
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 December 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

FPCU Term Sheet

On December 9, 2025, Critical Metals Corp. (the “Company”) entered into a joint investment development term sheet (the “Term Sheet”) with Fabrica de Prelucrare a Concentratelor de Uraniu S.R.L., a limited liability company organized under the laws of Romania (“FPCU”). FPCU is a state-owned entity controlled by the government of Romania.

The Term Sheet provides that the Company and FPCU will work to establish an equally owned joint venture (the “JV”) which will develop, construct and commission a processing plant located in Romania. The Term Sheet contemplates that the JV will obtain offtake rights to 50% of the production of rare-earth concentrate from the Tanbreez Green Rare Earth Mine (the “Tanbreez Project”). The Company currently owns 42% of the equity interests in the Tanbreez Project.

The Company has now entered into three non-binding term sheets for the offtake of rare-earth concentrate extracted from the Tanbreez Project, representing an aggregate amount of 75% of the future production of the Tanbreez Project. There can be no guarantee that the Company will enter into binding agreements with FPCU, or the other term sheet counterparties, on terms favorable to the Company or at all.

Incorporation by Reference

The information contained in this Form 6-K is hereby incorporated by reference into the Company’s registration statements registration statements on [Form F-3](#) (File No. 333-290973), [Form F-3](#) (File No. 333-286326), [Form F-1](#) (File No. 333-278400), [Form S-8](#) (File No. 333-291195) and [Form S-8](#) (File No. 333-280017).

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: December 12, 2025