the mining studies or Ore Reserve estimate.</li> <li>The mining method selected for the Wolfsberg project is a retreat long-hole</li> </ul> |
|   | <ul> <li>The choice, nature and<br/>appropriateness of the<br/>selected mining method(s)<br/>and other mining parameters</li> </ul>  | <ul> <li>open stoping method (LHOS) as follows:</li> <li>o Longitudinal narrow LHOS for individual pegmatite veins with a sub-level interval of 25 m (floor to floor)</li> </ul>   |
|   | including associated design issues such as pre-strip.  | <ul> <li>Sill- and no-plilars are to be left between stopes for geotechnical stability</li> <li>Access provided via oredrives running along the veins</li> </ul>   |
|   | access, etc.   | <ul> <li>Surface access via a widening of the existing adit and creation of a new<br/>portal, with internal declines providing access to sub-levels</li> </ul>   |
| <ul> <li>The assumptions made<br/>regarding geotechnical<br/>parameters (e.g. pit slopes,<br/>stope sizes, etc.), grade<br/>control and pre-production<br/>drilling.</li> </ul> | <ul> <li>Deswik's Stope optimizer package has been used to generate mineable<br/>shapes and quantify the diluted tonnes and grade above the Li<sub>2</sub>O cutoff of 0.3%<br/>Li<sub>2</sub>O.</li> </ul> |  |
|   | <ul> <li>The mining sequence and basis for the mine design has been determined<br/>through the assessment of:</li> </ul>   |  |
|   | • The major assumptions made<br>and Mineral Resource model   | <ul> <li>Geotechnically stable stope spans and underground chambers throughout<br/>the deposit, considering ground-control requirements.</li> </ul>  |
|   | <ul> <li>used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors</li> </ul>  | $_{\odot}~$ Variable orebody width, dip and strike length  |
|   |  | <ul> <li>Impact of mining recovery and dilution</li> </ul>   |
|   |  | <ul> <li>A sub-level interval of 25 m providing a balance between practical access<br/>development for various mining stages – production drilling, blasting and<br/>mucking and economic considerations</li> </ul>  |
|   | <ul><li>used.</li><li>Any minimum mining widths</li></ul>  | <ul> <li>Blending of material types to create a material balance for down-stream<br/>processes</li> </ul>  |
|   | <ul><li>used.</li><li>The manner in which Inferred</li></ul>   | <ul> <li>Sizing of working areas to create desired material throughput to processing<br/>plant.</li> </ul>   |
|   | Mineral Resources are utilised   | <ul> <li>Stockpiling requirements for predominant material types</li> </ul>  |

| Criteria                                   | JORC Code explanation   | Commentary   |
|--|---|--|
|  | <ul> <li>in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul> | <ul> <li>Mine dilution is based on geotechnical assessment, assumed blast design and<br/>benchmarked industry standards for the variation of long-hole open stoping<br/>given orebody geometry and lithological characteristics. Dilution has been<br/>included at the stope optimization phase – i.e. a dilution skin has been applied<br/>to the optimized stope shapes. This has been set as 0.3 m on the footwall and<br/>0.5 m on the hanging wall. The minimum mining width has been set to 1.2 m.</li> </ul>  |
|  | -   | <ul> <li>Dilution for development activities has been reduced by split firing, removing<br/>60% of the waste from each cut.</li> </ul>   |
|  |   | <ul> <li>Overall, around 45% waste is contained in the RoM feed going to the ore<br/>sorters. This effect is mitigated by the use of ore sorters.</li> </ul>   |
|  |   | <ul> <li>Mining recovery has been set at 80%. This represents the sill and rib pillars left<br/>in-situ for long-hole open stoping. Development recovery has been assumed<br/>to be 100%</li> </ul>  |
|  |   | • The mine plan takes a phased approach to development based on available underground infrastructure. During the initial pre-production phase (Phase 1), development material is handled via trackless equipment and stored on surface. During Phase 2, development and equipping of the underground crushing and sorting facilities is carried out, prior to any production activities. Phase 3 sees the commissioning of the underground crushing and sorting facilities, with an incremental ramp-up to full production (Phase 4). The mine plan includes considerable upfront development for materials handling pass systems and main haulage levels as a means of reducing long-term materials handling and underground trucking requirements. |
| Metallurgical<br>factors or<br>assumptions | • The metallurgical process<br>proposed and the<br>appropriateness of that<br>process to the style of<br>mineralisation.  | <ul> <li>The metallurgical process proposed for the Wolfsberg project have been<br/>produced concurrently with the mining studies of the PFS and have built upon<br/>the work conducted between 1982 and 1984 by North Carolina State Minerals<br/>Research Laboratory testwork on behalf of Minerex, Dorfner Anzaplan in 2017<br/>and DRA/Dorfner Anzaplan in 2018.</li> </ul>  |

| Criteria JORC Code explanation   | Commentary   |
|--|--|
| CriteriaJORC Code explanation• Whether the metallurgic<br>process is well-test<br>technology or novel in nature• The nature, amount at<br>representativeness<br>metallurgical testwo<br>undertaken, the nature of th<br>metallurgical domainin<br>applied and the correspondin<br>metallurgical recovery factor<br>applied.• Any assumptions<br>allowances made fillowance | <ul> <li>Commentary</li> <li>al • The process proposed is conventional for production of spodumene concentrate and the conversion to lithium hydroxide is by the only commercially established process</li> <li>• Testing at North Carolina was on a range of material throughout the deposit and can be considered representative of the orebody as a whole. Pegmatites from the two host rock types have similar and fairly uniform chemistry but a difference in spodumene crystal size. Testing in 2017/2018 was on two 500t bulk samples mined from the deposit from the two host rock types. Pilot plant testing was carried out for DMS and ore sorting. Flotation and conversion work was at industrial laboratory scale</li> <li>Fe<sub>2</sub>O<sub>3</sub> content is an issue if spodumene was targeted to the glass and ceramics market. However, it is removed in the conversion to lithium hydroxide. The metallurgical process involves laser-based optical sorting to remove waste</li> </ul>   |
| <ul> <li>deleterious elements.</li> <li>The existence of any bus sample or pilot scale testword and the degree to which sursamples are considered representative of the orebord as a whole.</li> <li>For minerals that are defined by a specification, has the oreserve estimation between based on the appropriate mineralogy to meet the specifications?</li> </ul>      | <ul> <li>prior to spodumene flotation and then conversion of the spodumene to lithium hydroxide by calcination, acid baking, leaching, carbonate precipitation and transformation to lithium hydroxide with lime.</li> <li>Additional test work was completed in 2017 by Dorfner Anzaplan. During 2018 additional variability testwork was conducted on various ratios of AHP:MHP i.e. 30:70, 50:50 and 70:30.</li> <li>DRA cannot comment on the representivity of the sample as there was no involvement with sample selection.</li> <li>Pilot scale test work has not been completed.</li> <li>The metallurgical process involves laser-based optical sorting separation prior to slimes removal, magnetic separation, mica flotation, spodumene flotation and by-product (feldspar &amp; quartz) flotation, by-product cleaning and tailings disposal via backfill.</li> <li>Additional test work will be required for the feasibility study i.e. variability test work on core samples, additional lock cycle tests and a pilot plant campaign</li> </ul> |

| Criteria      | JORC Code explanation   | Commentary  |
|---------------|---|---|
|               |   | Test sample head grades should be similar to the expected life of mine head grades.   |
| Environmental | <i>Environmental</i> • The status of studies of potential environmental impacts of the mining and processing operation. Details | <ul> <li>A baseline environmental study has been undertaken for the mining and<br/>concentrator plant location, which highlights the sensitivities and potential<br/>conflicts for the biophysical and social receiving environments. Traffic and<br/>noise studies are planned.</li> </ul> |
|               | of waste rock characterisation<br>and the consideration of<br>potential sites, status of design                                 | <ul> <li>No environmental studies have been conducted for the proposed<br/>hydrometallurgical plant location. This will have to be done during the next<br/>phase of the project.</li> </ul>  |
|               | applicable, the status of approvals for process residue   | <ul> <li>A site-wide water balance has been compiled mining and concentrator site,<br/>considering the following elements:</li> </ul>   |
|               | storage and waste dumps   | <ul> <li>Current groundwater inflows to mine</li> </ul>   |
|               | should be reported.   | <ul> <li>Estimated mining operations water usage for mining fleet and dust<br/>suppression</li> </ul>   |
|               |   | <ul> <li>Process water demand as provided by DRA from their process water<br/>balance work</li> </ul>   |
|               |   | $_{\odot}~$ Tailing and mine waste dewatering flows   |
|               |   | <ul> <li>Potable water</li> </ul>   |
|               |   | <ul> <li>It is likely that no supplemental water supply will be required; mine process<br/>requirements should be able to be met using groundwater inflows to the mine.</li> </ul>  |
|               |   | <ul> <li>The mine and concentrator site will be in water-excess and water will need to<br/>be discharged to the local environment. This has implications in terms of water<br/>treatment for environmental studies and discharge licensing.</li> </ul>                                      |
|               |   | <ul> <li>Given the sensitive nature of the surrounding environment, approvals to<br/>discharge surplus water should be considered a project risk until further work<br/>has been done in this area.</li> </ul>  |
|               |   | <ul> <li>A temporary waste stockpile from mine development will be stored on surface.<br/>This has a capacity of 50,000 tonnes. Waste rock from this stockpile will be</li> </ul>   |

| Criteria          | JORC Code explanation   | Commentary   |
|-------------------|---|--|
|                   |   | crushed and used to construct the terraces and access road. Following construction, this waste is sold to local quarries who collect from this stockpile.  |
|                   |   | <ul> <li>It is envisioned that the waste from mining and processing will be utilised as fill<br/>in the mine and that there will be no permanent tailings dam.</li> </ul>  |
|                   |   | <ul> <li>The mine area is in a commercial forest and there are no nature conservation<br/>or water protection zones.</li> </ul>  |
|                   |   | <ul> <li>A HAZOP study was conducted for the concentrator plant where hydrofluoric<br/>(HF) acid addition was identified as a major risk. A HF consultant was<br/>appointed to identify and mitigate all risks when dealing with HF. A site visit<br/>was conducted to assess the risks.</li> </ul>  |
| Infrastructure    | • The existence of appropriate<br>infrastructure: availability of<br>land for plant development,<br>power, water, transportation<br>(particularly for bulk<br>commodities), labour,<br>accommodation; or the ease<br>with which the infrastructure<br>can be provided, or accessed. | <ul> <li>The work undertaken in this PFS, 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.</li> <li>Infrastructure for power, water, transportation, groundworks for plant development and other surface buildings – such as mine offices and changehouses – will need to be established.</li> </ul> |
|                   |   | <ul> <li>Negotiations regarding available land will have to be further advanced during<br/>the next phase of the project to secure the locations of the concentrator and<br/>hydrometallurgical sites.</li> </ul>  |
|                   |   | <ul> <li>The mine site is 20 km from Wolfsberg a town of 25,000 people. All personnel<br/>will accommodate themselves in Wolfsberg or other nearby towns.</li> </ul>   |
|                   |   | <ul> <li>There are good labour and technical skills in Austria</li> </ul>  |
|                   |   | <ul> <li>Motorway access, natural gas and power are available adjacent to the<br/>hydrometallurgical plant site</li> </ul>   |
| Costs             | • The derivation of, or assumptions made, regarding projected capital costs in the study.   | <ul> <li>The PFS capital cost estimate has an intended accuracy level of -15%/+25%</li> </ul>  |
| ass<br>pro<br>stu |   | <ul> <li>The capital costs for the surface facilities and underground mine are where<br/>possible, based on indicative quotes (preferably from local suppliers and</li> </ul>  |

| Criteria        | JORC Code explanation  | Commentary   |
|-----------------|--|--|
|                 | • The methodology used to estimate operating costs.  | contractors) for infrastructure, earthworks, mining equipment and consumables.   |
|                 | <ul> <li>Allowances made for the<br/>content of deleterious<br/>elements.</li> </ul>   | <ul> <li>The operational costs were estimated from first principals with the input<br/>parameters such as labour, explosives and energy costs locally sourced or<br/>adjusted for the project location and country</li> </ul>  |
|                 | • The source of exchange rates used in the study.  | <ul> <li>The royalty payment is 1.85 USD/tonne mineral products sold</li> <li>Exchange rates were from XE as of 1/2/2018</li> </ul>  |
|                 | • Derivation of transportation charges.  | <ul> <li>Transportation charges were estimated by DRA for transfer of concentrate from<br/>mine to hydrometallurgical plant. Charges for</li> </ul>  |
|                 | • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.   | by-product sales were estimated by a marketing consultant, Orykton Consulting, expert in European Industrial Minerals  |
|                 | <ul> <li>The allowances made for<br/>royalties payable, both<br/>Government and private.</li> </ul>  |  |
| Revenue factors | • The derivation of, or<br>assumptions made regarding<br>revenue factors including head<br>grade, metal or commodity<br>price(s) exchange rates,<br>transportation and treatment<br>charges, penalties, net smelter<br>returns etc | <ul> <li>Lithium hydroxide forecast prices were provided by Benchmark Minerals<br/>Intelligence a leading analyst in the lithium industry.</li> <li>Prices for by-products were estimated by the marketing consultant Orykton<br/>Consulting, for the quality of by-products of feldspar, quartz, aluminium silicate<br/>and sodium sulphate.</li> </ul> |
|                 | <ul> <li>The derivation of assumptions<br/>made of metal or commodity<br/>price(s), for the principal</li> </ul>   |  |

| Criteria             | JORC Code explanation   | Commentary  |
|----------------------|---|---|
|                      | metals, minerals and co-<br>products.   |   |
| Market<br>assessment | <ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul> | <ul> <li>Three separate market study reports were prepared by MiDevCon, Benchmark Minerals Intelligence and Orykton Consulting. These addressed demand, supply, future trends, customer and competitor analysis.</li> <li>The demand in the automotive industry for rechargeable lithium ion batteries is forecasted to become the main consumer of future lithium production. This is especially the case in Europe, where certain government policies to promote low emission vehicles and eliminate diesel engines are already in place.</li> <li>Roskill projections indicate a CAGR for global lithium of 17.7% through to 2026.</li> <li>It is estimated that Europe will account for 23% of global cell capacity by 2021, which is the second largest consumer after China. At present, almost all battery cells used in Europe are imported from Asia. The European Union has embarked on a concerted drive to develop lithium ion battery production, as a strategic industry in Europe. Of the planned twenty-five global megafactories, four will be based in Europe.</li> <li>Automotive manufacturers are envisaged to be the major driver of new cell capacity and key raw materials of lithium and cobalt, on long term contracts.</li> <li>With a central European location, the Wolfsberg project is ideally situated to be a supplier of battery grade lithium hydroxide into the developing European battery market.</li> <li>As a result of supply and demand dynamics, Benchmark Minerals Intelligence anticipates that both lithium carbonate and hydroxide will be in short supply in the near term. Batteries are moving towards higher nickel and lower cobalt content which requires lithium hydroxide rather than lithium carbonate. This will result in hydroxide growth at 2.5 times the rate of carbonate. Market prices are envisaged to remain at historically high levels through to 2025, peaking in</li> </ul> |

| Criteria | JORC Code explanation  | Commentary  |
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|          |  | 2022-2023 and then subsiding to a long term real price beyond 2025 of 15 USD/kg for lithium hydroxide and 11 USD/kg for lithium carbonate, as new production comes on stream.   |
|          |  | • The Feldspar from Wolfsberg comprises a glass grade and a finer ceramic grade and is of a high quality. Europe imports large quantities of Turkish feldspar and there is opportunity to displace some of this with attractive pricing. The ceramics centre of Sassuolo, Italy is a target market.   |
|          |  | <ul> <li>The Wolfsberg quartz grade, classified in glass and ceramics, meets the lower<br/>scale clear glass requirements of consumers. Orykton Consulting advocate<br/>that Austria and the adjacent regions of Bavaria, Czech Republic and Slovakia<br/>could absorb the total quartz production of Wolfsberg.</li> </ul>   |
|          |  | <ul> <li>Orykton Consulting conclude that Lenzing in Austria, could absorb the<br/>Wolfsberg production of sodium sulphate within its marketing, if offered at an<br/>attractive price.</li> </ul>  |
|          |  | <ul> <li>The Wolfsberg aluminium silicate is suitable as a feed stock for the local<br/>cement industry.</li> </ul>   |
| Economic | <ul> <li>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.</li> <li>NPV ranges and sensitivity to the source of the sensitivity to the sensitivity the sensitivity to the sensitivity the sensitivity to the sensitivity the sensitivity the sensitivity to the sensensitivity to the sensitivity to the sensitivity to the sens</li></ul> | <ul> <li>DRA have evaluated the project by using the mine production schedule,<br/>concentrator recovery model, the capex and opex derived by DRA. This has<br/>been done on a real terms basis. NPV was estimated for the project with a<br/>base discount rate of 8%. Sensitivities were made on the various factors such<br/>as lithium price, capex, opex and discount rate.</li> </ul> |
|          | • variations in the significant assumptions and inputs.  |   |
| Social   | <ul> <li>The status of agreements with<br/>key stakeholders and matters</li> </ul>   | <ul> <li>No social impact assessments have been conducted to date. This will have to<br/>be done during the next phase of the project. The project has been introduced<br/>to the local mayor and the Carinthian government who have been supportive.</li> </ul>  |

