

SUCCESSFUL PRODUCTION OF LITHIUM HYDROXIDE

European Metals Holdings Limited (ASX & AIM: EMH) ("European Metals" or the "Company") is pleased to announce the successful production of lithium hydroxide monohydrate from pregnant leach solution manufactured during the recent larger-scale Cinovec pilot programme.

Highlights

- The pilot programme has confirmed the viability of the Lithium Chemical Plant ("LCP") process flowsheet for the industrial-scale production of either lithium carbonate or lithium hydroxide.
- Crude lithium carbonate from the pilot programme has been converted into exceptionally clean battery-grade lithium hydroxide monohydrate at laboratory scale.
- The pilot programme processed ore is fully-representative in all respects of the run-of-mine for the first seven years of mining planned at Cinovec, including average grade and expected rock-type mix from the bulk mining.

Executive Chairman Keith Coughlan commented, "We are extremely pleased with the results from the lithium hydroxide test program. The lithium hydroxide produced was of the highest grade possible and exceptionally clean. This, when combined with the ability to produce either battery-grade lithium carbonate or hydroxide, enables a wider range of off-takers for the Cinovec product."

Pilot Programme and Battery-Grade Lithium End-Products

The Cinovec LCP flowsheet produces a high purity lithium sulphate solution which is capable of being used to produce either lithium carbonate or lithium hydroxide.

The first stage (un-reprocessed) crude lithium carbonate produced is very close to battery grade and easily upgraded to battery grade in a single bicarbonation step (see the Company's ASX/ AIM announcement of 9 November 2023 "**Successful Battery-Grade pilot programme for Cinovec Lithium Project**").

The Cinovec LCP flowsheet lends itself to producing battery-grade lithium hydroxide monohydrate either directly, or indirectly via re-processing the first stage crude lithium carbonate. The project team has assessed the relative industrial process risks of manufacturing battery-grade lithium hydroxide monohydrate using both methods. It was concluded the indirect method was regarded as the lower-risk method, when considering process risks and costs.

This method of production of lithium hydroxide monohydrate has been tested as part of the pilot programme and has successfully produced battery-grade lithium hydroxide monohydrate at a laboratory scale.

European Metals has previously produced battery-grade lithium hydroxide monohydrate (see the Company's ASX/ AIM announcement of 8 April 2019 "**Cinovec Project Update – Battery Grade Lithium Hydroxide Sample Produced**"). The principal differences between the previous and current samples produced are that the current sample has come from the much larger-scale batch-continuous pilot programme for the revised LCP flowsheet commenced in 2023; and that the assaying requirements have been more extensive, to a better-developed reference standard published in 2020 (see further below). The revised substantially simpler LCP flowsheet was announced by the Company on 31 October

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2022 – see the Company's ASX/ AIM announcement "**Simplified Extraction Process Delivers Exceptionally Clean Battery Grade Lithium Product with Improved Economics**").

The table below details the assay results of this product, compared with the globally-accepted Chinese reference standard for battery-grade lithium hydroxide monohydrate, GB/T 26008-2020. "D1" grade is the highest grade specified by the standard.

	Na pp m	K pp m	Fe pp m	Ca pp m	Cu pp m	Mg pp m	Mn pp m	Si pp m	Cl- pp m	SO ₄ ²⁻ pp m	CO ₃ ²⁻ ppm	B pp m	Acid Solubles †
GB/T 26008-2020 D1	50	30	7	20	1	10	10	50	20	80	4,000	50	50
GB/T 26008-2020 D2	50	30	7	50	1	10	10	50	20	100	5,000	50	50
GB/T 26008-2020 D3	100	50	7	100	1	10	10	50	20	100	5,000	100	50
Cinovec Pilot LHM Assay	4.83	1.63	2.78	0.28	0.32	0.33	0.17	3.28	9.20	25.3 1	9,658	0.03	NA
Cinovec Highest Grade met	D1	D1	D1	D1	D1	D1	D1	D1	D1	D1	Over *	D1	NA

*Cinovec battery-grade lithium hydroxide monohydrate contains a higher carbonate level than specified in the reference standard because it has been prepared at laboratory scale. Lithium carbonate crystallises simultaneously with lithium hydroxide monohydrate; conditions are optimised to reduce the production of lithium carbonate to a minimum. In an industrial-scale plant, the lithium carbonate, which is produced in much finer crystals than the lithium hydroxide monohydrate, is separated from the end-product by the physical process of elutriation in solution. Elutriation is a process for separating the finer lithium carbonate particles, using a stream of solution flowing in the opposite direction to the sedimentation of the larger lithium hydroxide monohydrate crystals. This process is not possible in laboratory-scale tests.

†Acid solubles were not measured as there was not enough sample for this test. Magnetic metal particles were also not measured due to the large sample that is required as well as pilot plant equipment being materially different to the commercial plant and there being far less contact with metal components in the pilot plant.

This announcement has been approved for release by the Board.

CONTACT

For further information on this update or the Company generally, please visit our website at www.europeanmet.com or see full contact details at the end of this release.

BACKGROUND INFORMATION ON CINOVEC

PROJECT OVERVIEW

Cinovec Lithium Project

Geomet s.r.o. controls the mineral exploration licenses awarded by the Czech State over the Cinovec Lithium Project. Geomet has been granted a preliminary mining permit by the Ministry of Environment and the Ministry of Industry. The company is owned 49% by EMH and 51% by CEZ a.s. through its wholly owned subsidiary, SDAS. Cinovec hosts a globally significant hard rock lithium deposit with a total Measured Mineral Resource of 53.3Mt at 0.48% Li₂O, Indicated Mineral Resource of 360.2Mt at 0.44% Li₂O and an Inferred Mineral Resource of 294.7Mt at 0.39% Li₂O containing a combined 7.39 million tonnes Lithium Carbonate Equivalent (refer to the Company's ASX/ AIM release dated 13 October 2021) (**Resource Upgrade at Cinovec Lithium Project**).

An initial Probable Ore Reserve of 34.5Mt at 0.65% Li₂O reported 4 July 2017 (**Cinovec Maiden Ore Reserve – Further Information**) has been declared to cover the first 20 years mining at an output of 22,500tpa of lithium carbonate (refer to the Company's ASX/ AIM release dated 11 July 2018) (**Cinovec Production Modelled to Increase to 22,500tpa of Lithium Carbonate**).

This makes Cinovec the largest hard rock lithium deposit in Europe and the fifth largest non-brine deposit in the world.

The deposit has previously had over 400,000 tonnes of ore mined as a trial sub-level open stope underground mining operation.

On 19 January 2022, EMH provided an update to the 2019 PFS Update. It confirmed the deposit is amenable to bulk underground mining (refer to the Company's ASX/ AIM release dated 19 January 2022) (**PFS Update delivers outstanding results**). Metallurgical test-work has produced both battery-grade lithium hydroxide and battery-grade lithium carbonate at excellent recoveries. In February 2023 DRA Global Limited ("DRA") was appointed to complete the Definitive Feasibility Study ("DFS").

Cinovec is centrally located for European end-users and is well serviced by infrastructure, with a sealed road adjacent to the deposit, rail lines located 5 km north and 8 km south of the deposit, and an active 22 kV transmission line running to the historic mine. The deposit lies in an active mining region.

The economic viability of Cinovec has been enhanced by the recent push for supply security of critical raw materials for battery production, including the strong increase in demand for lithium globally, and within Europe specifically, as demonstrated by the European Union's Critical Raw Materials Act (CRMA).

BACKGROUND INFORMATION ON CEZ

Headquartered in the Czech Republic, CEZ a.s. is one of the largest companies in the Czech Republic and a leading energy group operating in Western and Central Europe. CEZ's core business is the generation, distribution, trade in, and sales of electricity and heat, trade in and sales of natural gas, and coal extraction. The foundation of power generation at CEZ Group are emission-free sources. The CEZ strategy named Clean Energy for Tomorrow is based on ambitious decarbonisation, development of renewable sources and nuclear energy. CEZ announced that it would move forward its climate neutrality commitment by ten years to 2040.

The largest shareholder of its parent company, CEZ a.s., is the Czech Republic with a stake of approximately 70%. The shares of CEZ a.s. are traded on the Prague and Warsaw stock exchanges and included in the PX and WIG-CEE exchange indices. CEZ's market capitalization is approximately EUR 20.3 billion.

As one of the leading Central European power companies, CEZ intends to develop several projects in areas of energy storage and battery manufacturing in the Czech Republic and in Central Europe.

