PROSPECTUS Supplement No. 5

(to the prospectus dated February 26, 2025)

## CRITICAL METALS CORP.

Primary Offering of 7,750,000 Ordinary Shares issuable upon exercise of warrants

Secondary Offering of 100,312,567 Ordinary Shares

This prospectus supplement No. 5 (this "Supplement") supplements, updates and amends the information contained in the prospectus dated February 26, 2025 (the "Prospectus") relating to the issuance of ordinary shares, par value \$0.001 per share ("Ordinary Shares"), of Critical Metals Corp. (the "Company") upon the exercise of the public warrants of the Company (the "Public Warrants") and the resale from time to time of Ordinary Shares by the selling securityholders (including their donees, pledgees, transferees or other successors-in-interest) named in the Prospectus. This Supplement updates and supplements the Prospectus.

This Supplement is being filed to update and supplement the information previously included in the Prospectus with the information contained in the Company's Report of Foreign Private Issuer on Form 6-K filed with the Securities and Exchange Commission on March 31, 2025 (the "Form 6-K"). Accordingly, we have attached the Form 6-K to this Supplement. You should read this Supplement in conjunction with the Prospectus. This Supplement is not complete without, and may not be delivered or used except in conjunction with, the Prospectus, including any amendments or supplements thereto. This Supplement is qualified by reference to the Prospectus, except to the extent that the information provided by this Supplement supersedes information contained in the Prospectus. Capitalized terms used in this Supplement have the meanings given to them in the Prospectus.

Our Ordinary Shares and Public Warrants are listed on the Nasdaq Stock Market LLC ("Nasdaq") under the trading symbols "CRML" and "CRMLW," respectively. On March 28, 2025, the closing prices for our Ordinary Shares and Public Warrants on Nasdaq were \$1.40 per share and \$0.15 per warrant, respectively.

We are an "emerging growth company" as defined under the federal securities laws, and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD CAREFULLY CONSIDER THE RISK FACTORS SET FORTH UNDER THE SECTION ENTITLED "RISK FACTORS" ON PAGE 25 OF THE PROSPECTUS, BEFORE MAKING ANY DECISION WHETHER TO INVEST IN OURSECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this Supplement or the accompanying Prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is March 31, 2025.

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

## FORM 6-K

## REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2025

Commission File Number: 001-41973

Critical Metals Corp. (Exact name of registrant as specified in its charter)

c/o Maples Corporate Services (BVI) Limited Kingston Chambers, PO Box 173, Road Town Tortola, British Virgin Islands (Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:		
	Form 20-F ⊠	Form 40-F □

#### EXPLANATORY NOTE

On March 31, 2025, Critical Metals Corp. (the "Company") issued a press release relating to the Preliminary Economic Assessment (the "PEA") on the Tanbreez Rare Earth Project in Greenland (the "Tanbreez Project"). A copy of this press release is furnished as Exhibit 99.1 herewith.

The PEA states that the Tanbreez Project is expected to have a Net Present Value ("NPV") of approximately US\$3 billion (approximately US\$2.8 Billion to 3.6 Billion at discount rates of 15% and 12.5%, respectively, before tax) with an internal rate of return of approximately 180%. The NPV was calculated based off an initial Mineral Resource Estimate of 44.97 million metric tons of rare earth materials (indicated and inferred resources), which is approximately 1% of the 4.7 billion metric ton host rock.

### Tanbreez Project Highlights

- · Phased Growth Strategy: Planned initial production ~85,000 tonnes per annum ("tpa") of rare earth element; scalable to ~425,000 tpa with modular expansion.
- Permitted & ESG-Aligned: Granted exploitation license; low radioactivity and minimal environmental footprint.
- Strategic Location: Coastal site with deep-water fjord access and proximity to existing infrastructure.
- · Western Supply Chain Partner: Positioned as a long-term supplier to United States's and European Union's critical mineral and defense sectors.
- Large-Scale HREE Project: Resource base of 45 million tonnes (indicated and inferred resources) at 0.40% total rare-earth oxide grades with 27% heavy rare earth elements ("HREE") (such asDy, Tb, Y); resource open laterally and at depth.
- Fully Permitted: Mining license granted through to 2050; low radioactivity mineralization and ESG-aligned development path.
- Modular Processing: Dry beneficiation to concentrate; hydrometallurgical refining planned in the United States or European Union.
- Logistical Advantage: Fjord-side location with year-round deep-water access; proximity to existing infrastructure.
- Strategic Supply Source: One of the few Western-aligned HREE sources; potential supply partner for United States's and European Union's critical materials strategy.
- Low Capex to commence mining.
- Two easily separated by products available for sale (feldspar and alflarsenite).
- · Only 3% waste material.

Critical Metals Corp currently has a 42% equity interest in Tanbreez. Critical Metals Corp plans to invest \$10 million in exploration expense in Tanbreez by the end of 2025. Once the investment is completed, the Company will have the option to acquire an additional 50.5% equity interest, which would bring Critical Metal Corp's aggregate ownership in Tanbreez to 92.5% at such time, by issuing additional ordinary shares to Tanbreez's current majority owner having a value equal to \$116 million at such time.

The information contained in this Report on Form 6-K (the "Form 6-K"), except for Exhibit 99.1, is hereby incorporated by reference into the Company's registration statements on Form S-8 (File No. 333-280017) (including any prospectuses forming a part of such registration statement) and to be a part thereof from the date on which this Form 6-K is furnished, to the extent not superseded by documents or reports subsequently filed or furnished.

## **Cautionary Note Regarding Forward Looking Statements**

This Form 6-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements include, without limitation, statements regarding the net present value and the economic viability of the Tanbreez Project, Critical Metals Corp's plans regarding future investments in Tanbreez and its acquisition of the additional 50.5% equity interest, as well as the financial position, financial performance, business strategy, expectations of our business and the plans and objectives of management for future operations. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this news release, forward-looking statements may be identified by the use of words such as "estimate," "plan," "project," "forecast," "intend," "will," "expect," "anticipate," "believe," "seek," "target," "designed to" or other similar expressions that predict or indicate future events or trends or that are not statements of historical facts. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements.

Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements for many reasons, including the factors discussed under the "Risk Factors" section in the Company's Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission. These forward-looking statements are based on information available as of the date of this news release, and expectations, forecasts and assumptions as of that date, involve a number of judgments, risks and uncertainties. Accordingly, forward-looking statements should not be relied upon as representing our views as of any subsequent date, and we do not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

# EXHIBIT INDEX

99.1 Press Release of Critical Metals Corp., dated March 31, 2025.

3

## **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

## Critical Metals Corp.

By: /s/ Tony Sage

Name: Tony Sage

Title: Chief Executive Officer and Executive Chairman

Date: March 31, 2025

## Critical Metals Corp.'s Tanbreez Valued at \$3 Billion With IRR of 180% and Significant Additional Upside Potential

Preliminary Economic Assessment reveals 1% of the world-class Tanbreez Project's 4.7 billion metric ton host rock in Southern Greenland has an NPV of \$3 billion

NEW YORK, March 31, 2025 (GLOBE NEWSWIRE) -- Critical Metals Corp. (Nasdaq: CRML) ("Critical Metals Corp" or the "Company"), a leading mining development company, today announced that the Company has released an independent Preliminary Economic Assessment ("PEA") on the Tanbreez Project in Southern Greenland, one of the largest rare earth deposits in the world with a 4.7 billion metric ton mineralized kakortokite unit. The full PEA report, which is a key study for advancing the development strategy for the Tanbreez Project, can be viewed by visiting: https://www.criticalmetalscorp.com/projects/project-tanbreez. Agricola Mining Consultants Pty Ltd conducted the PEA.

The results of the PEA demonstrate that the Tanbreez Project is expected to have a Net Present Value (NPV) of approximately US\$3 Billion (approximately US\$2.8 Billion to 3.6 Billion at discount rates of 15% and 12.5%, respectively, before tax), with an Internal Rate of Return (IRR) of approximately 180%. The NPV was calculated based off an initial Mineral Resource Estimate (MRE) of 44.97 million metric tons of rare earth materials (indicated and inferred resources), which is approximately 1% of the 4.7 billion metric ton host rock. On March 12, 2025, Critical Metals Corp released its technical report on the Tanbreez Project in compliance with Regulation S-K 1300.

#### **Key Highlights:**

- Phased Growth Strategy: Initial production ~85,000 tpa REO; scalable to ~425,000 tpa with modular expansion.
- Permitted & ESG-Aligned: Granted exploitation license; low radioactivity and minimal environmental footprint.
- Strategic Location: Coastal site with deep-water fjord access and proximity to existing infrastructure.
- Western Supply Chain Partner: Positioned as a long-term supplier to US/EU critical mineral and defense sectors.
- Large-Scale HREE Project: Robust Resource Base of 45 Mt @ 0.40% TREO with 27% HREE (Dy, Tb, Y); resource open laterally and at depth.
- Fully Permitted: Mining license granted through to 2050; low radioactivity mineralization and ESG-aligned development path.
- Modular Processing: Dry beneficiation to concentrate; hydrometallurgical refining planned in the US or EU.
- Logistical Advantage: Fjord-side location with year-round deep-water access; proximity to existing infrastructure.
- Strategic Supply Source: One of the few Western-aligned HREE sources; potential supply partner for US/EU critical materials strategy.
- Low Capex to commence mining.
- Two easily separated by products available for sale (feldspar and alflarsenite).
- Only 3% waste material.

"The release of the PEA for Tanbreez confirms the exceptional economic credentials of the project and fast tracks the development strategy for this game-changing rare earth deposit," said Tony Sage, CEO and Chairman of Critical Metals Corp. "With significant macroeconomic tailwinds and global policy initiatives, including the U.S.'s recent executive order to tap the Department of Defense to expand the production of rare earths, the Tanbreez Project is expected to play an essential role in supporting an integrated Western supply chain. As this PEA was only based on a fraction of the total resource potential at Tanbreez, Critical Metals Corp believes that more drilling can unlock enormous upside potential for Western stakeholders producing defense applications and other next-generation technologies, and can substantially increase the Tanbreez Project's NPV."

As Critical Metals Corp continues to progress its verification work and garner key findings from third-party reports, the Company expects to conduct additional drilling campaigns. Critical Metals Corp expects to complete a definitive feasibility study for the Tanbreez Project by the end of 2025.

Critical Metals Corp currently has a 42% equity interest in Tanbreez. Critical Metals Corp plans to invest \$10 million in exploration expense in Tanbreez by the end of 2025. Once the investment is completed, the Company will have the option to acquire an additional 50.5% equity interest, which would bring Critical Metal Corp's aggregate ownership in Tanbreez to 92.5% at such time, by issuing additional ordinary shares to Tanbreez's current majority owner having a value equal to \$116 million at such time.

## **About Critical Metals Corp.**

Critical Metals Corp (Nasdaq: CRML) is a leading mining development company focused on critical metals and minerals, and producing strategic products essential to electrification and next generation technologies for Europe and its western world partners. Its flagship Project, Tanbreez, is one of the world's largest rare earth deposits and is located in Southern Greenland. The deposit is expected to have access to key transportation outlets as the area features year-round direct shipping access via deep water fjords that lead directly to the North Atlantic Ocean.

Another key asset is the Wolfsberg Lithium Project located in Carinthia, 270 km south of Vienna, Austria. The Wolfsberg Lithium Project is the first fully permitted mine in Europe and is strategically located with access to established road and rail infrastructure and is expected to be the next major producer of key lithium products to support the European market. Wolfsberg is well positioned with offtake and downstream partners to become a unique and valuable asset in an expanding geostrategic critical metals portfolio.

With this strategic asset portfolio, Critical Metals Corp is positioned to become a reliable and sustainable supplier of critical minerals essential for defense applications, clean energy transition, and next-generation technologies in the western world.

For more information, please visit https://criticalmetalscorp.com/.

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### Critical Metals Corp.

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