| Criteria | JORC Code explanation   | Commentary   |
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|          | leading to social licence to operate.   | Land purchase or easements must be obtained from landowners. In case of failure to agree with the landowner at mine site the Mining Law provides for arbitration by the Mining authority or compulsory easement for the mining licence holder  |
| Other    | <ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>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</li> </ul> | <ul> <li>No natural risks have been identified other than operating in an alpine region subject to winter snowfall. The project is designed to be an all weather operation</li> <li>No marketing agreements have yet been negotiated</li> <li>The project must file a mine operating plan with the Mining Authority before mining can commence. This must detail production information, mining techniques and address safety as well as protection of the environment.</li> <li>The hydrometallurgical plant must complete an EIA as part of the licensing regime with the Carinthian Government.</li> <li>No new mining projects have been developed in Austria for a long time and the evaluation of the project by the authorities has an uncertain time line. However, the Carinthian Government is supportive of the region becoming a leading supplier to the European supply chain of lithium for batteries as there is currently no meaningful lithium production in Europe.</li> <li>There has been an ongoing dispute with landowner at mine site. An agreement was signed in 2011 whereby the landowner waived all rights to object to the development of an underground mine in exchange for payment. The landowner has attempted to declare this agreement terminated but arbitration tribunals and the Courts in Carinthia have found the agreement to remain valid and ECM has the right to undertake all works required for the development and operation of a mine. ECM has made the landowner a proposal to buy the required land.</li> </ul> |

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|   | third party on which extraction of the reserve is contingent.  |   |  |
| Classification                                    | <ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>                                  | <ul> <li>of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> <li>The results of any audits or of Ore Reserves</li> </ul>  |  |
| Audits or reviews                                 | <ul> <li>The results of any audits or<br/>reviews of Ore Reserve<br/>estimates.</li> </ul>   | <ul> <li>No external reviews have been undertaken</li> </ul>  |  |
| Discussion of<br>relative accuracy/<br>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 limits, or, if such an | <ul> <li>The confidence level in the Ore Reserve estimate is high, due the following reasons: <ul> <li>Realistic input parameters have been used for the Deswik Stope Optimiser process.</li> <li>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.</li> <li>The veins have been mapped for geological and geotechnical purposes.</li> <li>The financial outcomes of the project are positive enough to allow for some changes, such as an unexpected increase in dilution, lower recovery, or lower grades.</li> <li>Further details can be found in the PFS report.</li> </ul> </li> </ul> |  |

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|          | approach is not deemed<br>appropriate, a qualitative<br>discussion of the factors which<br>could affect the relative<br>accuracy and confidence of<br>the estimate.  |            |
|          | • The statement should specify<br>whether it relates to global or<br>local estimates, and, if local,<br>state the relevant tonnages,<br>which should be relevant to<br>technical and economic<br>evaluation. Documentation<br>should include assumptions<br>made and the procedures<br>used.               |            |
|          | <ul> <li>Accuracy and confidence<br/>discussions should extend to<br/>specific discussions of any<br/>applied Modifying Factors that<br/>may have a material impact on<br/>Ore Reserve viability, or for<br/>which there are remaining<br/>areas of uncertainty at the<br/>current study stage.</li> </ul> |            |
|          | <ul> <li>It is recognised that this may<br/>not be possible or appropriate<br/>in all circumstances. These<br/>statements of relative<br/>accuracy and confidence of</li> </ul>  |            |

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|          | the estimate should be compared with production data, where available. |            |