CEZ is also a market leader for E-mobility in the region and has installed and operates a network of EV charging stations throughout Czech Republic. The automotive industry in the Czech Republic is a significant contributor to GDP, and the number of EV's in the country is expected to grow significantly in the coming years.

COMPETENT PERSONS

Information in this announcement relating to the FECAB metallurgical testwork is based on technical data compiled or supervised by Mr Walter Mädel, a full-time employee of Geomet s.r.o a subsidiary of the Company. Mr Mädel is a member of the Australasian Institute of Mining and Metallurgy (AUSIMM) and a mineral processing professional with over 27 years of experience in metallurgical process and project development, process design, project implementation and operations. Of his experience, at least 5 years have been specifically focused on hard rock pegmatite Lithium processing development. Mr Mädel consents to the inclusion in the announcement of the matters based on this information in the form and context in which it appears. Mr Mädel is a participant in the long-term incentive plan of the Company.

Information in this release that relates to exploration results is based on information compiled by Dr Vojtech Sesulka. Dr Sesulka is a Certified Professional Geologist (certified by the European Federation of Geologists), a member of the Czech Association of Economic Geologist, and a Competent Person as defined in the JORC Code 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Sesulka has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears. Dr Sesulka is an independent consultant with more than 10 years working for the EMH or Geomet companies. Dr Sesulka does not own any shares in the Company and is not a participant in any short- or long-term incentive plans of the Company.

Mr Grant Harman (B.Sc Chem Eng, B.Com) is an independent consultant with in excess of 14 years of lithium chemicals experience. Mr Harman supervised and reviewed the metallurgical test work and the process design criteria and flow sheets in relation to the LCP. Mr Harman is a participant in the long-term incentive plan of the Company.

The information in this release that relates to Mineral Resources and Exploration Targets is based on, and fairly reflects, information and supporting documentation prepared by Mr Lynn Widenbar. Mr Widenbar, who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australasian Institute of Geoscientists, is a full-time employee of Widenbar and Associates and produced the estimate based on data and geological information supplied by European Metals. Mr Widenbar has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code 2012 Edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Widenbar has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context that the information appears. Mr Widenbar does not own any shares in the Company and is not a participant in any short- or long-term incentive plans of the Company.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

CAUTION REGARDING FORWARD LOOKING STATEMENTS

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance, and achievements to differ materially from any future results, performance, or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the company's business and operations in the future. The company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the company or management or beyond the company's control.

Although the company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

LITHIUM CLASSIFICATION AND CONVERSION FACTORS

Lithium grades are normally presented in percentages or parts per million (ppm). Grades of deposits are also expressed as lithium compounds in percentages, for example as a percent lithium oxide (Li_2O) content or percent lithium carbonate (Li_2CO_3) content.

Lithium carbonate equivalent ("LCE") is the industry standard terminology for, and is equivalent to, Li_2CO_3 . Use of LCE is to provide data comparable with industry reports and is the total equivalent amount of lithium carbonate, assuming the lithium content in the deposit is converted to lithium carbonate, using the conversion rates in the table included below to get an equivalent Li_2CO_3 value in percent. Use of LCE assumes 100% recovery and no process losses in the extraction of Li_2CO_3 from the deposit.

Lithium resources and reserves are usually presented in tonnes of LCE or Li.

The standard conversion factors are set out in the table below:

Table: Conversion Factors for Lithium Compounds and Minerals

Convert from		Convert to Li	Convert to Li ₂ O	Convert to Li ₂ CO ₃	Convert to LiOH.H ₂ O
Lithium	Li	1.000	2.153	5.325	6.048
Lithium Oxide	Li ₂ O	0.464	1.000	2.473	2.809
Lithium Carbonate	Li ₂ CO ₃	0.188	0.404	1.000	1.136
Lithium Hydroxide	LiOH.H ₂ O	0.165	0.356	0.880	1.000
Lithium Fluoride	LiF	0.268	0.576	1.424	1.618

WEBSITE

A copy of this announcement is available from the Company's website at www.europeanmet.com/announcements/.

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The information contained within this announcement is deemed by the Company to constitute inside information under the Market Abuse Regulation (EU) No. 596/2014 ("MAR") as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 and is disclosed in accordance with the Company's obligations under Article 17 of MAR.

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