

PRESS RELEASE

CRITICAL ELEMENTS LITHIUM RECOGNIZED AS A TOP 10 RANKED COMPANY IN THE MINING SECTOR BY TSX VENTURE 50 FOR 2023

February 21st, **2023** – Montreal, Québec - Critical Elements Lithium Corporation (TSXV: CRE (OTCQX: CRECF) (FSE: F12) ("**Critical Elements**" or the "**Corporation**") is pleased to announce it has ranked in the top 10 performing mining stocks in the 2023 TSX Venture 50[™], which is comprised of the top 50 from over 1,713 companies on the TSX Venture Exchange.

"it's a great honor to be included in the Venture 50 ranking. It's a great testament to the progress being made over the year on the Rose Lithium-Tantalum project as it accelerates toward a Final Investment Decision" says CEO, Jean-Sebastien Lavallée. "2023 should be an exciting year as we advance detailed engineering toward construction and continue an active drilling campaign on the Corporation's prospective 1,050 square kilometer exploration portfolio" he concluded.

About Critical Elements Lithium Corporation

Critical Elements aspires to become a large, responsible supplier of lithium to the flourishing electric vehicle and energy storage system industries. To this end, Critical Elements is advancing the wholly owned, high purity Rose lithium project in Québec, the Corporation's first lithium project to be advanced within a land portfolio of over 1,050 square kilometers. On June 13th, 2022, the Corporation announced results of a feasibility study on Rose for the production of spodumene concentrate. The after-tax internal rate of return for the Project is estimated at 82.4%, with an estimated after-tax net present value of US\$1.9 B at an 8% discount rate. In the Corporation's view, Québec is strategically well-positioned for US and EU markets and boasts good infrastructure including a low-cost, low-carbon power grid featuring 93% hydroelectricity. The project has received approval from the Federal Minister of Environment and Climate Change on the recommendation of the Joint Assessment Committee, comprised of representatives from the Impact Assessment Agency of Canada and the Cree Nation Government and also received the Certificate of Authorization pursuant to section 164 of Québec's *Environment Quality Act* from the Québec Minister of the Environment, the Fight against Climate Change, Wildlife and Parks.

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Cautionary statement concerning forward-looking statements

This news release contains "forward-looking information" within the meaning of Canadian Securities legislation. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "scheduled", "anticipates", "expects" or "does not expect", "is expected", "scheduled", "targeted", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information contained herein include, without limitation, statements relating to the results and completion of the 2023 exploration program, the permitting process, the results and outcome of the Front-End Engineering Design Study as well as the outcome of the formal process launched by the Corporation in connection with the project financing. Forward-looking information is based on assumptions management believes to be reasonable at the time such statements are made. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information.

Although Critical Elements has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking information include, but are not limited to: final and complete results of the Corporation's 2023 exploration program, the final outcome of the permitting process and the Corporation's ability to meet all conditions imposed thereunder, the final results of the Front-End Engineering Design Study and its effects on the development of the Rose Project, the formal process launched in connection with the project financing not producing the anticipated and expected results, as well as those risk factors set out in the Corporation's Management Discussion and Analysis for its most recent quarter ended November 30, 2022 and other disclosure documents available under the Corporation's SEDAR profile. Forward-looking information contained herein is made as of the date of this news release and Critical Elements disclaims any obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws